

Freshwater lampreys and fishes in the Middle East

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Monograph

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Abstract

Herewith, the status of the freshwater ichthyofauna in the Middle East is revised, and a checklist of the freshwater lampreys and fishes is presented. The confirmed freshwater fishes comprise 727 species belonging to 28 orders, 50 families, and 157 genera. Among these, 470 species (64.7%) are endemic to the Middle East, of these 352 species are endemic to only one country, and 56 species (7.7%) are alien. The orders with the largest numbers of species are the Cypriniformes (472 species, 64.8), followed by the Gobiiformes (55 species, 7.6%), Cyprinodontiformes (49 species, 6.7%), Salmoniformes (30 species, 4.1%), Cichliformes (21 species, 2.9%), Clupeiformes (20 species, 2.7%), and Siluriformes (23 species, 3.2%). At the family level, the Leuciscidae has the greatest number of species (159 species; 21.8% of the total species), followed by Cyprinidae (140 species, 19.2%), and Nemacheilidae (112 species, 15.4%), Gobiidae (53 species, 7.3%), Aphaniidae (42 species, 5.8%), and Cobitidae (34 species, 4.7%). According to IUCN Red List criteria, among 671 naturally distributed species (alien species not included), six fish species are extinct (EX), one species is extinct in the wild (EW) and 133 species (19.8%) are categorised as threatened extinctions, including 38 (5.7%) are CR, 58 (8.6%) are EN, and 37 (5.5%) are VU. IUCN categories have not been evaluated (NE) for over one-third of the species (266 species).

Keywords: Fish diversity, Freshwater ichthyofauna, endemism, freshwater ecoregion, introduced, Middle East

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Introduction

The term "Middle East" may have originated in the 1850s in the British India Office. As for the term "the Middle East," the first person who used it, was Thomas E. Gordon in the article entitled "The Problem of the Middle East," published in 1900 (Koppes, 1976: 95-98; Byczkowski, 2021). However, it became more widely known when American naval strategist Alfred Thayer Mahan used the term in 1902 to "designate the area between Arabia and India." Alfred T. Mahan was of great importance in the popularisation of the term due to his article entitled "The Persian Gulf and International Relations," which became an inspiration for Valentine Chirol to write his series of articles under the common title "The Middle Eastern Question" (Mahan, 1902: 39; Chirol, 1903: 5; Byczkowski, 2021).

Traditionally included within the Middle East are Iran, Asia Minor, Mesopotamia, the Levant, the Arabian Peninsula, and Egypt. In modern-

day-country terms, it is a geopolitical region encompassing Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian territories (West Bank and Gaza Strip), Qatar, Saudi Arabia, Syria, Türkiye, the United Arab Emirates, and Yemen (see Byczkowski, 2021). Here, we follow Byczkowski (2021).

At the juncture of Asia, Europe, and Africa, the Middle East boasts mountains, deserts, steppes, valleys, river deltas, freshwater and marine ecosystems, and man-made or artificial systems (e.g., reservoirs and qanats). Across the region, a rich diversity of faunal elements, including mammals, reptiles, birds, and insects, as well as freshwater and marine organisms (e.g., fishes), make their homes, each uniquely adapted to its environments.

The Middle East has a rich freshwater fish fauna in terms of diversity and endemism, and its ichthyofauna is characterized by unique mixed elements of Europe, Asia, and African origin, although it has received alien species from the Neotropical and Nearctic realms (see Esmaili et al., 2017, 2018, 2022; Çiçek et al., 2018, 2020; Freyhof et al., 2020; Esmaili, 2021; Esmaili & Abbasi, 2021; Zarei et al., 2022; Esmaili & Hamidan, 2023).

Written records on fish diversity in the Middle East date back to the third millennium B.C. in Mesopotamia, the plain shared between Iran and Iraq. The Uruk IV symbol for fish (an outline of a fish) dates to 3,100 B.C. or over 5,000 B.P. Later cuneiform writings on clay tablets refer to fish and attempts have been made to identify the species, with variable results (Scheil, 1918; Diemel, 1926; Civil, 1961; Landsberger, 1962; Salonen, 1970; Sahrhage and Lundbeck, 1992). About 324 Sumerian and Babylonian fish names have been identified, referring to about 90 species (some of which are marine). Fish played a prominent part in everyday life, both as food and as religious symbols (van Buren, 1948; Salonen, 1970; de Moor, 1998; Potts, 2012). Fish diversity (fish imagery) or painting of fish on historic items has been well illustrated in the Iranian artwork (see A'lam, 1999; Moradi and Esmaili, 2015; Sarami and Mokhtarian, 2015; Gholamifard, 2018, and in detail by Moradi (2008, 2015, 2017). This diversity has also been shown through the archaeological work. The Gohar Tepe archaeological site in Mazandaran, north of Iran, dates back 5,000 years and shows evidence of freshwater fish use by the inhabitants (Sheykhshoaei & Mousavi Kouhpar, 2017). Archaeological remains containing fish bones at Abu Salabikh, Iraq, dated to 3,000 B.C. (and summarised for south Mesopotamia), have been identified to include *Barbus* (= *Arabibarbus*) *grypus*, *Barbus* (= *Luciobarbus*) *esocinus*, *B.* (= *Luciobarbus*) *kersin*, *B.* (= *Luciobarbus*) *xanthopterus*, *B.* (= *Carasobarbus*) *luteus*, *Barbus* (= *Mesopotamichthys*) *sharpeyi*, *Aspius* (= *Leuciscus*) *vorax*, *Acanthobrama* (presumably *A. marmid*), *Cyprinion* sp. (presumably *C. macrostomus*), and *Alburnus* sp., among the cyprinoids. Such remarkable diversity attracted foreign naturalists and scientists for a long time. Travelers from Europe often wrote up accounts of their visits to Persia, and some commented on the fish, although such comments were mostly general and species were rarely identified. Studies, both formal and informal, significantly increased the knowledge of freshwater fish diversity in the Middle East. Scientific works relevant to the region begin with the *Systema Naturae*, 10th edition, by Carolus Linnaeus (1701-1778), published in 1758, in which scientific naming in zoology has its beginning. It continued with the work of Fredrik Hasselquist (1722-1752), Alexander Russell (1715-1768), Marc Elieser Bloch (1723-1799), Daniel Carl Solander (1736-1782), Johann Gottlob Schneider (1750-1822), Sir Joseph Banks (1743-1820), Franz Steindachner (1834-1919), Peter Simon Pallas (1741-1811), Johann Anton von Gldenstdt (Gueldenstaedt, Gldenstaedt) (1745-1781), Karl Eduard von Eichwald (Eduard Ivanovich Eikhval'd) (1795-1876), Francis Buchanan (1762-1829), Johann Jakob Heckel (1790-1857), Graf Eugen von Keyserling (1833-1889), Filippo de Filippi (1814-1867), Robert William Theodore Gnther (1869-1940), Karl Fedorovich Kessler (1815-1881), Francis Day (1829-1889), Henri Emile Sauvage (1844-1917), Aleksandr Mikhailovich Nikol'skii (Nikolskii or Nikolsky) (1858-1942), Serghyei Nikolaevich Kamenskii (or Kamensky) (1771 - 1834), Erich Zugmayer (1879-1938), William Thomas Blanford (1832-1905), (Thomas) Nelson Annandale (1876-1924), Francis Buchanan (1762-1829), Viktor Pietschmann (1881-1956), Lev Semyonovich Berg (1876-1950), Anton Bruun (1901-1961), Paul Khlsbauer (1912 -1988), and Mladen S. Karaman (1937-1991). For the recent work, see the bibliography. These scientific

works resulted in the description of new species, the documentation of new records, and taxonomic re-evaluations of existing taxa. The advent of new techniques, such as DNA barcoding and environmental DNA (eDNA), and also new systematic concepts (e.g., species concepts), mutated our knowledge of freshwater fishes in the Middle East.

The remarkable Middle East biota has interested foreign naturalists and scientists for a long time. Research on the fish fauna, including the descriptions of new fish species, was performed by foreign (mainly European) researchers, such as Gldenstdt Heckel Hanko, Berg and Ladiges (Çiçek et al., 2015).

Although there are quite a number of publications on freshwater fish taxonomy, the data set for freshwater fish assemblages is still poor. There are some uncertainties involving the number of freshwater species resident in the Middle East and the often-demonstrated major gaps in our knowledge of their actual geographic distributions. On the other hand, introduced alien species, either naturally (under the influence of climate and environmental changes) or through human activities (aquaculture, ornamental fish farming, trade, etc.), have been constantly linked to habitat degradation by altering structural and functional aspects of invasive ecosystems, leading to environmental imbalance and loss of biodiversity, in addition to affecting economic activities and various ecosystem services (Coop et al., 2005; Gkenas et al., 2023).

An understanding of the diversity of the freshwater ichthyofauna of any region is crucial so that scientists, policymakers, resource managers, and members of the public can better evaluate the impact of human activities on the freshwater fish within the country (Maldonado-Ocampo et al., 2008). Hence, the present study aims to revise the status of the freshwater ichthyofauna in the Middle East, and an updated checklist of the freshwater lampreys and fishes is presented. This checklist will provide guidelines for future studies of freshwater ichthyofauna in the Middle East.

Material and Methods

In this study, previous checklists were reviewed, and some errors were eliminated. The following previously published books, identification keys, and checklists were taken as a baseline: Geldiay and Balık (1988, 1996, 1999, 2002, 2007), Bilecenođlu et al. (2002, 2014), Kuru (2004), Fricke et al. (2007), Kuru et al. (2014), and Çiçek et al. (2015, 2018, 2020, 2022, 2023a) on the inland fishes of Trkiye; Coad (1991, 1995, 1996, 1998, 2010, 2024), Abdoli (2000), Esmaili et al. (2010a; 2017, 2018), Abbasi (2017), Esmaili (2021), Esmaili and Abbasi (2021); Jouladeh-Roudbar et al. (2020), Kovaćić et al. (2021), Zarei et al. (2021, 2022a,b,c 2023), Eagderi et al. (2022), and Sayyadzadeh and Esmaili (2024) on inland fishes of Iran; Krupp (1983), Freyhof et al. (2020); Esmaili and Hamidan (2023) on the inland fishes of the Arabian Peninsula; Esmaili et al. (2022a), Zarei et al. (2022d), and Sayyadzadeh et al. (2023) on freshwater fishes of Oman; Esmaili et al. (2020a), and Freyhof and Yođurtçuođlu (2020) on aphaniid fishes of the Middle East; Coad (2010), Al-Faisal (2020), and Çiçek et al. (2023b) on inland fishes of Iraq; and Saad et al. (2023) on freshwater fishes of Syria; Çiçek et al. (2023c) on inland fishes of Israel.

Some species that were probably missed out accidentally in previous studies have been added to the present study. In addition, newly described species until 17 January 2024 and species encountered for the first time have been added. The species in the following list were compiled from two different sources. The data were cross-checked and supplemented by information from recent publications dealing with species found in the inland waters of Middleeastern countries and descriptions of new species from the countries. Furthermore, some fish records published without documentation in recent decades, as well as some questionable species found in previous checklists, were evaluated and either verified or removed from the list.

We follow the family classifications of van der Laan et al. (2024), Nelson et al. (2016), Tan and Armbruster (2018), and Esmaili et al. (2020a), with orders, superfamilies, and families arranged systematically, but genera and species alphabetically within each family. The actual

taxonomic status of the species follows Eschmeyer's Catalog of Fishes unless mentioned otherwise (Fricke et al., 2024).

Information on common names and fish distribution in FishBase was evaluated (Froese & Pauly, 2023). IUCN categories of the species we checked and all species were classified according to their IUCN Red List categories (IUCN, 2023): The abbreviations are: [NE] Not Evaluated, [DD] Data Deficient, [LC] Least Concern, [NT] Near Threatened, [VU] Vulnerable, [EN] Endangered, [CR] Critically Endangered, and [EX] Extinct.

According to economic value, species are divided into six categories (Çiçek et al., 2023). These are: E1) Commercially important; E2) Locally commercially important; E3) Locally consumed, but of no commercial importance; E4) No commercial importance; E5) the valuable for the aquarium trade and E6) Has potential to be used as aquarium fish.

The reasons for the introduction of exotic species were categorised into five categories (Çiçek et al., 2022). These are R1) Aquaculture/research, R2) Fisheries: enhancement of wild stocks and sports fishing, R3) Bio-control: to prevent eutrophication, aquatic plants, and pest control, R4) Ornamental fish industry, R5) Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

In addition to the literature information, the distribution of the species according to Freshwater Ecoregions of the World (FEOW) (Abell et al., 2008) and river basins were also included for each country. However, considering the inaccuracies in species identification and insufficient data, it should not be ignored that the distribution area information of the species should be continuously updated.

The geographical borders of the Middle East fall within 29 ecoregions, and these are: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 439-Southwestern Arabian Coast, 440-Arabian Interior, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 443-Oman Mountains, 444-Lake Van, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 630-Middle Amu Darya, 631-Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.

Each country is divided into river basins; their codes and names are as follows:

Iran: 1-Persis, 2-Hormuz, 3-Makran, 4-Tigris (as exorheic basins, i.e., land-locked drainage networks that drain into the Persian Gulf and Oman Sea), 5-Bejestan, 6-Caspian Sea, 7-Dasht-e Kavir, 8-Dasht-e Lut, 9-Esfahan, 10-Hamun-e Mashkid, 11-Hamun-e Jaz Murian, 12-Kor River, 13-Lake Maharlu, 14-Lake Orumiyeh, 15-Namak Lake, 16-Sirjan, 17-Sistan, 18-Kerman-Na'in (all are considered endorheic basins, i.e., closed or terminal basins that do not drain into the sea), 19-Hari River, 20-Zohreh River.

Iraq: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab, 4-Great Zab, 5-Little Zab, 6-Al-Uzaym, 7-Diyalah, 8- Shatt al-Garaf.

Israel: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin.

Lebanon: 1-Orontes, 2-Litani, 3-Coastal.

Oman: 1-Al-Najd, 2-Al-Masarat, 3-Eastern Sands Wadi, 4-Al-Ma'awal, 5-West Central, 6-Ronb Valley.

Saudi Arabia: Saudi Arabia does not have any permanent rivers, but does have numerous wadis (valleys) which are riverbeds that are either permanently or intermittently dry.

Syria: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk.

Türkiye: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 16-Konya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh, 24-Aras, 25-Van Lake.

Yemen: 1-The Red Sea Basin, 2-The Gulf of Aden Basin, 3-The Arabian Sea Basin, 4-Al Rabaa Alkhali Basin.

Abbreviations of threats:

ABS-Water abstraction: A species that is threatened by water abstraction for irrigation projects or other human needs.

AQU-Aquaculture: A species that is threatened by aquaculture or introduction (changes in genetics, predation, disease, or competition from introduced species).

CLI-Climate change: A species that is threatened by the effects of global and/or local climate change, including warmer temperatures and less rainfall.

COM-Competition: A species that is threatened by competition from non-native, introduced species.

CON-Construction/Weirs: A migratory species that is threatened inland by construction measures, e.g., weirs, dams.

EUT-Eutrophication: A species that is threatened by the effects of eutrophication (nutrient-rich water, lack of oxygen, etc.) or various effects of organic or inorganic pollution, such as oil spills, various chemicals, hormones, etc.

FIT-Fishery (target species): A species that is commercially exploited as a target species.

HAB-Habitat loss: A species that is threatened by the loss of its habitat (silted sand bottoms due to eutrophication, etc.).

TOU-Tourism: A species that is threatened by the effects of tourism.

Acronyms for collections are:

AMNH, American Museum of Natural History, New York, U.S.A.; AMS, Australian Museum, Sydney, New South Wales, Australia; ANSP, Academy of Natural Sciences, Philadelphia, Pennsylvania, U.S.A.; AUBM, American University of Beirut, Natural History Museum, Beirut, Lebanon; BIAUBM, Babol Islamic Azad University Biological Museum, Babol, Iran; BMNH, Natural History Museum, London. Formerly British Museum Natural History, London, England; BNHM, Basrah Natural History Museum, Basrah, Iraq; BPBM, Bishop Museum, Honolulu, Hawai'i, U.S.A.; CMN, Canadian Museum of Nature, Ottawa, Canada; CMNFI, Canadian Museum of Nature, Ottawa, Canada. Same as NMC - National Museums of Canada, Canada; DUM, Zoological Museum, Zoology Branch, Department of Biology, Faculty of Science and Letters, Dicle University, Diyarbakir, Türkiye; ESFM-PISI, Ege University, Faculty of Fisheries Museum, Izmir, Türkiye; FCFUK, Fish collection, Fish Department, University of Kurdistan, Iran; FCME, Fish Collection, Kastamonu University, Fisheries Faculty, Kastamonu, Türkiye; FFR Faculty of Fisheries, Recep Tayyip Erdogan University, Rize, Turkey; FMNH, Division of Fishes, Department of Zoology, Field Museum of Natural History, Chicago, Illinois, U.S.A.; FMUL, Faculté de Médecine, Université de Lille 2, Lille, France; FSJF, Fischsammlung Jörg Freyhof Berlin, Germany; GUIC, Ichthyological Museum, Department of Fisheries. Natural Resources Faculty, University of Guilan, Guilan Province, Iran; HUIC, Hacettepe Üniversitesi, Faculty of Science, Department of Biology, Ichthyological Collection, Ankara, Türkiye; HUIJ, The Hebrew University of Jerusalem, Faculty of Science, Department of Zoology, Zoological Museum, Jerusalem, Israel; IFC-ESUF, Inland Fishes Collection, Isparta University of Applied Sciences, Isparta, Türkiye; IMNRF, Ichthyological Museum of Natural Resources Faculty, University of Tehran, Iran; IUT-IM, Isfahan University of Technology, Ichthyology Museum, Isfahan, Iran; ISBB, Institutul de Stiinte Biologice, Bucuresti, Romania; IUSHM, Istanbul Üniversitesi, Faculty of Science, Hydrobiology Museum, Istanbul, Türkiye; IZA, Instituto di Zoologia, Aquila, Italy; KAUMM, King Abdulaziz University Marine Museum, Jeddah, Saudi Arabia; LS, Linnean Society of London, Piccadilly, London, England; LSL, Linnean Society of London, London, England, United Kingdom; MCSNC, Museo Civico di Storia Naturale di Carmagnola, Torino, Italy; MCZ Museum of Comparative Zoology, Harvard University, Ichthyology Department, Cambridge, Massachusetts, U.S.A.; MCZ, Museum of Comparative Zoology, Harvard University, Ichthyology Department, Cambridge, Massachusetts, U.S.A.; MGHN, Musée Guimet d'Histoire Naturelle, Lyon, France; MHNG, Museum d'Histoire Naturelle, Département d'Herpétologie et Ichthyologie, Ville de Genève, Genève, Switzerland; MHNL, Musée d'Histoire Naturelle de Lyon, Lyon, France; MIZT, Museo, Istituto de Zoologia,

Università de Torino, Italy; MMB, The Moravian Museum, Ministry of Culture of the Czech Republic, Brno, Czech Republic; MMNHS, Macedonian Museum of Natural History, Skopje, Macedonia; MNH, Hungarian National Museum, Budapest, Hungary; MNHN, Museum National de Histoire Naturelle, Paris, France; MSCUB, Marine Science Centre, University of Basrah, Basrah, Iraq; MRAC, Musée Royal de l'Afrique Centrale, Tervuren, Belgium; MSNG, Museo Civico di Storia Naturale di Genova 'Giacomo Doria', Genova, Italy; MSNM, Comune di Milano, Museo Civico di Storia Naturale, Milano, Italy; MUFS, Department of Plant and Animal Sciences, Faculty of Agriculture, University of Miyazaki, Miyazaki, Japan; MZUF, Università di Firenze, Museo Zoologico e Storia Naturale de la Specola, Firenze, Italy; MZUSP, Universidade de São Paulo, Museu de Zoologia, São Paulo, Brazil; MZUT Università di Torino, Dipartimento di Biologia Animale e dell'Uomo, Museo Zoologico, Torino, Italy; NHVUIC, Ichthyology Collections of Nevsehir Haci Bektas Veli University, Nevşehir, Türkiye; NMC, Canadian Museum of Nature, Ottawa, Canada; NMNHS, National Museum of Natural History, Sofia, Bulgaria; NMW, Naturhistorisches Museum, Wien (Vienna), Austria; NRM, Naturhistoriska Riksmuseet, Stockholm, Sweden; NSMT, National Science Museum, Department of Zoology, Tokyo, Japan; NUIC, Ichthyology Collections of Nevsehir Haci Bektas Veli University, Nevşehir, Türkiye; QM, Queensland Museum, Centre for Biodiversity, Fishes, Brisbane, Queensland, Australia; RMNH, Naturalis - Nationaal Natuurhistorisch Museum, Leiden, the Netherlands; RMNH, Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands; SAIAB, South African Institute for Aquatic Biodiversity, National Research Foundation, Grahamstown, South Africa; SAM, South African Museum, Cape Town, South Africa; SCFK-SDU, Personal collection of F. Küçük, Eğirdir Su Ürünleri Fakültesi, T.C. Süleyman Demirel Üniversitesi, Eğirdir, Türkiye; SMF, Natur-Museum und Forschungs-Institut Senckenberg Frankfurt-am-Main, Germany; SMF, Senckenberg Forschungsinstitut und Naturmuseum, Abteilung Marine Zoologie, Sektion Ichthyologie, Frankfurt am Main, Hessen, Germany; SMNH-TAU (TAU), The Steinhardt Museum of Natural History, Tel Aviv University, Tel Aviv, Israel; SMNS, Staatliches Museum für Naturkunde in Stuttgart, Stuttgart, Baden-Württemberg Germany; SMNS, Staatliches Museum für Naturkunde in Stuttgart, Stuttgart, Baden-Württemberg Germany; USNM, United States National Museum, Smithsonian Institution, Washington, U.S.A.; VMFC, Vatandoust and Mousavi-Sabet Fish Collection, Tehran; ZFMK Zoologisches Forschungsmuseum Alexander König, Abteilung Wirbeltiere, Ichthyologie, Bonn, Nordrhein-Westfalen, Germany; ZFMK, Zoologisches Forschungsmuseum Alexander König, Abteilung Wirbeltiere, Ichthyologie, Bonn, Nordrhein-Westfalen, Germany; ZIN/ZISP, Zoological Institute, Academy of Sciences, St. Petersburg, Russia; ZMB, Museum für Naturkunde, Leibniz-Institut für Evolutions- und Biodiversitätsforschung, Berlin, Germany; ZMB, Universität Humboldt, Museum für Naturkunde, Berlin, Germany; ZM-CBSU, Zoological Museum of Shiraz University, Collection of Biology Department, Shiraz; ZMH, Universität Hamburg, Zoologisches Institut und Museum, Hamburg, Germany; ZMMU, Zoological Museum, Biological Faculty, M. V. Lomonosov Moscow State University, Moscow, Russia; ZM-SBUK, Iran Zoological Museum of the Shahid Bahonar University of Kerman; ZMT (ex ZIN), S. Janashia State Museum of Georgia, Zoological Section, Georgian Academy of Sciences, Tbilisi, Georgia; ZMUC, Kobenhavns Universitet Zoologisk Museum (Zoological Museum, University of Copenhagen), Copenhagen, Denmark; ZMUI (IUSHM), Istanbul Üniversitesi, Faculty of Science, Hydrobiology Museum, Istanbul, Turkey; ZMUI, Istanbul Üniversitesi, Faculty of Science, Hydrobiology Museum, Istanbul, Türkiye; ZMUU Zoological Museum, Biological Faculty, M. V. Lomonosov Moscow State University, Moscow, Russia; ZMUU, Uppsala Universitet, Zoologiska Museet, Uppsala, Sweden; ZSI, Zoological Survey of India, Calcutta, India; ZUMT, Department of Zoology, University Museum, University of Tokyo, Tokyo, Japan.

This list of freshwater fishes is given in the following order:

Species name with Author.

Common Name:

Taxonomy: Original description: [type locality; primary types].

Middle Eastern synonyms:

Revision:

Illustrations:

Distribution: *General distribution:*

Distribution in the Middle East:

Distribution in ecoregions:

Habitat:

Economic importance:

Reasons of introduction: (for exotic species)

Conservation: (for native species).

Threats:

Status in each country if found: [Occurrence]. — Local name. — References. — Distribution in

River Basin: — Country material:

Remarks: (If needed).

Results

Within the scope of this study, the studies carried out in the Middle East countries until 1 January 2024 have been examined in detail. The list of species with proven accuracy is given below in systematic order (* endemic species in the Middle East, [I] exotic species for the Middle East).

Petromyzonti

Petromyzontiformes

Petromyzontidae Bonaparte 1831 (lampreys)

Caspiomyzon wagneri (Kessler 1870)

**Lampetra lanceolata* Kux & Steiner 1972

Petromyzon marinus Linnaeus 1758

Elasmobranchii

Carcharhiniformes

Carcharhinidae Jordan & Evermann 1896 (requiem sharks)

Carcharhinus leucas (Valenciennes 1839)

Actinopteri

Acipenseriformes

Acipenseridae Bonaparte 1831 (sturgeons)

Acipenser baerii Brandt 1869 [I]

Acipenser colchicus Marty 1940

Acipenser gueldenstaedtii Brandt & Ratzeburg 1833

Acipenser nudiventris Lovetsky 1828

Acipenser persicus Borodin 1897

Acipenser ruthenus Linnaeus 1758

Acipenser stellatus Pallas 1771

Acipenser sturio Linnaeus 1758

Huso huso (Linnaeus 1758)

Lepisosteiformes

Lepisosteidae Agassiz 1832 (gars)

Atractosteus spatula (Lacepède 1803) [I]

Elopiiformes**Megalopidae Jordan & Gilbert 1883 (tarpons)***Megalops cyprinoides* (Broussonet 1782)**Anguilliformes****Anguillidae Rafinesque 1810 (freshwater eels)***Anguilla anguilla* (Linnaeus 1758)*Anguilla bengalensis* (Gray 1831)*Anguilla bicolor* McClelland 1844**Clupeiformes****Clupeoidei****Clupeidae Cuvier 1816 (herrings and sprats)***Sprattus sprattus* (Linnaeus 1758)**Ehiravidae Deraniyagala 1929 (river sprats)***Clupeonella cultriventris* (Nordman 1840)*Clupeonella engrauliformis* (Borodin 1904)*Clupeonella grimmi* Kessler 1877**Clupeonella muhlisi* Neu 1934**Alosidae Cuvier Svetovidov 1952 (shads and sardines)***Alosa braschnikowi* (Borodin 1904)*Alosa caspia* (Eichwald 1838)*Alosa curensis* (Suvorov 1907)*Alosa fallax* (Lacepède 1803)*Alosa immaculata* Bennett 1835*Alosa kessleri* (Grimm 1887)*Alosa maeotica* (Grimm 1901)*Alosa saposchnikowii* (Grimm 1885)*Alosa sphaerocephala* (Berg 1913)*Alosa tanaica* (Grimm 1901)*Alosa volgensis* (Berg 1913)*Sardina pilchardus* (Walbaum 1792)**Dorosomatidae Gill 1861 (thread herrings or gizzard shads and sardinellas)***Sardinella aurita* Valenciennes 1847*Tenualosa ilisha* (Hamilton 1822)**Gonorynchiformes****Chanidae Günther 1868 (milkfishes)***Chanos chanos* (Fabricius 1775)**Cypriniformes****Cobitoidei****Cobitidae Swainson 1838 (spined loaches)****Cobitis afffeae* Freyhof, Bayçelebi & Geiger 2018**Cobitis aliyeae* Freyhof, Bayçelebi & Geiger 2018**Cobitis anabelae* Freyhof, Bayçelebi & Geiger 2018**Cobitis avicennae* Mousavi-Sabet, Vatandoust, Esmaeili, Geiger & Freyhof 2015**Cobitis battalgilae* Băcescu 1962**Cobitis bilseli* Battalgil 1942**Cobitis dorademiri* Erk'akan, Özdemir & Özeren 2017

- **Cobitis elazigensis* Coad & Sarieyyüpoğlu 1988
- **Cobitis emrei* Freyhof, Bayçelebi & Geiger 2018
- **Cobitis erkakanae* Freyhof, Bayçelebi & Geiger 2018
- **Cobitis evreni* Erk'akan, Özeren & Nalbant 2008
- **Cobitis fahireae* Erk'akan, Atalay-Ekmekçi & Nalbant 1998
- **Cobitis faridpaki* Mousavi-Sabet, Vasil'eva, Vatandoust & Vasil'ev 2011
- **Cobitis indus* Eagderi, Seçer & Freyhof 2022
- **Cobitis joergbohleni* Freyhof, Bayçelebi & Geiger 2018
- **Cobitis kellei* Erk'akan, Atalay-Ekmekçi & Nalbant 1998
- **Cobitis levantina* Krupp & Moubayed 1992
- **Cobitis linea* (Heckel 1847)
- **Cobitis phrygica* Battalgil 1944
- **Cobitis pirii* Freyhof, Bayçelebi & Geiger 2018
- Cobitis pontica* Vasil'eva & Vasil'ev 2006
- Cobitis puncticulata* Erk'akan, Atalay-Ekmekçi & Nalbant 1998
- Cobitis saniae* Eagderi, Jouladeh-Roudbar, Jalili, Sayyadzadeh & Esmaeili 2017
- Cobitis satunini* Gladkov 1935
- **Cobitis simplicispina* Hankó 1925
- **Cobitis sipahilerae* Erk'akan, Özdemir & Özeren 2017
- **Cobitis splendens* Erk'akan, Atalay-Ekmekçi & Nalbant 1998
- Cobitis strumicae* Karaman 1955
- Cobitis taenia* Linnaeus 1758
- **Cobitis troasensis* Freyhof, Bayçelebi & Geiger 2018
- **Cobitis turcica* Hankó 1925
- Sabanejewia aurata* (De Filippi 1863)
- Sabanejewia balcanica* (Karaman 1922)
- Sabanejewia caspia* (Eichwald 1838)

Nemacheilidae Regan 1911 (brook loaches)

- **Eidinemacheilus proudlovei* Freyhof, Abdullah, Ararat, Ibrahim & Geiger 2016
- **Eidinemacheilus smithi* (Greenwood 1976)
- **Nun galilaeus* (Günther 1864)
- **Oxynoemacheilus afrenatus* (Battalgil 1941)
- **Oxynoemacheilus amanos* Kaya, Yoğurtçuoğlu, & Freyhof 2021
- **Oxynoemacheilus anaticus* Erk'akan, Özeren & Nalbant 2008
- **Oxynoemacheilus angorae* (Steindachner 1897)
- **Oxynoemacheilus araxensis* (Bănărescu & Nalbant 1978)
- **Oxynoemacheilus argyrogramma* (Heckel 1847)
- **Oxynoemacheilus arsanius* Freyhof, Kaya, Turan & Geiger 2019
- **Oxynoemacheilus axylos* Yoğurtçuoğlu, Kaya & Freyhof 2022
- **Oxynoemacheilus banarescui* (Delmastro 1982)
- Oxynoemacheilus bergi* (Gratzianov 1907)
- Oxynoemacheilus bergianus* (Derjavin 1934)
- Oxynoemacheilus brandtii* (Kessler 1877)
- Oxynoemacheilus bureschi* (Drensky 1928)
- Oxynoemacheilus cemali* Turan, Kaya, Kalayci, Bayçelebi & Aksu 2019
- **Oxynoemacheilus ceyhanensis* (Erk'akan, Nalbant & Özeren 2007)
- **Oxynoemacheilus chomanicus* Kamangar, Prokofiev, Ghaderi & Nalbant 2014
- **Oxynoemacheilus ciceki* Sungur, Eagderi & Jalili 2017
- **Oxynoemacheilus cilicicus* Kaya, Turan, Bayçelebi, Kalaycı & Freyhof 2020
- **Oxynoemacheilus cyri* (Berg 1910)
- **Oxynoemacheilus eliasi* Yoğurtçuoğlu, Kaya & Freyhof 2022
- **Oxynoemacheilus elsae* Eagderi, Jalili & Çiçek 2018

- **Oxynoemacheilus ercisanus* (Erk'akan & Kuru 1986)
 **Oxynoemacheilus eregliensis* (Bănărescu & Nalbant 1978)
 **Oxynoemacheilus euphraticus* (Bănărescu & Nalbant 1964)
Oxynoemacheilus evreni (Erk'akan, Nalbant & Özeren 2007)
 **Oxynoemacheilus fatsaensis* Saygun, Ağdamar & Özuluğ 2021
 **Oxynoemacheilus frenatus* (Heckel 1843)
 **Oxynoemacheilus germencicus* (Erk'akan, Nalbant & Özeren 2007)
 **Oxynoemacheilus gyndes* Freyhof & Abdullah 2017
 **Oxynoemacheilus hamwii* (Krupp & Schneider 1991)
 **Oxynoemacheilus hanae* Freyhof & Abdullah 2017
 **Oxynoemacheilus hazarensis* Freyhof & Özuluğ 2017
 **Oxynoemacheilus insignis* (Heckel 1843)
 **Oxynoemacheilus isauricus* Yoğurtçuoğlu, Kaya, Özuluğ & Freyhof 2021
 **Oxynoemacheilus karunensis* Freyhof 2016
 **Oxynoemacheilus kaynaki* Erk'akan, Özeren & Nalbant 2008
 **Oxynoemacheilus kentritensis* Freyhof, Kaya & Turan 2017
 **Oxynoemacheilus kiabii* Golzarianpour, Abdoli & Freyhof 2011
 **Oxynoemacheilus kurdistanicus* Kamangar, Prokofiev, Ghaderi & Nalbant 2014
 **Oxynoemacheilus leontinae* (Lortet 1883)
 **Oxynoemacheilus longipinnis* (Coad & Nalbant 2005)
 **Oxynoemacheilus marmaraensis* Turan, Bayçelebi & Kalayci 2023
 **Oxynoemacheilus marunensis* Sayyadzadeh & Esmaili 2020
 **Oxynoemacheilus mediterraneus* (Erk'akan, Nalbant & Özeren 2007)
 **Oxynoemacheilus melenicus* Turan, Aksu, & Kalayci 2023
 **Oxynoemacheilus muefiti* Freyhof, Kaya, Turan & Geiger 2019
 **Oxynoemacheilus namiri* (Krupp & Schneider 1991)
 **Oxynoemacheilus nasreddini* Yoğurtçuoğlu, Kaya & Freyhof 2021
 **Oxynoemacheilus panthera* (Heckel 1843)
 **Oxynoemacheilus parvinae* Sayyadzadeh, Eagderi & Esmaili 2016
 **Oxynoemacheilus paucilepis* (Erk'akan, Nalbant & Özeren 2007)
 **Oxynoemacheilus persa* (Heckel 1847)
 **Oxynoemacheilus sakaryaensis* Turan, Aksu, & Kalayci 2023
 **Oxynoemacheilus samanticus* (Bănărescu & Nalbant 1978)
 **Oxynoemacheilus sarus* Freyhof, Yoğurtçuoğlu & Kaya 2021
 **Oxynoemacheilus seyhanensis* (Bănărescu 1968)
 **Oxynoemacheilus seyhanicola* (Erk'akan, Nalbant & Özeren 2007)
 **Oxynoemacheilus shehabi* Freyhof & Geiger 2021
 **Oxynoemacheilus simavicus* (Balik & Bănărescu 1978)
Oxynoemacheilus theophilii Stoumboudi, Kottelat & Barbieri 2006
 **Oxynoemacheilus tigris* (Heckel 1843)
 **Oxynoemacheilus tongiorgii* (Nalbant & Bianco 1998)
 **Oxynoemacheilus veyselorum* Çiçek, Eagderi & Sungur 2018
 **Oxynoemacheilus zagrosensis* Kamangar, Prokofiev, Ghaderi & Nalbant 2014
 **Oxynoemacheilus zarzianus* Freyhof & Geiger 2017
 **Paracobitis abrishamchiani* Mousavi-Sabet, Vatandoust, Geiger & Freyhof 2019
 **Paracobitis atrakensis* Esmaili, Mousavi-Sabet, Sayyadzadeh, Vatandoust & Freyhof 2014
 **Paracobitis basharensis* Freyhof, Esmaili, Sayyadzadeh & Geiger 2014
 **Paracobitis hircanica* Mousavi-Sabet, Sayyadzadeh, Esmaili, Eagderi, Patimar & Freyhof 2015
 **Paracobitis malapterura* (Valenciennes 1846)
 **Paracobitis molavii* Freyhof Esmaili, Sayyadzadeh & Geiger 2014
 **Paracobitis persa* Freyhof, Esmaili, Sayyadzadeh & Geiger 2014
 **Paracobitis rhadinaea* (Regan 1906)
 **Paracobitis salihae* Kaya, Turan, Kalayci, Bayçelebi & Freyhof 2020

- **Paracobitis zabgawraensis* Freyhof, Esmaili, Sayyadzadeh & Geiger 2014
 **Paraschistura abdolii* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015
Paraschistura alta (Nalbant & Bianco 1998)
 **Paraschistura aredvi* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015
Paraschistura bampurensis (Nikolskii 1900)
 **Paraschistura chrysicristinae* (Nalbant 1998)
 **Paraschistura cristata* (Berg 1898)
 **Paraschistura deloarii* Mousavi-Sabet & Eagderi 2015
 **Paraschistura hormuzensis* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015
 **Paraschistura ilamensis* Vatandoust & Eagderi 2015
 **Paraschistura kermanensis* Sayyadzadeh, Teimori & Esmaili 2019
Paraschistura kessleri (Günther 1889)
 **Paraschistura makranensis* Eagderi, Mousavi-Sabet & Freyhof 2019
 **Paraschistura naumanni* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015
 **Paraschistura nielsenii* (Nalbant & Bianco 1998)
 **Paraschistura susiani* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015
Paraschistura turcmenica (Berg 1932)
Paraschistura turcomana (Nikolskii 1947)
 **Sasanidus kermanshahensis* (Bănărescu & Nalbant 1966)
 **Seminemacheilus ahmeti* Sungur, Jalili, Eagderi & Çiçek 2018
 **Seminemacheilus attalicus* Yoğurtçuoğlu, Kaya, Geiger & Freyhof 2020
 **Seminemacheilus dursunavsari* Çiçek 2020
 **Seminemacheilus ekmekciae* Yoğurtçuoğlu, Kaya, Geiger & Freyhof 2020
 **Seminemacheilus ispartensis* Erk'akan, Nalbant & Özeren 2007
 **Seminemacheilus lendlii* (Hankó 1925)
 **Turcinoemacheilus ansari* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023
 **Turcinoemacheilus bahaii* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014
 **Turcinoemacheilus christofferi* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023
 **Turcinoemacheilus ekmekciae* Kaya, Yoğurtçuoğlu, Aksu, Bayçelebi & Turan 2023
 **Turcinoemacheilus hafezi* Golzarianpour, Abdoli, Patimar & Freyhof 2013
 **Turcinoemacheilus inexpectatus* Freyhof & Jouladeh-Roudbar 2024
 **Turcinoemacheilus kosswigi* Banărescu & Nalbant 1964
 **Turcinoemacheilus minimus* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014
 **Turcinoemacheilus moghbeli* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023
 **Turcinoemacheilus saadii* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014

Cyprinoidei

Cyprinidae Rafinesque 1815

Labeoninae Bleeker 1859 (labeonines)

Bangana dero (Hamilton 1822) [I]

- **Garra amirhosseini* Esmaili, Sayyadzadeh, Coad & Eagderi 2016
 **Garra barreimiae* Fowler & Steinitz 1956
 **Garra buettikeri* Krupp 1983
 **Garra caudomaculata* (Battalgil 1942)
 **Garra culiciphaga* (Pellegrin 1927)
 **Garra dunsirei* Banister 1987
 **Garra elegans* (Günther 1868)
 **Garra festai* (Tortonese 1939)
 **Garra gallagheri* Krupp 1988
 **Garra ghorensis* Krupp 1982
 **Garra gymnothorax* Berg 1949
 **Garra hormuzensis* Zamani-Faradonbe, Zhang & Keivany 2021
 **Garra jordanica* Hamidan, Geiger & Freyhof 2014

- **Garra kemali* (Hankó 1925)
- **Garra klatti* (Kosswig 1950)
- **Garra lautior* Banister 1987
- **Garra longipinnis* Banister & Clarke 1977
- **Garra lorestanensis* Mousavi-Sabet & Eagderi 2016
- **Garra mamshuqa* Krupp 1983
- **Garra meymehensis* Zamani-Faradonbe, Keivany, Dorafshan & Zhang 2021
- **Garra mondica* Sayyadzadeh, Esmaeili & Freyhof 2015
- **Garra nana* (Heckel 1843)
- **Garra nudiventris* (Berg 1905)
- **Garra orontesi* Bayçelebi, Kaya, Turan & Freyhof 2021
- **Garra persica* Berg 1914
- **Garra quadrimaculata* (Rüppell 1835)
- **Garra rezai* Mousavi-Sabet, Eagderi, Saemi-Komsari, Kaya & Freyhof 2022
- **Garra roseae* Mousavi-Sabet, Saemi-Komsari, Doadrio & Eagderi 2019
- **Garra rossica* (Nikolskii 1900)
- **Garra rufa* (Heckel 1843)
- **Garra sahilia* Krupp 1983
- **Garra sauvagei* (Lortet 1883)
- **Garra shamal* Kirchner, Kruckenhauser, Pichler, Borkenhagen & Freyhof 2020
- **Garra sharq* Kirchner, Kruckenhauser, Pichler, Borkenhagen & Freyhof 2020
- **Garra shoemakeri* (Ladiges 1964)
- **Garra tashanensis* Mousavi-Sabet, Vatandoust, Fatemi & Eagderi 2016
- **Garra tiam* Zamani-Faradonbe, Keivany, Dorafshan & Zhang 2021
- **Garra tibanica* Trewavas 1941
- **Garra turcica* Karaman 1971
- **Garra typhlops* (Bruun & Kaiser 1944)
- **Garra variabilis* (Heckel 1843)
- **Garra widdowsoni* (Trewavas 1955)

Torinae Karaman 1971 (large barbs)

- **Carasobarbus apoensis* (Banister & Clarke 1977)
- **Carasobarbus canis* (Valenciennes 1842)
- **Carasobarbus chantrei* (Sauvage 1882)
- **Carasobarbus exulatus* (Banister & Clarke 1977)
- **Carasobarbus kosswigi* (Ladiges 1960)
- **Carasobarbus luteus* (Heckel 1843)
- **Carasobarbus sublimus* (Coad & Najafpour 1997)

Cyprininae Rafinesque 1815 (carps)

- Carassius auratus* (Linnaeus 1758) [I]
- Carassius carassius* (Linnaeus 1758) [I]
- Carassius gibelio* (Bloch 1782) [I]
- Carassius langsdorfii* Temminck & Schlegel 1846 [I]
- **Cyprinion acinaces* (Banister & Clarke 1977)
- **Cyprinion kais* Heckel 1843
- **Cyprinion macrostomus* Heckel 1843
- **Cyprinion mhalense* Alkahem & Behnke 1983
- **Cyprinion microphthalmum* (Day 1880)
- **Cyprinion milesi* (Day 1880)
- **Cyprinion muscatense* (Boulenger 1888)
- **Cyprinion tenuiradius* Heckel 1847
- **Cyprinion watsoni* (Day 1872)

Cyprinus carpio Linnaeus 1758
Cyprinus rubrofasciatus Lacépède 1803 [I]

Barbinae Bleeker 1859 (barbels)

- **Arabibarbus arabicus* (Trewavas 1941)
- **Arabibarbus grypus* (Heckel 1843)
- **Arabibarbus hadhrami* Borkenhagen 2014
- **Barbus anatolicus* Turan, Kaya, Geiger & Freyhof 2018
- **Barbus bergi* Chichkoff 1935
- **Barbus cyclolepis* Heckel 1837
- **Barbus cyri* De Filippi 1865
- **Barbus ercisianus* Karaman 1971
- **Barbus escherichii* Steindachner 1897
- **Barbus ida* Güçlü, Kalayci, Özuluğ, Küçük & Turan 2021
- **Barbus karunensis* Khaefi, Esmaili, Geiger & Eagderi 2017
- **Barbus lacerta* Heckel 1843
- **Barbus miliaris* De Filippi 1863
- **Barbus niluferensis* Turan, Kottelat & Ekmekçi 2009
- **Barbus oligolepis* Battalgil 1941
- **Barbus pergamonensis* Karaman 1971
- **Barbus rionicus* Kamensky 1899
- **Barbus xanthos* Güçlü, Kalayci, Küçük & Turan 2020
- **Caecocypris basimi* Banister & Bunni 1980
- **Capoeta aculeata* (Valenciennes 1844)
- **Capoeta alborzensis* Jouladeh-Roudbar, Eagderi, Ghanavi & Doadrio 2016
- **Capoeta antalyensis* (Battalgil 1944)
- **Capoeta aydinensis* Turan, Küçük, Kaya, Güçlü & Bektaş 2017
- Capoeta banarescui* Turan, Kottelat, Ekmekçi & Imamoglu 2006
- **Capoeta bergamae* Karaman 1969
- **Capoeta birunii* Zareian & Esmaili 2017
- **Capoeta buhsei* Kessler 1877
- **Capoeta caelestis* Schöter, Özuluğ & Freyhof 2009
- Capoeta capoeta* (Güldenstädt 1773)
- **Capoeta coadi* Alwan, Zareian & Esmaili 2016
- **Capoeta damascina* (Valenciennes 1842)
- **Capoeta ferdowsii* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017
- **Capoeta fusca* Nikolskii 1897
- **Capoeta gracilis* (Keyserling 1861)
- **Capoeta heratensis* (Keyserling 1861)
- Capoeta kaput* Levin, Prokofiev & Roubenyan 2019
- **Capoeta macrolepis* (Heckel 1847)
- **Capoeta oguzelii* Elp, Osmanoglu, Kadak & Turan 2018
- **Capoeta pestai* (Pietschmann 1933)
- **Capoeta pyragyi* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017
- **Capoeta raghazensis* Eagderi & Mousavi-Sabet 2021
- **Capoeta razii* Jouladeh-Roudbar, Eagderi, Ghanavi & Doadrio 2017
- **Capoeta saadii* (Heckel 1847)
- **Capoeta shajariani* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017
- Capoeta sieboldii* (Steindachner 1864)
- **Capoeta tinca* (Heckel 1843)
- **Capoeta umbla* (Heckel 1843)
- Labeo rohita* (Hamilton 1822) [I]
- **Luciobarbus barbulus* Heckel 1847

- Luciobarbus brachycephalus* (Kessler 1872)
Luciobarbus capito (Güldenstädt 1773)
Luciobarbus caspius (Berg 1914)
 **Luciobarbus conocephalus* (Kessler 1872)
 **Luciobarbus esocinus* Heckel 1843
 **Luciobarbus kersin* (Heckel 1843)
 **Luciobarbus kottelati* Turan, Ekmekçi, İlhan & Engin 2008
 **Luciobarbus longiceps* (Valenciennes 1842)
 **Luciobarbus lorteti* (Sauvage 1882)
 **Luciobarbus lydianus* (Boulenger 1896)
Luciobarbus mursa (Güldenstädt 1773)
 **Luciobarbus pectoralis* (Heckel 1843)
 **Luciobarbus subquincunciatus* (Günther 1868)
 **Luciobarbus xanthopterus* Heckel 1843
 **Mesopotamichthys sharpeyi* (Günther 1874)
 **Paracapoeta anamisensis* Zareian, Esmaeili & Freyhof 2016
 **Paracapoeta barroisi* (Lortet 1894)
 **Paracapoeta erhani* (Turan, Kottelat & Ekmekçi 2008)
 **Paracapoeta mandica* (Bianco & Bănărescu 1982)
 **Paracapoeta trutta* (Heckel 1843)
 **Schizocypris altidorsalis* Bianco & Bănărescu 1982

Schizopygopsinae (mountain barbels)

- **Schizopygopsis stolickai* Steindachner 1866
 **Schizothorax intermedius* McClelland & Griffith 1842
 **Schizothorax pelzami* Kessler 1870
 **Schizothorax zarudnyi* (Nikolskii 1897)
 **Tariqilabeo adiscus* (Annandale 1919)
 **Tariqilabeo diplochilus* (Heckel 1838)

Danionidae Bleeker 1863 (danionids)

Chedrinae Bleeker 1863 (troutbarbs)

- **Barilius mesopotamicus* Berg 1932
 **Cabdio occidentalis* Jouladeh-Roudbar, Mliana, Vatandoust, Ghanavi & Freyhof 2023

Xenocyprididae Günther 1868 (East Asian minnows or sharpbellies)

- Ctenopharyngodon idella* (Valenciennes 1844) [I]
Hemiculter leucisculus (Basilewsky 1855) [I]
Hypophthalmichthys molitrix (Valenciennes 1844) [I]
Hypophthalmichthys nobilis (Richardson 1845) [I]
Mylopharyngodon piceus (Richardson 1846) [I]

Tincidae Jordan 1878 (tenches)

- Tinca tinca* (Linnaeus 1758)

Acheilognathidae Bleeker 1863 (bitterlings)

- Rhodeus amarus* (Bloch 1782)
 **Rhodeus caspius* Esmaeili, Sayyadzadeh, Japoshvili, Eagderi, Abbasi & Mousavi-Sabet 2020

Gobionidae Bleeker 1863 (freshwater gudgeons)

- Gobio artvinicus* Turan, Japoshvili, Aksu & Bektaş 2016
 **Gobio baliki* Turan, Kaya, Bayçelebi, Aksu & Bektaş 2017
Gobio bulgaricus Drensky 1926

- **Gobio fahrettini* Turan, Kaya, Bayçelebi, Aksu & Bektaş 2018
- **Gobio gymnostethus* Ladiges 1960
- **Gobio hettitorum* Ladiges 1960
- **Gobio insuayanus* Ladiges 1960
- **Gobio intermedius* Battalgil 1944
- **Gobio kizilirmakensis* Turan, Japoshvili, Aksu & Bektaş 2016
- Gobio kovatschevi* Chichkoff 1937
- **Gobio maeandricus* Naseka, Erk'akan & Küçük 2006
- **Gobio microlepidotus* Battalgil 1942
- Gobio nigrescens* (Keyserling 1861)
- **Gobio sakaryaensis* Turan, Ekmekçi, Luskova & Mendel 2012
- Pseudorasbora parva* (Temminck & Schlegel 1846) [I]
- Romanogobio macropterus* (Kamensky 1901)
- **Romanogobio persus* (Günther 1899)

Leuciscidae Bonaparte 1835 (minnows)

Leuciscinae Bonaparte 1835 (leuciscines)

- Abramis brama* (Linnaeus 1758)
- **Acanthobrama centisquama* Heckel 1843
- **Acanthobrama hadiyahensis* Coad Alkahem & Behnke 1983
- **Acanthobrama lissneri* Tortonese 1952
- **Acanthobrama marmid* Heckel 1843
- Acanthobrama microlepis* (De Filippi 1863)
- **Acanthobrama orontis* Berg 1949
- **Acanthobrama persidis* (Coad 1981)
- **Acanthobrama telavivensis* Goren Fishelson & Trewavas 1973
- **Acanthobrama thisbeae* Freyhof & Özuluğ 2014
- **Acanthobrama tricolor* (Lortet 1883)
- **Acanthobrama urmianus* (Günther 1899)
- **Alburnoides coskuncelepii* Turan, Kaya, Aksu, Bayçelebi & Bektaş 2019
- **Alburnoides damghani* Jouladeh-Roudbar, Eagderi, Esmaeili, Coad & Bogutskaya 2016
- **Alburnoides diclensis* Turan, Bektaş, Kaya & Bayçelebi 2016
- Alburnoides eichwaldii* (De Filippi 1863)
- **Alburnoides emineae* Turan, Kaya, Ekmekçi & Doğan 2014
- Alburnoides fasciatus* (Nordmann 1840)
- **Alburnoides freyhofi* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017
- **Alburnoides holciki* Coad & Bogutskaya 2012
- Alburnoides idignensis* Bogutskaya & Coad 2009
- **Alburnoides kosswigi* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017
- **Alburnoides kurui* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017
- **Alburnoides manyasensis* Turan, Ekmekçi, Kaya & Güçlü 2013
- **Alburnoides namaki* Bogutskaya & Coad 2009
- **Alburnoides nicolausi* Bogutskaya & Coad 2009
- **Alburnoides petrubanarescui* Bogutskaya & Coad 2009
- **Alburnoides qanati* Coad & Bogutskaya 2009
- Alburnoides samiii* Mousavi-Sabet, Vatandoust & Doadrio 2015
- **Alburnoides smyrnae* Pellegrin 1927
- **Alburnoides tabarestanensis* Mousavi-Sabet, Anvarifar & Azizi 2015
- **Alburnoides turani* Kaya 2020
- Alburnoides tzanevi* Chichkoff 1933
- **Alburnoides velioglui* Turan, Kaya, Ekmekçi & Doğan 2014
- **Alburnus adanensis* Battalgazi [Battalgil] 1944
- **Alburnus akili* Battalgil 1942

- Alburnus alburnus* (Linnaeus 1758)
 **Alburnus atropatena* Berg 1925
 **Alburnus attalus* Özuluğ & Freyhof 2007
 **Alburnus baliki* Bogutskaya, Küçük & Ünlü 2000
 **Alburnus caeruleus* Heckel 1843
 **Alburnus carianorum* Freyhof, Kaya, Bayçelebi, Geiger & Turan 2019
 **Alburnus carinatus* Battalgil 1941
Alburnus chalcoides (Güldenstadt 1772)
 **Alburnus demiri* Özuluğ & Freyhof 2008
 **Alburnus derjugini* Berg 1923
 **Alburnus doriae* De Filippi 1865
 **Alburnus escherichii* Steindachner 1897
Alburnus filippii Kessler 1877
 **Alburnus goekhani* Özuluğ, Geiger & Freyhof 2018
Alburnus hohenackeri Kessler 1877
 **Alburnus istanbulensis* Battalgil 1941
 **Alburnus kotschy* Steindachner 1863
 **Alburnus kurui* (Bogutskaya 1995)
 **Alburnus magnificus* Freyhof & Turan 2019
 **Alburnus nicaeensis* Battalgil 1941
 **Alburnus orontis* Sauvage 1882
 **Alburnus qalilus* Krupp 1992
Alburnus schischkovi (Drensky 1943)
 **Alburnus sellal* Heckel 1843
 **Alburnus taeniatus* Kessler 1874
 **Alburnus tarichi* (Güldenstadt 1814)
 **Alburnus timarensis* Kuru 1980
Ballerus sapa (Pallas 1814)
Blicca bjoerkna (Linnaeus 1758)
 **Chondrostoma angorense* Elvira 1987
 **Chondrostoma beysehirense* Bogutskaya 1997
 **Chondrostoma ceyhanense* Küçük, Turan, Güçlü, Mutlu & Çiftçi 2017
Chondrostoma colchicum Derjugin 1899
Chondrostoma cyri Kessler 1877
 **Chondrostoma esmaeilii* Eagderi, Jouladeh-Roudbar, Birecikligil, Çiçek & Coad 2017
 **Chondrostoma holmwoodii* (Boulenger 1896)
 **Chondrostoma kinzelbachi* Krupp 1985
 **Chondrostoma meandrense* Elvira 1987
Chondrostoma nasus (Linnaeus 1758)
 **Chondrostoma orientale* Bianco & Bănărescu 1982
 **Chondrostoma regium* (Heckel 1843)
 **Chondrostoma smyrnae* Küçük, Çiftçi, Güçlü & Turan 2021
 **Chondrostoma toros* Küçük, Turan, Güçlü, Mutlu & Çiftçi 2017
 **Chondrostoma turnai* Güçlü, Çiftçi, Küçük, Turan & Mutlu 2018
 **Egirdira nigra* (Kosswig & Geldiay 1952)
 **Ladigesocypris mermere* (Ladiges 1960)
Leucalburnus satunini (Berg 1910)
Leucaspis delineatus (Heckel 1843)
Leuciscus aspius (Linnaeus 1758)
Leuciscus vorax (Heckel 1843)
 **Mirogrex hulensis* Goren Fishelson & Trewavas 1973
 **Mirogrex terraesanctae* (Steinitz 1952)
Pelecus cultratus (Linnaeus 1758)

- Petroleuciscus borysthenicus* (Kessler 1859)
 **Petroleuciscus ninae* Turan, Kalayci, Kaya, Bektaş & Küçük 2018
Petroleuciscus smyrnaeus (Boulenger 1896)
 **Petroleuciscus ulanus* (Günther 1899)
Pimephales promelas Rafinesque 1820 [I]
 **Pseudophoxinus alii* Küçük 2007
 **Pseudophoxinus anatolicus* (Hankó 1925)
 **Pseudophoxinus antalyae* Bogutskaya 1992
 **Pseudophoxinus battalgilae* Bogutskaya 1997
 **Pseudophoxinus burduricus* Küçük, Gülle, Güçlü, Çiftçi & Doğan 2013
 **Pseudophoxinus caralis* (Battalgil 1942)
 **Pseudophoxinus cilicicus* Saç, Özuluğ, Geiger & Freyhof 2019
 **Pseudophoxinus crassus* (Ladiges 1960)
 **Pseudophoxinus drusensis* (Pellegrin 1933)
 **Pseudophoxinus elizavetae* Bogutskaya, Küçük & Atalay 2006
 **Pseudophoxinus evliya* Freyhof & Özuluğ 2010
 **Pseudophoxinus fahrettini* Freyhof & Özuluğ 2010
 **Pseudophoxinus firati* Bogutskaya, Küçük & Atalay 2006
 **Pseudophoxinus handlirschi* (Pietschmann 1933)
 **Pseudophoxinus hasani* Krupp 1992
 **Pseudophoxinus hittitorum* Freyhof & Özuluğ 2010
 **Pseudophoxinus iconii* Küçük, Gülle & Güçlü 2016
 **Pseudophoxinus kervillei* (Pellegrin 1911)
 **Pseudophoxinus libani* (Lortet 1883)
 **Pseudophoxinus maeandri* (Ladiges 1960)
 **Pseudophoxinus maeandricus* (Ladiges 1960)
 **Pseudophoxinus mehmeti* Ekmekçi, Atalay, Yogurtçuoğlu, Turan & Küçük 2015
 **Pseudophoxinus ninae* Freyhof & Özuluğ 2006
 **Pseudophoxinus syriacus* (Lortet 1883)
 **Pseudophoxinus turani* Küçük & Güçlü 2014
 **Pseudophoxinus zekayi* Bogutskaya, Küçük & Atalay 2006
 **Pseudophoxinus zeregi* (Heckel 1843)
Rutilus frisii (Nordmann 1840)
Rutilus lacustris (Pallas 1814)
Rutilus rutilus (Linnaeus 1758)
 **Scardinius elmaliensis* Bogutskaya 1997
Scardinius erythrophthalmus (Linnaeus 1758)
 **Squalius adanaensis* Turan, Kottelat & Doğan 2013
 **Squalius agdamicus* Kamensky 1901
 **Squalius anatolicus* (Bogutskaya 1997)
 **Squalius aristotelis* Özuluğ & Freyhof 2011
 **Squalius berak* Heckel 1843
 **Squalius cappadocicus* Özuluğ & Freyhof 2011
 **Squalius carinus* Özuluğ & Freyhof 2011
 **Squalius cephalus* (Linnaeus 1758)
Squalius cii (Richardson 1857)
 **Squalius fellowesii* (Günther 1868)
 **Squalius irideus* (Ladiges 1960)
 **Squalius kosswigi* (Karaman 1972)
 **Squalius kottelati* Turan, Yilmaz & Kaya 2009
Squalius latus Keyserling 1861
 **Squalius lepidus* Heckel 1843
 **Squalius namak* Khaefi, Esmaili, Sayyadzadeh, Geiger & Freyhof 2016

Squalius orientalis (Nordmann 1840)
Squalius orpheus Kottelat & Economidis 2006
 **Squalius pursakensis* (Hankó 1925)
 **Squalius recurvirostris* Özuluğ & Freyhof 2011
 **Squalius semae* Turan, Kottelat & Bayçelebi 2017
 **Squalius seyhanensis* Turan, Kottelat & Doğan 2013
 **Squalius spurius* Heckel 1843
Squalius turcicus De Filippi 1865
Squalius verepi Turan 2022
 **Turcichondrostoma fahirae* (Ladiges 1960)
Vimba melanops (Heckel 1837)
 **Vimba mirabilis* (Ladiges 1960)
 **Vimba persa* (Pallas 1814)
Vimba vimba (Linnaeus 1758)

Phoxininae Bleeker 1863 (phoxinines)

**Phoxinus abanticus* Turan, Bayçelebi, Özuluğ, Gaygusuz & Aksu 2023
Phoxinus colchicus Berg 1910
Phoxinus strandjae Drensky 1926

Characiformes

Characoidei

Serrasalminae Bleeker 1859 (piranhas and allies)

Piaractus brachypomus (Cuvier 1818) [I]
Serrasalmus maculatus Kner 1858 [I]

Siluriformes

Loricarioidei

Loricariidae Rafinesque 1815 (suckermouth armored catfishes)

Hypostominae Kner 1853 (suckermouth catfishes)

Hypostomus plecostomus (Linnaeus 1758) [I]
Pterygoplichthys disjunctivus (Weber 1991) [I]
Pterygoplichthys joselimaianus (Weber 1991) [I]
Pterygoplichthys pardalis (Castelnau 1855) [I]

Pangasiidae Bleeker 1858 (pangasid catfishes)

Pangasianodon hypophthalmus (Sauvage 1878) [I]
Pangasius sanitwongsei Smith 1831 [I]

Siluroidei

Bagridae Bleeker 1858 (bagrid catfishes)

**Mystus cyrusi* Esmaeili, Sayyadzadeh, Zarei, Eagderi & Mousavi-Sabet 2022
 **Mystus misrai* Anuradha 1986
 **Mystus pelusius* (Solander 1794)

Sisoridae Bleeker 1858 (sisorid catfishes)

Glyptosterninae Gill 1861 (Asian sucker catfishes)

**Glyptothorax armeniacus* (Linnaeus 1766)
 **Glyptothorax cous* (Linnaeus 1766)
 **Glyptothorax daemon* Freyhof, Kaya, Abdullah & Geiger 2021
 **Glyptothorax kurdistanicus* (Berg 1931)
 **Glyptothorax pallens* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021
 **Glyptothorax sardashtensis* Jokar, Kamangar, Ghaderi & Freyhof 2023

- **Glyptothorax silviae* Coad 1981
- **Glyptothorax steindachneri* (Pietschmann 1913)
- **Glyptothorax vatandousti* Jouladeh-Roudbar, Ghanavi & Freyhof 2023

Siluridae Rafinesque 1815 (sheatfishes)

- Silurus glanis* Linnaeus 1758
- Silurus triostegus* Heckel 1843

Clariidae Bonaparte 1845 (airbreathing or labyrinth catfishes)

- Clarias batrachus* (Linnaeus 1758) [I]
- Clarias gariepinus* (Burchell 1822)

Heteropneustidae Hora 1936 (airsac catfishes)

- Heteropneustes fossilis* (Bloch 1794) [I]

Esociformes

Esocidae Rafinesque 1815 (pikes)

- Esox lucius* Linnaeus 1758

Salmoniformes

Salmonidae Jarocki/Schinz 1822 (salmonids)

Coregoninae Bonaparte 1845 (whitefishes)

- Coregonus albula* (Linnaeus 1758) [I]
- Coregonus lavaretus* (Linnaeus 1758) [I]

Salmoninae Jarocki/Schinz 1822 (salmons, trouts, chars, and allies)

- Oncorhynchus keta* (Walbaum 1792) [I]
- Oncorhynchus kisutch* (Walbaum 1792) [I]
- Oncorhynchus mykiss* (Walbaum 1792) [I]
- **Salmo abanticus* Tortonese 1954
- **Salmo araxensis* Turan, Kottelat & Kaya 2022
- **Salmo ardahanensis* Turan, Kottelat & Kaya 2022
- **Salmo baliki* Turan, Aksu, Oral, Kaya & Bayçelebi 2021
- Salmo caspius* Kessler 1877
- **Salmo chilo* Turan, Kottelat & Engin 2012
- Salmo ciscaucasicus* Dorofeeva 1967
- **Salmo coruhensis* Turan, Kottelat & Engin 2010
- **Salmo duhani* Turan & Aksu 2021
- **Salmo euphrataeus* Turan, Kottelat & Engin 2014
- **Salmo fahrettini* Turan, Kalayci, Bektaş, Kaya & Bayçelebi 2020
- **Salmo kottelati* Turan, Doğan, Kaya & Kanyılmaz 2014
- **Salmo labecula* Turan, Kottelat & Engin 2012
- Salmo labrax* Pallas 1814
- **Salmo munzuricus* Turan, Kottelat & Kaya 2017
- **Salmo murathani* Turan, Kottelat & Kaya 2022
- **Salmo okumusi* Turan, Kottelat & Engin 2014
- **Salmo opimus* Turan, Kottelat & Engin 2012
- Salmo pelagonicus* Karaman 1938
- **Salmo platycephalus* Behnke 1968
- Salmo rizeensis* Turan, Kottelat & Engin 2010
- **Salmo tigridis* Turan, Kottelat & Bektaş 2011
- Salmo trutta* Linnaeus 1758
- Salvelinus fontinalis* Mitchill 1814 [I]

Stenodus leucichthys (Güldenstädt 1772)

Gadiformes

Gadidae Rafinesque 1810 (cods and haddocks)

Lota lota (Linnaeus 1758)

Syngnathiformes

Syngnathoidei

Syngnathidae Bonaparte 1831 (pipefishes and seahorses)

Hippichthys penicillus (Cantor 1849)

Nerophis ophidion (Linnaeus 1758)

Syngnathus abaster Risso 1827

Syngnathus caspius Eichwald 1831

Gobiiformes

Eleotridae Bonaparte 1835 (sleepers)

Butinae Bleeker 1874 (gudgeons)

Ophiocara porocephala Valenciennes 1837

Eleotrinae Bonaparte 1835 (spinycheek sleepers or bullies)

Eleotris acanthompus (Bleeker 1853)

Gobiidae Cuvier 1816 (gobies)

Gobiinae Cuvier 1816 (gobies)

Anatirostrum profundorum (Berg 1927)

Babka gymnotrachelus (Kessler 1857)

Benthophilus baeri Kessler 1877

Benthophilus ctenolepidus Kessler 1877

Benthophilus granulatus Kessler 1877

Benthophilus leobergius Berg 1949

Benthophilus macrocephalus (Pallas 1787)

Benthophilus persicus Kovačić, Esmaeili, Zarei, Abbasi & Schliewen 2021

Benthophilus pinchuki Ragimov 1982

Cryptocentroides arabicus (Gmelin 1789)

Favonigobius melanobranchus Fowler 1934

Favonigobius reichei (Bleeker 1854)

Glossogobius giuris (Hamilton 1822)

Glossogobius tenuiformis Fowler 1934

Gobius paganellus Linnaeus 1758

Mesogobius batrachocephalus (Pallas 1814)

Mesogobius nonultimus (Iljin 1936)

Neogobius bathybius (Kessler 1877)

Neogobius caspius (Eichwald 1831)

Neogobius fluviatilis (Pallas 1814)

Neogobius melanostomus (Pallas 1814)

Neogobius pallasii (Berg 1916)

Pomatoschistus anatoliae Engin & Innal 2017

Ponticola constructor (Nordmann 1840)

Ponticola cyrius (Kessler 1874)

Ponticola eurycephalus (Kessler 1874)

Ponticola goebelii (Kessler 1874)

Ponticola gorlap (Iljin 1949)

**Ponticola hircaniaensis* Zarei, Esmaeili, Kovacic, Schliewen & Abbasi 2022

- **Ponticola iranicus* Vasil'eva, Mousavi-Sabet & Vasil'ev 2015
 **Ponticola patimari* Eagderi, Nikmehr & Poorbagher 2020
Ponticola ratan (Nordmann 1840)
 **Ponticola rizensis* (Kovacic & Engin 2008)
Ponticola syrman (Nordmann 1840)
 **Ponticola turani* (Kovacic & Engin 2008)
Proterorhinus nasalis (De Filippi 1863)
Proterorhinus semilunaris (Heckel 1837)

Gobionellinae Bleeker 1874 (oxudercids)

- Awaous jayakari* (Boulenger 1888)
 **Hyracanogobius bergi* Iljin 1928
 **Knipowitschia byblisia* Ahnelt 2011
Knipowitschia caucasica (Berg 1916)
 **Knipowitschia caunosi* Ahnelt 2011
Knipowitschia iljini Berg 1931
Knipowitschia longicaudata (Kessler 1877)
 **Knipowitschia mermere* Ahnelt 1995
 **Knipowitschia ricasolii* (Di Caporiacco 1935)
Oxyurichthys omanensis Zarei, Al Jufaili & Esmaili 2022
Rhinogobius cheni (Nichols 1931) [I]
Rhinogobius lindbergi Berg 1933 [I]
Rhinogobius sp. [I]

Oxudercinae Günther 1861 (mudskippers and allies)

- Boleophthalmus dussumieri* Valenciennes 1837
Periophthalmus waltoni Koumans 1941
Scartelaos tenuis (Day 1876)

Synbranchiformes

Mastacembeloidei

Mastacembelidae Swainson 1839 (freshwater spiny-eels)

- **Mastacembelus mastacembelus* (Banks & Solander in Russell 1794)

Carangiformes

Pleuronectoidei

Pleuronectidae Rafinesque 1815 (righteye flounders)

Pleuronectinae Rafinesque 1815 (true flounders)

- Platichthys flesus* (Linnaeus 1758)

Anabantiformes

Channoidei

Channidae Fowler 1934 (1831) (snakeheads)

- Channa gachua* (Hamilton 1822)
Channa micropeltes (Cuvier 1831) [I]

Cichliformes

Ambassidae Klunzinger 1870 (Asiatic glassfishes)

- Ambassis gymnocephalus* (Lacepède 1802)

Cichlidae Bonaparte 1835 (cichlids)

- Amatitlania nigrofasciata* (Günther 1867) [I]
Astatotilapia flavijosephi (Lortet 1883)

Astronotus ocellatus (Agassiz 1831) [I]
Aulonocara sp. [I]
Cichla kelberi Kullander & Ferreira 2006 [I]
Coptodon rendalli (Boulenger 1897) [I]
Coptodon zillii (Gervais 1848)
Dimidiochromis compressiceps (Boulenger 1908) [I]
**Iranocichla hormuzensis* Coad 1982
**Iranocichla persa* Esmaeili, Sayyadzadeh & Seehausen 2016
**Iranocichla* sp.
Labidochromis caeruleus Fryer 1956 [I]
Oreochromis aureus (Steindachner 1864)
Oreochromis mossambicus (Peters 1852) [I]
Oreochromis niloticus (Linnaeus 1758) [I]
Pseudotropheus sp. [I]
Sarotherodon galilaeus (Linnaeus 1758)
**Tristramella magdalenae* (Lortet 1883)
**Tristramella sacra* (Günther 1865)
**Tristramella simonis* (Günther 1864)

Atheriniformes

Atherinidae Risso 1827 (old world silversides)

Atherininae Risso 1827 (silversides)

Atherina boyeri Risso 1810
Atherina caspia Eichwald 1831

Cyprinodontiformes

Cyprinodontoidei

Poeciliidae Bonaparte 1831 (poeciliids)

Poeciliinae Bonaparte 1831 (livebearers)

Gambusia holbrooki Girard 1859 [I]
Poecilia latipinna (Lesueur 1821) [I]
Poecilia reticulata Peters 1859 [I]
Poecilia sphenops Valenciennes 1846 [I]
Poecilia velifera (Regan 1914) [I]
Xiphophorus hellerii Heckel 1848 [I]
Xiphophorus maculatus (Günther 1866) [I]

Aphaniidae Hoedeman 1949 (Oriental killifishes)

**Anatolichthys anatoliae* (Leidenfrost 1912)
**Anatolichthys chantrei* (Gaillard 1895)
**Anatolichthys danfordii* (Boulenger 1890)
**Anatolichthys fontinalis* (Akşiray 1948)
**Anatolichthys iconii* (Akşiray 1948)
**Anatolichthys irregularis* (Yogurtcuoglu & Freyhof 2018)
**Anatolichthys maeandricus* (Akşiray 1948) Maeander
**Anatolichthys marassantensis* (Pfleiderer, Geiger & Herder 2014)
**Anatolichthys meridionalis* (Akşiray 1948)
**Anatolichthys saldae* (Akşiray 1955)
**Anatolichthys splendens* Kosswig & Sözer 1945
**Anatolichthys sureyanus* (Neu 1937)
**Anatolichthys transgrediens* (Ermin 1946)
**Anatolichthys villwocki* (Hrbek & Wildekamp 2003)
Aphaniops dispar (Rüppell 1829)

- **Aphaniops furcatus* (Teimori, Esmaeili, Erpenbeck & Reichenbacher 2014)
- **Aphaniops ginaonis* (Holly 1929)
- **Aphaniops hormuzensis* (Teimori, Esmaeili, Hamidan & Reichenbacher 2018)
- **Aphaniops kruppi* Freyhof, Weissenbacher & Geiger 2017
- **Aphaniops richardsoni* Boulenger 1907
- **Aphaniops sirhani* (Villwock, Scholl & Krupp 1983)
- **Aphaniops stoliczkanus* (Day 1872)
- Aphanius almiriensis* Kottelat, Barbieri & Stoumboudi 2007
- Aphanius fasciatus* (Valenciennes 1821)
- **Esmaeilius arakensis* (Teimori, Esmaeili, Gholami, Zarei & Reichenbacher 2012)
- **Esmaeilius darabensis* (Esmaeili, Teimori, Gholami & Reichenbacher 2014)
- **Esmaeilius isfahanensis* (Hrbek, Keivany & Coad 2006)
- **Esmaeilius kavirensis* (Esmaeili, Teimori, Gholami & Reichenbacher 2014)
- **Esmaeilius mesopotamicus* (Coad 2009)
- **Esmaeilius persicus* (Jenkins 1910)
- **Esmaeilius pluristriatus* (Jenkins 1910)
- **Esmaeilius shirini* (Gholami, Esmaeili, Erpenbeck & Reichenbacher 2014)
- **Esmaeilius sophiae* (Heckel 1847)
- **Esmaeilius vladykovi* (Coad 1988)
- **Kosswigichthys asquamatus* Sözer 1942
- **Paraphanius alexandri* (Akşiray 1948)
- **Paraphanius boulengeri* (Akşiray 1948)
- Paraphanius mento* (Heckel 1843)
- **Paraphanius mentoides* (Akşiray 1948)
- **Paraphanius orontis* (Akşiray 1948)
- **Paraphanius similis* (Akşiray 1948)
- **Paraphanius striptus* (Goren 1974)

Mugiliformes

Mugilidae Jarocki 1822 (mulletts)

- Chelon auratus* (Risso 1810)
- Chelon labrosus* (Risso 1827)
- Chelon ramada* (Risso 1827)
- Chelon saliens* (Risso 1810)
- Ellochelon vaigiensis* (Quoy & Gaimard 1825)
- Mugil cephalus* Linnaeus 1758
- Oedalechilus labeo* (Cuvier 1829)
- Planiliza abu* (Heckel 1843)
- Planiliza carinata* (Valenciennes 1836)
- Planiliza klunzingeri* (Day 1888)
- Planiliza macrolepis* (Smith 1846)
- Planiliza subviridis* (Valenciennes 1836)

Blenniiformes

Blenniidae Rafinesque 1810 (combtooth blennies)

Salariinae Gill 1859 (saliin blennies)

- Salaria pavo* (Risso 1810)
- Salariopsis burcucae* Yoğurtçuoğlu, Kaya, Atalay, Ekmekçi, & Freyhof 2023
- Salariopsis fluviatilis* (Asso y del Rio 1801)
- **Salariopsis renatorum* Yoğurtçuoğlu, Kaya, Atalay, Ekmekçi, & Freyhof 2023

Perciformes**Percoidei****Percidae Rafinesque 1815 (perches and darters)****Percinae Rafinesque 1815 (freshwater perches)***Gymnocephalus cernua* (Linnaeus 1758) [I]*Perca fluviatilis* Linnaeus 1758**Luciopercinae Jordan & Evermann 1896 (pikeperches and Danube perches)***Sander lucioperca* (Linnaeus 1758)*Sander marinus* (Cuvier 1828)**Gasterosteidae Bonaparte 1831 (sticklebacks)***Gasterosteus aculeatus* Linnaeus 1758*Pungitius platygaster* (Kessler 1859)**Centrarchiformes****Centrarchidae Bleeker 1859 (sunfishes and freshwater basses)****Lepominae Gill 1864***Lepomis gibbosus* (Linnaeus 1758) [I]**Acanthuriformes****Moronidae Jordan & Evermann 1896 (white basses or temperate basses)***Dicentrarchus labrax* (Linnaeus 1758)**Acanthuriformes****Sparidae Rafinesque 1818 (porgys and seabreams)***Acanthopagrus arabicus* Iwatsuki 2013

The confirmed ichthyofauna of Middle East comprise 727 species belonging to 28 orders, 50 families, and 157 genera. Information such as distribution, habitat, IUCN categories, etc. for each species are given below, considering the systematic ranking.

Petromyzonti**Petromyzontiformes****Petromyzontidae Bonaparte 1831 (lampreys)***Caspiomyzon wagneri* (Kessler 1870)**Common name:** Caspian lamprey

Taxonomy: Original description: *Petromyzon wagneri* Kessler 1870: 207, pl. 3 (figs. 4-5) [Volga River between Tver (Tvertsa) and Astrakhan, Russia, 46°21'N, 48°03'E; syntypes: (10) NMW 61053 (1), SMNS 2398 (1), ZIN 2407 (2)].

Middle Eastern synonyms: *Agnathomyzon (Haploglossa) caspicus* Gratzianov 1907.

Revisions: Berg (1948: 28).

Illustrations: Berg (1948: 29, figs. 10-12).

Distribution. General distribution: Eurasia: Caspian Sea basin (Kazakhstan, Russia, Azerbaijan, Iran, and Turkmenistan).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine, 631-Amu Darya.

Habitat: Adults live in sea and spawn in reaches of rivers and streams with strong current.

Ammocoetes live in detritus-rich sands or clay sediments. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: NT (IUCN, 2023).

Threats: CLI, CON, FIB, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iran: [Native]. — Marmahi-ye dehangerd, Dahangerd-e daryaye Khazar. — Listed in previous checklists by Esmaili et al. (2010a, 2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran materials: ZM-CBSU.

***Lampetra lanceolata* Kux & Steiner 1972**

Common name: Turkish brook lamprey

Taxonomy: Original description: *Lampetra lanceolata* Kux & Steiner 1972: 377, figs. 1-3, 6, 10 [Upstream of Iyidere River, Trabzon, Türkiye; holotype: MMB 2077/2].

Middle Eastern synonyms: None.

Revisions: Yamazaki and Goto (2000: 8).

Illustration: Kux and Steiner (1972: 377, figs. 1-3, 6, 10).

Distribution. General distribution: Türkiye: Eastern Black Sea coasts of Anatolian watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species occurs in piedmont zones in clear, well-oxygenated brooks. Ammocoetes live in detritus-rich sands or clay sediments. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Türk dokuz gözlüsü. — Recorded from Türkiye in the original description by Kux and Steiner (1972); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Eudontomyzon lanceolata*; Fricke et al. (2007) as *Eudontomyzon lanceolata*; Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 22-Doğu Karadeniz. — Türkiye material: MMB.

***Petromyzon marinus* Linnaeus 1758**

Common name: Sea lamprey

Taxonomy: Original description: *Petromyzon marinus* Linnaeus 1758: 230 [Basel, Switzerland (original "in Mari Europæo", European seas; lectotype selected by Kottelat (1997: 29) as the specimen illustrated by Gesner (1604: 590) (specimen not preserved) which results in fixing the type locality].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 26).

Illustration: Kottelat and Freyhof (2007: 44, fig.).

Distribution. General distribution: North-western Atlantic: northern Gulf of Mexico northward; North Atlantic: Greenland, Iceland; Baltic Sea; Mediterranean Sea; Black Sea [now extinct]; north-eastern Atlantic: White Sea and northern Norway south to northern Morocco.

Distribution in the Middle East: Türkiye and Syria.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 436-Coastal Levant, 437-Orontes.

Habitat: This species is anadromous. Adult fish migrate from the ocean or lake to spawning streams. Landlocked populations in lakes may migrate up to about 50 miles upstream for spawning. Anadromous populations with access to the ocean migrate up to a couple hundred miles. Females deposit numerous small eggs in nests made by males in the gravel, sand, and rubble of streams with a moderately strong current. Larvae burrow in sand and silt bottoms in quiet water downstream from spawning areas and filter-feed on plankton and detritus. — Freshwater, brackish, marine.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, FIB, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Derebofa balığı. — Listed in previous checklists from Türkiye by Bilecenoglu et al. (2002, 2014); Fricke et al. (2007); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan. — Türkiye material: None.

Status in Syria: [Native]. — Jalki. — First record from Syria by Saad et al. (2021: 22); subsequently listed by Saad et al. (2023). — Distribution in River Basin: 6-Coastal. — Syrian material: MSL.

Elasmobranchii

Carcharhiniformes

Carcharhinidae Jordan & Evermann 1896 (requiem sharks)

Carcharhinus leucas (Valenciennes 1839)

Common name: Bull shark

Taxonomy: Original description: *Carcharias (Prionodon) leucas* Valenciennes 1839: 42 [Antilles, western Atlantic; syntypes: (4) MNHN A-9650 (1, dry), A-9652 (1, dry), uncat. (2, lost)].

Middle Eastern synonyms: None.

Revisions: Compagno (1984: 478).

Illustrations: Hussain et al. (2012).

Distribution. General distribution: Circumglobal in tropical seas (including Caribbean Sea, Persian Gulf, Gulf of California/Mexico).

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: The species is demersal and pelagic in tropical, sub-tropical, and temperate waters, both inshore and offshore. The species is euryhaline; it commonly moves into estuarine and fresh waters, where females normally give birth, and the young can remain for up to five years. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: VU (IUCN, 2023).

Threats: CLI, FIT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Kooseh, Kooseh-kuli, Sag mahi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017a, 2018); Coad (2015); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: None.

Status in Iraq: [Native]. — Kausaj. — First record from Iraq by Günther (1874); confirmed by Kennedy (1937); Al-Hassan et al. (1989); Hussain et al. (2012); listed by Çiçek et al. (2023b). — Distribution in River Basin: 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Actinopteri

Acipenseriformes

Acipenseridae Bonaparte 1831 (sturgeons)

Acipenser baerii Brandt 1869

Common name: Siberian sturgeon

Taxonomy: Original description: *Acipenser baerii* Brandt 1869: 115 [Ob and Lena River systems, Siberia, Russia; syntypes: whereabouts unknown].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 86).

Illustrations: Berg (1948: 86, fig. 66).

Distribution. General distribution: North-eastern Asia: from the Ob' River to Kolyma River, Arctic rivers of Siberia; introduced elsewhere.

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: The species can be found in all types of freshwater benthic habitats in large rivers and lakes. It spawns in lotic habitats in the main streams of large and deep rivers on a stone or gravel bottom. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Tas mahi baeri. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Iraq: [Exotic]. — None. — Record of this species was confirmed by Mosavi-Sabet et al. (2019) from Tigris River, (34°33'0.39"N, 45°46'20.02"E) and from the Ghuretu Stream where it enters the reservoir (34°32'42.11"N, 45°47'33.59"E) (both about 1.5-3.5 km away from the cage-culture farm within the reservoir) in the Tigris-Euphrates River drainages, Kermanshah Province, western Iran, at the border of Iraq; listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris. — Iraq materials: None. **Remarks.** The establishment of the species should be monitored.

Status in Türkiye: [Exotic]. — None. — Several specimens of this species caught from Keban Dam Lake by local fisherman (Çiçek et al., 2022). — Turkish materials: None. **Remarks.** The establishment of the species should be monitored.

Acipenser colchicus Marty 1940

Common name: Colchian sturgeon

Taxonomy: Original description: *Acipenser gueldenstadtii* var. *colchica* Marty 1940: 869 [South-eastern part of Black Sea near mouth of Rioni and Inguri Rivers, Georgia, Eurasia; syntypes: (many)].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 84) as *Acipenser gueldenstaedtii colchicus*.

Illustrations: Berg (1948: 84, fig. 65) as *Acipenser gueldenstaedtii colchicus*.

Distribution. General distribution: South-eastern Black Sea basin and lower Danube River.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species is anadromous. Marine habitat for this species includes shallow coastal and estuarine zones. In freshwater, it occurs in the deep parts of large rivers with a moderate to swift current. Russian sturgeon spawns in strong currents (1-1.5 m/s) in large and deep rivers on stone or gravel bottoms. This species has anadromous and freshwater populations. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: ABS, CON, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Türkiye: [Native]. — Mersin balığı. — Listed in previous checklists from Türkiye by Fricke et al. (2007); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

Acipenser gueldenstaedtii* Brandt & Ratzeburg 1833*Common name:** Russian sturgeon**Taxonomy:** Original description: *Acipenser gueldenstaedtii* Brandt & Ratzeburg 1833: 13, pl. 3 (figs. 2, 2A-E) [Caspian Sea and tributaries; Black Sea; no types known].**Middle Eastern synonyms:** None.**Revisions:** Berg (1948: 78).**Illustrations:** Kottelat and Freyhof (2007: 51, fig.).**Distribution. General distribution:** Eastern Atlantic; Europe and Middle East: Basins of Sea of Marmara, Black Sea, Sea of Azov and Caspian Sea and adjacent watersheds; introduced elsewhere.**Distribution in the Middle East:** Iran, Iraq, and Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia, 433-Western Transcaucasia, 441-Lower Tigris and Euphrates, 450-Turan Plain, 452-Caspian Marine, 631-Amu Darya.**Habitat:** This species is anadromous, marine habitat includes shallow coastal and estuarine zones. In freshwater, it occurs in deep parts of large rivers with moderate to swift current and spawns in strong currents (1-1.5 m/s) in large and deep rivers on a stone or gravel bottom. — Freshwater, brackish, marine.**Economic importance:** Commercially important.**Conservation:** IUCN: CR (IUCN, 2023).**Threats:** CON, COM, EUT, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Iran:** [Native]. — Chalbash, Tasmahi-ye Rus. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.**Status in Iraq:** [Exotic]. — Hafash. — First record from Iraq by Jawad et al. (2021a); listed by Çiçek et al. (2023b). — Distribution in River Basin: 2-Euphrates. — Iraq materials: None.**Status in Türkiye:** [Native]. — Rus mersin balığı. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.***Acipenser nudiiventris* Lovetsky 1828****Common name:** Fringebarbel sturgeon**Taxonomy:** Original description: *Acipenser nudiiventris* Lovetsky 1828: 78, pl. 6, fig. 2 [Aral Sea; no types known; original description reproduced in Berg (1905: 2, footnote)].**Middle Eastern synonyms:** None.**Revisions:** Berg (1948: 66).**Illustrations:** Berg (1948: 68, figs. 55-56).**Distribution. General distribution:** Eastern Atlantic, Europe and Middle East: Basins of Black, Azov, Caspian and Aral seas and Sea of Marmara.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 423-Thrace, 430-Northern Anatolia, 433-Western Transcaucasia, 441-Lower Tigris and Euphrates, 450-Turan Plain, 452-Caspian Marine, 631-Amu Darya.**Habitat:** This species is anadromous: juveniles move to the ocean or inland seas; mature specimens migrate back into rivers for spawning, which takes place in strong-current habitats in the main courses of large and deep rivers on stone or gravel bottoms. — Freshwater, transitional water, marine.**Economic importance:** Commercially important.**Conservation:** IUCN: CR (IUCN, 2023).**Threats:** CON, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Regionally exterminated. — High priority for conservation action.

Status in Iran: [Native]. — Tas mahi shekam brahne. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Türkiye: [Native]. — Sip balığı. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

***Acipenser persicus* Borodin 1897**

Common name: Persian sturgeon

Taxonomy: Original description: *Acipenser persicus* Borodin 1897: 18, figs. [Ural'sk, Kazakhstan; Kura River, Azerbaijan; southern shore of Caspian Sea, Iran; syntypes: (2 measured) none at ZIN].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 81) as *Acipenser güldenstädti persicus*.

Illustrations: Kottelat and Freyhof (2007: 54).

Distribution. General distribution: Eastern Atlantic, Europe and Middle East: Caspian Sea and adjacent watersheds; introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine, 631-Amu Darya.

Habitat: This species is as a truly anadromous species. It spawns in the large rivers in its range, and juveniles migrate to coastal water and spend the time until maturity at sea, in coastal and estuarine zones. Juveniles are found in riverine habitats during their first summer. — Freshwater, brackish.

Economic importance: Commercially important.

Conservation: IUCN: CR (IUCN, 2023).

Threats: CON, COM, EUT, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Iran: [Native]. — Qara burun or Gareburun, Tasmahi-ye Irani. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran materials: None.

***Acipenser ruthenus* Linnaeus 1758**

Common name: Sterlet sturgeon

Taxonomy: Original description: *Acipenser ruthenus* Linnaeus 1758: 237 [Danube River; holotype: NRM 96].

Middle Eastern synonyms: *Acipenser koster* Gmelin 1789; *Acipenser gmelini* Fitzinger in Fitzinger & Heckel 1836; *Acipenser primigenius* Chalikov 1944 (Chalikov, 1944: 47; hybrid between *A. ruthenus* X *A. gueldenstaedtii*).

Revisions: Berg (1948: 70).

Illustrations: Berg (1948: 72, figs. 57-59) as *A. ruthenus marsiglii*; Kottelat and Freyhof (2007: 55, fig.).

Distribution. General distribution: Arctic rivers; Europe and Middle East: Black Sea, Sea of Azov, White Sea, and Caspian Sea watersheds. Introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 430-Northern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine, 631-Amu Darya.

Habitat: This species is found in large rivers, usually in the current and in deep water. As water level rises, it moves to flooded areas to feed. It spawns on gravel in strong-current habitats. The Sterlet is a potamodromous freshwater species. — Freshwater, brackish.

Economic importance: Commercially important.

Conservation: IUCN: EN (IUCN, 2023).

Threats: CON, EUT, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Iran: [Native]. — Mahi-ye Khaviar. — Reported from the middle and South Caspian Sea by Naseka and Bogutskaya (2009) but not confirmed by specimens for Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran materials: None.

Acipenser stellatus Pallas 1771

Common name: Starry sturgeon

Taxonomy: Original description: *Acipenser stellatus* Pallas 1771: 460 [Volga River at Simbirsk, Caspian Sea, Ural River to Gwje; no types known].

Middle Eastern synonyms: *Acipenser ratzeburgii* Brandt in Brandt & Ratzeburg 1833; *Acipenser seuruga* Gldenstdt 1772.

Revisions: Berg (1948: 96).

Illustrations: Berg (1948: 106, fig 79); Kottelat and Freyhof (2007: 56, fig.).

Distribution. General distribution: Eastern Atlantic; Mediterranean Sea; Black Sea; Caspian Sea.

Distribution in the Middle East: Iran and Trkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine, 631-Amu Darya.

Habitat: This species is anadromous, spending at least part of its life in salt water and returning to rivers to breed. At sea, in coastal and estuarine areas, it mainly forages on clay-sand bottoms, as well as in middle and upper water layers. Juveniles inhabit shallow riverine habitats during their first summer. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: CR (IUCN, 2023).

Threats: CON, COM, EUT, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Iran: [Native]. — Ozoonboroon, Derakul, Tirij, Puze draz. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Trkiye: [Native]. — Mersin balıęı. — Listed in previous checklists from Trkiye by Bilecenoęlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Kçük Menderes, 7-Byk Menderes, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doęu Karadeniz, 23-Çoruh. — Turkish materials: None.

Acipenser sturio Linnaeus 1758

Common name: European sturgeon

Taxonomy: Original description: *Acipenser sturio* Linnaeus 1758: 237 [Charente River at Saintes, France; neotype: MNHN 1962-1295].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 93).

Illustrations: Berg (1948: 94, 95, fig 75, 75a).

Distribution. General distribution: Eastern Atlantic (currently only the Gironde Estuary, France, and adjacent waters); Mediterranean Sea; Black Sea; Sea of Marmara. Reintroduced in Germany.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia, 433-Western Transcaucasia, 450-Turan Plain, 452-Caspian Marine, 631-Amu Darya.

Habitat: This is an anadromous species (i.e., it spends at least part of its life in salt water and returns to rivers to breed). — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: CON, COM, EUT, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Native]. — Kolan balığı. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

***Huso huso* (Linnaeus 1758)**

Common name: Beluga

Taxonomy: Original description: *Acipenser huso* Linnaeus 1758: 238 [Danube and the rivers of Russia; no types known].

Middle Eastern synonyms: *Acipenser shyp* Forster 1767; *Acipenser schypa* Gmelin 1789; *Acipenser brandtii* Günther 1870; *Huso huso ponticus* Sal'nikov & Malyatskii 1934; *Huso huso caspicus* Babushkin 1942; *Huso huso orientalis* Lelek 1987.

Revisions: Berg (1948: 61).

Illustrations: Berg (1948: 61, fig. 54); Kottelat and Freyhof (2007: 58-59, figs.).

Distribution. General distribution: Eastern Atlantic; Mediterranean Sea; Sea of Marmara; Black Sea; Sea of Azov; Caspian Sea. Introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine, 631-Amu Darya.

Habitat: This species is anadromous, spending most of its life in salt water and returning to its natal rivers to reproduce. At sea, this species is found in the pelagic zone, following food organisms. It spawns in the main course of large and deep rivers on a stone or gravel bottom. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CON, COM, EUT, FIT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Fil mahi, Mahi-ye khaviar. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Iraq: [Exotic]. — None. — Record of this species was confirmed by Mosavi-Sabet et al. (2019a) from Tigris River. 34°33'0.39"N, 45°46'20.02"E) and from the Ghuretu Stream where it enters the reservoir (34°32'42.11"N, 45°47'33.59"E) (both about 1.5-3.5 km away from the cage-culture farm within the reservoir) in the Tigris-Euphrates basin, Kermanshah Province, western Iran, at the border of Iraq; listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris. — Iraq materials: None. **Remarks.** Establishment of the species should be monitored.

Status in Türkiye: [Native]. — Mersin morinası. — Listed in previous checklists from Türkiye by Bilecenoglu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

Lepisosteiformes

Lepisosteidae Agassiz 1832 (gars)

Atractosteus spatula (Lacepède 1803)

Common name: Alligator gar

Taxonomy: Original description: *Lepisosteus spatula* Lacepède 1803: 331, 334, pl. 6 (fig. 2) [No locality (North America); holotype: MNHN 0000-5804 (dry, mounted)].

Middle Eastern synonyms: None.

Revisions: Grande (2010: 292).

Illustrations: Lacepède (1803: 331, 334, pl. 6 (fig. 2) as *Lepisosteus spatula*; Mutlak et al. (2017).

Distribution. General distribution: North America: central and southern U.S.A. and northern Mexico. Introduced in Iran; Java and Bali (Indonesia). Introduced elsewhere.

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This gar is one of the largest freshwater fishes in North America, inhabiting sluggish pools of large rivers and their bayous, oxbow lakes, swamps, backwaters, and brackish and marine waters along the coast. Feeds on mostly fish and crabs, and occasionally other small vertebrates. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Mahi-e sousmari. — First record from Iran by Esmaeili et al. (2017b); subsequently reported by Mousavi-Sabet et al. (2023); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 6-Caspian Sea. — Iran material: None.

Status in Iraq: [Exotic]. — None. — First record from Iraq by Mutlak et al. (2017); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: MSCUB.

Elopiformes

Megalopidae Jordan & Gilbert 1883 (tarpons)

Megalops cyprinoides (Broussonet 1782)

Common name: Indo-Pacific tarpon

Taxonomy: Original description: *Clupea cyprinoides* Broussonet 1782: (39), pl. (9) [Tana, New Hebrides [Tanna, Vanuatu] (original localities: tropical seas, several localities); lectotype: BMNH 1962.12.1.1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Heemstra (2022: pl. 1, fig.).

Distribution. General distribution: Red Sea; Indo-West Pacific: Algoa Bay northward (South Africa), East Africa, Persian Gulf, Seychelles, Madagascar, and Mascarenes (La Réunion, Mauritius, Rodrigues) east to Mariana Islands, Tuamotu Archipelago and Marquesas Islands, north to Korea, Russia, and Japan, south to northwestern Australia, New South Wales (Australia), New Caledonia and Austral Islands.

Distribution in the Middle East: Saudi Arabia, and Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: The species is found in depths to 50 m in coastal waters and ranges inland to hundreds of kilometres upstream in rivers and floodplains. It is commonly observed near the surface in shallow inshore waters. This species inhabits coral reefs, small lakes (billabongs), mangrove swamps, rivers, reservoirs, floodplains, coastal bays, and canals. The favoured inshore habitat may be wave-dominated estuaries, having lower temperature and salinity but higher silicate levels. It may be more common in systems with unmodified river flows. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: DD (IUCN, 2023).

Threats: ABS, CON, EUT, FIT, HAB, TOU. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Saudi Arabia: [Native]. — None. — Listed by Froese and Pauly (2023) without any reference. — Saudi Arabia material: None.

Status in Yemen: [Native]. — None. — First record from Yemen by Myers (1991); confirmed by Zajons et al. (2019). — Yemen materials: None.

Anguilliformes

Anguillidae Rafinesque 1810 (freshwater eels)

Anguilla anguilla (Linnaeus 1758)

Common name: European eel

Taxonomy: Original description: *Muraena anguilla* Linnaeus 1758: 245 [Europe, Mediterranean Sea, Baltic Sea, northeastern Atlantic (original: "in Europa; maxima in lacu Cornachio Ferrariensi"); localities include Sweden; England; Belgium; Germany; Poland; France; Ferrara and Rome, Italy; Lesbos Island, Greece; Syria; no types known].

Middle Eastern synonyms: *Anguilla vulgaris* Shaw 1803.

Revisions: Ege (1939: 90).

Illustration: Kottelat and Freyhof (2007: 62, fig.).

Distribution. General distribution: Western Atlantic: larvae in Sargasso Sea and Gulf Stream; eastern Atlantic, Baltic Sea, North Sea, White Sea, Mediterranean Sea, Sea of Marmara, Black Sea: European seas and adjacent watersheds, spawning and larval migration routes to and from the western Atlantic. Introduced in the Caspian Sea basin.

Distribution in the Middle East: Iran, Israel, Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 450-Turan Plain, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 452-Caspian Marine.

Habitat: This species is catadromous and found in a range of habitats, from small streams to large rivers and lakes, and in estuaries, lagoons, and coastal waters. It also occupies open ocean areas during migrations but is rarely observed in this. Under natural conditions, it only occurs in bodies of water that are connected to the sea; it is stocked elsewhere. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, FIT, HAB, EUT, CON, COM, TOU. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Exotic]. — Marmahi-ye ma'muli, Marmahi mohajer, Marmahi-e haghghi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Israel: [Native]. — Tzlofach eyrpi. — First record from Israel by Günther (1865: 490) as *Anguilla microptera*; Lortet (1883: 179); Tristram (1884: 177) as *Anguilla vulgaris*; Spicer

(1931); confirmed by Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin. — Israel material: HUIJ.

Status in Lebanon: [Native]. — Hanklis. — First record from Lebanon by George et al. (1964); confirmed by Mouneimné (1977) and Mouneimné (2002). — Lebanon material: AUBM, FMNH, MNHN, SMF, USNM.

Status in Syria: [Native]. — Hanklis. — First record from Syria by Pellegrin (1911: 109) as *Anguilla vulgaris*; confirmed by Gruvel (1931); Beckman (1962: 46); Saad et al. (2006); Barakat et al. (2020); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: MCZ, MNHN, MSL.

Status in Türkiye: [Native]. — Yılan balığı. — Listed in previous checklists from Türkiye by Bilecenoglu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 22-Doğu Karadeniz, 23-Çoruh. — Türkiye material: None.

Anguilla bengalensis (Gray 1831)

Common name: Indian mottled eel

Taxonomy: Original description: *Muraena bengalensis* Gray 1831: no page number, pl. 95 (fig. 5) [India; No types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Smith (2022: pl. 13, fig.).

Distribution. General distribution: Indian Ocean and adjacent freshwater habitats: South Africa north to Kenya, east to Malaysia, north to Nepal.

Distribution in the Middle East: Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: This species is catadromous and found in a range of habitats, from small streams to large rivers and lakes, and in estuaries, lagoons, and coastal waters. It also occupies open ocean areas during migrations but is rarely observed in this. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CON, COM, EUT, FIT, HAB, TOU. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Yemen: [Native]. — Jeeloom. — First record from Yemen by Attaala and Rubaia (2013); confirmed by Freyhof et al. (2020); Heemstra et al. (2022); Esmaili and Hamidan (2023). — Yemen material: None.

Anguilla bicolor McClelland 1844

Common name: Shortfin eel

Taxonomy: Original description: *Anguilla bicolor* McClelland 1844: 178, 202, 209, pl. 6 (fig. 1) [Sandoway, Malay coast, India; syntypes: SMF 776 (1)].

Middle Eastern synonyms: None.

Revisions: Ege (1939: 151).

Illustrations: Smith (2022: pl. 13, fig.).

Distribution. General distribution: Indo-West Pacific: Seychelles, Mayotte (France), Madagascar and Mascarenes (La Réunion, Mauritius, Rodrigues) east to China and New Britain (Papua New Guinea), south to northern Western Australia.

Distribution in the Middle East: Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: This species is catadromous and found in a range of habitats, from small streams to large rivers and lakes, and in estuaries, lagoons, and coastal waters. It also occupies open ocean areas during migrations but is rarely observed in this. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CON, COM, EUT, FIT, HAB, TOU. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Yemen: [Native]. — None. — First record from Yemen by Attaala and Rubaia (2013); confirmed by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Yemen material: None.

Osteoglossiformes

Notopteridae Bleeker 1851 (featherfin knifefishes or featherbacks)

Notopterinae Bleeker 1851 (Asiatic featherbacks)

Chitala ornata (Gray 1831)

Common name: Clown featherback

Taxonomy: Original description: *Notopterus ornata* Gray 1831: 16 [India; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Southeast Asia; Mekong, Chao Phraya and Mae Klong River basins, Laos, Thailand, Cambodia, and Vietnam. Introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits lowland river mainstems and tributaries, including floodplains, marshland, and larger waterbodies. It is well-adapted to impounded waters. Feeds in mainstream and the Sesan tributary system, lives in deep pools of mainstream. These fish can also breathe air to survive in stagnant waters if there is a lack of oxygen. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — First record from Iran by Mousavi-Sabet et al. (2023). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Clupeiformes

Clupeoidei

Clupeidae Cuvier 1816 (herrings and sprats)

Sprattus sprattus (Linnaeus 1758)

Common name: European sprat

Taxonomy: Original description: *Clupea sprattus* Linnaeus 1758: 318 [European seas; syntypes: Probably LS 46 and 47; others lost].

Middle Eastern synonyms: None.

Revisions: Whitehead (1985: 49).

Illustrations: Whitehead (1985: 49, fig.).

Distribution. General distribution: North Sea; Mediterranean Sea; Sea of Marmara; Black Sea; eastern Atlantic: British Isles south to Morocco, including Madeira.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species is a pelagic, oceanodromous, and littoral species. This species forms schools. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: EUT, FIT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Çaç. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Fricke et al. (2007); Çiçek et al. (2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Ehiravidae Deraniyagala 1929 (river sprats)

***Clupeonella cultriventris* (Nordman 1840)**

Common name: Black Sea sprat

Taxonomy: Original description: *Clupea cultriventris* Nordman 1840: 42 [Pont-Euxin (Black Sea); syntypes: MNHN 0000-3681 (3)].

Middle Eastern synonyms: *Clupeonella abrau* (non Maliatsky 1930) of authors; *Clupeonella delicatula caspia* Svetovidov 1941.

Revisions: Whitehead (1985: 52).

Illustrations: Kottelat and Freyhof (2007: 76, fig.) as *Clupeonella caspia*.

Distribution. General distribution: Black Sea, Sea of Azov, Sea of Marmara, and adjacent watersheds.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: This species is found in coastal waters, lagoons and lakes, estuaries, and the lower reaches of large rivers with salinities up to 13‰. Absent from pure seawater. — Brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Rizeh kuli, Kilka-e-maamooli. — Listed in the previous checklists by Esmaeili et al. (2010a, 2017a, 2018); Jouladeh-Roudbar et al. (2020) as *Clupeonella caspia*; Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024) as *Clupeonella caspia*. — Distribution in River Basin: 6-Caspian Sea. — Iran materials: None.

Status in Türkiye: [Native]. — Tülka balığı. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

Remark: *Clupeonella cultriventris* is widespread along coasts of the Black and Caspian Seas, entering lower reaches of rivers. Based on unpublished data (see Kuljanishvili et al., 2020) including molecular and morphological studies they failed to distinguish the Caspian population (*C. caspia*) from the Black Sea population (*C. cultriventris*). Hoestlandt (1991) followed by Kottelat and Freyhof (2007) separate these two tyulkas largely based on the length of paired fins, a character that found to be very much overlapping in the materials examined by Kuljanishvili et al. (2020). Therefore, they treated *C. caspia* as a synonym of *C. cultriventris*. More data using different populations from the southern Caspian Sea and the Black see is needed to accept this synonymy.

Clupeonella engrauliformis* (Borodin 1904)*Common name:** Anchovy shad**Taxonomy:** Original description: *Clupea engrauliformis* Borodin 1904: 42 [Near Buinak, Caspian Sea, Russia; lectotype: ZIN 13860 (124 mm)].**Middle Eastern synonyms:** None.**Revisions:** Whitehead (1985: 53).**Illustrations:** Whitehead (1985: 53, fig.).**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.**Habitat:** This is a marine, schooling species endemic to the Caspian Sea. This species mainly occupies open sea areas but occasionally approaches the shore. — Brackish, marine.**Economic importance:** Commercially important.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** CLI, COM, FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Iran:** [Native]. — Kilka-e anchovy. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.***Clupeonella grimmi* Kessler 1877****Common name:** Southern Caspian shad**Taxonomy:** Original description: *Clupeonella grimmi* Kessler 1877: 187, pl. 6 (fig. 24) [Middle Caspian Sea, 560-1750 feet (80-250 Russian fathoms); lectotype: ZIN 10934 (31.5 mm), lectotype selected by Svetovidov (1952: 20)].**Middle Eastern synonyms:** None.**Revisions:** Whitehead (1985: 54).**Illustrations:** Whitehead (1985: 54, fig.).**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.**Habitat:** This is a schooling species, endemic to the Caspian Sea. This is an open water species known to inhabit deeper areas of the central and southern Caspian Sea. This species rarely uses inshore areas. — Brackish, marine.**Economic importance:** Commercially important.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** CLI, COM, FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Iran:** [Native]. — Kilka-e cheshm dorosht. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.***Clupeonella muhlisi* Neu 1934****Common name:** Apolyont sprat**Taxonomy:** **Original description:** Original description: *Clupeonella muhlisi* Neu in Woltereck & Neu 1934: 446, fig. 1 [Abuliont Gölü, Bursa Province, Türkiye; no types known].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** None.

Distribution. General distribution: Uluabat Gölü, Bursa Province (Türkiye).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This is a pelagic in lakes. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Cüce ringa, filisa balığı. — Recorded from Türkiye in the original description by Neu (1934); listed in previous checklists from Türkiye by Kuru (2004) as *Clupeonella abrau muhlisi*; Geldiay and Balık (2007) as *Clupeonella abrau muhlisi*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018, 2020, 2023). — Distribution in River Basin: 3-Susurluk. — Turkish material: None.

Alosidae Cuvier Svetovidov 1952 (shads and sardines)

***Alosa braschnikowi* (Borodin 1904)**

Common name: Caspian marine shad

Taxonomy: Original description: *Clupea caspiopontica* var. *braschnikowi* Borodin 1904: 180 [13], fig. 4 [Near Fort Aleksandrovs, middle Caspian Sea, Kazakhstan; lectotype: ZIN 13051 (280 mm)].

Middle Eastern synonyms: None.

Revisions: Whitehead (1985: 195) as *Alosa braschnikovi*.

Illustrations: Whitehead (1985: 195, fig.) as *Alosa braschnikovi*.

Distribution. General distribution: Eurasia: Caspian Sea and its watersheds.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: This is an oceanodromous species that is endemic to the pelagic zone of the Caspian Sea in brackish water. Although this species is strongly migratory, it does not migrate into freshwater, and is therefore most predominately found in the southern portion of the Caspian Sea where salinity is higher. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: DD (IUCN, 2023).

Threats: Threats: EUT, FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Shagmahi, Shagmahi-e Khazari. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Alosa caspia* (Eichwald 1838)**

Common name: Caspian shad

Taxonomy: Original description: *Clupea caspia* Eichwald 1838: 134 [Caspian Sea; Type illustrated in Berg 1948: 137].

Middle Eastern synonyms: *Caspialosa knipowitschi* Iljin 1927; *Caspialosa caspia* var. *persica* Iljin 1927; *Alosa bulgarica* Drensky 1934.

Revisions: Whitehead (1985: 197).

Illustrations: Whitehead (1985: 197, fig.).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: At sea, pelagic, in coastal waters with steady current, avoids areas with stable salinity. Migrates from sea to mouth of large rivers, spawns in fresh or slightly brackish water at shallow sites washed by flow of large rivers. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Shagmahi-e shekambozorg, Shagmahi-e chekameh dar, Shagmahi-e darya-e Khazar. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Alosa curensis (Suvorov 1907)

Common name: Kura shad

Taxonomy: Original description: *Clupea (Alosa) curensis* Suvorov 1907:162 [24], Fig. 4 [Southern Caspian Sea, near mouth of Kura River, Azerbaijan; lectotype: ZIN 13984].

Middle Eastern synonyms: *Caspialosa curensis* (Suvorov 1907).

Revisions: *Caspialosa curensis* (Suvorov 1907).

Revisions: Berg (1948: 120) as *Caspialosa curensis*.

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: Specimens have been taken from brackish water near a river mouth. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: DD (IUCN, 2023).

Threats: Threats to this species are unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — None. — Reported from the middle and South Caspian Sea by Naseka and Bogutskaya (2009) but not confirmed by specimens for Iran Esmaeili et al. (2010a, 2017, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Alosa fallax (Lacepède 1803)

Common name: Twaite shad

Taxonomy: Original description: *Clupea fallax* Lacepède 1803: 424, 452 [Seine River at Rouen, France; neotype: MNHN 0000-3188].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 144); Whitehead (1985: 199).

Illustrations: Whitehead (1985: 199, fig.); Kottelat and Freyhof (2007: 69, fig.).

Distribution. General distribution: Baltic Sea; North Sea; Mediterranean Sea; Sea of Marmara; southern Black Sea; northeastern Atlantic; also, adjacent freshwater river habitats of Europe.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 436-Coastal Levant.

Habitat: This species is pelagic at sea. Juveniles remain close to shorelines and estuaries. Migrates from the sea to rivers and spawns in the main river, often only a few kilometres above the limit of brackish water. Spawning was also reported from small rivers over gravel bottoms. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, EUT, FIB, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Türkiye: [Native]. — Tirsi. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Alosa fallax nilotica*; Geldiay and Balık (2007) as *Alosa fallax nilotica*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

Alosa immaculata Bennett 1835

Common name: Pontic shad

Taxonomy: Original description: *Alosa immaculata* Bennett 1835: 92 [Near Trabzon (Trebizond), Türkiye, Black Sea; no types known].

Middle Eastern synonyms: *Clupea pontica* Eichwald 1838; *Alosa pontica* (Eichwald 1838); *Clupea eichwaldii* Grimm 1901.

Revisions: None.

Illustrations: Berg (1948: 124); Whitehead (1985: 204).

Illustrations: Whitehead (1985: 204, fig.); Kottelat and Freyhof (2007: 70, fig.).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species is pelagic at sea, in deep water. Migrates to the middle reaches of large rivers, spawning where the current is strongest, close to the surface, usually at 2-3 m depth in the main channel. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: VU (IUCN, 2023).

Threats: CON, FIT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Türkiye: [Native]. — Ringa balığı, Tirsi. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

Alosa kessleri (Grimm 1887)

Common name: Caspian anadromous shad

Taxonomy: Original description: *Clupea kessleri* Grimm 1887: 7, 16 [Volga River delta, Astrakhan; lectotype: ZIN 15925, lectotype selected by Berg (1913: 32)].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 127) as *Caspialosa kessleri*; Whitehead (1985: 201).

Illustrations: Whitehead (1985: 201, fig.); Kottelat and Freyhof (2007: 71, fig.).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: At sea, pelagic, in a wide variety of habitats. Migrates to middle reaches of large rivers, spawning close to shores in main channel and in almost-still water bodies such as river bays, river eddies and flood plains. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, FIT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Shagmahi-e-mohajer, Puzanok, Zalom. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Alosa maeotica* (Grimm 1901)**

Common name: Azov shad

Taxonomy: Original description: *Clupea maeotica* Grimm 1901: 67 [Kerch Strait, between Black and Azov seas; neotype: ZIN 32230 (25.7 mm, 1 of 50)].

Middle Eastern synonyms: None.

Revisions: Whitehead (1985: 202).

Illustrations: Whitehead (1985: 202, fig.); Kottelat and Freyhof (2007: 72, fig.).

Distribution. General distribution: Black Sea, Sea of Azov, and adjacent watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species is pelagic at sea in deep water, entering brackish lagoons to spawn. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, FIB, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Ringa balığı. — Listed in previous checklists from Türkiye by Bilecenoglu et al. (2002, 2014); Kuru (2004) as *Alosa fallax maeotica*; Geldiay and Balık (2007) as *Alosa fallax maeotica*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

***Alosa saposchnikowii* (Grimm 1885)**

Common name: Saposhnikov shad

Taxonomy: Original description: *Alosa saposchnikowii* Grimm 1885: 2 [Delta of the Volga River [45.85°N, 47.57°E], Russia; lectotype (?): ZIN 15921 (1 of 6, 200 mm)].

Middle Eastern synonyms: *Caspialosa caspia nigra* Kisselevitz 1923.

Revisions: Berg (1948: 121) as *Caspialosa saposchnikovi*; Whitehead (1985: 208).

Illustrations: Whitehead (1985: 208, fig.).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: This species is a pelagic, euryhaline, non-anadromous species generally found in the northern Caspian Sea. — Freshwater, brackish.

Economic importance: Commercially important.

Conservation: IUCN: DD (IUCN, 2023).

Threats: EUT, FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Shagmahi-e cheshmdorosht. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Alosa sphaerocephala* (Berg 1913)*Common name:** Agrakhon shad**Taxonomy:** Original description: *Clupeonella sphaerocephala* Berg 1913: 20, pl. 12 (figs. 1, 1a) [Off Tyuleniy Island, north of Agrakhan Bay, Russia, Caspian Sea; lectotype: ZIN 15928 (190 mm), lectotype established by Svetovidov (1952: 227)].**Middle Eastern synonyms:** None.**Revisions:** Berg (1948: 122) as *Caspialosa sphaerocephala*; Whitehead (1985: 209).**Illustrations:** Whitehead (1985: 209, fig.).**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.**Habitat:** This is a non-anadromous species confined to semi-saline waters of the Caspian Sea. — Brackish.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** EUT, FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Shagmahi-e Agrakhan. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.***Alosa tanaica* (Grimm 1901)****Common name:** Black Sea shad**Taxonomy:** Original description: *Clupea tanaica* Grimm 1901: 67 [Don River near Rostov-na-Donu, Russia; lectotype: ZIN 16115 (1 of 2, 147 mm) (not 16125)].**Middle Eastern synonyms:** ?*Caspialosa tanaica etemi* Battalgil 1941.**Revisions:** Berg (1948: 135) as *Caspialosa caspia tanaica*; Whitehead (1985: 197).**Illustrations:** Whitehead (1985: 197, fig.); Kottelat and Freyhof (2007: 72, fig.).**Distribution. General distribution:** Black Sea, Sea of Azov, Sea of Marmara, and adjacent watersheds.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 430-Northern Anatolia, 433-Western Transcaucasia.**Habitat:** This species is pelagic at sea in deep water (50-70 m) in coastal waters. Migrates from sea to mouth and lower reaches of large rivers, spawns in fresh or slightly brackish water, usually close to shore, in the upper 2-4 m of almost still water bodies such as flood plains or lakes. — Freshwater, brackish, marine.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** CLI, CON, FIT, HAB, POL. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Türkiye:** [Native]. — Tirsi. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) *Alosa (Caspialosa) caspia tanaica*; Geldiay and Balık (2007) as *Alosa caspia tanaica* and *Alosa caspia nordmanni*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.***Alosa volgensis* (Berg 1913)****Common name:** Volga shad**Taxonomy:** Original description: *Clupeonella caspia volgensis* Berg (ex Meissner) 1913: 34, pl. 5. [Podovskaya Tonya near Cherny Yar, mouth of Volga River, Russia; lectotype: ZIN 15926].

Middle Eastern synonyms: None.

Revisions: Whitehead (1985: 201) as *Alosa kessleri volgensis*.

Illustrations: Kottelat and Freyhof (2007: 74, fig.).

Distribution. General distribution: Eurasia: Caspian Sea.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 452-Caspian Marine.

Habitat: Pelagic, in a wide variety of marine habitats. Migrates to delta and lower reaches of large rivers, spawns in main channel. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, FIT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Shagmahi-ye Volga. — Presence in Iranian waters needs confirmation by specimens Esmaili et al., (2010, 2017, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Sardina pilchardus* (Walbaum 1792)**

Common name: European pilchard

Taxonomy: Original description: *Clupea harengus* var. *pilchardus* Walbaum 1792: 38 [Cornwall, England, north-eastern Atlantic; no types known].

Middle Eastern synonyms: *Clupea pilchardus* Bloch 1795.

Revisions: Whitehead (1985: 55).

Illustrations: Whitehead (1985: 55, fig.).

Distribution. General distribution: Mediterranean Sea; Sea of Marmara; Black Sea; eastern Atlantic.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 437-Orontes, 436-Coastal Levant.

Habitat: This species is a pelagic, oceanodromous, and littoral species. This species forms schools. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Sardalya. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Fricke et al. (2007); Çiçek et al. (2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Dorosomatidae Gill 1861 (thread herrings or gizzard shads and sardinellas)

***Sardinella aurita* Valenciennes 1847**

Common name: Round sardinella

Taxonomy: Original description: *Sardinella aurita* Valenciennes in Cuvier & Valenciennes 1847: 263, pl. 594 [Messina, Sicily, Italy, Mediterranean Sea; lectotype: MNHN A-9824].

Middle Eastern synonyms: *Clupea venulosa* Steinitz 1927.

Revisions: Whitehead (1967: 37); Whitehead (1985: 93).

Illustrations: Whitehead (1985: 93, fig.).

Distribution. General distribution: Mediterranean Sea; Sea of Marmara; Black Sea; eastern Atlantic.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 437-Orontes, 436-Coastal Levant.

Habitat: This pelagic species schools in subtropical coastal waters from inshore to the shelf edge. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Yuvarlak sardalya. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Fricke et al. (2007); Çiçek et al. (2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

***Tenulosa ilisha* (Hamilton 1822)**

Common name: Hilsa

Taxonomy: Original description: *Clupanodon ilisha* Hamilton 1822: 243, 382, pl. 19 (fig. 73). [Ganges estuaries, Patua, Goyakarra, Calcutta, and Dhasa, India; No types known].

Middle Eastern synonyms: *Hilsa ilisha* (Hamilton 1822).

Revisions: Whitehead (1985: 222).

Illustrations: Whitehead (1985: 222, fig.).

Distribution. General distribution: Indo-West Pacific: Madagascar and Persian Gulf east to South China Sea.

Distribution in the Middle East: Iran, Iraq, and Saudi Arabia.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages, 701-Baluchistan.

Habitat: This species is pelagic and schools in coastal waters, euryhaline waters, and anadromous ascending rivers. Breeds mainly in rivers. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, EUT, FIT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Hilisha, Sobour. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 2-Hormuz. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Saboor. — First record from Iraq by Hora and Misra (1943); listed by Çiçek et al. (2023b). — Distribution in River Basin: 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: BNHM.

Status in Saudi Arabia: [Native]. — Suboor. — First record from Saudi Arabia by Whitehead (1985); Esmaili and Hamidan (2023). — Saudi Arabia materials: None.

Gonorynchiformes

Chanidae Günther 1868 (milkfishes)

***Chanos chanos* (Fabricius 1775)**

Common name: Milkfish

Taxonomy: Original description: *Mugil chanos* Fabricius in Niebuhr (ex Forsskål), 1775: 74, xiv [Jeddah, Saudi Arabia, Red Sea (not Mediterranean Sea); holotype: ZMUC P17154 (dry skin)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Randall (2005: 60, fig.).

Distribution. General distribution: Red Sea; Indo-Pacific: KwaZulu-Natal (South Africa), East Africa, Persian Gulf, Seychelles, Madagascar, and Mascarenes (La Réunion, Mauritius, Rodrigues) east to Hawaiian Islands (U.S.A.), north to southern Japan, south to Western Australia, New South Wales (Australia) and Norfolk Island; eastern Pacific: southern California (U.S.A.) south to northern Peru, including Galapagos Islands (Ecuador); Mediterranean Sea immigrant.

Distribution in the Middle East: Iran, Iraq, Oman, Saudi Arabia.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages, 701-Baluchistan.

Habitat: This species is a marine species entering estuaries and rivers. It is a benthopelagic, amphidromous species that occurs in tropical waters between depths of 1 to 30 m. It is found in offshore marine waters and shallow coastal embayments, also frequently entering estuaries and occasionally penetrating freshwater streams. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: COM, FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Khome mahi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 2-Hormuz, 3-Makran. — Iran material: None.

Status in Iraq: [Native]. — None. — First record from Iraq by Qasim et al. (2019); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

Status in Oman: [Native]. — Nemer. — First record from Oman by Esmaili et al. (2022a); listed in previous checklist from the Arabian Peninsula/Oman by Esmaili and Hamidan (2023). — Oman material: ZM-CBSU.

Status in Saudi Arabia: [Native]. — Bunji. — Recorded from Türkiye in the original description by Forsskål (1775); listed in previous checklists from Saudi Arabia by Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Cypriniformes

Cobitoidei

Cobitidae Swainson 1838 (spined loaches)

Cobitis afifae Freyhof, Bayçelebi & Geiger 2018

Common name: Afife's spined loach

Taxonomy: Original description: *Cobitis afifae* Freyhof, Bayçelebi & Geiger 2018: 41, figs. 30-32 [Büyük Menderes River at Cindere about 9 km south of Güney, Denizli province, Türkiye, 38.083 29.014; holotype: ZFMK ICH-99950].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2018a: figs. 30-32).

Distribution. General distribution: Asia Minor: Küçük Menderes and Büyük Menderes River drainages.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Freyhof et al. (2018a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: ZFMK.

***Cobitis aliyeae* Freyhof, Bayçelebi & Geiger 2018**

Common name: Aliye's spined loach

Taxonomy: Original description: *Cobitis aliyeae* Freyhof, Bayçelebi & Geiger 2018: 45, figs. 33-35 [Seyhan River below water regulation doors at Yüreyir, south of Adana, Adana province, Türkiye, 36.975 35.335; holotype: ZFMK ICH-97840].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2018a: figs. 33-35).

Distribution. General distribution: Lower reaches of the Seyhan and Ceyhan River drainages.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Freyhof et al. (2018a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan, 20-Ceyhan. — Turkish material: ZFMK.

***Cobitis anabelae* Freyhof, Bayçelebi & Geiger 2018**

Common name: Anabel's spined loach

Taxonomy: **Original description:** *Cobitis anabelae* Freyhof, Bayçelebi & Geiger 2018: 48, figs. 36-38 [Karasu River about 4 km south of Kırıkhan, Hatay province, Türkiye; holotype: ZFMK ICH-98633].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2018a: figs. 36-38).

Distribution. General distribution: Asia Minor: Lower reaches of the Orontes River drainage.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species lives in streams and lakes with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Syria: [Native]. — Tinia. — Recorded from Syria in the original description by Freyhof et al. (2018a: 48). Previously *Cobitis taenia* was reported from the Orontes River by Beckman (1962: 69) and (Saad et al., 2006; 2009) most likely, these records refer to *C. anabelae*; listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: BMNH, ZFMK ICH, FSJF, MSL.

Status in Türkiye: [Native]. — Anabel taşısiranı. — Recorded from Türkiye in the original description by Freyhof et al. (2018a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Türkiye material: ZFMK.

Cobitis avicennae* Mousavi-Sabet, Vatandoust, Esmaeili, Geiger & Freyhof 2015*Common name:** Zagros spined loach**Taxonomy:** Original description: *Cobitis avicennae* Mousavi-Sabet, Vatandoust, Esmaeili, Geiger & Freyhof 2015: 562, figs. 3-7 [Hamedan Province, Gamasiab River at Dehno, a tributary to Karkheh, 34°10'15"N, 48°21'19"E, altitude 1610 meters, Iran; holotype: GUIC CC1462MA].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Mousavi-Sabet et al. (2015a: figs. 3-7).**Distribution. General distribution:** Middle East: Lower Tigris River drainage.**Distribution in the Middle East:** Iran and Iraq.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species lives in streams and lakes with clear water and bottoms with sand or fine gravel. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Iran:** [Native]. — Loch mahi-e Ebne Sina. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2015a); Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran materials: GUIC, ZM-CBSU.**Status in Iraq:** [Native]. — None. — First record from Iraq by Freyhof et al. (2021a); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris. — Iraq materials: None.***Cobitis battalgilae* Băcescu 1962****Common name:** Battalgil spined loach**Taxonomy:** Original description: *Cobitis battalgili* Băcescu 1962: 437 (3), fig. 1b [Türkiye (probably from Lake Beyşehir); lectotype: ZMH 4744].**Middle Eastern synonyms:** *Cobitis battalgili* Băcescu 1962.**Revisions:** Freyhof et al. (2018a: 12).**Illustrations:** Freyhof et al. (2018a: 12).**Distribution. General distribution:** Beyşehir Lake basin and Manavgat River basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia, 432-Southern Anatolia.**Habitat:** This species lives in flowing waters with gravel, sand, and silt bottoms, often with dense submerged vegetation. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** ABS, CON, COM, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Taşısıran. — Recorded from Türkiye in the original description by Băcescu (1962); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya, 16-Konya. — Turkish material: ZMH.***Cobitis bilseli* Battalgil 1942****Common name:** Great Beyşehir spined loach**Taxonomy:** Original description: *Cobitis bilseli* Battalgil 1942: 292, fig. 4 [Beyşehir Lake, Türkiye; no types known].**Middle Eastern synonyms:** None.**Revisions:** Freyhof et al. (2018a: 14).

Illustrations: Freyhof et al. (2018a: 14, fig. 7).

Distribution. General distribution: Asia Minor: Lake Beyşehir and tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species prefers gravel and sand substrates in streams with dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Koca taşısiran. — Recorded from Türkiye in the original description by Battalgil (1942); listed in previous checklists from Türkiye by Kuru (2004) as *Cobitis elongata bilseli*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: None.

Cobitis dorademiri Erk'akan, Özdemir & Özeren 2017

Common name: Spined loach

Taxonomy: Original description: *Cobitis dorademiri* Erk'akan, Özdemir & Özeren 2017: 83, fig. 1 [Balıklı stream, Köyceğiz Basin, Muğla province, Türkiye; holotype: HUIC-AKDY1].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2018a: 15).

Illustrations: Erk'akan et al. (2017: 83, fig. 1); Freyhof et al. (2018a: 15, fig. 8).

Distribution. General distribution: Asia Minor: Lake Köyceğiz basin and lower Dalaman River drainage.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Erk'akan et al. (2017); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 8-Batı Akdeniz. — Turkish material: HUIC.

Cobitis elazigensis Coad & Sarieyyüoğlu 1988

Common name: Tigris spined loach

Taxonomy. Original description: Original description: *Cobitis elazigensis* Coad & Sarieyyüoğlu 1988: 426, figs. 1-2 [creek at Cip, drainage of Murat Nehri, tributary of Euphrates River, Elazig Province, Türkiye, 38°42'N, 39°05'E; holotype: NMC 85-0679A].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2018a: 16).

Illustrations: Coad and Sarieyyüoğlu (1988: 426, figs. 1-2).

Distribution. General distribution: Asia Minor and Middle East: Upper Euphrates River basin in Türkiye and Syria.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species lives in streams and lakes with sand or fine gravel bottoms. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — Keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Syria: [Native]. — *Tinia*. — Recorded from Syria by Coad (2010: 202) as *Cobitis taenia* (non Linnaeus 1758) (see Freyhof et al. 2018: 16); listed by Saad et al. (2023). — Distribution in River Basin: 2-Euphrates and Aleppo. — Syrian material: None.

Status in Türkiye: [Native]. — Taşısiran. — Recorded from Türkiye in the original description by Coad and Sarieyyüpoğlu (1988); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: NMC.

***Cobitis emrei* Freyhof, Bayçelebi & Geiger 2018**

Common name: Sapanca spined loach

Taxonomy: Original description: *Cobitis emrei* Freyhof, Bayçelebi & Geiger 2018: 52, figs. 39-41 [Stream Kurtköy flowing to Lake Sapanca at Kurtköy, Adapazarı (Sakarya) province, Türkiye, 40.713 30.175; holotype: ZFMK ICH-099187].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2018a: 52, figs. 39-41).

Distribution. General distribution: Asia Minor: Lake Sapanca basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia.

Habitat: This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Freyhof et al. (2018a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 12-Sakarya. — Turkish material: ZFMK.

***Cobitis erkakanae* Freyhof, Bayçelebi & Geiger 2018**

Common name: Gölbaşı spined loach

Taxonomy: Original description: *Cobitis erkakanae* Freyhof, Bayçelebi & Geiger 2018: 55, figs. 42-44 [River connecting Lakes Gölbaşı and Azaplı west of Gölbaşı, Adıyaman province, Türkiye, 37.790 37.626; holotype: ZFMK ICH-98958].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2018a: 55, figs. 42-44).

Distribution. General distribution: Asia Minor: Ceyhan River Basin, Gölbaşı Lakes basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species lives in lake ecosystem. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Freyhof et al. (2018a); listed in previous checklists from Türkiye by Çiçek et

al. (2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: ZFMK.

***Cobitis evreni* Erk'akan, Özeren & Nalbant 2008**

Common name: Ceyhan spined loach

Taxonomy: Original description: *Cobitis evreni* Erk'akan, Özeren & Nalbant 2008: 112, figs. 1-2 [Kömür Stream, Göksun, Kahramanmaraş, Türkiye, 38°00'52.24"N, 36°30'31.11"E; holotype: HUIC-CEY-2].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Erk'akan et al. (2008: 112, figs. 1-2).

Distribution. General distribution: Asia Minor: Upper Ceyhan River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species lives in flowing waters with a gravel or sand bottom. Not known to inhabit reservoirs. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Erk'akan et al. (2008); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: HUIC.

***Cobitis fahireae* Erk'akan, Atalay-Ekmekçi & Nalbant 1998**

Common name: Aegean spined loach

Taxonomy: Original description: *Cobitis fahireae* Erk'akan, Atalay-Ekmekçi & Nalbant 1998: 10, figs. 2A-E [Küçük Menderes River, Selçuk-Aydın, Türkiye; holotype: HUIC uncat].

Middle Eastern synonyms: *Cobitis vardarensis fahireae* Erk'akan, Atalay-Ekmekçi & Nalbant 1998; *Cobitis fahireae* Erk'akan, Atalay-Ekmekçi & Nalbant 1998; *Cobitis damlae* Erk'akan & Özdemir 2014.

Revisions: None.

Illustrations: Erk'akan et al. (1998: 10, figs. 2A-E).

Distribution. General distribution: Asia Minor: eastern Aegean Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives ubiquitously and is found in rivers, lakes, and lake tributaries. — Freshwater.

Economic importance: No commercial importance.

Conservation: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Erk'akan et al. (1998); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz. — Turkish material: HUIC.

Cobitis faridpaki* Mousavi-Sabet, Vasil'eva, Vatandoust & Vasil'ev 2011*Common name:** Siahrud spined loach**Taxonomy:** Original description: *Cobitis faridpaki* Mousavi-Sabet, Vasil'eva, Vatandoust & Vasil'ev 2011: 928, figs. 2-4 [Siahrud River, Mazandaran region, 36°26'85.05"N, 52°56'70.08"E, northern Iran, elevation 83 meters; holotype: GUIC CC1403MA].**Middle Eastern synonyms:** *Cobitis keyvani* Mousavi-Sabet, Yerli, Vatandoust, Özeren & Moradkhani 2012.**Revisions:** None.**Illustrations:** Mousavi-Sabet et al. (2011: 928, fig. 2).**Distribution. General distribution:** Middle East: eastern Caspian Sea tributaries.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 446-Caspian Highlands, 447-Namak, 450-Turan Plain.**Habitat:** This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** CLI, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Loch mahi-e Faridpaki. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2011); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea, 15-Namak Lake. — Iran material: GUIC, ZM-CBSU.***Cobitis indus* Eagderi, Seçer & Freyhof 2022****Common name:** Dalaman spined loach**Taxonomy:** Original description: *Cobitis indus* Eagderi, Seçer & Freyhof 2022: 414, figs. 2-5 [Dalaman River at Alci, Denizli Province, Türkiye, 37.1476, 29.1876; holotype: NHVUIC 1708-H].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Eagderi et al. (2022: 414, figs. 2-5).**Distribution. General distribution:** Asia Minor: middle Dalaman River drainage.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 429-Western Anatolia.**Habitat:** This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** CLI, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Taşısıran. — Recorded from Türkiye in the original description by Eagderi et al. (2022); listed by Çiçek et al. (2023a). — Distribution in River Basin: 8-Batı Akdeniz. — Turkish material: NHVUIC.***Cobitis joergbohleni* Freyhof, Bayçelebi & Geiger 2018****Common name:** Sultan spined loach**Taxonomy:** Original description: *Cobitis joergbohleni* Freyhof, Bayçelebi & Geiger 2018: 58, figs. 45-47 [Spring Soysallı, about 1 km north of Soysallı, Kayseri province, Türkiye, 38.390 35.365; holotype: ZFMK ICH-97624].**Middle Eastern synonyms:** *Cobitis fusunae* Özdemir 2019.**Revisions:** None.

Illustrations: Freyhof et al. (2018a: 58, figs. 45-47).

Distribution. General distribution: Asia Minor: Sultan Sazlığı marshes, Kızılırmak basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species lives in springs, streams, and lakes with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, CON, ABS, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Freyhof et al. (2018a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: ZFMK.

***Cobitis kellei* Erk'akan, Atalay-Ekmekçi & Nalbant 1998**

Common name: Diyarbakir spined loach

Taxonomy: Original description: *Cobitis kellei* Erk'akan, Atalay-Ekmekçi & Nalbant 1998: 10, figs. 1 A-E [Göksu stream, Tigris catchment, Cinar, Diyarbakir, Türkiye; holotype: ISBB 4682].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Erk'akan et al. (1998: 10, figs. 1 A-E).

Distribution. General distribution: Asia Minor: Göksu River drainage, upper Tigris River basin (Persian Gulf tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species was described from a small lowland stream. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Erk'akan et al. (1998); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: ISBB.

***Cobitis levantina* Krupp & Moubayed 1992**

Common name: Orontes spined loach

Taxonomy: **Original description:** *Cobitis levantina* Krupp & Moubayed 1992: 391 [Outflow of Buhairat Hims near Qattina, 34°40'N, 36°37'E, Syria; holotype: SMF 24371].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2018a: 23).

Illustrations: Freyhof et al. (2018a: 24, fig. 16).

Distribution. General distribution: Asia Minor and Middle East: upper Orontes River system and Litani River drainage.

Distribution in the Middle East: Lebanon, Syria.

Distribution in Ecoregions: 436-Coastal Levant, 437-Orontes.

Habitat: This species lives in mainly streams with clear water and bottom with silty, sand or fine gravel bottom and few submerged vegetation. In moderate current. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CON, CLI, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Lebanon: [Native]. — None. — First record from Lebanon by Krupp and Moubayed (1992); confirmed by Freyhof et al. (2020). — Lebanon material: None.

Status in Syria: [Native]. — *Tinia*. — Recorded from Syria in original description by Krupp and Moubayed (1992: 391); subsequently reported Saad et al. (2009); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: SMF, BMNH, MIZT.

***Cobitis linea* (Heckel 1847)**

Common name: Persepolis/Kor spined loach

Taxonomy: Original description: *Acanthopsis linea* Heckel 1847: 267 [Creeks at Persepolis, Iran; syntypes: NMW 48560 or 48450 (7)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2018a: 24, fig. 18).

Distribution. General distribution: West Asia: Kor River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Kor. — Recorded from Iran in the original description by Heckel (1847); listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 12-Kor River. — Iran material: NMW, ZM-CBSU.

***Cobitis phrygica* Battalgil 1944**

Common name: Phrygian spined loach

Taxonomy: Original description: *Cobitis phrygica* Battalgil 1944: 300, figs. 1-2 [Vilâyet Afyonkarahisar, Aci göl, western central Türkiye; no types known. Author also seen as Battalgazi].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Battalgil (1944: 300, figs. 1-2).

Distribution. General distribution: Asia Minor: upper Dalaman River drainage and streams of Lake Gölhisar, Burdur basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives in flowing and standing waters of springs and streams with sand or silt bottoms, often with dense submerged vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Battalgil (1944); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 8-Batı Akdeniz, 10-Burdur. — Turkish material: None.

Cobitis piri* Freyhof, Bayçelebi & Geiger 2018*Common name:** Spined loach**Taxonomy:** Original description: *Cobitis piri* Freyhof, Bayçelebi & Geiger 2018: 61, figs. 48-50 [Stream Aksu at Bağlılı, Isparta province, Türkiye, 37.763 31.033; holotype: ZFMK ICH-99635].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Freyhof et al. (2018a: 61, figs. 48-50).**Distribution. General distribution:** Asia Minor: Lake Eğirdir basin, Aksu and Köprü River drainages.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** CLI, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Freyhof et al. (2018a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: ZFMK.***Cobitis pontica* Vasil'eva & Vasil'ev 2006****Common name:** Burgas spined loach**Taxonomy:** Original description: *Cobitis pontica* Vasil'eva & Vasil'ev 2006: S17, fig. [Veleka River, Bulgaria; holotype: ZMUU P-21363].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Kottelat and Freyhof (2007: 312, fig.).**Distribution. General distribution:** Southeastern Europe: European Black Sea, Sea of Marmara watersheds.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace.**Habitat:** This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Native]. — Taşısiran. — Listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.***Cobitis punctulata* Erk'akan, Atalay-Ekmekçi & Nalbant 1998****Common name:** Spotted spined loach**Taxonomy:** Original description: *Cobitis punctulata* Erk'akan, Atalay-Ekmekçi & Nalbant 1998: 12, figs. 4 A-E [Karadere Stream, at the outlet of Manyas (Kus) Lake, Balıkesir Province, Türkiye; holotype: HUIC uncat].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Erk'akan et al. (1998: 12, figs. 4 A-E).**Distribution. General distribution:** Eurasia: Aegean Sea tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives in well-oxygenated streams and lakes with muddy bottoms and abundant submerged vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Taşısiran. — Recorded from Türkiye in the original description by Erk'akan et al. (1998); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: HUIC.

***Cobitis saniae* Eagderi, Jouladeh-Roudbar, Jalili, Sayyadzadeh & Esmaeili 2017**

Common name: Sania's spined loach

Taxonomy: Original description: *Cobitis saniae* Eagderi, Jouladeh-Roudbar, Jalili, Sayyadzadeh & Esmaeili 2017: 51, figs. 2-9, 11b, 12c, 13 [Bara Goor River a tributary of Sefid River, near Emamzadeh Hashem, Caspian Sea basin, Guilan province, Iran, 37°00'11"N, 49°37'49"E; holotype: IMNRF-UT-1091].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Eagderi et al. (2017: 51, fig. 2).

Distribution. General distribution: Eurasia: Georgian Black Sea basin, Lake Urmia basin, and southwestern Caspian Sea tributaries.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, ABS, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Sania. — Recorded from Iran in the original description by Eagderi et al. (2017); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: IMNRF.

Status in Türkiye: [Native]. — Taşısiran. — Listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 23-Çoruh. — Turkish material: None.

***Cobitis satunini* Gladkov 1935**

Common name: Colchic spined loach

Taxonomy. Original description: *Cobitis taenia satunini* Gladkov 1935: 73 [Lower stream of the Kintrich River, Kobuleti, eastern Black Sea basin, Georgia, Eurasia; holotype: ZMMU P-2852].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2018a: 30, Fig. 22).

Distribution. General distribution: Eurasia: southeast coastal rivers of Black Sea basin, Georgia, and Türkiye.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: Streams with still to moderately fast flowing clear water and mud or sand bottom.
— Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CLI, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Taşısiran. — First record from Türkiye by Freyhof et al. (2018a); listed by Çiçek et al. (2023a). — Distribution in River Basin: 23-Çoruh. — Turkish material: FSJF.

Cobitis simplicispina Hankó 1925

Common name: Sakarya spined loach

Taxonomy: Original description: *Cobitis simplicispina* Hankó 1925: 153, fig. 4; pl. 3 (fig. 7) [Eminekin village, Porsuk River basin, Sakarya River system, Eskisehir, Türkiye; neotype: ISBB 4694].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Hankó (1925: 153, fig. 4; pl. 3, fig. 7).

Distribution. General distribution: Asia Minor: Sakarya and Kizilirmak River basins (southern Black Sea tributaries).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species lives in streams with still to moderately flowing clear water and a mud or sand bottom, also in lakes and reservoirs. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Hankó (1925); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 11-Akarçay, 12-Sakarya, 15-Kızilirmak. — Turkish material: ISBB.

Cobitis sipahilerae Erk'akan, Özdemir & Özeren 2017

Common name: Spined loach

Taxonomy: Original description: *Cobitis sipahilerae* Erk'akan, Özdemir & Özeren 2017: 83, fig. 2 [Yediarıklar stream, Aksu River, Topçular District, Antalya province, Türkiye; holotype: HUIC-AKD1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Erk'akan et al. (2017: 83, fig. 2).

Distribution. General distribution: Asia Minor: Aksu River basin (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species lives in wetlands with clear water and muddy or sandy bottoms. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, ABS, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Erk'akan et al. (2017); listed in previous checklists from Türkiye by Çiçek et

al. (2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: HUIC.

***Cobitis splendens* Erk'akan, Atalay-Ekmekçi & Nalbant 1998**

Common name: Splendid spined loach

Taxonomy: Original description: *Cobitis splendens* Erk'akan, Atalay-Ekmekçi & Nalbant 1998: 11, figs. 3 A-E [Small stream tributary to the Black Sea, about 200 meters from sea border, 16 kilometers east of Akçakoca, and about 30 kilometers southwest of Ereğli (Black Sea), Türkiye; holotype: HUIC uncat.].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Erk'akan et al. (1998: 11, figs. 3 A-E).

Distribution. General distribution: Asia Minor: Black Sea coastal watersheds, northern Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species lives in the lower and middle parts of streams with still to moderately flowing, clear water with muddy or sandy bottoms. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Erk'akan et al. (1998); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 13-Batı Karadeniz. — Turkish material: HUIC.

***Cobitis strumicae* Karaman 1955**

Common name: Struma spined loach

Taxonomy: Original description: *Cobitis taenia strumicae* Karaman 1955: 190, fig. 4 [Monospitovo swamp and Strumica River, Yugoslavia; syntypes: MMNHS (lost)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Karaman (1955: 190, fig. 4).

Distribution. General distribution: Eurasia: Aegean and Black Sea basins.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species lives in stagnant to flowing waters with sand or silt bottoms. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Taşısiran. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege. — Turkish material: None.

***Cobitis taenia* Linnaeus 1758**

Common name: Spined loach

Taxonomy: Original description: *Cobitis taenia* Linnaeus 1758: 303 [Europe; Possible type: ZMUU Linn. Coll. 205 (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kottelat and Freyhof (2007: 315, fig.).

Distribution. General distribution: Central and Eastern Europe and northwestern Asia (southwestern Black Sea basin).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia.

Habitat: This species lives in small lowland streams and large rivers. In channels, ditches, backwaters, and lakes on sand bottoms. Able to inhabit very degraded streams, especially if siltation is a problem. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Taşısiran. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 13-Batı Karadeniz. — Turkish material: None.

***Cobitis troasensis* Freyhof, Bayçelebi & Geiger 2018**

Common name: Troya spined loach

Taxonomy: Original description: *Cobitis troasensis* Freyhof, Bayçelebi & Geiger 2018: 65, figs. 51-53 [Stream Tuzla about 1 km south of Ayvack, Çanakkale province, Türkiye, 39.596 26.438; holotype: ZFMK ICH-098603].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2018a: figs. 51-53).

Distribution. General distribution: Asia Minor: Tuzla River basin, Aegean coast.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives in streams with clear water and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: CLI, HAB, EUT. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Freyhof et al. (2018a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege. — Turkish material: ZFMK.

***Cobitis turcica* Hankó 1925**

Common name: Turkish spined loach

Taxonomy: Original description: *Cobitis taenia turcica* Hankó 1925: 154, fig. 3; pl. 3 (fig. 8) [Eregli, Türkiye; syntypes: MNH (2)].

Middle Eastern synonyms: *Cobitinula anatoliae* Hankó 1925.

Revisions: None.

Illustrations: Hankó (1925: fig. 3; pl. 3, fig. 8).

Distribution. General distribution: Asia Minor: Mediterranean tributaries, central Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species lives in streams, lakes, and marshes with still to moderately flowing, clear water with muddy and sandy bottoms. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Taşısiran. — Recorded from Türkiye in the original description by Hankó (1925); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: MNH.

***Sabanejewia aurata* (De Filippi 1863)**

Common name: Golden spined loach

Taxonomy: Original description: *Cobitis aurata* De Filippi 1863: 391 [Stream near Sartschem (apparently Sarcham-e Sofla, 39°07'N, 47°54'E), Iran; lectotype: MZUT 674; lectotype selected by Tortonese (1961: 188)].

Middle Eastern synonyms: *Cobitis aurata* De Filippi 1863; *Acanthopsis aurata* (De Filippi 1863); *Cobitis aralensis* Kessler 1877; *Sabanejewia aralensis* (Kessler 1877); *Cobitis hohenackeri* Kessler 1877.

Revisions: Berg (1949: 894) as *Cobitis aurata*, Vasil'eva et al. (2022: 12).

Illustrations: Berg (1949: 894-895, figs. 644-645) as *Cobitis aurata*; Sayyadzadeh et al. (2018: 279-284, figs. 2-7).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species occurs in primarily hilly streams with moderate currents, clear water, and bottoms with sand or fine gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Roftgar mahi-e talae. — Recorded from Iran in the original description by De Filippi (1863); listed by Sayyadzadeh et al. (2018); listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Taşısiran. — Listed in previous checklists from Türkiye by Geldiay and Balık (2007) as *Cobitis aurata*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish materials: None.

***Sabanejewia balcanica* (Karaman 1922)**

Common name: Balcan spined loach

Taxonomy: Original description: *Cobitis balcanica* Karaman 1922: 307 (1), figs. 1-2 [Vardar River, Yugoslavia; paratypes: MNHN 1928-0222 (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Karaman (1922: 307, figs. 1-2).

Distribution. General distribution: Eurasia: Black Sea and Aegean Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species occurs in mostly hilly streams with clear water and a sandy or fine gravel bottom. In a moderate current with few plants at water depths up to 1.5 m. Also observed in large rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Taşısiran. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

***Sabanejewia caspia* (Eichwald 1838)**

Common name: Caspian spined loach

Taxonomy: Original description: *Cobitis caspia* Eichwald 1838: 133 [Caspian Sea at Lenkoran, Azerbaidjan; No types known].

Middle Eastern synonyms: None.

Revisions: See Sayyadzadeh et al. (2018).

Illustrations: Sayyadzadeh et al. (2018: 284-289, figs. 9-14).

Distribution. General distribution: Eurasia: southwestern and southern Caspian Sea watersheds.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species occurs in primarily hilly streams with moderate currents, clear water, and bottoms with sand or fine gravel. Also found river mouth of Caspian Sea. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Roftgar mahi-e khazar. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024); recorded by Sayyadzadeh et al. (2018). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Remarks. For a long time, the Iranian spined loaches of the genus *Sabanejewia* have been classified into three species, *S. aurata*, *S. caspia*, and *S. caucasica* (Esmaeili et al. 2010, 2014, 2017, 2018; Jouladeh-Roudbar et al. 2015; Coad 2017) but presence of *S. caucasica* (Sayyadzadeh et al. 2018: 288, fig. 16) in Iran was under question. It is morphologically similar to *S. caspia* than to *S. aurata* and is distinguished from *S. caspia* by having marbled pigmentation along flank not forming a streak (vs. a narrow continuous dark brown streak along flank in *S. caspia*); dark blotches on dorsum often fused (vs. no large dorsal blotches in *S. caspia*); branches of suborbital spine the same size (vs. the anterior one much shorter than posterior in *S. caspia*) (Kottelat and Freyhof 2007). Sayyadzadeh et al. (2018) failed to find any spined loach in the examined materials as *S. caucasica*, so the data (morphologically and genetically) confirmed presence of only two *Sabanejewia* species in the Iranian drainage of the Caspian Sea basin (Sayyadzadeh et al. 2018).

Nemacheilidae Regan 1911 (brook loaches)

***Eidinemacheilus proudlovei* Freyhof, Abdullah, Ararat, Ibrahim & Geiger 2016**

Common name: Subterranean blind loach

Taxonomy: Original description: *Eidinemacheilus proudlovei* Freyhof Abdullah, Ararat, Ibrahim & Geiger, 2016: 228, figs. 2-6, 7A [Subterranean waters, Little Zab River, Sulaimani province, ephemeral spring in the Tabeen Gorge at the slope of the northernmost Piramagrün mountain, about 800 m east of the village Kanishok, 35°50'3.40"N, 45°6'22.14"E, Iraq; holotype: ZFMK-ICH 102318].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2016: figs. 2-6, 7A).

Distribution. General distribution: Little Zab River.

Distribution in the Middle East: Iraq.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species lives in subterranean caves; it was washed out of an aquifer into an ephemeral spring close to the Kanishok village. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iraq: [Endemic]. — None. — Recorded from Iraq in original description by Freyhof et al. (2016); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq materials: ZFMK-ICH, FSJF.

***Eidinemacheilus smithi* (Greenwood 1976)**

Common name: Zagros blind crested loach

Taxonomy: Original description: *Noemacheilus smithi* Greenwood 1976: 130, figs. 1a-c, 2 [A natural well at Kaaje-Ru, 33°05'N, 48°36'E, near Baq-e-Loveh Oasis, Zagros Mountains, Iran; holotype (unique): BMNH 1976.6.28.1].

Middle Eastern synonyms: *Nemacheilus smithi* Greenwood 1976; *Paracobitis smithi* (Greenwood 1976).

Revisions: None.

Illustrations: Freyhof et al. (2014: 21, fig. 11).

Distribution. General distribution: Middle East: spring and subterranean waters, Tigris River Drainage (Persian Gulf basin), Zagros Mountains.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species is a cave-dwelling species living in subterranean waters. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unspecified. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Mahi koor-e Zagros. — Recorded from Iran in the original description by Greenwood (1976); listed in previous checklists from Iran by Esmaeili et al. (2010a) as *Paracobitis smithi*; Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: BMNH.

***Nun galilaeus* (Günther 1864)**

Common name: Galilean loach

Taxonomy: Original description: *Cobitis galilaea* Günther 1864: 493 [Lake Tiberias [Galilée], Israel; holotype (unique): BMNH 1863.11.3.8].

Middle Eastern synonyms: *Cobitis galilaea* Günther 1864; *Nemacheilus galilaeus* (Günther 1864); *Oxynoemacheilus galilaeus* (Günther 1864); *Nun galilaea* (Günther 1864).

Revisions: Banarescu et al. (1982: 23), Prokofiev (2009, 2010, 2017: 252).

Illustrations: Prokofiev (2017: 254, fig. 68); Freyhof et al. (2012: 304, fig. 1, Syria); Freyhof et al. (2020: 231) as *Oxynoemacheilus galilaeus*.

Distribution. General distribution: Hula Lake, Jordan River basin.

Distribution in the Middle East: Israel, Jordan Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species is a lacustrine species which inhabits lake shores. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CON, CLI, EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Israel: [Native]. — Nun ha'hula. — Recorded from Israel in original description by Günther (Günther (1865: 490) as *Cobitis galilaea*; by Lortet (1883: 173); Tristram (1884: 177); Steinitz (1953: 214) as *Nemachilus galilaeus*; confirmed by Goren and Ortal (1999: 4) as *Nemacheilus panthera* and *Nun galilaeus*; listed by Çiçek et al. (2023c). — Israel material: BMNH, HUI. **Remarks.** This species extinct in Israel.

Status in Syria: [Native]. — None. — First record from Syria by Saad et al (2009); listed by Saad et al. (2023). — Distribution in River Basin: 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syria material: FSJF.

***Oxynoemacheilus afrenatus* (Battalgil 1941)**

Common name: Tigris loach

Taxonomy: Original description: *Nemachilus frenatus afrenatus* Battalgil 1941: 183 [Small creek at Diyarbakir, tributary of the Tigris River, Türkiye; no types known].

Middle Eastern synonyms: None.

Revisions: Prokofiev (2009: 880) as *Oxynoemacheilus frenatus afrenatus*.

Illustrations: None.

Distribution. General distribution: Small creek at Diyarbakir, tributary of the Tigris River.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits moderately fast-flowing waters, from small streams to the shores of large rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: ABS, CON, CLI, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Battalgil (1941); listed by Çiçek et al. (2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Oxynoemacheilus amanos* Kaya, Yoğurtçuoğlu & Freyhof 2021**

Common name: Amanos loach

Taxonomy: Original description: *Oxynoemacheilus amanos* Kaya, Yoğurtçuoğlu & Freyhof 2021: 560, figs. 1-3 [Spring İncesu at Hassa, Hatay province, Türkiye, 36.7935, 36.5135; holotype: FFR 15582].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kaya et al. (2021: 560, figs. 1-3).

Distribution. General distribution: spring İncesu at Hassa, northern Orontes basin, Hatay province, Türkiye.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species inhabits moderately fast-flowing waters in small streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: ABS, CON, CLI, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Amanos çöpçü balığı. — Recorded from Türkiye in the original description by Kaya et al. (2021); listed by Çiçek et al. (2023a). — Distribution in River Basin: 19-Asi. — Turkish material: FFR.

Oxynoemacheilus anatolicus* Erk'akan, Özeren & Nalbant 2008*Common name:** Burdur loach**Taxonomy:** Original description: *Oxynoemacheilus anatolicus* Erk'akan, Özeren & Nalbant 2008: 117, figs. 4-6 [Input of Karamanli Dam Lake, Burdur, southwestern Türkiye; holotype: HUIC-AKD-13].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Erk'akan et al. (2008: 117, figs. 4-6).**Distribution. General distribution:** Asia Minor: Burdur River basin and upper Dalaman River basin, Burdur Province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species inhabits slow-moving streams with dense vegetation and sand, mud, or gravel substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2008); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 10-Burdur. — Turkish material: HUIC.***Oxynoemacheilus angorae* (Steindachner 1897)****Common name:** Angora loach**Taxonomy:** Original description: *Nemacheilus angorae* Steindachner 1897: 693 [9], pl. 4 (fig. 4a-c) [Tabakane-Sir and Tschibuk-Tschai, Türkiye; syntypes: (16) NMW].**Middle Eastern synonyms:** *Nemachilus angorae* Steindachner 1897; *Orthrias angorae* (Steindachner 1897); *Barbatula phoxinoides* Erk'akan, Nalbant & Özeren 2007; *Oxynoemacheilus phoxinoides* (Erk'akan, Nalbant & Özeren 2007).**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Asia Minor: western and central Anatolian Black Sea basins, Marmara and Susurluk basins.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 430-Northern Anatolia.**Habitat:** This species inhabits a wide range of habitats, from fast-running mountain streams and the shores of large rivers to muddy lakes with dense vegetation. Only moderately rheophilic, avoiding very fast currents. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Çamur balığı. — Recorded from Türkiye in the original description by Steindachner (1897); listed in previous checklists from Türkiye by Kuru (2004) as *Orthrias angorae angorae*; Geldiay and Balık (2007) as *Orthrias (Noemacheilus) angorae*; Fricke et al. (2007) as *Nemacheilus angorae*; Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 13-Batı Karadeniz, 15-Kızılırmak. — Turkish material: NMW.

Oxynoemacheilus araxensis* (Bănărescu & Nalbant 1978)*Common name:** Erzurum loach**Taxonomy:** *Orthrias angorae araxensis* Bănărescu & Nalbant 1978: 259, fig. 2; pl. 20 (figs. 1-4) [Kandili Karassu, upper Karassu drainage, Euphrates-Tigris basin, eastern Türkiye; holotype: ZMH 4827].**Middle Eastern synonyms:** *Orthrias araxensis* Bănărescu & Nalbant 1978; *Barbatula araxensis* (Bănărescu & Nalbant 1978).**Revisions:** Prokofiev (2009: 880) as *Oxynoemacheilus angorae araxensis*; Freyhof et al. (2012: 307).**Illustrations:** Bănărescu and Nalbant (1978: 259, fig. 2; pl. 20, figs. 1-4).**Distribution. General distribution:** Asia Minor: upper Euphrates (Firat Nehri) (Persian Gulf tributary), Erzurum Province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits gravel-bottomed streams with moderately flowing currents. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: DD (IUCN, 2023).**Threats:** Current threats to the species are unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Bănărescu and Nalbant (1978); listed in previous checklists from Türkiye by Kuru (2004) as *Orthrias angorae araxensis*; Geldiay and Balık (2007); Fricke et al. (2007) as *Orthrias araxensis*; Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Firat-Dicle. — Turkish material: ZMH.***Oxynoemacheilus argyrogramma* (Heckel 1847)****Common name:** Two spot loach**Taxonomy: Original description:** *Cobitis argyrogramma* Heckel 1847: 239, pl. 18 (fig. 3) [Aleppo, Syria; syntypes: NMW 48541 (8), 59913 (4)].**Middle Eastern synonyms:** *Barbatula argyrogrammus* (Heckel 1847); *Noemacheilus tschaiyssuensis* Bănărescu & Nalbant 1964; *Nemacheilus tschaiyssuensis* Bănărescu & Nalbant 1964; *Orthrias tschaiyssuensis* (Bănărescu & Nalbant 1964); *Oxynoemacheilus tschaiyssuensis* (Bănărescu & Nalbant 1964).**Revisions:** Prokofiev (2009: 888) as *O. argyrogrammus*; Freyhof et al. (2012).**Illustrations:** Heckel (1847: 239, pl. 18, fig. 3) as *Cobitis argyrogramma*.**Distribution. General distribution:** Asia Minor and Middle East: Euphrates and Tigris River basins.**Distribution in the Middle East:** Iraq Syria, and Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits a wide range of habitats with moderately fast-flowing waters, from small hill streams to the shores of large rivers, also in stagnant water bodies and reservoirs. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON, CLI. — High sensitivity to human activities. — No keystone species. — Decline status: Significant decline, locally extinct. — Moderate priority for conservation action.**Status in Iraq:** [Native]. — None. — First record from Iraq by Coad (2010); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris. — Iraq materials: None.**Status in Syria:** [Native]. — Lahhas alsakhr. — Recorded from Syria in original description by Heckel (1847) as *Cobitis argyrogramma*; subsequently reported by Beckman (1962: 72) as *Nemachilus argyrogramma*; listed by Saad et al. (2023). — Distribution in River Basin: 1-

Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, MNHN, NMW.

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Noemacheilus argyrogramma*; Geldiay and Balık (2007) as *Orthrias (Noemacheilus) argyrogramma*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Oxynoemacheilus arsanius* Freyhof, Kaya, Turan & Geiger 2019**

Common name: Loach

Taxonomy: Original description: *Oxynoemacheilus arsanius* Freyhof, Kaya, Turan & Geiger 2019: 44, figs. 12-14 [Stream Kaynarca at Tepe, Muş Province, Türkiye; holotype: FFR 15530].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2019: 44, figs. 12-14).

Distribution. General distribution: Asia Minor: Murat and upper Karasu River drainages, upper Euphrates basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits gravel-bottomed streams with moderately flowing currents. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Freyhof et al. (2019). — Listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Oxynoemacheilus axylos* Yoğurtçuoğlu, Kaya & Freyhof 2022**

Common name: Melendiz loach

Taxonomy: Original description: *Oxynoemacheilus axylos* Yoğurtçuoğlu, Kaya & Freyhof 2022: 472, figs. 14-16 [Spring at Baltalı, 30 km east of Haymana, Konya province, Türkiye, 39.2393, 32.7501; holotype: FFR 15616].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Yoğurtçuoğlu et al. (2022: 472, figs. 14-16).

Distribution. General distribution: Asia Minor: springs, streams and rivers in the endorheic Lake Tuz basin, Central Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits gravel-bottomed streams with moderately flowing currents. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Yoğurtçuoğlu et al. (2022); listed by Çiçek et al. (2023a). — Distribution in River Basin: 16-Konya. — Turkish material: FFR.

Oxynoemacheilus banarescui* (Delmastro 1982)*Common name:** Paphlagonian sportive loach**Taxonomy:** Original description: *Orthrias brandti araxensis banarescui* Delmastro 1982: 53, fig. 1 [Devrekani creek near Devrekani, Anatolia, Türkiye; holotype: MCSNC].**Middle Eastern synonyms:** None.**Revisions:** Freyhof et al. (2012: 307).**Illustrations:** Delmastro (1982: 53, fig. 1).**Distribution. General distribution:** Asia Minor: Black Sea tributaries, Kastamonu Province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia.**Habitat:** This species inhabits fast-flowing streams and rivers with gravel or rocky substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NT (IUCN, 2023).**Threats:** ABS, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Native]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Delmastro (1982); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak. — Turkish material: MCSNC.***Oxynoemacheilus bergi* (Gratzianov 1907)****Common name:** Berg's loach**Taxonomy:** Original description: *Nemacheilus bergi* Gratzianov 1907: 163, 167 [Akstapha (Akstafa) River, right tributary of Kura River, Azerbaijan; syntypes: (2) ZMMU (not found in 2002)].**Middle Eastern synonyms:** *Nemacheilus angorae lenkoranensis* Abdurakhmanov 1962; *Oxynoemacheilus lenkoranensis* (Abdurakhmanov 1962); *Nemacheilus angorae alasanicus* Elanidze 1983.**Revisions:** None.**Illustrations:** Freyhof et al. (2021b: 144, fig. 7).**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.**Habitat:** This species inhabits gravel-bottomed streams with moderate to fast-flowing currents. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.**Remarks.** *Nemacheilus bergi* was named by Gratzianov (1907) based on a description by Berg (1899) of two individuals (61 mm, 35 mm) from the Akstapha [Agstafa] River, a right tributary of the Kura in Azerbaijan. Berg (1899:73) wrote in his chapter on *Nemacheilus* sp.: "Die Schwanzflosse ist im Verhältnis zu *N. Brandt* schwach ausgeschnitten (bei dem Exemplar von 61 mm. Länge ist der mittelste Strahl der Schwanzflosse 8 mm. Und die seitlichen 11 mm lang)." [The caudal fin is slightly emarginate in comparison with *N. brandtii* (in the specimen of 61 mm the length of the central caudal-fin ray is 8 mm and of the lateral ones 11 mm)]. Also, Berg (1899:72-73) mentions that the pelvic fin reaches the anus, there is a bold bar at the caudal-fin base, a wide band in the middle of the caudal fin

and incomplete bars on the flank. This species is further treated as a synonym of *O. angorae* by Berg (1949), who distinguished *O. angorae* from *O. bergianus* by the caudal peduncle being less than two times longer than deep in *O. angorae* vs. more in *O. bergianus*. Çiçek et al. (2018) treat *N. bergi* as a valid species in *Oxynoemacheilus* without giving further details. Based on a photo sent by SE to Jörg Freyhof (see Freyhof et al. 2021, fig. 7) of one individual collected in the Kura, very close to the inflow of the Agstafa, this individual has the caudal-peduncle depth two times in the caudal-peduncle length, the caudal fin is emarginate and the middle caudal-fin ray is 75% of the length of the longest principal ray in the lower caudal-fin lobe (72% in the description of Berg 1899, but unclear which lobe was measured). These two-character states as well as its colour pattern distinguish *O. bergi* clearly from *O. brandtii* (caudal peduncle 2.5-3.2 times longer than deep, caudal fin forked). Indeed, the fish on fig. 7 agree with the characters given for *N. bergi* by Berg (1899) and thus Freyhof et al. (2021b) supported the view of Çiçek et al. (2018) treating *O. bergi* as a valid species.

Oxynoemacheilus bergianus (Derjavin 1934)

Common name: Kura sportive loach

Taxonomy: Original description: *Nemachilus bergianus* Derjavin 1934: 109, fig. 8 [Kisum village, Shah-rud River, Safid Rud basin, Iran; holotype (unique): ZIN 25433].

Middle Eastern synonyms: *Nemacheilus bergianus* Derjavin 1934; *Orthrias bergianus* (Derjavin 1934); *Barbatula erdali* Erk'akan, Nalbant & Özeren 2007; *Oxynoemacheilus erdali* (Erk'akan, Nalbant & Özeren 2007).

Revisions: None.

Illustrations: Derjavin (1934: fig. 8) as *Nemachilus bergianus*; Sayyadzadeh et al. (2017: 236, fig. 7).

Distribution. General distribution: Eurasia: Caspian Sea, Urmia and Namak Lake basins.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 447-Namak.

Habitat: This species inhabits fast flowing streams and rivers with gravel or rocky substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Sefidrud. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 15-Namak Lake, 14-Lake Orumiyeh. — Iran material: ZM-CBSU (see Sayyadzadeh and Esmaili 2020).

Status in Iraq: [Native]. — None. — First record from Iraq by Freyhof et al. (2022); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq material: None.

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle, 24-Aras. — Turkish material: None.

Oxynoemacheilus brandtii (Kessler 1877)

Common name: Kura loach

Taxonomy: Original description: *Nemachilus brandtii* Kessler 1877: 174, pl. 6 (fig. 23) [Upper Kura River at Tbilis, Georgia, Eurasia; syntypes: (5) BMNH 1897.7.5.39 [ex ZIN] (1) Tiflis, ZIN 2923 (4, lost in 1924)].

Middle Eastern synonyms: *Nemacheilus brandti* Kessler 1877; *Nemacheilus brandtii* Kessler 1877; *Barbatula brandtii* (Kessler 1877); *Orthrias brandtii* (Kessler 1877); *Nemacheilus brandtii gibbusnazus* Elanidze 1983.

Revisions: None.

Illustrations: Kessler (1877: pl. 6, fig. 23) as *Nemachilus brandtii*; Jouladeh-Roudbar et al. (2020:163, fig. 300).

Distribution. General distribution: Eurasia: Kura and Aras River drainages, Caspian Sea basin.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits fast to very fast-flowing streams and rivers with gravel or rocky substrates. Usually, they are most common in riffles and rapids in the middle of the river. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Kora. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh. — Iran material: ZM-CBSU (see Sayyadzadeh and Esmaili, 2020).

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *Orthrias brandtii*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Oxynoemacheilus bureschi* (Drensky 1928)**

Common name: Bulgarian stone loach

Taxonomy: Original description: *Nemachilus bureschi* Drensky 1928: 160, fig. 1 [Bezirk Radomir and a tributary of the Struma River in Bezirk Küstendil and Dupniza, Bulgaria; syntypes: NMNHS (2)]. It is absent in channelized habitats and prefers the fast-flowing water in midstream. Freshwater.

Middle Eastern synonyms: *Nemacheilus bureschi* Drensky 1928; *Barbatula bureschi* (Drensky 1928); *Orthrias bureschi* (Drensky 1928); *Orthrias brandti bureschi* (Drensky 1928); *Orthrias brandti macedonicus* Sorić 1999.

Revisions: Freyhof et al. (2012: 307).

Illustrations: Drensky (1928: fig. 1) as *Nemachilus bureschi*.

Distribution. General distribution: Eurasia: Aegean Sea watershed (Macedonia, Greece, Bulgaria, and Türkiye).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species is a small riverine that prefers the larger streams and is not found in the smaller creeks. It is absent in channelized habitats and prefers the fast-flowing water in midstream. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Orthrias brandti bureschi*; Geldiay and Balık (2007); Fricke et al. (2007) as *Barbatula bureschi*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

Oxynoemacheilus cemali* Turan, Kaya, Kalayci, Bayçelebi & Aksu 2019*Common name:** Loach**Taxonomy:** Original description: *Oxynoemacheilus cemali* Turan, Kaya, Kalayci, Bayçelebi & Aksu 2019: (2), figs.1-4 [Stream Yaglı, about 2 km southeast of Incesu, Erzurum Province, Türkiye, 40°18'30.49"N, 41°00'24.36"E; holotype: FFR 15504].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2019a: 2, figs.1-4).**Distribution. General distribution:** Eurasia: Çoruh and upper Yesilirmak River drainages, Black Sea basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia, 433-Western Transcaucasia.**Habitat:** This is a small riverine species that prefers the larger streams but is also found in the smaller creeks. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Native]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Turan et al. (2019a). — Listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 14-Yeşilirmak, 23-Çoruh. — Turkish material: FFR.***Oxynoemacheilus ceyhanensis* (Erk'akan, Nalbant & Özeren 2007)****Common name:** Elbistan loach**Taxonomy:** Original description: *Schistura ceyhanensis* Erk'akan, Nalbant & Özeren 2007: 80, fig. 10 [Yalak Village, Elbistan, Kahramanmaraş Province, 38°39'N, 36°37'E, Türkiye; holotype: HUIC CEY-1].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Erk'akan et al. (2007: 80, fig. 10).**Distribution. General distribution:** Asia Minor: Ceyhan River basin (Mediterranean tributary).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species prefers moderately fast-flowing streams and rivers with gravel or rocky substrates. It is found in the larger streams but is also found in the smaller creeks. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: DD (IUCN, 2023).**Threats:** ABS, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2007); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: HUIC.***Oxynoemacheilus chomanicus* Kamangar, Prokofiev, Ghaderi & Nalbant 2014****Common name:** Choman loach**Taxonomy:** Original description: *Oxynoemacheilus chomanicus* Kamangar, Prokofiev, Ghaderi & Nalbant 2014: 46, fig. 5 [Baneh River, Baneh, Kurdistan, Iran, 36°01'03"N, 45°55'20"E; holotype: FCFUK 176].**Middle Eastern synonyms:** None.

Revisions: None.

Illustrations: Kamangar et al. (2014: 46, fig. 5).

Distribution. General distribution: Tigris River Drainage (Persian Gulf basin).

Distribution in the Middle East: Iran, Iraq, and Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with moderately to rapidly flowing freshwater in both mountainous and desert landscapes. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: ABS, CON, EUT. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Choman. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Freyhof et al. (2022); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq material: None.

Status in Türkiye: [Native]. — Çöpçü balığı. — First record from Türkiye by Kaya et al. (2016); Listed in previous checklist by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Oxynoemacheilus ciceki* Sungur, Eagderi & Jalili 2017**

Common name: Sultan loach

Taxonomy: Original description: *Oxynoemacheilus ciceki* Sungur, Eagderi & Jalili 2017: 376, figs. 1-5 [Sultan Marsh, Kayseri Province, Türkiye, 38°23'23.53"N, 35°21'54.52"E; holotype: NHVUIC 2017-03-15-h].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Sungur et al. (2017: 376, figs. 1-5).

Distribution. General distribution: Asia Minor: Sultan Marsh, Kayseri Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species occurs in springs and small lakes with clear water and muddy and sandy bottoms. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Sultan Çöpçü balığı. — Recorded from Türkiye in the original description by Sungur et al. (2017); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: NHVUIC.

***Oxynoemacheilus cilicicus* Kaya, Turan, Bayçelebi, Kalaycı & Freyhof 2020**

Common name: Göksu loach

Taxonomy: Original description: Kaya, Turan, Bayçelebi, Kalaycı & Freyhof 2020: 289, figs. 2-5 [Irrigation canal 6 km southeast of Silifke, Mersin Province, Türkiye, 36.3465, 33.9806; holotype: FFR 15579].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kaya et al. (2020a: 289, figs. 2-5).

Distribution. General distribution: Asia Minor: Lower Göksu, Seyhan and Ceyhan River basins.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species prefers moderately fast-flowing streams and rivers with gravel or rocky substrates. It is found in the larger streams but is also found in the smaller creeks. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Göksu çöpçü balığı. — Recorded from Türkiye in the original description by Kaya et al. (2020a). — Listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 17-Doğu Akdeniz, 18-Seyhan, 20-Ceyhan. — Turkish material: FFR.

***Oxynoemacheilus cyri* (Berg 1910)**

Common name: Göle loach

Taxonomy: Original description: *Nemacheilus tigris cyri* Berg 1910: 170 [Upper reaches of the Kura River (Göle depression), near Okam village, Ardahan Province, Türkiye; syntypes: (several) ZIN 13291 (6+), 16885 (2)].

Middle Eastern synonyms: *Barbatula cyri* (Berg 1910); *Orthrias cyri* (Berg 1910); *Nemacheilus cyri* Berg 1910.

Revisions: Freyhof et al. (2012: 307).

Illustrations: None.

Distribution. General distribution: Asia Minor: Kura Nehri basin (Caspian Sea tributary), Ardahan Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits high mountain streams with moderately fast-flowing waters. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are no obvious threats for this species in the area. The area is grazed during summer months, but this is not a threat to the species. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Göle çöpçü balığı. — Recorded from Türkiye in the original description by Berg (1910); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *Orthrias cyri*; Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: ZIN.

***Oxynoemacheilus eliasi* Yoğurtçuoğlu, Kaya & Freyhof 2022**

Common name: Loach

Taxonomy: Original description: *Oxynoemacheilus eliasi* Yoğurtçuoğlu, Kaya & Freyhof 2022: 478, figs. 18-20 [Inlet of Tahtalı Reservoir, under Şaşal bridge, Izmir province, Türkiye, 38.1990, 27.1705; holotype: FFR 15619].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Yoğurtçuoğlu et al. (2022: 478, figs. 18-20).

Distribution. General distribution: Asia Minor: Gediz, Küçük Menderes and Tahtalı River drainages, western Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits moderately fast-flowing streams and rivers with gravel or rocky substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Yoğurtcuoğlu et al. (2022); listed by Çiçek et al. (2023a). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes. — Turkish material: FFR.

***Oxynoemacheilus elsae* Eagderi, Jalili & Çiçek 2018**

Common name: Elsa's loach

Taxonomy: Original description: *Oxynoemacheilus elsae* Eagderi, Jalili & Çiçek 2018: 454, figs. 1-4 [Zarneh River, near Shahin-Dej city, Lake Urmia basin, west Azerbaijan Province, Iran, 36°37'40"N, 46°43'30"E; holotype: IMNRF-UT-1404-H].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Eagderi et al. (2018: 454, figs. 1-4).

Distribution. General distribution: Middle East: Lake Urmia basin.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 445-Orumiyeh.

Habitat: This species inhabits moderately fast-flowing streams and rivers with gravel or rocky substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Oromiyeh. — Listed in previous checklists from Iran by Esmaeili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022). — Distribution in River Basin: 14-Lake Orumiyeh. — Iran material: IMNRF.

Status in Türkiye: [Native]. — Çöpçü balığı. — Recorded from Türkiye by (Kaya, 2020b); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 25-Van Lake. — Turkish material: None.

***Oxynoemacheilus ercisianus* (Erk'akan & Kuru 1986)**

Common name: Van loach

Taxonomy: Original description: *Orthrias angorae ercisianus* Erk'akan & Kuru 1986: 161, fig. 1a [Ercis stream, Lake Van basin, Türkiye; holotype: HUIC].

Middle Eastern synonyms: *Orthrias ercisianus* Erk'akan & Kuru 1986; *Nemacheilus pulsiz* Krupp 1992; *Paracobitis pulsiz* (Krupp 1992).

Revisions: Freyhof et al. (2012: 307).

Illustrations: Erk'akan & Kuru (1986: 161, fig. 1a).

Distribution. General distribution: Lake Van basin endemic, Van Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 444-Lake Van.

Habitat: This species inhabits moderately fast-flowing streams and rivers with gravel or rocky substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description Erk'akan & Kuru (1986); listed in previous checklists from Türkiye by Kuru

(2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 25-Van Lake. — Turkish material: HUIC.

***Oxynoemacheilus eregliensis* (Bănărescu & Nalbant 1978)**

Common name: Central Anatolian loach

Taxonomy: Original description: *Orthrias angorae eregliensis* Bănărescu & Nalbant 1978: 258, fig. 1 [Eregli, southwestern central Türkiye; holotype: ZMH 1921].

Middle Eastern synonyms: *Orthrias eregliensis* Bănărescu & Nalbant 1978; *Barbatula eregliensis* (Bănărescu & Nalbant 1978); *Oxynoemacheilus atili* Erk'akan 2012.

Revisions: Freyhof et al. (2012: 307).

Illustrations: Bănărescu and Nalbant (1978: 258, fig. 1).

Distribution. General distribution: Asia Minor: Central Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits small streams and springs with gravel, sand, or mud substrates and slowly flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Bănărescu and Nalbant (1978); listed in previous checklists from Türkiye by Kuru (2004) as *Orthrias angorae eregliensis*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: ZMH.

***Oxynoemacheilus euphraticus* (Bănărescu & Nalbant 1964)**

Common name: Euphrates loach

Taxonomy: Original description: *Nemacheilus insignis euphraticus* Bănărescu & Nalbant 1964: 175, pl. 7 (figs. 11-12) [Euphrates (Firat Nehri) Basin, Malatya, eastern Anatolia, Türkiye; holotype: ZMH 1889. Type catalog: Wilkens 1977: 158].

Middle Eastern synonyms: *Nemacheilus euphraticus* Bănărescu & Nalbant 1964; *Barbatula euphratica* (Bănărescu & Nalbant 1964); *Orthrias euphratica* (Bănărescu & Nalbant 1964); *Orthrias euphraticus* (Bănărescu & Nalbant 1964); *Oxynoemacheilus freyhofi* Jouladeh-Roudbar, Eagderi & Hosseinpour 2016.

Revisions: Kottelat (2012: 95); Freyhof et al. (2012).

Illustrations: Bănărescu and Nalbant (1964: 175, pl. 7, figs. 11-12) as *Nemacheilus insignis euphraticus*.

Distribution. General distribution: Asia Minor and Middle East: Euphrates River and Tigris River drainages (Türkiye, Syria, Iraq, and Iran). — Habitat: This species occurs in streams with moderate flow. Freshwater.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with moderate flow. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e forat. — Listed in previous checklists from Iraq by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Freyhof et al. (2021b); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq materials: ZFMK-ICH, FSJF.

Status in Syria: [Native]. — Lahhas alsakhr. — Listed in previous checklists from Syria by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: None.

Status in Türkiye: [Native]. — Çöpçü balığı. — Recorded from Türkiye in original description by Bănărescu and Nalbant (1964); listed in previous checklists from Türkiye by Kuru (2004) as *Orthrias insignis euphratica*; Geldiay and Balık (2007); Fricke et al. (2007) *Orthrias euphraticus*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: ZMH.

***Oxynoemacheilus evreni* (Erk'akan, Nalbant & Özeren 2007)**

Common name: Ceyhan sportive loach

Taxonomy: Original description: *Schistura evreni* Erk'akan, Nalbant & Özeren 2007: 82, fig. 12 [Tekir Stream, Göksu Basin, 38°39'N, 36°37'E, Türkiye; holotype: SEY-3].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2012: 307).

Illustrations: Erk'akan et al. (2007: 82, fig. 12).

Distribution. General distribution: Asia Minor: Ceyhan River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species is found in streams and rivers with gravel substrates and moderately to very fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Ceyhan Çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2007); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: HUIC.

***Oxynoemacheilus fatsaensis* Saygun, Ağdamar & Özuluğ 2021**

Common name: Loach

Taxonomy: Original description: *Oxynoemacheilus fatsaensis* Saygun, Ağdamar & Özuluğ 2021: 40, figs. 2-6 [Elekçi stream, Ordu Province, northern Anatolia, Türkiye, 40.53200N, 37.23390E; holotype: IUSHM 2021-1449].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Saygun et al. (2021: 40, figs. 2-6).

Distribution. General distribution: Asia Minor: Elekçi stream drainage, northern Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species is found in moderately fast-flowing to almost standing waters of springs, streams, and rivers with mud, sand, or gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Saygun et al. (2021); listed by Çiçek et al. (2023a). — Distribution in River Basin: 22-Doğu Karadeniz. — Turkish material: IUSHM.

Oxynoemacheilus frenatus* (Heckel 1843)*Common name:** Banded Tigris loach**Taxonomy:** Original description: *Cobitis frenata* Heckel 1843: 1086 (96) [Tigris River, Mosul, Iraq; syntypes: NMW 48552 (5), NRM 15477 (1)].**Middle Eastern synonyms:** *Nemacheilus frenatus* (Heckel 1843); *Orthrias frenatus* (Heckel 1843); *Barbatula frenata* (Heckel 1843); *Nemacheilus frenatus* (Heckel 1847); *Orthrias frenatus* (Heckel 1843).**Revisions:** Freyhof et al. (2012); Sayyadzadeh and Esmaili (2020).**Illustrations:** Heckel (1843: pl. 12, fig. 1) as *Cobitis frenatus*; Sayyadzadeh and Esmaili (2020: 202, 204, figs. 10-11).**Distribution. General distribution:** Asia Minor and Middle East: Tigris River and Lesser Zab drainages (Persian Gulf Basin).**Distribution in the Middle East:** Iran, Iraq, and Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species occurs in moderately fast-flowing to almost standing waters of springs, streams, and rivers with mud or gravel substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Stable. — High priority for conservation action.**Status in Iran:** [Native]. — Loch mahi-e Tigris. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq materials: NMW, NRM.**Status in Syria:** [Native]. — Lahhas alsakhr. — First record from Syria by Beckman (1962: 74) as *Nemachilus frenata*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, NRM.**Status in Türkiye:** [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Noemacheilus frenatus*; Fricke et al. (2007) as *Orthrias frenatus*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: None.***Oxynoemacheilus germencicus* (Erk'akan, Nalbant & Özeren 2007)****Common name:** Carian loach**Taxonomy:** Original description: *Barbatula germencica* Erk'akan, Nalbant & Özeren 2007: 70, fig. 2 [Aydin, Germencik, 15th kilometer, 37°38'N, 27°18'E [not correct, probably north of Germencik], Türkiye; holotype: HUIC BM-1].**Middle Eastern synonyms:** *Oxynoemacheilus cinicus* (Erk'akan, Nalbant & Özeren 2007); *Oxynoemacheilus mesudae* Erk'akan 2012; *Barbatula cinica* Erk'akan, Nalbant & Özeren 2007.**Revisions:** Freyhof et al. (2012: 307).**Illustrations:** Erk'akan et al. (2007: 79, fig. 9).**Distribution. General distribution:** Asia Minor: Büyük Menderes River basin (Aegean Sea tributary).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 429-Western Anatolia.**Habitat:** This species occurs in moderately fast-flowing to almost standing waters of springs, streams, and rivers with mud, sand, or gravel substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS; CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2007); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: HUIIC.

***Oxynoemacheilus gyndes* Freyhof & Abdullah 2017**

Common name: Sirvan loach

Taxonomy: Original description: *Oxynoemacheilus gyndes* Freyhof & Abdullah 2017: 74, figs. 1-5 [Stream Zalm south of Taparezina, 35°18'23"N, 45°58'14"E, Iraq; holotype: ZFMK 103019].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Abdullah (2017: 74, figs. 1-5).

Distribution. General distribution: Middle East: upper Sirwan drainage, Tigris basin.

Distribution in the Middle East: Iraq.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in moderately fast flowing waters of streams and rivers with mud or gravel substrate and low pollution level. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iraq: [Endemic]. — None. — Recorded from Iraq in original description by Freyhof and Abdullah (2017); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq materials: ZFMK, FSJF.

Remarks. Freyhof and Abdullah (2017) described two new species of loaches, *Oxynoemacheilus gyndes* and *O. hanae*, from the headwater streams of the upper Sirwan (Kurdish) drainage [Sirvan (Persian) or Diyala (Arabic)] in Iraqi Kurdistan (Tigris). Esmaeili et al. (2017a) mentioned that they might be available in the Sirvan tributaries in Iran too. Then Jouladeh-Roudbar et al. (2020) listed these two loach fishes in freshwater fishes of Iran. So far, no confirmed data (molecular and morphological) has been published about the presence of these two species for the Iranian inland waters. More data is needed to confirm their presence in the Sirvan tributaries of Iran.

***Oxynoemacheilus hamwii* (Krupp & Schneider 1991)**

Common name: Orontes sportive loach

Taxonomy: Original description: *Nemacheilus hamwii* Krupp & Schneider 1991a: 24, figs. 1-5 [Nahr Afrin in Afrin, Syria, 36°31'N, 36°52'E; holotype: SMF 17398].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2012).

Illustrations: Krupp and Schneider (1991a: 24, figs. 1-5); Freyhof and Geiger (2021: 580, fig. 10).

Distribution. General distribution: Asia Minor and Middle East: Orontes River basin.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species lives in moderately fast-flowing streams and rivers with a mud or gravel substrate and low pollution levels. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CON, HAB, EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Syria: [Native]. — Lahhas alsakhr. — Recorded from Syria in original description by Krupp & Schneider (1991a: 24); subsequently reported by Saad et al. (2009, 2023). — Distribution in River Basin: 4-Orontes. — Syrian material: SMF, MSL.

Status in Türkiye: [Native]. — Asi çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2016, 2020, 2023). — Distribution in River Basin: 19-Asi. — Turkish material: None.

***Oxynoemacheilus hanae* Freyhof & Abdullah 2017**

Common name: Hana's loach

Taxonomy: Original description: *Oxynoemacheilus hanae* Freyhof & Abdullah 2017: 79, figs. 6-10 [Stream Zalm south of Taparezina, 35°18'23"N, 45°58'14"E, Iraq; holotype: ZFMK 103020].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Abdullah (2017: 74, figs. 6-10).

Distribution. General distribution: Middle East: upper Sirwan drainage, Tigris basin.

Distribution in the Middle East: Iraq.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in moderately fast flowing to almost standing waters of clean springs, streams, and rivers with mud or gravel substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iraq: [Endemic]. — None. — Recorded from Iraq in original description by Freyhof and Abdullah (2017); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq materials: ZFMK, FSJF.

Remarks. Freyhof and Abdullah (2017) described two new species of loaches, *Oxynoemacheilus gyndes* and *O. hanae*, from the headwater streams of the upper Sirwan (Kurdish) drainage [Sirvan (Persian) or Diyala (Arabic)] in Iraqi Kurdistan (Tigris). Esmaili et al. (2017a) mentioned that they might be available in the Sirvan tributaries in Iran too. Then Jouladeh-Roudbar et al. (2020) listed these two loach fishes in freshwater fishes of Iran. So far, no confirmed data (molecular and morphological) has been published about the presence of these two species for the Iranian inland waters. More data is needed to confirm their presence in the Sirvan tributaries of Iran.

***Oxynoemacheilus hazarensis* Freyhof & Özuluğ 2017**

Common name: Hazar loach

Taxonomy: Original description: *Oxynoemacheilus hazarensis* Freyhof & Özuluğ 2017: 379, figs. 1-6 [North-eastern shore of Lake Hazar, Elazığ province, Türkiye, 38°28.398'N, 39°18.093'E; holotype: IUSHM 2017-1171].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2017a: 379, figs. 1-6).

Distribution. General distribution: Asia Minor: Lake Hazar basin endemic, upper Tigris River drainage (Persian Gulf Basin).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species lives in moderately fast-flowing streams and rivers with a mud or gravel substrate and a lake ecosystem. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Hazar çöpçü balığı. — Recorded from Türkiye in the original description by Freyhof & Özuluğ (2017). — Listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: IUSHM.

***Oxynoemacheilus insignis* (Heckel 1843)**

Common name: Syrian loach

Taxonomy: Original description: *Cobitis insignis* Heckel 1843: 1087 (97) [Damascus, Syria; syntypes: NMW (4, not found), SMF 166 (2, poor condition)].

Middle Eastern synonyms: *Nemacheilus insignis* (Heckel 1843); *Noemacheilus angorae jordanicus* Bănărescu & Nalbant 1966; *Noemacheilus angorae tortonesei* Bănărescu & Nalbant 1966; *Orthrias dori* Goren & Bănărescu 1982; *Nemacheilus dori* Goren & Bănărescu 1982; *Orthrias israeliticus* Goren & Nalbant 1982; *Oxynoemacheilus pantheroides* (Goren & Nalbant 1982); *Orthrias pantheroides* Goren & Nalbant 1982.

Revisions: Prokofiev (2009: 880) with subspecies, Freyhof et al. (2012: 307, 309).

Illustrations: Heckel (1843b: pl. 12, fig. 3).

Distribution. General distribution: Asia Minor and Middle East.

Distribution in the Middle East: Jordan Israel, Syria, and Türkiye.

Distribution in Ecoregions: 438-Jordan River, 442-Upper Tigris and Euphrates.

Habitat: This species lives in moderately fast-flowing streams and rivers with a mud or gravel substrate and low pollution levels. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CON, HAB, CLI, EUT. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Israel: [Native]. — Binun ha'yarden. — First record from Israel by Günther (1865: 490) as *Cobitis insignis*; Lortet (1883: 173); Tristram (1884: 177); Steinitz (1953: 213) as *Nemachilus insignis*; Bănărescu & Nalbant (1966) as *Noemacheilus angorae jordanicus* and *N. angorae tortonesei*; confirmed by Goren and Ortal (1999) as *Nemacheilus tigris* (non Heckel 1843); Günther (1864) as *Cobitis insignis* subsequently reported by Goren (1974: 93, 94) as *Noemacheilus angorae jordanicus*, *N. insignis tortonesei* and *Noemacheilus tigris* (non Heckel 1843); Goren and Bănărescu (1982) as *Nemacheilus dori*; Goren and Nalbant (1982) as *Orthrias israeliticus* and *O. pantheroides*; confirmed by Goren and Ortal (1999: 4) as *Nemacheilus jordanicus* and *Nemacheilus dori*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin, 3-Kinneret Basin. — Distribution in River Basin: 2-Dead Sea Basin, 3-Kinneret Basin. — Distribution in River Basin: 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUI, TAU, JMH.

Status in Jordan: [Native]. — None. — It is probable that this species is naturally distributed in the country. — Jordan material: None.

Status in Syria: [Native]. — Lahhas alsakhr. — Recorded from Syria in original description by Heckel (1843a: 1088) as *Cobitis insignis*; subsequently reported by Beckman (1962: 76) as *Nemachilus insignis*; listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 7-Al-Yarmouk. — Syrian material: BMNH, MNHN, NMW, SMF, FSJF.

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Geldiay and Balık (2007) as *Orthrias (Noemacheilus) insignis*; Fricke et al. (2007) as *Nemacheilus insignis*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.

Oxynoemacheilus isauricus* Yoğurtçuoğlu, Kaya, Özuluğ & Freyhof 2021*Common name:** Loach**Taxonomy:** Original description: *Oxynoemacheilus isauricus* Yoğurtçuoğlu, Kaya, Özuluğ & Freyhof 2021: 372, figs. 2-4, 6 [Stream Çeltek at Çeltek, south of Şarkikaraağaç, Isparta Province, Türkiye, 38.0124N, 31.3152E; holotype: IUSHM 2021-1425].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Yoğurtçuoğlu et al. (2021: 372, figs. 2-4, 6).**Distribution. General distribution:** Asia Minor: Lake Beyşehir and Suğla basins, Central Anatolia.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species lives in moderately fast-flowing waters of small streams with gravel substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Yoğurtçuoğlu et al. (2021); listed by Çiçek et al. (2023a). — Distribution in River Basin: 16-Konya. — Turkish material: IUSHM.***Oxynoemacheilus karunensis* Freyhof 2016****Common name:** Karun stone loach**Taxonomy:** Original description: *Oxynoemacheilus karunensis* Freyhof 2016: 94, figs. 1-5 [Gamasiab River at Do Ab, Hamadan province, Iran, 34°22'20.76"N, 47°55'00.1"E; holotype: ZFMK-ICH 102205].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Freyhof (2016a: 94, fig. 1).**Distribution. General distribution:** Middle East: Jarrahi and Karun River drainages, Tigris River basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species lives in moderately fast-flowing waters of small streams with gravel substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Loch mahi-e Karun. — Recorded from Iran in the original description by Freyhof (2016a); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZFMK, ZM-CBSU.***Oxynoemacheilus kaynaki* Erk'akan, Özeren & Nalbant 2008****Common name:** Melid loach**Taxonomy:** Original description: *Oxynoemacheilus kaynaki* Erk'akan, Özeren & Nalbant 2008: 115, figs. 1-3 [Goksu River, Nurhak, Elbistan, Firat basin, 37°53'22.82"N, 37°22'19.99"E, Türkiye; holotype: HUIC-F-20].**Middle Eastern synonyms:** None.**Revisions:** Freyhof et al. (2012: 307).**Illustrations:** Erk'akan et al. (2008: 115, figs. 1-3).

Distribution. General distribution: Asia Minor: upper Göksu River drainage, upper Euphrates River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species lives in fast to moderately fast-flowing streams with gravel substrates. Usually inhabits stream margins with little flow and muddy substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2008); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: HUIC.

Oxynoemacheilus kentritensis Freyhof, Kaya & Turan 2017

Common name: Kentrites loach

Taxonomy: Original description: *Oxynoemacheilus kentritensis* Freyhof, Kaya & Turan 2017: 552, figs. 1-4 [stream Kesan about 1 km south of Güntepe, Bitlis province, Türkiye, 38°21'24"N, 42°37'39"E; holotype: FFR 01566].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2017a: figs. 1-4).

Distribution. General distribution: Asia Minor and Middle East: upper Tigris River basin.

Distribution in the Middle East: Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species lives in moderately fast-flowing to almost standing waters of springs, reservoirs, streams, and rivers with mud or gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: ABS, CON, EUT. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iraq: [Native]. — None. — First record from Iraq by Freyhof et al. (2021b); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq materials: ZFMK-ICH, FSJF.

Status in Syria: [Native]. — Lahhas alsakhr. — Recorded from Syria in original description by Freyhof et al. (2017a); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian materials: None.

Status in Türkiye: [Native]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Freyhof et al. (2017a); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

Oxynoemacheilus kiabii Golzarianpour, Abdoli & Freyhof 2011

Common name: Kiabi stone loach

Taxonomy: Original description: *Oxynoemacheilus kiabii* Golzarianpour, Abdoli & Freyhof 2011: 202, figs. 1-3 [Stream Dehnoo, 3 km west of Nahavand on road from Nahavand to Sarab-e-Gamasiab, 34°10'N, 48°24'E, Hamadan Province, Iran; holotype: ZFMK 41847].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2012: 307).

Illustrations: Golzarianpour et al. (2011: 202, fig. 1).

Distribution. General distribution: Middle East: Karkheh River drainage, Tigris River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species lives in moderately fast-flowing waters of small streams with gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Kiabi. — Recorded from Iran in the original description by Golzarianpour et al. (2011); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZFMK, ZM-CBSU.

***Oxynoemacheilus kurdistanicus* Kamangar, Prokofiev, Ghaderi & Nalbant 2014**

Common name: Loach

Taxonomy: Original description: *Oxynoemacheilus kurdistanicus* Kamangar, Prokofiev, Ghaderi & Nalbant 2014: 38, fig. 3 [Choman River (Tajaban, sta. 6) Baneh, Kurdistan, 35°56'53"N, 45°41'40"E, Iran; holotype: FCFUK 146].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kamangar et al. (2014: 38, fig. 3).

Distribution. General distribution: Asia Minor and Middle East: Tigris River drainage.

Distribution in the Middle East: Iran, Iraq, and Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in moderately fast-flowing to almost standing waters of clean springs, streams, and rivers with mud or gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Kurdistan. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Freyhof et al. (2021b); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq materials: ZFMK-ICH, FSJF.

Status in Türkiye: [Native]. — Çöpçü balığı. — First record from Türkiye by Kaya et al. (2016); Listed in previous checklist by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: None.

***Oxynoemacheilus leontinae* (Lortet 1883)**

Common name: Lebanese loach

Taxonomy: Original description: *Nemachilus leontinae* Lortet 1883: 171, pl. 18, fig. 1 [Lake Tiberias (Kinneret), Israel; lectotype: MGHN 3665 (64 mm SL, poor condition)].

Middle Eastern synonyms: *Nemacheilus leontinae* Lortet 1883.

Revisions: Prokofiev (2009: 880), Freyhof et al. (2012: 307).

Illustrations: Krupp and Schnider (1989: 384, fig. 30).

Distribution. General distribution: Jordan River basin.

Distribution in the Middle East: Jordan and Israel.

Distribution in Ecoregions: 438-Jordan River.

Habitat: Slowly flowing or standing waters of streams and springs, also in wetlands, lake shores and spring lakes. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, HAB, EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Jordan: [Native]. — None. — It is probable that this species is naturally distributed in the country. — Jordan material: None.

Status in Israel: [Native]. — Binun kinnarti. — Recorded from Israel in original description by Lortet (1883: 171) as *Nemachilus leontinae*; Tristram (1884: 177) as *Nemachilus leontina*; Steinitz (1953: 214) with question as *Nemachilus leontina*; Goren (1974: 94) as *Noemacheilus panthera* (non Heckel 1843); confirmed by Goren and Ortal (1999: 4) as *Nemacheilus panthera* (non Heckel 1843); confirmed by Krupp and Schneider (1989); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUJ, MGHN.

Status in Lebanon: [Native]. — None. — First record from Lebanon by Krupp and Moubayed (1992); confirmed by Freyhof et al. (2020). — Lebanon material: None.

Oxynoemacheilus longipinnis (Coad & Nalbant 2005)

Common name: Meymeh loach

Taxonomy: Original description: *Ilamnemacheilus longipinnis* Coad & Nalbant 2005: 552, figs. 1-4 [Meymeh River (formerly tributary of Tigris River), Tigris-Euphrates drainage, 17 kilometers west of Dehloran City, about 21 kilometers east of Iraqi border, 32°45'30"N, 47°05'30"E, Iran; holotype: CMNFI 1979-0366 (ex NMC 79-966)].

Middle Eastern synonyms: None.

Revisions: Sayyadzadeh et al. (2017).

Illustrations: Coad and Nalbant (2005: 304, figs. 1, 3) as *Ilamnemacheilus longipinnis*.

Distribution. General distribution: Middle East: Meymeh River drainage, Tigris River basin.

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in moderately fast flowing to almost standing waters of clean springs, streams, and rivers with mud or gravel substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Ilam. — Listed in previous checklists from Iran by Esmaeili et al. (2010a as *Ilamnemacheilus longipinnis*, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — Recorded from Iraq in original description by Freyhof et al. (2021b); listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq materials: ZFMK-ICH, FSJF.

Oxynoemacheilus marmaraensis Turan, Bayçelebi & Kalayci 2023

Common name: Susurluk loach

Taxonomy. Original description: *Oxynoemacheilus marmaraensis* Turan, Bayçelebi & Kalayci 2023: 74, fig. 5 [Stream Dursunbey 10 km east of Dursunbey, 39°36'32.4"N 28°45'01.9"E, Balıkesir prov., Türkiye; holotype: FFR 15631].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2023a: figs. 1-2).

Distribution. General distribution: Asia Minor: Dursunbey Stream, Susurluk River drainage, Marmara Sea basin (Türkiye).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species occurs in moderate-flowing to almost standing waters of streams and rivers with gravel or mud substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Turan et al. (2023a); listed by Çiçek et al. (2023a). — Distribution in River Basin: 3-Susurluk. — Turkish material: FFR.

***Oxynoemacheilus marunensis* Sayyadzadeh & Esmaili 2020**

Common name: Marun stone loach

Taxonomy: Original description: *Oxynoemacheilus marunensis* Sayyadzadeh & Esmaili 2020: 195, figs. 2-7 [Marun/Maroon River at Kharestan, Khuzestan province, Iran, 30°39'22"N, 50°12'31"E; holotype: ZM-CBSU H2509].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Sayyadzadeh and Esmaili (2020: 195, figs. 2).

Distribution. General distribution: Marun River drainage, Jarrahi River basin, flowing to the Persian Gulf.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in moderately fast flowing to almost standing waters of clean springs, streams, and rivers with mud or gravel substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Marun. — Recorded from Iran in the original description by Sayyadzadeh and Esmaili (2020); listed in previous checklists from Iran by Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

***Oxynoemacheilus mediterraneus* (Erk'akan, Nalbant & Özeren 2007)**

Common name: Pamphylian loach

Taxonomy: Original description: *Barbatula mediterraneus* Erk'akan, Nalbant & Özeren 2007: 74, fig. 5 [Eğirdir, Çandir, Aksu Stream, 37°38'N, 30°31'E, Türkiye; holotype: HUIC AAKD-2a. HUIC AKD-2a (7), AKD-3 (27)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Erk'akan et al. (2007: 74, fig. 5), Freyhof et al. (2012: 307).

Distribution. General distribution: Asia Minor: Aksu and Köprüçay drainages, Gulf of Antalya.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species occurs in fast-flowing to almost standing waters of streams and rivers with gravel or mud substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2007); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: HUIC.

Oxynoemacheilus melenicus* Turan, Aksu & Kalayci 2023*Common name:** Melen loach**Taxonomy.** Original description: *Oxynoemacheilus melenicus* Turan, Aksu & Kalayci 2023: 448, fig. 11 [Eskişehir prov.: stream Yarılğan at Gemiç Village, 39.343°N, 30.463°E, Türkiye; holotype: FFR 15627].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2023b: figs. 11, 12).**Distribution. General distribution:** Asia Minor: Büyükmelen Stream and Sakarya River drainage in western Anatolia (Türkiye).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia.**Habitat:** This species occurs in moderate-flowing to almost standing waters of streams and rivers with gravel or mud substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Melen çöpçü balığı. — Recorded from Türkiye in the original description by Turan et al. (2023b); listed by Çiçek et al. (2023a). — Distribution in River Basin: 12-Sakarya. — Turkish material: FFR.***Oxynoemacheilus muefiti* Freyhof, Kaya, Turan & Geiger 2019****Common name:** Loach**Taxonomy:** Original description: *Oxynoemacheilus muefiti* Freyhof, Kaya, Turan & Geiger 2019: 48, figs. 15-17 [Murat River at Ballıbostan, Ağrı Province, Türkiye; holotype: FFR 15532].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Freyhof et al. (2019: 48, figs. 15-17).**Distribution. General distribution:** Asia Minor: upper Murat River drainage and the Eğri, a tributary to Atatürk reservoir.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species occurs in moderately fast-flowing waters of small streams with gravel substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Freyhof et al. (2019); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.***Oxynoemacheilus namiri* (Krupp & Schneider 1991)****Common name:** Levantine loach**Taxonomy:** Original description: *Nemacheilus namiri* Krupp & Schneider 1991: 28, figs. 7-13 [Orontes at Jisr ash-Shughur, Syria, 35°48'N, 36°19'E; holotype: SMF 17387].**Middle Eastern synonyms:** *Schistura namiri* (Krupp & Schneider 1991).**Revisions:** Freyhof et al. (2012: 307).**Illustrations:** Krupp and Schneider (1991: 28, figs. 7-13) as *Nemacheilus namiri*.**Distribution. General distribution:** Asia Minor and Middle East: Orontes River basin.**Distribution in the Middle East:** Syria and Türkiye.**Distribution in Ecoregions:** 437-Orontes.

Habitat: This species lives in moderately fast-flowing to almost standing waters of springs, reservoirs, streams, and rivers with mud or gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB, CLI, EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Syria: [Native]. — Lahhas alsakhr. — Recorded from Syria in original description by Krupp and Schneider (1991a: 28); subsequently reported by Saad et al. (2009, 2023). — Syrian material: CMN, SMF, FSJF. — Distribution in River Basin: 4-Orontes. — Syrian material: CMN, SMF, FSJF.

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.

Oxynoemacheilus nasreddini Yoğurtçuoğlu, Kaya & Freyhof 2021

Common name: Loach

Taxonomy: Original description: *Oxynoemacheilus nasreddini* Yoğurtçuoğlu, Kaya & Freyhof 2021: 138, figs. 2-5 [Stream Aksu at Ayvalı, 6 km north of Sincanlı, Afyon Province, Türkiye, 38.8101, 30.2560; holotype: FFR 15588].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Yoğurtçuoğlu et al. (2021: 138, figs. 2-5).

Distribution. General distribution: Asia Minor: Lakes Akşehir, Eber and Eğirdir, and Ilgın basins, Central Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species lives in moderately fast-flowing to almost standing waters of springs, reservoirs, streams, and rivers with mud or gravel substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Yoğurtçuoğlu et al. (2021); listed by Çiçek et al. (2023a). — Distribution in River Basin: 11-Akarçay, 12-Sakarya. — Turkish material: FFR.

Oxynoemacheilus panthera (Heckel 1843)

Common name: Damascus loach

Taxonomy: Original description: *Cobitis panthera* Heckel 1843: 1087 [97] [Damascus, Syria; holotype: syntypes: NMW 48565 (3), NRM 15478 (1)].

Middle Eastern synonyms: *Cobitis leopardus* Heckel 1843; *Orthrias panthera* (Heckel 1843); *Nemacheilus panthera* (Heckel 1843); *Barbatula panthera* (Heckel 1843).

Revisions: Prokofiev (2009: 880), Freyhof et al. (2012: 307).

Illustrations: Goren (1974: pl. 2 a-b); Freyhof et al. (2012: 304, fig. 2, Syria).

Distribution. General distribution: Asia Minor and Middle East.

Distribution in the Middle East: Lebanon, and Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species lives in the standing and slowly flowing waters of springs and streams with mud or gravel substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: HAB, CON, CLI, ABS, EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Lebanon: [Native]. — None. — First record from Lebanon by Goren (1974); confirmed by Kaya et al. (2020a). — Lebanon material: None.

Status in Syria: [Native]. — Lahhas alsakhr. — Recorded from Syria in original description by Heckel (1843a: 1087, 1089) as *Cobitis panthera* and *C. leopardus*; subsequently reported by Beckman (1962: 77) as *Nemachilus panther*; by Saad et al. (2009, 2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 7-Al-Yarmouk. — Syrian material: BMNH, FMNH, MCZ, MNHN, NRM, USNM, MSL, FSJF.

Remarks. According to Krupp and Schneider (1989) this species is a synonym of *Oxynoemacheilus insignis*.

Oxynoemacheilus parvinae Sayyadzadeh, Eagderi & Esmaili 2016

Common name: Parvin stone loach

Taxonomy: Original description: *Oxynoemacheilus parvinae* Sayyadzadeh, Eagderi & Esmaili 2016: 238, figs. 2-10 [Javanrud city, at Sharvineh village, Leilehrud (Leileh River), a tributary of Sirvan River drainage, Tigris basin, Kermanshah Province, Iran, 34°49'37.9"N, 46°21'30.0"E; holotype: ZM-CBSU H1987].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Sayyadzadeh et al. (2016: 238, fig. 2).

Distribution. General distribution: Middle East: Sirvan River drainage, Tigris River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species lives in the standing and slowly flowing waters of springs and streams with mud or gravel substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Parvin. — Recorded from Iran in the original description by Sayyadzadeh et al. (2016); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Oxynoemacheilus paucilepis (Erk'akan, Nalbant & Özeren 2007)

Common name: Mancilik loach

Taxonomy: Original description: *Barbatula paucilepis* Erk'akan, Nalbant & Özeren 2007: 79, fig. 9 [Sivas, Mancilik Stream, Gürün, 38°39'N, 37°38'E, Türkiye; holotype: HUIC F2].

Middle Eastern synonyms: *Paracobitis paucilepis* (Erk'akan, Nalbant & Özeren 2007).

Revisions: Prokofiev (2009: 881) as *Paracobitis paucilepis*, Freyhof et al. (2012: 307).

Illustrations: Erk'akan et al. (2007: 79, fig. 9).

Distribution. General distribution: Asia Minor: tributaries in Kangal and Gürün, Euphrates River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species lives in moderately fast-flowing waters of small streams with gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2007); listed in previous checklists from Türkiye by Kuru et

al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: HUIC.

***Oxynoemacheilus persa* (Heckel 1847)**

Common name: Persian stone loach

Taxonomy: Original description: *Cobitis persa* Heckel 1847: 266 [Springs at Persepolis, Fars Province, Iran; holotype (unique): NMW 48567].

Middle Eastern synonyms: *Nemacheilus persa* (Heckel 1847); *Orthrias persus* (Heckel 1847); *Barbatula persa* (Heckel 1847); *Oxynoemacheilus persus* (Heckel 1847); *Orthrias farsica* Nalbant & Bianco 1998; *Barbatula farsica* (Nalbant & Bianco 1998); *Oxynoemacheilus farsicus* (Nalbant & Bianco 1998).

Revisions: Prokofiev (2009: 881), Freyhof et al. (2012: 307); Sayyadzadeh et al. (2018b: 45, fig. 11).

Illustrations: Esmaeili et al. (2020:80, fig. 2).

Distribution. General distribution: Middle East: Mond and Kor River drainages and Lake Maharlu basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species lives in the standing and slowly flowing waters of springs and streams with mud or gravel substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Parsi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a) *Oxynoemacheilus persus* and *Oxynoemacheilus farsicus*; Esmaeili et al. 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 1-Persis, 12-Kor River, 13-Lake Maharlu. — Iran material: ZM-CBSU.

***Oxynoemacheilus sakaryaensis* Turan, Aksu & Kalayci 2023**

Common name: Sakarya loach

Taxonomy. Original description: *Oxynoemacheilus sakaryaensis* Turan, Aksu & Kalayci 2023: 443, fig. 1, 2 [Eskişehir prov.: Stream Kirmir 3 km north of GÜDÜL, a tributary of Sakarya River, 40.236°N, 32.606°E, Ankara province, Türkiye; holotype: FFR 15629].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2023b: figs. 1, 2).

Distribution. General distribution: Asia Minor: Sakarya River drainage in western Anatolia (Türkiye).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species occurs in moderate-flowing to almost standing waters of streams and rivers with gravel or mud substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Sakarya çöpçü balığı. — Recorded from Türkiye in the original description by Turan et al. (2023b); listed by Çiçek et al. (2023a). — Distribution in River Basin: 12-Sakarya. — Turkish material: FFR.

Oxynoemacheilus samanticus* (Bănărescu & Nalbant 1978)*Common name:** Samanti sportive loach**Taxonomy:** Original description: *Orthrias brandti samantica* Bănărescu & Nalbant in Bănărescu, Nalbant & Balik 1978: 263, fig. 4 [Tributary to Samanti, between Pinarbasi and Sariz, Seyhan basin, southern Türkiye; holotype: ZMH 3633].**Middle Eastern synonyms:** *Orthrias samantica* Bănărescu & Nalbant 1978; *Orthrias brandti samanticus* Bănărescu & Nalbant 1978; *Schistura samantica* (Bănărescu & Nalbant 1978).**Revisions:** Prokofiev (2009: 880) as *Oxynoemacheilus brandtii samanticus*, Freyhof et al. (2012: 307).**Illustrations:** Bănărescu and Nalbant (1978: 263, fig. 4).**Distribution. General distribution:** Asia Minor: Seyhan River basin, Mediterranean Sea tributaries.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia, 432-Southern Anatolia.**Habitat:** This species lives in fast-flowing streams and rivers with gravel substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Bănărescu and Nalbant (1978); listed in previous checklists from Türkiye by Kuru (2004) as *Orthrias brandti samantica*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 15-Kızılırmak, 18-Seyhan. — Turkish material: ZMH.***Oxynoemacheilus sarus* Freyhof, Yoğurtçuoğlu & Kaya 2021****Common name:** Loach**Taxonomy:** Original description: *Oxynoemacheilus sarus* Freyhof, Yoğurtçuoğlu & Kaya 2021: 128, figs. 2-5 [Lower stream Çakıt, south of Salbaş, Adana Province, Türkiye, 37.1031N, 35.1094E; holotype: FFR 15585].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Freyhof et al. (2021c: 128, figs. 2-5).**Distribution. General distribution:** Asia Minor: lower Ceyhan and Seyhan drainages.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species lives in moderately fast-flowing rivers with gravel substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Freyhof et al. (2021c); listed by Çiçek et al. (2023a). — Distribution in River Basin: 18-Seyhan, 20-Ceyhan. — Turkish material: FFR.***Oxynoemacheilus seyhanensis* (Bănărescu 1968)****Common name:** Seyhan loach**Taxonomy:** Original description: *Noemacheilus (Paracobitis) tigris seyhanensis* Bănărescu 1968: 355, pl. 3 (figs. 2-3) [Between Viransehir and Kazancik, Türkiye; holotype: ZMH H4014].**Middle Eastern synonyms:** *Nemacheilus seyhanensis* Bănărescu 1968; *Orthrias angorae kosswigi* Erk'akan & Kuru 1986; *Oxynoemacheilus kosswigi* (Erk'akan & Kuru 1986).

Revisions: Prokofiev (2009: 888) as *Paracobitis tigris seyhanensis*; Freyhof et al. (2012: 307).

Illustrations: Bănărescu (1968: pl. 3, figs. 2-3) as *Noemacheilus tigris seyhanensis*.

Distribution. General distribution: Asia Minor: Seyhan River basin, Mediterranean Sea tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species lives in moderately fast-flowing streams with gravel or muddy substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Bănărescu (1968); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 14-Yeşilırmak, 15-Kızılırmak, 18-Seyhan. — Turkish material: ZMH.

Oxynoemacheilus seyhanicola (Erk'akan, Nalbant & Özeren 2007)

Common name: Cilician loach

Taxonomy: Original description: *Schistura seyhanicola* Erk'akan, Nalbant & Özeren 2007: 81, fig. 11 [Dam Bridge, near Adana, Seyhan River basin, 38°39'N, 36°37'E, Türkiye; holotype (unique): HUIC SEY-1].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2012: 307).

Illustrations: Erk'akan et al. (2007: 81, fig. 11).

Distribution. General distribution: Asia Minor: Seyhan River basin (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species lives in moderately fast-flowing rivers with gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2007); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan. — Turkish material: HUIC.

Oxynoemacheilus shehabi Freyhof & Geiger 2021

Common name: Shehab's loach

Taxonomy: Original description: *Oxynoemacheilus shehabi* Freyhof & Geiger 2021: 573, figs. 2-6 [Orontes at Al Qusayr, Syria, 34.5086N, 36.5389E; holotype: ZFMK ICH-124181].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Geiger (2021: 573, figs. 2-6).

Distribution. General distribution: Western Asia: upper Orontes basin.

Distribution in the Middle East: Syria.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species lives in the standing and slowly flowing waters of springs and streams with mud or gravel substrate. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: ABS, CON, EUT. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Syria: [Endemic]. — Lahhas alsakhr. — Recorded from Syria in original description by Freyhof and Geiger (2021); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: ZFMK ICH.

***Oxynoemacheilus simavicus* (Balik & Bănărescu 1978)**

Common name: Simav loach

Taxonomy: Original description: *Orthrias brandti simavica* Balik & Bănărescu in Bănărescu, Nalbant & Balik 1978: 261, fig. 3 [Simav stream, Balıkesir, Türkiye; holotype: ISBB 2976].

Middle Eastern synonyms: *Oxynoemacheilus brandtii simavicus* Balik & Bănărescu 1978; *Barbatula simavica* (Balik & Bănărescu 1978).

Revisions: Prokofiev (2009: 880) as *Oxynoemacheilus brandtii simavicus*; Freyhof et al. (2012: 307)

Illustrations: Bănărescu et al. (1978: 261, fig. 3).

Distribution. General distribution: Asia Minor: Marmara Sea tributary.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species lives in moderately fast-flowing to standing waters of streams with gravel or mud substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Balik and Bănărescu (1978); listed in previous checklists from Türkiye by Kuru (2004) as *Orthrias brandti simavica*; Geldiay and Balik (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 3-Susurluk. — Turkish material: ISBB.

***Oxynoemacheilus theophilii* Stoumboudi, Kottelat & Barbieri 2006**

Common name: Lesbos stone loach

Taxonomy: Original description: *Oxynoemacheilus theophilii* Stoumboudi, Kottelat & Barbieri 2006: 140, figs. 8-9 [Lesbos Island, Tsingou springs, in Evergetoulas drainage, Greece; holotype: MHNG 2679.009].

Middle Eastern synonyms: *Oxynoemacheilus theophili* Stoumboudi, Kottelat & Barbieri 2006; *Barbatula bergamensis* Erk'akan, Nalbant & Özeren 2007; *Oxynoemacheilus bergamensis* (Erk'akan, Nalbant & Özeren 2007).

Revisions: Prokofiev (2009: 881), Freyhof et al. (2012: 307).

Illustrations: Stoumboudi et al. (2006: 140, figs. 8-9).

Distribution. General distribution: Eurasia: Lesbos Island, Greece and Bakir River drainage, western Anatolia, Türkiye.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives in the upper part of a stream with a current. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Fricke et al. (2007); Kuru et al. (2014) as *Barbatula bergamensis*; Çiçek et al. (2015, 2020,

2023a). — Distribution in River Basin: 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: None.

***Oxynoemacheilus tigris* (Heckel 1843)**

Common name: Tigris loach

Taxonomy: Original description: *Cobitis tigris* Heckel 1843: 1088 [98] [Kuiek River near Aleppo, Syria; syntypes: NMW 48441 (2), 49444-46 (2, 4, 2); SMF 405 (3)].

Middle Eastern synonyms: *Noemacheilus tigris* (Heckel 1843); *Nemacheilus tigris* (Heckel 1843); *Nemachilus tigris* (Heckel 1843); *Orthrias tigris* (Heckel 1843); *Paracobitis tigris* (Heckel 1843); *Barbatula tigris* (Heckel 1843).

Revisions: Berg (1949: 876) as synonym of *Nemacheilus sargadensis* Nikolskii 1900; Prokofiev (2009: 881, 888) as *Paracobitis tigris*; Freyhof et al. (2012: 307); Freyhof et al. (2015a: 17).

Illustrations: Heckel (1843b: pl. 12, fig. 4) as *Cobitis tigris*.

Distribution. General distribution: Asia Minor and Middle East: upper Euphrates River basin.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates.

Habitat: This species lives in moderately fast-flowing to standing waters of streams with gravel or mud substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Syria: [Native]. — Lahhas alsakhr. — Recorded from Syria in original description by Lortet (1883: 172) as *Nemachilus tigris*; subsequently reported by Beckman (1962: 77) as *Nemachilus tigris*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, NRM.

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Noemacheilus tigris*; Geldiay and Balık (2007) as *Orthrias (Noemacheilus) tigris*; Fricke et al. (2007) as *Orthrias tigris*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Oxynoemacheilus tongiorgii* (Nalbant & Bianco 1998)**

Common name: Tongiorgi stone loach

Taxonomy: Original description: *Seminemacheilus tongiorgii* Nalbant & Bianco 1998: 113, figs. 11 A-D [Large water spring near Darab town, Kul River basin, Iran; holotype: IZA 801. paratypes: ISBB uncat. (1)].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2012: 307, 309).

Illustrations: Nalbant and Bianco (1998: 113, fig. 11).

Distribution. General distribution: Middle East: Kor River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species is most often found in fast flowing upper courses. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Kor. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Seminemacheilus tongiorgii*; Esmaili et al. 2017, 2018; Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 12-Kor River. — Iran material: IZA, ZM-CBSU.

Oxynoemacheilus veyselorum* Çiçek, Eagderi & Sungur 2018*Common name:** Great loach**Taxonomy:** Original description: *Oxynoemacheilus veyseli* Çiçek, Eagderi & Sungur 2018: 233, figs. 1A, 2-6 [Bozkuş River, a tributary of the Aras River at Kars, Kars Province, Türkiye, 40°37'03.7"N, 42°47'04.9"E; holotype: NHVUIC 14005-H].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Çiçek et al. (2018: 233, figs. 1A, 2-6).**Distribution. General distribution:** Middle East: upper Aras River drainage.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.**Habitat:** This species lives in moderately fast-flowing to standing waters of streams with gravel or mud substrates. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Native]. — Baba çöpçü balığı. — Recorded from Türkiye in the original description by Çiçek et al. (2018); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: NHVUIC.***Oxynoemacheilus zagrosensis* Kamangar, Prokofiev, Ghaderi & Nalbant 2014****Common name:** Zagros stone loach**Taxonomy:** Original description: *Oxynoemacheilus zagrosensis* Kamangar, Prokofiev, Ghaderi & Nalbant 2014: 43, fig. 4 [Shooei River (Jemli, sta. 9), Baneh, Kurdistan, Iran, 35°58'01"N, 45°42'43"E; holotype: FCFUK 101].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Kamangar et al. (2014: 43, fig. 4).**Distribution. General distribution:** Middle East: Tigris River drainage.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species occurs in streams with slow to fast-flowing freshwater. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Loch mahi-e Zagros. — Recorded from Iran in the original description by Kamangar et al. (2014); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: FCFUK, ZM-CBSU.***Oxynoemacheilus zarzianus* Freyhof & Geiger 2017****Common name:** Loach**Taxonomy:** Original description: *Oxynoemacheilus zarzianus* Freyhof & Geiger 2017: 261, figs. 3-7 [Stream Kunamasi in Sevanja, 35°47.35'N, 45°24.18'E, Iraq; holotype: ZFMK Ich-103667].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Freyhof and Geiger (2017: 261, figs. 3-7).**Distribution. General distribution:** Middle East: Lesser Zab drainage and Marivan.**Distribution in the Middle East:** Iraq and Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with slow to fast-flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Sirvan. — Listed in previous checklists from Iran by Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: None.

Status in Iraq: [Native]. — None. — Recorded from Iraq in original description by Freyhof and Geiger (2017). — Distribution in River Basin: 5-Little Zab. — Iraq materials: ZFMK, FSJF.

***Paracobitis abrishamchiani* Mousavi-Sabet, Vatandoust, Geiger & Freyhof 2019**

Common name: Abrishamchi crested loach

Taxonomy: Original description: *Paracobitis abrishamchiani* Mousavi-Sabet, Vatandoust, Geiger & Freyhof 2019: 377, figs. 3-8 [Tributary of Babol River, upstream of Lafour reservoir, near Galeshkola, Mazandaran province, Iran, 36°12'33"N, 52°46'16"E; holotype: VMFC PCAB-H].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet et al. (2019: 377, fig. 3).

Distribution. General distribution: Middle East: Tajan, Siah, Talar, Babol, Haraz and Kaspal Rivers, southern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species occurs in streams with slow to moderate-flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e tajdar-e Abrishamchi. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2019b); listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020) as *Paracobitis abridshamchianorum*; Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: VMFC, ZM-CBSU.

***Paracobitis atrakensis* Esmaili, Mousavi-Sabet, Sayyadzadeh, Vatandoust & Freyhof 2014**

Common name: Atrak crested loach

Taxonomy: Original description: *Paracobitis atrakensis* Esmaili, Mousavi-Sabet, Sayyadzadeh, Vatandoust & Freyhof 2014: 238 [Atrak and Bidvaz River, northeastern Iran; holotype. From a listing].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaili et al. (2014a: 51, fig. 2).

Distribution. General distribution: Caspian Sea and Kavir basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 448-Kavir and Lut Deserts.

Habitat: This species occurs in streams with slow to moderate-flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e tajdar-e Atrak. — Recorded from Iran in the original description by Esmaili et al. (2014a); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Paracobitis basharensis* Freyhof, Esmaili, Sayyadzadeh & Geiger 2014**

Common name: Bashar crested loach

Taxonomy: Original description: *Paracobitis basharensis* Freyhof, Esmaili, Sayyadzadeh & Geiger 2014: 23, figs. 13-14 [Bashar River at Dehno, 30°38.42.6"N, 51°37'14.26"E, Iranian Tigris catchment, Iran; holotype: CM-CBSU J2920].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2014: 23, fig. 13).

Distribution. General distribution: Middle East: Tigris River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with slow to moderate-flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e tajdar-e Bashar. — Recorded from Iran in the original description by Freyhof et al. (2014); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

***Paracobitis hircanica* Mousavi-Sabet, Sayyadzadeh, Esmaili, Eagderi, Patimar & Freyhof 2015**

Common name: Eastern crested loach

Taxonomy: Original description: *Paracobitis hircanica* Mousavi-Sabet, Sayyadzadeh, Esmaili, Eagderi, Patimar & Freyhof 2015: 340, figs. 2-6 [Golestan province, Zarrin-Gol stream, a tributary of Gordan River, 36°50'39"N, 54°58'24"E, Iran; holotype: ZM-CBSU J3246].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet et al. (2015b: 340, fig. 2).

Distribution. General distribution: Middle East: southern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species occurs in streams with slow to moderate-flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e tajdar-e Hircani. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2015b); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Paracobitis malapterura* (Valenciennes 1846)*Common name:** Western crested loach**Taxonomy:** Original description: *Cobitis malapterura* Valenciennes 1846: 88, pl. 523 ["Sent from Syria" (Iran); syntypes: MNHN 0000-3962 (1), B-3070 (ex MNHN 0000-3962) (1)].**Middle Eastern synonyms:** *Nemacheilus malapterurus* (Valenciennes 1846); *Nemachilus malapterurus* (Valenciennes 1846); *Paracobitis iranica* Nalbant & Bianco 1998.**Revisions:** Freyhof et al. (2014).**Illustrations:** Valenciennes (1846: 88, pl. 523) as *Cobitis malapterura*.**Distribution. General distribution:** Middle East: Lake Namak basin and eastern Kavir basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 447-Namak, 448-Kavir and Lut Deserts.**Habitat:** This species occurs in streams with slow to fast-flowing freshwater. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Loch mahi-e tajdar-e Namak. — Recorded from Iran in the original description by Valenciennes (1846); Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 15-Namak Lake, 7-Dasht-e Kavir. — Iran material: ZM-CBSU.***Paracobitis molavii* Freyhof Esmaeili, Sayyadzadeh & Geiger 2014****Common name:** Molavi's crested loach**Taxonomy:** Original description: *Paracobitis molavii* Freyhof Esmaeili, Sayyadzadeh & Geiger 2014: 25, figs. 15-18 [Sulaymaniyah Province, Zalm at Khurmal, 35°18.38'N, 45°58.26'E, Iraq; holotype: ZFMK 56826].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Freyhof et al. (2014: 25, figs. 15-18).**Distribution. General distribution:** Middle East: Tigris River drainage.**Distribution in the Middle East:** Iran and Iraq.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species occurs in streams with slow to fast-flowing freshwater. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Loch mahi-e tajdar-e Molavi. — Recorded from Iran in the original description by Freyhof et al. (2014); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — Recorded from Iraq in original description by Freyhof et al. (2014); listed by Çiçek et al. (2023b). — Distribution in River Basin: 4-Great Zab, 5-Little Zab. — Iraq materials: ZFMK, FSJF.***Paracobitis persa* Freyhof, Esmaeili, Sayyadzadeh & Geiger 2014****Common name:** Persian crested loach**Taxonomy:** Original description: *Paracobitis persa* Freyhof, Esmaeili, Sayyadzadeh & Geiger 2014: 29, figs. 19-22 [Fars Province, Maloosjan spring east of Beiza, Kor basin, 29°52'23"N, 52°27'37"E, Iran; holotype: CM-CBSU J2659].**Middle Eastern synonyms:** None.**Revisions:** None.

Illustrations: Freyhof et al. (2014: 29, fig. 19).

Distribution. General distribution: Middle East: Kor River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with moderately to slow flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e tajdar-e Parsi. — Recorded from Iran in the original description by Freyhof et al. (2014); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 12-Kor River. — Iran material: ZM-CBSU.

***Paracobitis rhadinaea* (Regan 1906)**

Common name: Sistan loach

Taxonomy: Original description: *Nemacheilus rhadinaeus* Regan 1906: 8 [Helmand River basin, Seistan; syntypes: BMNH 1905.11.29.28-29 (2); ZSI F1240/1 (1)].

Middle Eastern synonyms: *Nemacheilus rhadinaeus* Regan 1906; *Paracobitis rhadinaeus* (Regan 1906); *Paracobitis vignai* Nalbant & Bianco 1998; *Nemachilus macmahoni* Chaudhuri 1910.

Revisions: Bănărescu & Nalbant (1995: 443) as *Paracobitis rhadinaeus*; Freyhof et al. (2014: 21); Sayyadzadeh et al. (2019).

Illustrations: Freyhof et al. (2014: 22, fig. 10), Sayyadzadeh et al. (2019: 223, figs. 1-3).

Distribution. General distribution: Middle East and South Asia: Helmand River, Sistan basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 702-Helmand-Sistan.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e tajdar-e Sistan. — First record from Iran by Esmaili et al. (2010a); subsequently by Sayyadzadeh et al. (2019); listed in previous checklists by Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 16-Sistan. — Iran material: ZM-CBSU.

***Paracobitis salihae* Kaya, Turan, Kalaycı, Bayçelebi & Freyhof 2020**

Common name: Crested loach

Taxonomy: Original description: *Paracobitis salihae* Kaya, Turan, Kalaycı, Bayçelebi & Freyhof 2020: 527, figs. 2-4 [Göksu River at 2 km east of Aktoprak, Adiyaman province, Türkiye, 37.8443°N, 37.6703°E; holotype: FFR 3657].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kaya et al. (2020b: 527, figs. 2-4).

Distribution. General distribution: Göksu River drainage, upper Euphrates basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams with gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.
Status in Türkiye: [Endemic]. — Çöpçü balığı. — Recorded from Türkiye in the original description by Kaya et al. (2020b); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Paracobitis zabgawraensis* Freyhof, Esmaili, Sayyadzadeh & Geiger 2014**

Common name: Great Zab crested loach

Taxonomy: Original description: *Paracobitis zabgawraensis* Freyhof, Esmaili, Sayyadzadeh & Geiger 2014: 33, figs. 23-26 [Erbil Province, Chami Rean River near Ziraran, Iraq, 36°56.60'N, 44°11.72'E; holotype: ZFMK 56827].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2014: 34-35, figs. 23-26).

Distribution. General distribution: Asia Minor and Middle East: Euphrates and Tigris River drainages (Persian Gulf Basin).

Distribution in the Middle East: Iraq and Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species lives in moderately fast-flowing streams with gravel or mud substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: ABS, CON, EUT. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iraq: [Native]. — None. — Recorded from Iraq in original description by Freyhof et al. (2014); listed by Çiçek et al. (2023b). — Distribution in River Basin: 4-Great Zab, 5-Little Zab. — Iraq materials: ZFMK, FSJF.

Status in Türkiye: [Native]. — Çöpçü balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *P. malapterura*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Paraschistura abdolii* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015**

Common name: Abdoli's loach

Taxonomy: Original description: *Paraschistura abdolii* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015: 19, figs. 19-23 [Kerman Province, Pol River at road between Rayen and Jiroft, Lut Basin, 29°21'06"N, 57°29'09"E, Iran; holotype: ZM-CBSU J3904].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2015a: 19, fig. 19).

Distribution. General distribution: Middle East: Kol, Hamun-e Jaz Murian and Sirjan basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 448-Kavir and Lut Deserts, 451-Northern Hormuz Drainages, 701-Baluchistan.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Abdoli. — Recorded from Iran in the original description by Freyhof et al. (2015a); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and

Esmaili (2024). — Distribution in River Basin: 2-Hormuz, 11-Hamun-e Jaz Murian, 16-Sirjan. — Iran material: ZM-CBSU.

***Paraschistura alta* (Nalbant & Bianco 1998)**

Common name: Highfin loach

Taxonomy: Original description: *Schistura alta* Nalbant & Bianco 1998: 118, fig. 21 [Helmand River drainage, northeast of Girisk, Kajkai, Afghanistan; holotype: ZMC P 27115].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Nalbant and Bianco (1998: fig. 21) as *Schistura alta*.

Distribution. General distribution: Middle East and South Asia: Helmand River, Sistan and Baluchestan basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Hirmand. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 16-Sistan. — Iran material: ZM-CBSU.

***Paraschistura aredvii* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015**

Common name: Anahita loach

Taxonomy: Original description: *Paraschistura aredvii* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015: 25, figs. 24-28 [Fars Province, Sarab-e Bahram spring at Sarab-e Bahram, a tributary of Fahlian River, 30°02'48"N, 51°33'34"E, Iran; holotype: ZM-CBSU J2959].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2015a: 25, fig. 24).

Distribution. General distribution: Middle East: Zohreh River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Nahid. — Recorded from Iran in the original description by Freyhof et al. (2015a); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 20-Zohreh. — Iran material: ZM-CBSU.

***Paraschistura bampurensis* (Nikolskii 1900)**

Common name: Bampur loach

Taxonomy: Original description: *Nemacheilus bampurensis* Nikolskii 1900: 414 [40] [Kjagur and Kashin (Kaekin) rivers, Bampur River near Bazman, Iran; syntypes: ZIN 11698-99 (6+, 4)].

Middle Eastern synonyms: *Nemacheilus bampurensis* Nikolskii 1900; *Schistura bampurensis* (Nikolskii 1900); *Nemacheilus baluchiorum* Zugmayer 1912; *Noemacheilus baluchiorum* Zugmayer 1912; *Schistura baluchiorum* (Zugmayer 1912); *Schistura balachiorum* (Zugmayer 1912).

Revisions: Nalbant and Bianco (1998: 118) as *Schistura bampurensis*; Freyhof et al. (2015a: 7).

Illustrations: Freyhof et al. (2015a: 7-8, figs. 4-5).

Distribution. General distribution: Middle East and South Asia: Bampur River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. These areas are dependent on the level of use of water resources and rain levels in relation to climate change. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, CLI, ABS. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Bampur. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 11-Hamun-e Jaz Murian, 10-Hamun-e Mashkid, 3-Makran. — Iran material: ZM-CBSU.

***Paraschistura chrysicristinae* (Nalbant 1998)**

Common name: Batman crested loach

Taxonomy: Original description: *Schistura chrysicristinae* Nalbant 1998: 372, fig. 1 [Batman River, a tributary of upper Tigris at Catalköprü, about 18 kilometers east from Silvan, Türkiye; holotype: ISBB uncat].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Nalbant (1998: 372, fig. 1).

Distribution. General distribution: Asia Minor: upper Tigris River drainage (Persian Gulf Basin).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams with gravel substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: The threats to the species are unknown. Recent field work in the area (2008-2012) found no obvious threats, and the habitats seemed to be in good condition. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Batman çöpçü balığı. — Recorded from Türkiye in the original description by Nalbant (1998); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: ISBB.

***Paraschistura cristata* (Berg 1898)**

Common name: Crested loach

Taxonomy: Original description: *Nemacheilus cristatus* Berg 1898: 19 [5], fig. [Tedzhen River near Ashgabat (Ashkhabad), Turkmenistan; syntypes: ISBR 996 (2), ZIN 11055 (1), ZMMU P-2555 (59)].

Middle Eastern synonyms: *Nemacheilus cristatus* Berg 1898; *Noemacheilus cristatus* Berg 1898; *Schistura cristata* (Berg 1898); *Metaschistura cristata* (Berg 1898).

Revisions: Berg (1949: 886) as *Nemachilus cristatus*; Prokofiev (2009: 893) as *Metaschistura cristata*; Freyhof et al. (2015a: 10).

Illustrations: Berg (1949: 886, fig. 36) as *Nemachilus cristatus*; Freyhof et al. (2015a: figs. 6-8).

Distribution. General distribution: Middle East, North Asia, and South Asia: Hari River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 631-Upper Amu Darya.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e tajdare Torkaman. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Metaschistura cristata*; Esmaili et al. 2017, 2018; Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 19-Hari River. — Iran material: ZM-CBSU.

***Paraschistura delvarii* Mousavi-Sabet & Eagderi 2015**

Common name: Delvari's loach

Taxonomy: Original description: *Paraschistura delvarii* Mousavi-Sabet & Eagderi 2015: 299, figs. 2-5 [Upstream of Mond River, Persian Gulf basin, Fars province, Iran, 29°40'22"N, 52°08'57"E; holotype: VMFC PSD1-H].

Middle Eastern synonyms: None.

Revisions: Sayyadzadeh et al. (2018b).

Illustrations: Mousavi-Sabet and Eagderi (2015: 299, fig. 2).

Distribution. General distribution: Middle East: Mond River drainage, Persian Gulf basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Delvari. — Recorded from Iran in the original description by Mousavi-Sabet and Eagderi (2015); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 1-Persis. — Iran material: VMFC, ZM-CBSU.

***Paraschistura hormuzensis* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015**

Common name: Hormuz loach

Taxonomy: Original description: *Paraschistura hormuzensis* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015: 28, figs. 29-33 [Hormozgan Province, Rudan River at Abnama bridge, a tributary of Minab River, 27°28'24"N, 57°15'14"E, Iran; holotype: ZM-CBSU J3168].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2015a: 28, fig. 29).

Distribution. General distribution: Middle East: Makran River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: This species occurs in streams with moderately to fast flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Hormuz. — Recorded from Iran in the original description by Freyhof et al. (2015a); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 3-Makran. — Iran material: ZM-CBSU.

***Paraschistura ilamensis* Vatandoust & Eagderi 2015**

Common name: Ilam loach

Taxonomy: Original description: *Paraschistura ilamensis* Vatandoust & Eagderi 2015: 178, figs. 1-5 [Ilam Province, Spring at Siahgav, Tigris River drainage, Iran, 33°51'54"N, 47°42'02"E; holotype: VMFC PS13-H].

Middle Eastern synonyms: *Paraschistura pasatigris* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015.

Revisions: None.

Illustrations: Vatandoust and Eagderi (2015: 178, fig. 1); Freyhof et al. (2015a:37, figs. 42-47).

Distribution. General distribution: Middle East: Tigris River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with moderately to fast flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Ilam. — Recorded from Iran in the original description by Vatandoust and Eagderi (2015) and the original description Freyhof et al. (2015a) as *Paraschistura pasatigris*; listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: VMFC, ZM-CBSU.

***Paraschistura kermanensis* Sayyadzadeh, Teimori & Esmaili 2019**

Common name: Kerman loach

Taxonomy: Original description: *Paraschistura kermanensis* Sayyadzadeh, Teimori & Esmaili 2019: 574, figs. 3-8 [Bidkhoon River at Hanjam village, Kerman province, Iran, 29°39'51.2"N, 56°30'52.3"E; holotype: ZM-CBSU H2442].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Sayyadzadeh et al. (2019: 574, fig. 3).

Distribution. General distribution: Middle East: Bidkhoon River drainage, Kerman-Naein basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 448-Kavir and Lut Deserts.

Habitat: This species occurs in streams with moderately to fast flowing freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Kerman. — Recorded from Iran in the original description by Sayyadzadeh et al. (2019); listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 18-Kerman-Na'in. — Iran material: ZM-CBSU.

***Paraschistura kessleri* (Günther 1889)**

Common name: Pishin lora loach

Taxonomy: Original description: *Nemacheilus kessleri* Günther 1889: 109 [Nushki, Pishin Lora River basin, Afghanistan (today Pakistan); syntypes: (8) BMNH 1886.9.21.177-180 (4), ZSI 11487-90 (now 3)].

Middle Eastern synonyms: *Nemacheilus kessleri* Günther 1889; *Noemacheilus kessleri* Günther 1889; *Schistura kessleri* (Günther 1889); *Nemacheilus sargadensis* Nikolskii 1900; *Noemacheilus sargadensis* Nikolskii 1900; *Paraschistura sargadensis* (Nikolskii 1900); *Noemacheilus lindbergi haarlovi* Bănărescu & Nalbant 1966.

Revisions: Berg (1949: 877) as *Nemachilus kessleri*; Bănărescu and Nalbant (1966a: 171) as *Schistura kessleri*.

Illustrations: Berg (1949: 878, fig. 623) as *Nemachilus kessleri*; Bănărescu and Nalbant (1966a: fig. 11, pl. 21, figs. 3-4) as *Schistura kessleri*.

Distribution. General distribution: Middle East and South Asia: Mashkid River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, CLI, ABS. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e Kessler. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 16-Sistan, 10-Hamun-e Mashkid. — Iran material: FSJF.

***Paraschistura makranensis* Eagderi, Mousavi-Sabet & Freyhof 2019**

Common name: Makran loach

Taxonomy: Original description: *Paraschistura makranensis* Eagderi, Mousavi-Sabet & Freyhof 2019: 261, figs. 2-8 [Jegin River at Jegin, Hormuzgan province, Iran, 26°09'43.1"N, 57°53'30.0"E; holotype: IMNRF-UT-1093-16].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Eagderi et al. (2019: 261, fig. 2).

Distribution. General distribution: Middle East: upper Jegin River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan.

Habitat: This species is a carnivorous species and a bottom feeder that occurs in streams with stony bed clear water streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Makran. — Recorded from Iran in the original description by Eagderi et al. (2019); listed in previous checklists from Iran by Jouladeh-

Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 3-Makran. — Iran material: IMNRF.

***Paraschistura naumanni* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015**

Common name: Naumann loach

Taxonomy: Original description: *Paraschistura naumanni* Freyhof, Sayyadzadeh, Esmaili & Geiger 2015: 32, figs. 34-41 [Fars Province, Golabi spring, about 35 km west of Darab, a tributary of Kol River, 28°47'15"N, 54°22'19"E, Iran; holotype: ZM-CBSU J2941].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2015a: 32, fig. 34).

Distribution. General distribution: Middle East: Mond River Drainage (Persian Gulf Basin), Lake Maharlo, and drainage, Kol River Drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages

Habitat: This species is a carnivorous species and a bottom feeder that occurs in streams with stony bed clear water streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Nauman. — Recorded from Iran in the original description by Freyhof et al. (2015a); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 13-Lake Maharlu, 1-Persis (Mond River Drainage, 2-Hormuz. — Iran material: ZM-CBSU.

***Paraschistura nielsenii* (Nalbant & Bianco 1998)**

Common name: Nielsen's loach

Taxonomy: Original description: *Schistura nielsenii* Nalbant & Bianco 1998: 119, figs. 22 A-C [Bazar River, Iran; holotype: ZMC P 27109].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Sayyadzadeh et al. (2018b: 45, fig. 10).

Distribution. General distribution: Middle East: Helleh and Mond River basins, Persian Gulf basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species is a carnivorous species and a bottom feeder that occurs in streams with stony bed clear water streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Nilsen. — Recorded from Iran in the original description by Nalbant and Bianco (1998); listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Sayyadzadeh et al. (2018b); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 1-Persis. — Iran material: ZMC, ZM-CBSU.

Paraschistura susiani* Freyhof, Sayyadzadeh, Esmaeili & Geiger 2015*Common name:** Susian loach**Taxonomy:** Original description: *Paraschistura susiani* Freyhof, Sayyadzadeh, Esmaeili & Geiger 2015: 41, figs. 48-52 [Khuzestan Province, Zard River close to Rudzard village at road from Ramhormoz to Baghmalek, a tributary of Jarahi, 31°22'34"N, 49°43'11"E, Iran; holotype: ZM-CBSU J3009].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Freyhof et al. (2015a: 41, fig. 48).**Distribution. General distribution:** Middle East: Tigris River basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species is a carnivorous species and a bottom feeder that occurs in streams with stony bed clear water streams. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Loch mahi-e Shoshi. — Recorded from Iran in the original description by Freyhof et al. (2015a); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.***Paraschistura turcmunica* (Berg 1932)****Common name:** Turkmenistan loach**Taxonomy:** Original description: *Nemacheilus turcmunicus* Berg 1932: 149, fig. 1 [Kelte-chinar River (Cherokh River) near Gyaurs (37°47'N, 58°44'E), Turkmenistan; syntypes: ZIN 11064 (3)].**Middle Eastern synonyms:** *Nemacheilus turcmunicus* Berg 1932.**Revisions:** Berg (1949: 876) as synonym of *Nemacheilus sargadensis* Nikolskii 1900; Freyhof et al. (2015a: 17).**Illustrations:** Berg (1932: fig. 1) as *Nemacheilus turcmunicus*.**Distribution. General distribution:** Middle East, northern-central Asia, and South Asia.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 631-Upper Amu Darya.**Habitat:** This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Loch mahi-e Torkamani. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 19-Hari River, 7-Dasht-e Kavir, 5-Bejestan. — Iran material: ZM-CBSU.***Paraschistura turcomana* (Nikolskii 1947)****Common name:** Murgab loach**Taxonomy:** Original description: *Nemacheilus kessleri turcomanus* Nikolskii 1947: 32, fig. 3 [Kushka River near town of Kushka, Murgab River basin, Turkmenistan; syntypes: ZMMU P-5734 (3), P-5735 (1)].**Middle Eastern synonyms:** None.**Revisions:** Kottelat (2012: 102).

Illustrations: Nikolskii (1947: fig. 3) as *Nemacheilus kessleri turcomanus*.

Distribution. General distribution: Middle East, northern-central Asia, and South Asia: eastern Hari River basin, Murghab drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 630-Middle Amu Darya.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch-e Torkamani. — Listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 19-Hari River. — Iran material: ZM-CBSU.

Remarks. *Nemacheilus kessleri turcomanus* Nikolskii 1947 is a synonym according to Freyhof et al. (2015a), but Mousavi-Sabet et al. (2015c) consider it as valid species of *P. turcomana*. Coad (1995) placed *turcomana* in *Noemacheilus kessleri* as subspecies, Kottelat (2012) regard as full species and transferred to *Paraschistura*. Morphological characters of this species, not diagnostic and most of them overlap with *P. turcomanica* so Jouladeh-Roudbar et al. (2020) suggested the validity of this species should be examined by molecular markers.

***Sasanidus kermanshahensis* (Bănărescu & Nalbant 1966)**

Common name: Kermanshah stone loach

Taxonomy: Original description: *Noemacheilus kermanshahensis* Bănărescu & Nalbant 1966: 151, figs. 1-2; pl. 19 (fig. 2) [Kermanshah in the drainage of the Karun River, tributary of lower Tigris, western Iran; holotype: ZMUC P2787].

Middle Eastern synonyms: *Nemacheilus kermanshahensis* Bănărescu & Nalbant 1966, *Orthrias kermanshahensis* (Bănărescu & Nalbant 1966); *Barbatula kermanshahensis* (Bănărescu & Nalbant 1966).

Revisions: Freyhof et al. (2016b).

Illustrations: Bănărescu and Nalbant (1966b: 151, fig. 1).

Distribution. General distribution: Middle East: Karkheh and Dez River drainages.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species occurs in streams with moderately to fast flowing freshwater in both mountainous and lowlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e Kermanshah. — Recorded from Iran in the original description by Bănărescu and Nalbant (1966b); listed in previous checklists from Iran by Esmaili et al. (2010a) as *Oxynoemacheilus kermanshahensis*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZMUC, ZM-CBSU.

***Seminemacheilus ahmeti* Sungur, Jalili, Eagderi & Çiçek 2018**

Common name: Ahmet's motley loach

Taxonomy: Original description: *Seminemacheilus ahmeti* Sungur, Jalili, Eagderi & Çiçek 2018: 467, figs. 1-4, 5b, 6b, 7b [Sultan Marshes near Yeşilova Village, Kızılırmak Basin, Kayseri Province, Türkiye, 38°12'05.26"N, 35°13'19.76"E; holotype: NHVUIC 2017-06-17].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Sungur et al. (2018: 491, figs. 12-14, 18).

Distribution. General distribution: Asia Minor: Sultan Marsh basin (Kayseri).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits springs, streams, and marshes. Usually in habitats with standing water and dense submerged vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Ahmet alaca çöpçüsü. — Recorded from Türkiye in the original description by Sungur et al. (2018); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: NHVUIC.

***Seminemacheilus attalicus* Yoğurtçuoğlu, Kaya, Geiger & Freyhof 2020**

Common name: Motley loach

Taxonomy: Original description: *Seminemacheilus attalicus* Yoğurtçuoğlu, Kaya, Geiger & Freyhof 2020: 488, figs. 9-11, 18 [Spring Kırkgöz, Antalya Province, Türkiye, 37.1097, 30.5807; holotype: FFR 15566].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Yoğurtçuoğlu et al. (2020: 488, figs. 9-11, 18).

Distribution. General distribution: Kırkgöz drainage, Antalya Province, southern Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits springs, streams, and marshes. Usually in habitats with standing water and dense submerged vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kırkgöz alaca çöpçüsü. — Recorded from Türkiye in the original description by Yoğurtçuoğlu et al. (2020); listed by Çiçek et al. (2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: FFR.

***Seminemacheilus dursunavsari* Çiçek 2020**

Common name: Avşar motley loach

Taxonomy: Original description: *Seminemacheilus dursunavsari* Çiçek 2020: 69, figs. 2-6 [Input of Alanözü Dam Lake, Goksu River drainage, Eastern Mediterranean basin, Konya province, Türkiye, 37°07'48.8"N, 32°42'19.3"E; holotype: NUIC-1811].

Middle Eastern synonyms: *Seminemacheilus tubae* Yoğurtçuoğlu, Kaya, Geiger & Freyhof 2020.

Revisions: None.

Illustrations: Çiçek (2020: 69, figs. 2-6).

Distribution. General distribution: Asia Minor: Goksu River drainage and Lake Beyşehir watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia, 432-Southern Anatolia.

Habitat: This species inhabits springs, streams, and marshes. Usually in habitats with standing water and dense submerged vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Avşar alaca çöpçüsü. — Recorded from Türkiye in the original description by Çiçek (2020); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 16-Konya, 17-Doğu Akdeniz. — Turkish material: NUIC.

***Seminemacheilus ekmekciae* Yoğurtçuoğlu, Kaya, Geiger & Freyhof 2020**

Common name: Motley loach

Taxonomy: Original description: *Seminemacheilus ekmekciae* Yoğurtçuoğlu, Kaya, Geiger & Freyhof 2020: 491, figs. 12-14, 18 [Stream Insuyu in Pınarbaşı village at Cihanbeyli, Konya Province, Türkiye, 38.7336, 32.7054; holotype: FFR 15567].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Yoğurtçuoğlu et al. (2020: 491, figs. 12-14, 18).

Distribution. General distribution: Asia Minor: Lake Tuz basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits springs, streams, and marshes. Usually in habitats with standing water and dense submerged vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tuz Gölü alaca çöpçüsü. — Recorded from Türkiye in the original description by Yoğurtçuoğlu et al. (2020); listed by Çiçek et al. (2023a). — Distribution in River Basin: 16-Konya. — Turkish material: FFR.

***Seminemacheilus ispartensis* Erk'akan, Nalbant & Özeren 2007**

Common name: Isparta motley loach

Taxonomy: Original description: *Seminemacheilus ispartensis* Erk'akan, Nalbant & Özeren 2007: 76, fig. 7 [Isparta Creek, Eğirdir-Isparta Road, 1st railway pass, 37°38'N, 30°31'E [not correct], Türkiye; holotype: HUIC AD-1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Erk'akan et al. (2007: 76, fig. 7).

Distribution. General distribution: Asia Minor: Lakes Eğirdir and Salda basins, Isparta Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits springs, streams, and marshes. Usually in habitats with standing water and dense submerged vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Isparta alaca çöpçü balığı. — Recorded from Türkiye in the original description by Erk'akan et al. (2007); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: HUIC.

Seminemacheilus lendlii* (Hankó 1925)*Common name:** Anatolian motley loach**Taxonomy:** Original description: *Nemachilus lendlii* Hankó 1925: 155, pl. 3 (fig. 9) [Eski-Chehir (= Eskişehir), western Anatolia, Türkiye; syntypes: (10, lost)].**Middle Eastern synonyms:** *Nemacheilus lendlii* Hankó 1925; *Nemachilus lendli* Hankó 1925; *Seminemacheilus lendli* (Hankó 1925).**Revisions:** None.**Illustrations:** Hankó (1925: 155, pl. 3, fig. 9).**Distribution. General distribution:** Asia Minor: upper Sakarya River basin and endorheic Lakes Akşehir and Eber basins, western Anatolia.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia, 431-Central Anatolia.**Habitat:** This species inhabits marshes, lakes, springs, and streams with standing waters and dense vegetation. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Alaca çöpçü balığı. — Recorded from Türkiye in the original description by Hankó (1925); listed in previous checklists from Türkiye by Kuru (2004) as *Noemacheilus lendli*; Geldiay and Balık (2007) as *Orthrias (Noemacheilus) lendlii*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 11-Akarçay, 12-Sakarya. — Turkish material: None.***Turcinoemacheilus ansari* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023****Common name:** Ansar dwarf loach**Taxonomy:** Original description: *Turcinoemacheilus ansari* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023: 25p., figs. 4-6 [Kohgiluyeh and Boyer-Ahmad prov., Beshar River, Allah Abad village, Karun drainage, 30.45029, 51.75346, Iran; holotype: BIAUBM 3-H].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Jouladeh-Roudbar et al. (2023: 8, figs. 4-6).**Distribution. General distribution:** Middle East: Khersan Rivers, Karun drainage.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Loch mahi-e kotolye Ansari. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2023). — Distribution in River Basin: 4-Tigris. — Iran material: BIAUBM, FSJF.***Turcinoemacheilus bahaii* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014****Common name:** Bahaii dwarf loach**Taxonomy:** Original description: *Turcinoemacheilus bahaii* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014: 259, figs. 3-6, 7a [Esfahan province, Zayandeh River between Azadegan and Qalee Shahrokh, 32°40'54"N, 50°27'47"E, Iran; holotype: ZM-CBSU 7193B].**Middle Eastern synonyms:** None.**Revisions:** None.

Illustrations: Esmaeili et al. (2014b: 259, fig. 3).

Distribution. General distribution: Middle East: Zayandeh River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 449-Esfahan.

Habitat: This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e kotolye Bahaii. — Recorded from Iran in the original description by Esmaeili et al. (2014b); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 9-Esfahan. — Iran material: ZM-CBSU.

***Turcinoemacheilus christofferi* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023**

Common name: Lorestan dwarf loach

Taxonomy: Original description: *Turcinoemacheilus christofferi* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023: 12p., figs. 8-9 [Lorestan prov., Gholiyan River, tributary Holotype. BIAUBM 4-H, 1, 54.2 mm SL; Iran: Lorestan, Iran; holotype: BIAUBM 4-H].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2023: 12, figs. 8-9).

Distribution. General distribution: Middle East: Gholiyan River, Lorestan province.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e kotolye Christoffer. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2023). — Distribution in River Basin: 4-Tigris. — Iran material: BIAUBM, FSJF.

***Turcinoemacheilus ekmekciae* Kaya, Yoğurtçuoğlu, Aksu, Bayçelebi & Turan 2023**

Common name: Ekmekci's dwarf loach

Taxonomy. Original description: *Turcinoemacheilus ekmekciae* Kaya, Yoğurtçuoğlu, Aksu, Bayçelebi & Turan 2023: figs. 1-4 [Muş prov.: stream Kaynarca at Kalecik, Murat drainage, 39.1519N 41.3534E, Türkiye; holotype: FFR 3608].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kaya et al. (2023: figs. 1-4).

Distribution. General distribution: Asia Minor: upper Euphrates River (Firat Nehri) basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.
Status in Türkiye: [Endemic]. — Cüce çöpçü balığı. — Recorded from Türkiye in the original description by Kaya et al. (2023); listed by Çiçek et al. (2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Turcinoemacheilus hafezi* Golzarianpour, Abdoli, Patimar & Freyhof 2013**

Common name: Hafez dwarf loach

Taxonomy: Original description: *Turcinoemacheilus hafezi* Golzarianpour, Abdoli, Patimar & Freyhof 2013: 43, figs. 1-6, 8 [tream at Joneqon, tributary of Kohrang River, Iran, 32°05'22"N, 50°39'48"E; holotype: ZFMK 48841].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Golzarianpour et al. (2013: 43, fig. 1).

Distribution. General distribution: Middle East: Karoun and Dez drainages, Tigris River drainage (Persian Gulf basin).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Loch mahi-e kotolye Hafez. — Recorded from Iran in the original description by Golzarianpour et al. (2013); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZFMK, ZM-CBSU.

***Turcinoemacheilus inexpectatus* Freyhof & Jouladeh-Roudbar 2024**

Common name: Expected dwarf loach

Taxonomy: Original description: *Turcinoemacheilus inexpectatus* Freyhof & Jouladeh-Roudbar 2024: 174, figs. 1-5, [Stream Kuna Massi in Sevanja, a tributary to Lesser Zab, 35.78880, 45.40298, Iraq; holotype: ZFMK-ICH 98400].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Jouladeh-Roudbar (2024: 174, figs. 1-5).

Distribution. General distribution: Middle East: Greater Zab, the Lesser Zab and the Sirvan.

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2024).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Loch mahi-e kotolye Zab. — Recorded from Iran in the original description by Freyhof and Jouladeh-Roudbar (2024). — Distribution in River Basin: 4-Tigris. — Iran material: AJRPC, MZLU.

Status in Iraq: [Native]. — None. — Recorded from Iran in the original description by Freyhof and Jouladeh-Roudbar (2024). — Distribution in River Basin: 1-Tigris. — Iran material: ZFMK-ICH, FSJF.

Turcinoemacheilus kosswigi* Banarescu & Nalbant 1964*Common name:** Kosswig's dwarf loach**Taxonomy:** Original description: *Turcinoemacheilus kosswigi* Bănărescu & Nalbant 1964: 178, pl. 8 (fig. 14) [Kapoziç Kadun, Tigris basin, 37°34'40"N, 43°44'10"E, Hakkari, Türkiye; holotype: ZMH H1884].**Middle Eastern synonyms:** None.**Revisions:** Esmaili et al. (2014b).**Illustrations:** Banarescu and Nalbant (1964: 178, pl. 8, fig. 14).**Distribution. General distribution:** Asia Minor and Middle East: upper Euphrates and Tigris watersheds.**Distribution in the Middle East:** Iran, Iraq, and Türkiye.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Iran:** [Native]. — Loch mahi-e kotolye Zagros. — Listed in the previous checklists from Iran by Esmaili et al. (2010a, 2014, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — First record from Iraq by Esmaili et al. (2014b). — Distribution in River Basin: 4-Great Zab. — Iraq materials: None.**Status in Türkiye:** [Native]. — Cüce çöpçü balığı. — Recorded from Türkiye in original description by Bănărescu and Nalbant (1964); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: ZMH.***Turcinoemacheilus minimus* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014****Common name:** Göksu dwarf loach**Taxonomy:** Original description: *Turcinoemacheilus minimus* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014: 265, figs. 7b, 9-11 [Adıyaman province: Upper Göksu, 5 km northeast of Gölbaşı, 37°50.22'N, 37°41.09'E, Türkiye; holotype: IUSHM 2013-1050].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Esmaili et al. (2014b: 265, figs. 7b, 9-11).**Distribution. General distribution:** Asia Minor: upper Euphrates River (Fırat Nehri) basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Cüce çöpçü balığı. — Recorded from Türkiye in the original description by Esmaili et al. (2014b); listed in previous checklists from Türkiye by Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: IUSHM.

Turcinoemacheilus moghbeli* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023*Common name:** Dwarf loach**Taxonomy:** Original description: *Turcinoemacheilus moghbeli* Jouladeh-Roudbar, Vatandoust, Doadrio & Ghanavi 2023: 15, figs. 11-13 [Kermanshah prov., Leyleh River at Sepidbarg, tributary of Sirvan drainage, 34.87334, 46.35020, Iran; holotype: BIAUBM 5-H].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Jouladeh-Roudbar et al. (2023: 16, figs. 11-13).**Distribution. General distribution:** Middle East: Gholiyan River, Lorestan province.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Loch mahi-e kotolye Moghbeli. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2023). — Distribution in River Basin: 4-Tigris. — Iran material: BIAUBM, FSJF.***Turcinoemacheilus saadii* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014****Common name:** Saadi dwarf loach**Taxonomy:** Original description: *Turcinoemacheilus saadii* Esmaili, Sayyadzadeh, Özuluğ, Geiger & Freyhof 2014: 268, figs. 7c, 13-15 [Fars province, stream Tang-e-Tizab, a tributary to Bashar River which drains to the Karoun, 30°23'12"N, 51°46'50"E, Iran; holotype: ZM-CBSU 7169B].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Esmaili et al. (2014b: 268, fig. 7).**Distribution. General distribution:** Middle East: Karun River drainage (Persian Gulf Basin).**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits fast-flowing sections of rivers and even very small streams, usually in rapids and riffles with coarse gravel or rocks. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Loch mahi-e kotolye Saadi. — Recorded from Iran in the original description by Esmaili et al. (2014b); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.**Cyprinoidei****Cyprinidae Rafinesque 1815****Labeoninae Bleeker 1859 (labeonines)*****Bangana dero* (Hamilton 1822)****Common name:** Kalabans**Taxonomy:** Original description: *Cyprinus dero* Hamilton 1822: 277, 385, pl. 22 (fig. 78) [Brahmaputra River, at Gualpara (Goalpara), Assam, India; no types known].**Middle Eastern synonyms:** *Sinilabeo dero* (Hamilton 1822); *Labeo dero* (Hamilton 1822).**Revisions:** Zhang and Chen (2006: 50).

Illustrations: Hamilton (1822: pl. 22, fig. 78) as *Cyprinus dero*.

Distribution. General distribution: Upper Brahmaputra basin: Pakistan to China; introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan.

Habitat: This species is found to inhabit torrential hillstreams in shallow waters. Adults migrate to warmer regions near lakes and streams during the winter. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Kalabans. — First reported from Iran by Esmaili et al. (2013a); listed in previous checklists from Iran by Esmaili et al. (2015, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 10-Hamun-e Mashkid. — Iran material: ZM-CBSU.

***Garra amirhosseini* Esmaili, Sayyadzadeh, Coad & Eagderi 2016**

Common name: Amirhossein's garra

Taxonomy: Original description: *Garra amirhosseini* Esmaili, Sayyadzadeh, Coad & Eagderi 2016: 87, figs. 2-10 [Sartang-e-Bijar hot spring at Mehran, Tigris River drainage, Ilam Province, Iran, 33°46'16.3"N, 45°56'17.2"E; holotype: ZM-CBSU H1216].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaili et al. (2016a: 87, fig. 2).

Distribution. General distribution: Middle East: Tigris River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates.

Habitat: This species is typically found in small rock or gravel pools, shallow sections of larger pools with slow-moving water, springs, and fast running perennial rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Amirhossein. — Recorded from Iran in the original description by Esmaili et al. (2016a); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

***Garra barreimiae* Fowler & Steinitz 1956**

Common name: Oman garra

Taxonomy: Original description: *Garra barreimiae* Fowler & Steinitz 1956: 262, figs. 1-4 [Buraimi, Oman; holotype: ANSP 72129 (missing)].

Middle Eastern synonyms: *Garra barreimiae shawkahensis* Banister & Clarke 1977.

Revisions: Fowler & Steinitz (1956: figs. 1-4).

Illustrations: None.

Distribution. General distribution: Middle East: both flanks of the northern Hajar Mountains.

Distribution in the Middle East: Oman, UAE.

Distribution in Ecoregions: 443-Oman Mountains.

Habitat: This species is typically found in small rock or gravel pools, shallow sections of larger pools with slow-moving water, springs, and fast running perennial rivers. The species can evidently survive the almost complete disappearance of surface water from its wadi environment. Its behaviour at springs contains hints that the fish may, to some extent, be pre-adapted to subterranean conditions, and this has given rise to speculation that it may

be able to resort to fossicking for short periods, withdrawing to the interstitial space in wadi gravels, when the water level retreats below ground. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, COM, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Stable. — High priority for conservation action.

Status in Oman: [Native]. — Buraimi garra. — Recorded from Oman in original description by Fowler and Steinitz (1956: 262); subsequently reported by Freyhof et al. (2020); Esmaeili et al. (2022a); Esmaeili and Hamidan (2023). — Oman material: ANSP, ZM-CBSU.

Status in UAE: [Native]. — Buraimi garra. — Listed in previous checklists from UEA by Freyhof et al. (2020); Esmaeili et al. (2022a); Esmaeili and Hamidan (2023). — UAE material: None.

Garra buettikeri Krupp 1983

Common name: Asir garra

Taxonomy: Original description: *Garra buettikeri* Krupp 1983: 595, fig. 21 [Wadi Turabah, Saudi Arabia, 20°29'N, 41°12'E, elevation 1470 meters; holotype: NMBA 5552].

Middle Eastern synonyms: None.

Revisions: Krupp (1983: fig. 21).

Illustrations: None.

Distribution. General distribution: Asir Mountains.

Distribution in the Middle East: Saudi Arabia.

Distribution in Ecoregions: 440-Arabian Interior.

Habitat: This species is found in the upper reaches of two wadis. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Saudi Arabia: [Endemic]. — Asir garra. — Recorded from Saudi Arabia in original description by Krupp (1983); subsequently listed by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Saudi Arabia material: NMBA.

Garra caudomaculata (Battalgil 1942)

Common name: Antakya minnow

Taxonomy: Original description: *Hemigrammocapoeta caudomaculata* Battalgil 1942: 296, fig. 7 [Amik Lake, Antakya, Hatay Province, southern Türkiye; no types known].

Middle Eastern synonyms: *Discognathus lamta* (non Hamilton 1822); *Crossocheilus caudomaculatus* (Battalgil 1942).

Revisions: None.

Illustrations: Battalgil (1942: fig. 7).

Distribution. General distribution: Asia Minor: Amik Lake basin, Orontes River basin.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species lives in slowly running rivers and streams, densely vegetated springs, and wetlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — No keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Syria: [Native]. — Lahhas alhajar. — First record from Syria by Pellegrin (1911: 108) as *Discognathus lamta*; confirmed by Saad et al. (2009) as *Garra caudomaculata*. — Distribution in River Basin: 4-Orontes. — Syrian material: BMNH, MCZ, MNHN, MSL.

Status in Türkiye: [Native]. — Lekeli sazbalığı. — Recorded from Türkiye in original description by Battalgil (1942); listed in previous checklists from Türkiye by Fricke et al. (2007); Çiçek et al. (2015, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.

***Garra culiciphaga* (Pellegrin 1927)**

Common name: Red stripe barb

Taxonomy: Original description: *Hemigrammocapoeta culiciphaga* Pellegrin 1927: 34 [Adana, Asia Minor [Türkiye]; syntypes: BMNH 1927.5.7.7 (1), MNHN 1926-0396 (6), MSNM 27 [ex MSNM 4411 and ex MNHN] (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Seyhan and Ceyhan River basins.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits slowly moving rivers and streams, densely vegetated springs, and wetlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Saz balığı. — Recorded from Türkiye in the original description by Pellegrin (1927); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 17-Doğu Akdeniz, 18-Seyhan, 20-Ceyhan. — Turkish material: BMNH, MSNM.

***Garra dunsirei* Banister 1987**

Common name: Tawi Atair garra

Taxonomy: Original description: *Garra dunsirei* Banister 1987: 59, figs. 1, 2a, 3-5 [Sink hole, Tawi Atair [or Attair], 17°06'N, 54°34'E, in the Jabal Qara (Jabal Samhan) mountains, Dhofar, Oman; holotype: BMNH 1984.3.6.571].

Middle Eastern synonyms: None.

Revisions: Sayyadzadeh et al. (2023).

Illustrations: Sayyadzadeh et al. (2023).

Distribution. General distribution: Wadi Hadhramut, Wadi Andhur, and Laggashalyon drainages.

Distribution in the Middle East: Oman.

Distribution in Ecoregions: 440-Arabian Interior, 439-Southwestern Arabian Coast.

Habitat: This species is found in pools 200 m down a sinkhole, and several freshwater Wadis in Oman. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Stable. — High priority for conservation action.

Status in Oman: [Endemic]. — Tawi atair garra. — Recorded from Oman in original description by Banister (1987: 59); subsequently reported by Freyhof et al. (2020); Esmaeili et al. (2022a); Esmaeili and Hamidan (2023); Sayyadzadeh et al. (2023). — Oman material: ANSP, and ZM-CBSU.

Garra elegans* (Günther 1868)*Common name:** Mesopotamian garra**Taxonomy:** Original description: *Tylognathus elegans* Günther 1868: 64 [Mesopotamia?; no types known].**Middle Eastern synonyms:** *Hemigarra elegans* (Günther 1868); *Hemigrammocapoeta elegans* (Günther 1868).**Revisions:** None.**Illustrations:** Freyhof (2016b).**Distribution. General distribution:** Middle East: Tigris River drainage.**Distribution in the Middle East:** Iran and Iraq.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits large lowland rivers. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON, HAB, EUT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Gel cheragh-e ziba. — Listed in previous checklists from Iran by Esmaeili et al. (2010a as) *Hemigrammocapoeta elegans*; Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); but needs confirmation by specimens for Iran (Sayyadzadeh & Esmaeili, 2023). — Distribution in River Basin: 4-Tigris: according to Freyhof (2016) it is found in lower part of Tigris, Little Zab and Sirvan Rivers). — Iran material: None.**Status in Iraq:** [Native]. — Kara. — Recorded from Iraq in original description by Günther (1868: 64); subsequently reported by Freyhof (2016b); listed by Çiçek et al. (2023b). — Distribution in River Basin: 4-Great Zab, 5-Little Zab. — Iraq materials: MNH 1850.10.21.31-35.***Garra festai* (Tortonese 1939)****Common name:** Ammiq garra**Taxonomy:** Original description: *Tylognathus festai* Tortonese 1939: 323 (13), pl. 1 (fig. 1) [El Bekáa, Lebanon; holotype (unique): MZUT 2917].**Middle Eastern synonyms:** None.**Revisions:** Hamidan et al. (2014).**Illustrations:** Freyhof et al. (2020).**Distribution. General distribution:** Middle East: El Bekáa and Ammik marshes.**Distribution in the Middle East:** Lebanon.**Distribution in Ecoregions:** 436-Coastal Levant.**Habitat:** This fish restricted to a small wetland with dense reed stands and spring areas. Spawns in dense vegetation. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: CR (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Lebanon:** [Endemic]. — Lahhas alhajar. — Recorded from Lebanon in original description by Tortonese (1939: 323); subsequently reported by Hamidan et al. (2014). — Lebanon material: MZUT, FSJF.**Remarks.** Endemic to the Aammiq wetland in the upper Litani River drainage at the western edge of Mount Lebanon. These marshes are a remnant of what was formerly a much larger wetland, and this species inhabits a tiny perennial freshwater spring. It is threatened by water abstraction and increasing frequency and intensity of droughts due to climate change (Freyhof et al. 2020). Hamidan et al. (2014) discussed its phylogenetic affinity with other *Garra* species in the region.

Garra gallagheri* Krupp 1988*Common name:** Black garra**Taxonomy:** Original description: *Garra barreimiae gallagheri* Krupp 1988: 402, fig. 1 [Wadi Bani Khalid north of Muqal, 22°40'N, 59°05'E, Oman; holotype: SMF 17262].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Middle East: Wadi Bani Khalid and falaj irrigation systems downstream.**Distribution in the Middle East:** Oman.**Distribution in Ecoregions:** 443-Oman Mountains.**Habitat:** This species lives in slowly running rivers and streams, densely vegetated springs, and wetlands. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — No keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Oman:** [Endemic]. — Black garra. — Recorded from Oman in original description by Krupp (1988: 402); subsequently reported by Freyhof et al. (2020), Kirchner et al. (2020); Esmaeili et al. (2022; Esmaeili and Hamidan (2023). — Oman material: CMN, FSJF, ZM-CBSU.***Garra ghorensis* Krupp 1982****Common name:** Dead Sea garra**Taxonomy:** Original description: *Garra tibanica ghorensis* Krupp 1982: 319, figs. 1-2 [Dead Sea Valley, Ain al-Hadita, Jordan 31°18'N, 35°32'E; holotype: SMF 16436].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Krupp (1982: figs. 1-2).**Distribution. General distribution:** Middle East: Jordan River basin.**Distribution in the Middle East:** Jordan and Israel.**Distribution in Ecoregions:** 438-Jordan River.**Habitat:** This fish inhabits shallow fast and clear streams and springs with stony beds. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** ABS, CLI, COM, CON, HAB. — Low sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Israel:** [Native]. — Aguleset sdom. — Recorded from Israel in original description by Krupp (1982); subsequently reported by Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUJ, SMF.**Status in Jordan:** [Native]. — None. — Recorded from Jordan in original description by Krupp (1982). — Jordan material: SMF.***Garra gymnothorax* Berg 1949****Common name:** Chest scaleless garra**Taxonomy:** Original description: *Garra rufa gymnothorax* Berg 1949: 792, figs. 4-5 [Tigris River, Iran; syntypes: ZIN 13214-15 (6, 6+), plus additional specimen 24429 (1), 24435-36 (10, 3)].**Middle Eastern synonyms:** None.**Revisions:** Esmaeili et al. (2016a).**Illustrations:** Esmaeili et al. (2016a: 93, figs. 12, 13).**Distribution. General distribution:** Middle East: Karun River system, Balarud River and Bashar River drainages.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This fish inhabits shallow fast and clear streams and springs with stony beds. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e shekam berahne. — Recorded from Iran in the original description by Berg (1949), and subsequently reported by Esmaeili et al. (2016a); listed by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZIN, ZM-CBSU.

***Garra hormuzensis* Zamani-Faradonbe, Zhang & Keivany 2021**

Common name: Hormuz garra

Taxonomy: Original description: *Garra hormuzensis* Zamani-Faradonbe, Zhang & Keivany 2021: 385, figs. 2-6 [Shur River about 12 km west of Hajiabad, upper Kol River basin, Hormuzgan Province, Iran, 28.1885N, 55.7777E; holotype: IUT-IM GH1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Zamani-Faradonbe et al. (2021: 51, fig. 2); Sayyadzadeh and Esmaeili (2021: 271-273, figs 2-6).

Distribution. General distribution: Kol River drainage (Persian Gulf Basin), Hormuzgan and Fars Provinces.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: It is found in the rivers and springs with dominant substrate type of cobble and boulder and the bush riparian vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Hormuz. — Recorded from Iran in the original description by Zamani-Faradonbe et al. (2021); listed in previous checklists from Iran by Eagderi et al. (2022). — Distribution in River Basin: 2-Hormuz. — Iran material: IUT-IM, ZM-CBSU.

***Garra jordanica* Hamidan, Geiger & Freyhof 2014**

Common name: Jordan garra

Taxonomy: Original description: *Garra jordanica* Hamidan, Geiger & Freyhof 2014: 227, figs. 2-5 [lower part of Mujib River, 31°27.998'N, 35°34.417'E, Jordan; holotype: ZFMK 66328].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Hamidan et al. (2014: figs. 2-5).

Distribution. General distribution: Middle East: northern Dead Sea basin.

Distribution in the Middle East: Jordan and Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species lives in slowly running rivers and streams, densely vegetated springs, and wetlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Jordan: [Native]. — None. — Recorded from Jordan in original description by Hamidan et al. (2014: 227). — Jordan material: CMN, FSJF.

Status in Syria: [Native]. — Lahhas alhajar. — Recorded from Syria in original description by Hamidan et al. (2014: 227); listed in by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 7-Al-Yarmouk. — Syrian material: CMN, FSJF.

***Garra kemali* (Hankó 1925)**

Common name: Ereğli minnow

Taxonomy: Original description: *Varicorhinus kemali* Hankó 1925: 149, pl. 3 (fig. 4) [Eregli, Türkiye; syntypes: (5) MNHN 1928-0219 (1)].

Middle Eastern synonyms: *Hemigrammocapoeta kemali* (Hankó 1925).

Revisions: None.

Illustrations: Hankó (1925: pl. 3, fig. 4) as *Varicorhinus kemali*.

Distribution. General distribution: Asia Minor: Central Anatolia, Isparta, Konya, Afyonkarahisar provinces etc.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia, 432-Southern Anatolia.

Habitat: This species inhabits densely vegetated marshes, streams, and lakes. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Saz balığı. — Recorded from Türkiye in the original description by Hankó (1925); listed in previous checklists from Türkiye by Kuru (2004) as *Hemigrammocapoeta kemali*; Geldiay and Balık (2007) as *Hemigrammocapoeta kemali*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: MNHN.

***Garra klatti* (Kosswig 1950)**

Common name: Anatolian golden barb

Taxonomy: Original description: *Tylognathus* (*Neotylognathus*) *klatti* Kosswig 1950: 409, fig. 4 [Egridir (sic, Eğirdir), Türkiye; holotype: ZMUI].

Middle Eastern synonyms: *Chrossocheilus klatti* (Kosswig 1950); *Hemigrammocapoeta menderesensis* Küçük, Bayçelebi, Güçlü & Gülle 2015; *Garra menderesensis* (Küçük, Bayçelebi, Güçlü & Gülle 2015).

Revisions: None.

Illustrations: Kosswig (1950: fig. 4) as *Tylognathus klatti*.

Distribution. General distribution: Asia Minor: Lakes Eğirdir and Isikli and Büyük Menderes River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 431-Central Anatolia, 432-Southern Anatolia.

Habitat: This species inhabits densely vegetated shores of streams, springs, and lakes. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Saz balığı. — Recorded from Türkiye in the original description by Kosswig (1950); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *Crossocheilus klatti*; Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes, 9-Antalya, 16-Konya. — Turkish material: ZMUI.

***Garra lautior* Banister 1987**

Common name: Smooth hadramaut garra

Taxonomy: Original description: *Garra lautior* Banister 1987: 65, figs. 2b, 6, 7 right, 8-9, 11-12 [Qasam area, Wadi Hadhramut, Yemen; holotype: BMNH 1976.4.7.398].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Banister (1987: 65, figs. 2b, 6, 7 right, 8-9, 11-12); Freyhof et al. (2020: 160).

Distribution. General distribution: Wadi Hadhramut drainage.

Distribution in the Middle East: Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: This fish restricted to a small wetland with dense reed stands and spring areas. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Yemen: [Endemic]. — Smooth hadhramut garra. — Recorded from Yemen in original description by Banister (1987: 65); confirmed by Freyhof et al. (2020: 160); Esmaeili and Hamidan (2023: 210). — Yemen material: BMNH.

***Garra longipinnis* Banister & Clarke 1977**

Common name: Jabal Akhdar garra

Taxonomy: Original description: *Garra longipinnis* Banister & Clarke 1977: 137, fig. 23 [Saiq, Jabal al Akhdar, 23°02'N, 57°28'E, Oman; holotype: BMNH 1968.10.11.1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Banister & Clarke (1977: fig. 23); Esmaeili et al. (2022:469, fig. 20).

Distribution. General distribution: Middle East: southern Hajar Mountains.

Distribution in the Middle East: Oman.

Distribution in Ecoregions: 443-Oman Mountains.

Habitat: This species is found in several wadis, and Hoota Cave, including small pools. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: ABS, CLI, COM, CON, EUT, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Oman: [Endemic]. — Jabal akhdar garra. — Recorded from Oman in original description by Banister and Clarke (1977: 137); subsequently reported by Freyhof et al. (2020); Esmaeili et al. (2022a); Esmaeili and Hamidan (2023). — Oman material: CMN, FSJF, ZM-CBSU.

***Garra lorestanensis* Mousavi-Sabet & Eagderi 2016**

Common name: Blind cave garra

Taxonomy: Original description: *Garra lorestanensis* Mousavi-Sabet & Eagderi 2016: 46, figs. 1-4, 8a, 9a, 9b [Loven Cave, Tigris River drainage, Persian Gulf basin, Lorestan Province, Iran, 33°04'39"N, 48°35'33"E; holotype: VMFC GL-H].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet and Eagderi (2016: 46, fig. 1); Esmaeili et al. (2016a: 100, fig. 15).

Distribution. General distribution: Middle East: subterranean waters, Tigris River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: Small poll and the natural outlet of a subterranean limestone system of the Zagros Mountains. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Mahi koor-e lorestani. — Recorded from Iran in the original description by Mousavi-Sabet and Eagderi (2016a); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: VMFC.

***Garra mamshuqa* Krupp 1983**

Common name: Spiny hadramaut garra

Taxonomy: Original description: *Garra mamshuqa* Krupp 1983: 599, figs. 25-27, 29 [Wadi Hadhramut, Qasam area, Yemen, about 16°10'N, 49°04'E; holotype: BMNH 1976.4.7.380].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Krupp (1983: 599, figs. 25-27, 29); Freyhof et al. (2020: 168).

Distribution. General distribution: Wadi Hadhramut drainage.

Distribution in the Middle East: Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: This species lives in slowly running rivers and streams, densely vegetated springs, and wetlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Yemen: [Endemic]. — Hadhramut garra. — Recorded from Yemen in original description by Krupp (1983: 599); confirmed by Banister (1987), Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Yemen material: CMN, FSJF.

***Garra meymehensis* Zamani-Faradonbe, Keivany, Dorafshan & Zhang 2021**

Common name: Meymeh garra

Taxonomy: Original description: *Garra meymehensis* Zamani-Faradonbe, Keivany, Dorafshan & Zhang 2021: 256, figs. 3-9 [Meymeh River at km 16 on road from Dehloran to Mehran, Tigris River drainage, western Iran, 32°44'33"N, 47°9'23"E; holotype: IUT-IM M43].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Zamani-Faradonbe et al. (2021: 256, fig. 3).

Distribution. General distribution: Lower Tigris River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: It is found in the rivers and springs with dominant substrate type of cobble and boulder and the riparian vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Meymeh. — Recorded from Iran in the original description by Zamani-Faradonbe et al. (2021). — Distribution in River Basin: 4-Tigris. — Iran material: IUT-IM, ZM-CBSU.

***Garra mondica* Sayyadzadeh, Esmaili & Freyhof 2015**

Common name: Mond garra

Taxonomy: Original description: *Garra mondica* Sayyadzadeh, Esmaili & Freyhof 2015: 78, figs. 2-6 [Konar Siyah spring at Firuzabd, Fars Province, Iran, 28°43'40"N, 52°25'20"E; holotype: ZM-CBSU H1032].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Sayyadzadeh et al. (2015: 78, figs. 2-6).

Distribution. General distribution: Middle East: Mond River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages.

Habitat: It is found in the rivers and springs with dominant substrate type of cobble and boulder and the riparian vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Mond. — Recorded from Iran in the original description by Sayyadzadeh et al. (2015); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 1-Persis. — Iran material: ZM-CBSU.

***Garra nana* (Heckel 1843)**

Common name: Damascus garra

Taxonomy: Original description: *Tylognathus nanus* Heckel 1843: 1073 [83] [Damascus, Syria; syntypes: (3) not found at NMW].

Middle Eastern synonyms: *Hemigrammocapoeta nana* (Heckel 1843); *Tylognathus steinitziorum* Kosszig 1950; *Tylognathus (Tylognathus) steinitziorum* Kosszig 1950.

Revisions: None.

Illustrations: Heckel (1843b: pl. 8, fig. 4) as *Tylognathus nanus*.

Distribution. General distribution: Middle East: Jordan River basin.

Distribution in the Middle East: Israel, Jordan, and Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species is found in a variety of habitats, such as rivers, lakes, and small ponds. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Israel: [Native]. — Yableset matzuya. — Recorded from Israel in original description by Kosszig (1950) as *Tylognathus steinitziorum* Kosszig 1950; subsequently reported by Steinitz (1953: 211) as *Tylognathus steinitziorum*; Goren (1974: 91) as *Tylognathus steinitziorum*; Goren and Ortal (1999: 4) as *Hemigrammocapoeta nana*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin. — Israel material: ZMUI, HUI.

Status in Jordan: [Native]. — None. — Listed in previous checklists from Jordan by It is probable that this species is naturally distributed in the country. — Jordan material: None.
Status in Syria: [Native]. — Lahhas alhajar. — Recorded from Syria in original description by Heckel (1843a: 1074) as *Tylognathus nanus*; subsequently reported by Beckman (1962: 142) as *Tylognathus nanus*; listed by Saad et al. (2023). — Syrian material: BMNH, MNHN, NMW.

***Garra nudiventris* (Berg 1905)**

Common name: Lut garra

Taxonomy: Original description: *Discognathus rossicus* var. *nudiventris* Berg 1905: 52 [Shivar [Seistan / Southern Baluchistan], north-east Kerman, Persia; syntypes: ZIN 11113 (2)].

Middle Eastern synonyms: *Discognathus phryne* Annandale 1919.

Revisions: Esmaili et al. (2016a).

Illustrations: Esmaili et al. (2016a: 103, fig. 16).

Distribution. General distribution: Middle East: Lut River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 448-Kavir and Lut Deserts.

Habitat: Qanat system (Kalat-e-Baba). — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Lut. — Recorded from Iran in the original description by Berg (1905); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 8-Dasht-e Lut. — Iran material: ZIN, ZM-CBSU.

***Garra orontesi* Bayçelebi, Kaya, Turan & Freyhof 2021**

Common name: Orontes garra

Taxonomy: Original description: *Garra orontesi* Bayçelebi, Kaya, Turan & Freyhof 2021: 171, figs. 1-5 [Stream Karasu below Tahtaköprü dam, Gaziantep Province, Türkiye, 36.8520°N, 36.6861°E; holotype: FFR 4034].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Bayçelebi et al. (2021: figs. 1-5).

Distribution. General distribution: Asia Minor: Orontes River drainage, eastern Mediterranean Sea basin.

Distribution in the Middle East: Syria, Türkiye, and possibly Lebanon.

Distribution in Ecoregions: 436-Coastal Levant, 437-Orontes.

Habitat: This species lives in slowly running rivers and streams, densely vegetated springs, and wetlands. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — No keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Lebanon: [Native]. — None. — In original description by Bayçelebi et al. (2021) claimed that this species possible found in Lebanon. Need to confirmation by field trip. — Lebanon materials: None.

Status in Syria: [Native]. — Lahhas alhajar. — Recorded from Syria in original description by Bayçelebi et al. (2021:171; listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: FSJF.

Status in Türkiye: [Native]. — Vantuzlu balık. — Recorded from Türkiye in original description by Bayçelebi et al. (2021a); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 19-Asi. — Turkish material: FFR.

***Garra persica* Berg 1914**

Common name: Persian garra

Taxonomy: Original description: *Garra persica* Berg 1914: 61 [Bampur River, southern Iran; Kiabad in Zirkuh, eastern Khorassan; syntypes: (7) ZIN 11706-07 (1, 6)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaeili et al. (2016a: 111, fig. 26).

Distribution. General distribution: Widespread in Iran and possibly in adjacent Pakistan.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 441-Northern Hormuz Drainages, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: It is found in the rivers and springs with dominant substrate type of gravels and cobble and low riparian vegetation (including halophytes in some area). — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Parsi. — Recorded from Iran in the original description by Berg (1914); listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2015, 2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz, 3-Makran, 11-Hamun-e Jaz Murian. — Iran material: ZIN, ZM-CBSU.

***Garra rezai* Mousavi-Sabet, Eagderi, Saemi-Komsari, Kaya & Freyhof 2022**

Common name: Reza's garra

Taxonomy: Original description: *Garra rezai* Mousavi-Sabet, Eagderi, Saemi-Komsari, Kaya & Freyhof 2022: 423, figs. 2-9 [Stream Bouein-Sofla near Bahia, Kurdistan Province, Iran, 35.9378°N, 45.9363°E; holotype: GUIC 7979].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet et al. (2022: 423, figs. 2-9).

Distribution. General distribution: Middle East: upper Tigris River drainage.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of flowing water habitats, from fast-flowing headwaters to moderately flowing ones. At its type locality, the spring has about 2-3 meters wide, and the outflowing stream had a low velocity, and the bed was covered by gravel. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Gel cheragh-e Rezaei. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2022); listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: GUIC.

Status in Iraq: [Native]. — None. — According to Mousavi-Sabet et al. (2022) possibly distributed in Iraq; listed by Çiçek et al. (2023b). — Distribution in River Basin: 5-Little Zab. — Iraq material: None.

Status in Türkiye: [Native]. — Vantuzlu balık. — Recorded from Türkiye in the original description by Mousavi-Sabet et al. (2022); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Garra roseae* Mousavi-Sabet, Saemi-Komsari, Doadrio & Eagderi 2019**

Common name: Rose's garra

Taxonomy: Original description: *Garra roseae* Mousavi-Sabet, Saemi-Komsari, Doadrio & Eagderi 2019: 228, figs. 3-8 [Stream Tang-e-Sarhe near Siahangari, at km 465 on road from Zahedan to Chabahar, Sistan-va-Baluchistan, Iran, 26.5383°N, 59.9406°E; holotype: GUIC 7847].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet et al. (2019: 228, fig. 3).

Distribution. General distribution: Middle East: Stream Tang-e-Sarhe.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan.

Habitat: It is found in shallow stream with slow current. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Rose. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2019c); listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 3-Makran. — Iran material: GUIC.

***Garra rossica* (Nikolskii 1900)**

Common name: Hari garra

Taxonomy: Original description: *Discognathus rossicus* Nikolskii 1900: no page number, pl. 88, fig. 3 [Tedzhen River, Turkmenistan; rivers in eastern Iran; syntypes: ZIN 10365 (4, now 3), 11113 (6), 11703-05 (6+, 6, 6), 11708 (6)].

Middle Eastern synonyms: *Discognathichthys rossicus* (Nikolskii 1900).

Revisions: Berg (1949: 674) as *Discognathichthys rossicus*; Esmaili et al. (2016a: 105).

Illustrations: Berg (1949: 674, figs. 430-431) as *Discognathichthys rossicus*; Nikolskii (1900: pl. 88, fig. 3) as *Discognathus rossicus*; Esmaili et al. (2016a: 105, fig. 21).

Distribution. General distribution: Middle East and South Asia, Iran.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 631-Upper Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species occurs in streams with stone beds. It is a benthopelagic species mostly found along the sides of streams where the water is slow and transparent. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Sharq. — Recorded from Iran in the original description by Nikolskii (1900); listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 19-Hari River, 5-Bejestan, 16-Sistan, 8-Dasht-e Lut8-Dasht-e Lut, 11-Hamun-e Jaz Murian, 10-Hamun-e Mashkid, 3-Makran. — Iran material: ZM-CBSU.

Garra rufa* (Heckel 1843)*Common name:** Red garra**Taxonomy:** Original description: *Discognathus rufus* Heckel 1843: 1071 (81) [Aleppo, Syria; lectotype: NMW 53240 (108 mm SL)].**Middle Eastern synonyms:** *Discognathus obtusus* Heckel 1843; *Discognathus crenulatus* Heckel 1847.**Revisions:** Sayyadzadeh et al. (2015); Esmaeili et al. (2016a).**Illustrations:** Heckel (1843: pl. 8, fig. 2) as *Discognathus rufus*; Esmaeili et al. (2016a: 108, fig. 23); Esmaeili et al. (2016a: 109, fig. 24) as *Discognathus crenulatus*.**Distribution. General distribution:** Asia Minor: Euphrates and Tigris River basins.**Distribution in the Middle East:** Iran, Iraq, Jordan Syria, and Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 438-Jordan River.**Habitat:** This species inhabits a very wide range of habitats with flowing water, from fast-flowing headwaters and reservoirs to polluted canals and large lowland rivers. Usually absent from standing waters. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are many threats in the area, but none is serious enough to seriously impact this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Iran:** [Native]. — Gel cheragh-e Maamoli. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 13-Lake Maharlu, 1-Persis. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — First record from Iraq by Heckel (1843). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: NMW.**Status in Israel:** [Native]. — Aguleset ha'nehalim. — First record from Israel by Günther (1865: 490) as *Discognathus rufus*; confirmed by Steinitz (1953: 211) as *Garra rufus*; Goren (1974: 80); Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUI.**Status in Jordan:** [Native]. — None. — Listed in previous checklists from Jordan by It is probable that this species is naturally distributed in the country. — Jordan material: None.**Status in Syria:** [Native]. — Lahhas alhajar. — Recorded from Syria in original description by Heckel (1843a: 1072, 1073) as *Discognathus rufus* and *D. obtusus*; subsequently reported by Beckman (1962: 126) as *Garra rufus*; Ali (2003); Saad et al. (2006); Barakat et al. (2020); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: BMNH, MCZ, MNHN, NMW, MSL.**Status in Türkiye:** [Native]. — Vantuzlu balık-Doktor balık. — Listed in previous checklists from Türkiye by Kuru (2004) as *Garra rufa obtusa*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: None.***Garra sahilia* Krupp 1983****Common name:** Aden garra, Coastal garra**Taxonomy:** Original description: *Garra sahilia* Krupp 1983: 601, fig. 32, 36 [Wadi Bana, Yemen, 13°26'N, 43°09'E; holotype: BMNH 1976.4.7.419].**Middle Eastern synonyms:** *Garra sahilia gharbia* Krupp 1983.**Revisions:** None.**Illustrations:** Freyhof et al. (2020: 170).**Distribution. General distribution:** Coastal streams of Gulf of Aden and Red Sea.**Distribution in the Middle East:** Saudi Arabia, Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: Wadis with high seasonal fluctuations in discharge. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Saudi Arabia: [Native]. — Coastal garra. — Listed in previous checklists from Saudi Arabia by Hamidan et al. (2014); Lyon et al. (2016); Hamidan and Shobrak (2019); Freyhof et al. (2020); Esmaeili and Hamidan (2020). — Saudi Arabia material: FSJF.

Status in Yemen: [Native]. — Coastal garra. — Recorded from Yemen in original description by Krupp (1983: 601); listed in previous checklists from Iran by Hamidan and Shobrak (2019); Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Yemen material: CMN, FSJF.

Garra sauvagei (Lortet 1883)

Common name: Kinneret deep-water garra

Taxonomy: Original description: *Capoeta sauvagei* Lortet 1883:154, pl. 13 (fig. 2) [Lake Tiberias (Kinneret), Israel; lectotype: MGHN 3491 (77 mm SL)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Lortet (1883: pl. 13, fig. 2) as *Capoeta sauvagei*.

Distribution. General distribution: Lake Tiberias.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species is found in a variety of habitats, such as rivers, lakes, and small ponds. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023). **Remarks.** Probably EX.

Threats: Threats: Unknown. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Israel: [Endemic]. — None. — Recorded from Israel in original description by Lortet (1883: 154); confirmed by Steinitz (1953: 210) as *Varicorhinus sauvagei*; Geiger et al. (2014); listed by Çiçek et al. (2023c). — Distribution in River Basin: 3-Kinneret Basin. — Israel material: MGHN.

Garra shamal Kirchner, Kruckenhauser, Pichler, Borkenhagen & Freyhof 2020

Common name: Muscat garra, Shamal garra.

Taxonomy: Original description: *Garra shamal* Kirchner, Kruckenhauser, Pichler, Borkenhagen & Freyhof 2020: 533, figs. 8-11 [Wadi Sahtan, Oman, 23.384°N, 57.306°E; holotype: NMW-100004].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2020: 173); Esmaeili et al. (2022: 470, fig. 22).

Distribution. General distribution: Middle East: northern Hajar Mountains.

Distribution in the Middle East: Oman.

Distribution in Ecoregions: 443-Oman Mountains.

Habitat: This species is found in mountain wadis, streams, falaj systems and springs with fresh and brackish waters and gravels or bedrocks bottoms. — Freshwater, Brackishwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — No keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Oman: [Endemic]. — Shamal garra. — Recorded from Oman in original description by Kirchner et al. (2020: 533); subsequently reported by Freyhof et al. (2020); Esmaili et al. (2022a); Esmaili and Hamidan (2023). — Oman material: FSJF, ZM-CBSU.

***Garra sharq* Kirchner, Kruckenhauser, Pichler, Borkenhagen & Freyhof 2020**

Common name: Dayqah garra, Sharq garra

Taxonomy: Original description: *Garra sharq* Kirchner, Kruckenhauser, Pichler, Borkenhagen & Freyhof 2020: 538, figs. 13-16 [Qifayfah, Oman, 22.915°N, 58.425°E; holotype: NMW-100002].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2020: 176); Esmaili et al. (2022: 472, fig. 24).

Distribution. General distribution: Middle East: Wadi Dayqah.

Distribution in the Middle East: Oman.

Distribution in Ecoregions: 443-Oman Mountains.

Habitat: This species is found in wadis, including small pools. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — No keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Oman: [Endemic]. — Sharq garra. — Recorded from Oman in original description by Kirchner et al. (2020: 533); subsequently reported by Freyhof et al. (2020); Esmaili et al. (2022a); Esmaili and Hamidan (2023). — Oman material: FSJF, ZM-CBSU.

***Garra shoemakeri* (Ladiges 1964)**

Common name: Shoemakers garra

Taxonomy: Original description: *Tylognathus shoemakeri* Ladiges 1964: 91 [Ammik swamp, Lebanon; holotype: HUI 3260/1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Middle East: Ammik swamp.

Distribution in the Middle East: Lebanon.

Distribution in Ecoregions: 436-Coastal Levant.

Habitat: This species is found in a variety of habitats, such as rivers, lakes, and small ponds. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Lebanon: [Endemic]. — Shoemakers garra. — Recorded from Lebanon in original description by Ladiges (1964: 9). — Lebanon material: HUI.

***Garra tashanensis* Mousavi-Sabet, Vatandoust, Fatemi & Eagderi 2016**

Common name: Tashan blind cave garra

Taxonomy: Original description: *Garra tashanensis* Mousavi-Sabet, Vatandoust, Fatemi & Eagderi 2016: 135, figs. 2-6, 10, 14B [Tashan Cave, Tigris River drainage, Persian Gulf basin, Khuzestan Province, Iran, 30°51'91"N, 50°10'49"E, elevation 490 meters; holotype: VMFC GT-H].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet et al. (2016: 135, fig. 2).

Distribution. General distribution: Middle East: subterranean waters, Tigris River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species is a cave-dwelling species living in subterranean waters. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Mahi koor-e Tashan. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2016b); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: VMFC, ZM-CBSU.

***Garra tiam* Zamani-Faradonbe, Keivany, Dorafshan & Zhang 2021**

Common name: Tiam garra

Taxonomy: Original description: *Garra tiam* Zamani-Faradonbe, Keivany, Dorafshan & Zhang 2021: 261, figs. 10-16 [Abshur River at km 40 on the road from Masjed Soleyman to Haftgel, tributary of the Karun River, Tigris River drainage, Khozestan Province, Iran, 31°41'33"N, 49°24'17"E; holotype: UT-IM T43].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Zamani-Faradonbe et al. (2021: 261, fig. 10).

Distribution. General distribution: Karun River drainage, Tigris River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species is found in a variety of habitats, such as rivers and small ponds. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gel cheragh-e Tiam. — Recorded from Iran in the original description by Zamani-Faradonbe et al. (2021); listed in previous checklists from Iran by Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: UT-IM.

***Garra tibanica* Trewavas 1941**

Common name: Arabian garra, Hijaz garra

Taxonomy: Original description: *Garra tibanica* Trewavas 1941: 8, fig. A [Pool at Usaifira, 1 mile north of Ta'izz, 13°35'N, 44°02'E, Yemen, elevation 4500 feet; lectotype: BMNH 1940.2.15.2].

Middle Eastern synonyms: *Garra brittoni* Trewavas 1941; *Garra tibanica dhamarica* Balletto & Spanò 1977; *Garra tibanica elbahraca* Balletto & Spanò 1977; *Garra tibanica kasaba* Balletto & Spanò 1977; *Garra tibanica multaka* Balletto & Spanò 1977; *Garra tibanica nakalani* Balletto & Spanò 1977; *Garra tibanica scorteccii* Balletto & Spanò 1977; *Garra tibanica yemenica* Balletto & Spanò 1977.

Revisions: None.

Illustrations: Freyhof et al. (2020: 184).

Distribution. General distribution: Western Arabia.

Distribution in the Middle East: Saudi Arabia and Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast, 440-Arabian Interior.

Habitat: Wadis with high seasonal fluctuations in discharge. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Saudi Arabia: [Native]. — Hijaz garra. — Listed in previous checklists from Saudi Arabia by Hamidan et al. (2014); Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Saudi Arabia material: FSJF.

Status in Yemen: [Native]. — Hijaz garra. — Recorded from Yemen in original description by Attaala and Rubaia (2005), Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Yemen material: BMNH.

***Garra turcica* Karaman 1971**

Common name: Ceyhan garra

Taxonomy: Original description: *Garra rufa turcica* Karaman 1971: 234, pl. 2 (fig. 3) [Ceyhan, Türkiye; holotype (unique): ZMH H1687].

Middle Eastern synonyms: None.

Revisions: Bayçelebi et al. (2021: 170).

Illustrations: Karaman (1971: pl. 2, fig. 3) as *Garra rufa turcica*.

Distribution. General distribution: Asia Minor: rivers Kızıl (Mersin), Seyhan, Ceyhan and the small coastal streams south of the Ceyhan until Arsuz.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits a wide range of standing and slowly flowing waters, such as rivers, springs, and streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yapışkan balık. — Recorded from Türkiye in the original description by Karaman (1971); redescribed by Bayçelebi et al. (2021: 170); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 17-Doğu Akdeniz, 18-Seyhan, 20-Ceyhan. — Turkish material: ZMH.

***Garra typhlops* (Bruun & Kaiser 1944)**

Common name: Discless blind cave garra

Taxonomy: Original description: *Iranocypris typhlops* Bruun & Kaiser 1944: 5, pl. 1 (figs. 1-4) [From a flood resurgence at Kaaje-Ru, valley of Ab-i-Serum, Lorestan Province, Zagros mountains, Iran, 33°05'N, 48°36'E (33°04'39"N, 48°35'33"E); holotype: ZMUC P26475].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaeili et al. (2016a: 113, fig. 28).

Distribution. General distribution: Middle East: subterranean waters, Tigris River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species is a cave-dwelling species living in subterranean waters. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unspecified. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Mahi koor-e ghar. — Recorded from Iran in the original description by Bruun and Kaiser (1944); listed in previous checklists from Iran by Esmaeili et al. (2010a as *Iranocypris typhlops*; Esmaeili et al. 2016, 2017, 2018; Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZMUC, CMNFI, FSJF, ZM-CBSU.

Garra variabilis* (Heckel 1843)*Common name:** Small-mouth garra**Taxonomy:** Original description: *Discognathus variabilis* Heckel 1843: 1069 [79] [Aleppo, Syria; Mosul, Iraq; syntypes: NMW 53238-40 (3, 8, ca. 10), 53260-69 (1, 2, 2, 2, 3, 2, 2, 2, 2, 2), 53272 (4); SMF 403 (ex NMW in 1844) (4); ZMB 3301 (4) (ex NMW)].**Middle Eastern synonyms:** None.**Revisions:** Sayyadzadeh et al. (2015).**Illustrations:** Heckel (1843: pl. 8, fig. 1) as *Discognathus variabilis*.**Distribution. General distribution:** Asia Minor and Middle East: Tigris River drainage.**Distribution in the Middle East:** Iraq, Syria, and Türkiye.**Distribution in Ecoregions:** 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits a wide range of standing and slowly flowing waters, such as rivers, springs, marshes, and streams. It seems to be quite tolerant of pollution and inhabits reservoirs. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are many threats in the area, but none seems to be serious enough to really impact this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Iraq:** [Native]. — None. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: NMW, SMF.**Status in Syria:** [Native]. — Lahhas alhajar. — Recorded from Syria in original description by Heckel (1843a: 1070) as *Discognathus variabilis*; subsequently reported by Saad et al. (2009); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 4-Orontes. — Syrian material: BMNH, MCZ, MNHN, NMW, SMF, SMNS, ZMUC, MSL.**Status in Türkiye:** [Native]. — Yapışkan balık. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: None.***Garra widdowsoni* (Trewavas 1955)****Common name:** Haditha cave garra**Taxonomy:** Original description: *Typhlogarra widdowsoni* Trewavas 1955: 553, figs. 1-2 [Cavern 25 feet below ground, 6 miles north of Haditha, 34°04'N, 42°24'E, Iraq; holotype: BMNH 1953.12.31.1].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Trewavas (1955: 553, fig. 1-2) as *Typhlogarra widdowsoni*.**Distribution. General distribution:** Only known from a Karst system, Euphrates River basin.**Distribution in the Middle East:** Iraq.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates.**Habitat:** This species is a subterranean species. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: CR (IUCN, 2023).**Threats:** ABS, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Iraq:** [Endemic]. — Kara amia. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 2-Euphrates. — Iraq materials: NMW, SMF.

Torinae Karaman 1971 (large barbs)***Arabibarbus arabicus* (Trewavas 1941)****Common name:** Arabian shabout**Taxonomy:** Original description: *Barbus arabicus* Trewavas 1941: 14 [Wadi Kharid, 20 miles northeast of San'a, Yemen; holotype (unique): BMNH 1940.2.15.1].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Krupp (1983: 578, figs.).**Distribution. General distribution:** Southern Red Sea and internal basins.**Distribution in the Middle East:** Saudi Arabia, Yemen.**Distribution in Ecoregions:** 439-Southwestern Arabian Coast, 440-Arabian Interior.**Habitat:** This species found in running freshwater wadis in a wide range of habitats. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, COM, CON, EUT, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Stable. — High priority for conservation action.**Status in Saudi Arabia:** [Native]. — Arabian shabout. — Listed in previous checklists from Saudi Arabia by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: None.**Status in Yemen:** [Endemic]. — Arabian shabout. — Recorded from Yemen in original description by Trewavas (1941: 14); c); listed in previous checklists from Yemen by Borkenhagen (2014); Freyhof et al. (2020); Esmaili and Hamidan (2023). — Yemen material: BMNH, SMF.***Arabibarbus grypus* (Heckel 1843)****Common name:** Shabout**Taxonomy:** Original description: *Barbus grypus* Heckel 1843: 1048 [58] [Tigris River, Mosul, Iraq; syntypes: NMW 54160-61 (1, 2), 91023 (1); SMF 2613 (1, dry), ZMB 8788 (1)].**Middle Eastern synonyms:** *Tor grypus* (Heckel 1843); *Labeobarbus kotschyi* Heckel 1843.**Revisions:** Borkenhagen (2014: 1179, 1189).**Illustrations:** Borkenhagen (2014: 1184, fig. 1C).**Distribution. General distribution:** Asia Minor and Middle East: Euphrates and Tigris River systems and rivers.**Distribution in the Middle East:** Iran, Iraq, and Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits big rivers as well as large reservoirs. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS, CON, CLI, EUT, FIT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Shirbot. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 2-Hormuz. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — Sahboot. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: NMW, ZMB, BNHM.**Status in Syria:** [Native]. — Roumi. — First record from Syria by Gruvel (1931) as *Barbus grypus*; confirmed by Beckman (1962: 100); Krupp and Schneider (1991b: 73); Ali (2003); Saad et al. (2006) as *Barbus grypus*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MNHN, MSL.

Status in Türkiye: [Native]. — Şaput-Şabot. — Listed in previous checklists from Türkiye by Kuru (2004) as *Tor grypus*; Geldiay and Balık (2007) as *Tor grypus*; Fricke et al. (2007) as *Barbus grypus*; Kuru et al. (2014) as *Barbus grypus*; Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: None.

***Arabibarbus hadhrami* Borkenhagen 2014**

Common name: Hanhrami shabout

Taxonomy: Original description: *Arabibarbus hadhrami* Borkenhagen 2014: 1183, figs. 1-4 [Wādī Mara, tributary to Daw'an, Wadi Hadhramaut/Wadi al Masila system, Yemen, 15°08'36"N, 48°26'58"E; holotype: SMF 34837].

Middle Eastern synonyms: None.

Revisions: Borkenhagen (2014, 2017).

Illustrations: Borkenhagen (2014: 1183, figs. 1-4); Freyhof et al. 2020: 124).

Distribution. General distribution: Wadi Hadhramaut drainage.

Distribution in the Middle East: Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: This species found in running freshwater wadis in a wide range of habitats. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — No keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Yemen: [Endemic]. — Hadhramaut shabout. — Recorded from Yemen in original description by Borkenhagen (2014: 1183); listed in previous checklists from Yemen by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Yemen material: CMN, FSJF.

***Carasobarbus apoensis* (Banister & Clarke 1977)**

Common name: Arabian himri

Taxonomy: Original description: *Barbus apoensis* Banister & Clarke 1977: 113, fig. 1 [Permanent stream near Khamis Mushyat, 18°17'N, 42°34'E, Saudi Arabia; holotype: BMNH 1976.4.7.166].

Middle Eastern synonyms: None.

Revisions: Borkenhagen and Krupp (2013).

Illustrations: Borkenhagen and Krupp (2013: 7, figs. 1,2).

Distribution. General distribution: Hijaz Mountain range.

Distribution in the Middle East: Saudi Arabia.

Distribution in Ecoregions: 440-Arabian Interior.

Habitat: This species inhabits the upper courses of wadis, which are characterised by strong seasonal fluctuations in water levels, temperature, and other physiochemical parameters. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, COM, CON, FIT, HAB. — High sensitivity to human activities. — No keystone species. — Decline status: Stable. — High priority for conservation action.

Status in Saudi Arabia: [Endemic]. — Himri. — Recorded from Saudi Arabia in original description by Banister and Clarke (1977); subsequently reported by Borkenhagen and Krupp (2013; Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: BMNH, CMNFI, SMF.

***Carasobarbus canis* (Valenciennes 1842)**

Common name: Jordan himri

Taxonomy: Original description: *Barbus canis* Valenciennes in Cuvier & Valenciennes 1842: 186, pl. 468 [Jordan River, Palestine; lectotype: MNHN 0000-1413].

Middle Eastern synonyms: *Labeobarbus canis* Günther 1864; *Barbus beddomii* Günther 1868; *Tor canis* Goren 1974.

Revisions: Borkenhagen and Krupp (2013).

Illustrations: Borkenhagen and Krupp (2013: 16, figs. 8, 9).

Distribution. General distribution: Asia Minor and Middle East: Jordan River system.

Distribution in the Middle East: Israel, Jordan Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species inhabits a wide range of streams, rivers, pools, and lakes including reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Israel: [Native]. — Binit gdolat kaskasim. — Recorded from Israel in original description by Valenciennes (1842: 186); subsequently reported by Günther (1865: 490) as *Labeobarbus canis*; Lortet (1883: 161) as *Barbus canis*; Tristram (1884: 174) as *Barbus canis* and *B. beddomii*; Steinitz (1953: 208) as *Barbus canis* and *B. beddomi*; Goren (1974) as *Barbus canis*; confirmed by Krupp and Schneider (1989); Goren and Ortal (1999: 4) as *Barbus canis*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUJ.

Status in Jordan: [Native]. — None. — Listed in the previous revision on *Carrasobarbus* from Jordan by Borkenhagen and Krupp (2013). — Jordan material: BMNH, SMF, ZMH.

Status in Syria: [Native]. — Samak bonni. — First record from Syria by Gruvel (1931) as *Barbus canis*; confirmed by Beckman (1962: 98); Krupp and Schneider (1989); Ali (2003); Taha (2005); Borkenhagen and Krupp (2013); listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: MSL, SMF.

***Carasobarbus chantrei* (Sauvage 1882)**

Common name: Orontes himri

Taxonomy: Original description: *Labeobarbus chantrei* Sauvage 1882: 165 [Antakya Lake (= Amik Gölü) (36°12'14"N, 36°09'26"E), Hatay Province, Türkiye; lectotype: MNHN A-3866; lectotype selected by Krupp (1985c: 19) and again later (same specimen) by Ekmekçi and Bănărescu (1998: 92)].

Middle Eastern synonyms: *Barbus chantrei* (Sauvage 1882); *Barbus canis* (non Valenciennes 1842); *Tor canis* (non Valenciennes 1842); *Barynotus verhoeffi* Battalgiç 1942.

Revisions: Ekmekçi and Bănărescu (1998: 92); Borkenhagen et al. (2011: 328); Borkenhagen and Krupp (2013: 17).

Illustrations: Borkenhagen and Krupp (2013: 19, figs. 10-11).

Distribution. General distribution: Asia Minor and Middle East: Orontes River system.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species inhabits lowland rivers, backwaters, lakes, reservoirs, springs, and ponds, rarely in fast-flowing waters. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Syria: [Native]. — Bonni. — First record from Syria by Beckman (1962:98) as *Barbus chantrei*; confirmed by Krupp (1985c: 18); Saad et al. (2009) as *Barbus chantrei*; listed by Saad

et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: BMNH, CMN, MNHN, SMNS, SMF, MS.

Status in Türkiye: [Native]. — None. — Listed in previous checklists from Türkiye by Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: MNHN, FSJF, SMF, CMNFI.

***Carasobarbus exulatus* (Banister & Clarke 1977)**

Common name: Hadramaut himri

Taxonomy: Original description: *Barbus exulatus* Banister & Clarke 1977: 116, fig. 5; pl. 1 [Qasam, Wadi Hadhramaut, 16°10'N, 49°04'E, southern Yemen; holotype: BMNH 1976.4.7.299].

Middle Eastern synonyms: None.

Revisions: Borkenhagen and Krupp (2013).

Illustrations: Banister and Clarke (1977: 116, fig. 5; pl. 1); Borkenhagen and Krupp (2013: 9, fig., 3d); Freyhof et al. (2020: 129).

Distribution. General distribution: Wadi Hajr and upper Wadi Hadhramaut drainage.

Distribution in the Middle East: Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: This species is found in wadis with high seasonal fluctuations and sections of deep pools, over gravels, bare rocks, or soft substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Yemen: [Endemic]. — Hadhramaut himri. — Recorded from Yemen in original description by Banister and Clarke (1977: 116); listed in previous checklists by Attaala and Rubaia (2013); Borkenhagen and Krupp (2013); Freyhof et al. (2020); Esmaili and Hamidan (2023). — Yemen material: BMNH, SMF.

***Carasobarbus kosswigi* (Ladiges 1960)**

Common name: Kosswig's barb

Taxonomy: Original description: *Cyclocheilichthys kosswigi* Ladiges 1960: 135, fig. 7 [Batman suyu (Batman Çayı), Türkiye; holotype: ZMH H 1148].

Middle Eastern synonyms: *Barbus kosswigi* (Ladiges 1960); *Kosswigobarbus kosswigi* (Ladiges 1960).

Revisions: Borkenhagen et al. (2011: 328); Borkenhagen and Krupp (2013: 32).

Illustrations: Borkenhagen and Krupp (2013: 33, figs. 21-22).

Distribution. General distribution: Asia Minor and Middle East: Tigris-Euphrates system.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits lowland rivers, backwaters, lakes, reservoirs, springs, and ponds, rarely in fast-flowing waters. It seems to inhabit summer-warm mountain river stretches with fast-flowing water and gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Iran: [Native]. — Abohanj. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Kosswigobarbus kosswigi*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: CMNFI, SMF, ZM-CBSU.

Status in Iraq: [Native]. — Himri. — First record from Iraq by Karaman (1971); listed in previous checklist from Iraq by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: BMNH.

Status in Syria: [Native]. — Bonni. — First record from Syria by Krupp and Schneider (1991b) as *Barbus kosswigi*; listed in previous checklists from Syria by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: SMF.

Status in Türkiye: [Native]. — None. — Listed in previous checklists from Türkiye by Kuru (2004) as *Kosswigobarbus kosswigi*; Geldiay and Balık (2007) as *Kosswigobarbus kosswigi*; Fricke et al. (2007) as *Kosswigobarbus kosswigi*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: NMW, ZMH.

***Carasobarbus luteus* (Heckel 1843)**

Common name: Mesopotamian himri

Taxonomy: Original description: *Systemus luteus* Heckel 1843: 1061 [71] [Mosul, Iraq; lectotype: NMW 54253: 2; lectotype selected by Borkenhagen & Krupp (2013: 37)].

Middle Eastern synonyms: *Barbus luteus* (Heckel 1843); *Systemus albus* Heckel 1843; *Systemus albus alpina* Heckel 1847; *Barbus parieschanica* Wossughi, Khoshzahmat & Etemadfar 1983.

Revisions: Ekmekçi and Bănărescu (1998: 90); Borkenhagen et al. (2011: 328); Borkenhagen and Krupp (2013: 34).

Illustrations: Heckel (1843: pl. 6, fig. 1); Borkenhagen and Krupp (2013: 38, figs. 23-24).

Distribution. General distribution: Asia Minor and Middle East: Tigris and Euphrates and adjacent basins.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of habitats, from small lowland streams and springs to marshes, lakes, and reservoirs to large and brackish lowland rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: While there are many threats in the area, none is strong enough to threaten this ubiquitous species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Hemri Beinolnahrain. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 12-Kor River, 13-Lake Maharlu, 1-Persis, 2-Hormuz. — Iran material: CMNFI, NMW, ZM-CBSU.

Status in Iraq: [Native]. — Himri. — Recorded from Iraq in original description by Heckel (1843); listed by Jawad et al. (2018a); Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-3-Shatt al-Arab. — Iraq materials: NMW, RMNH.

Status in Syria: [Native]. — Bonni hamri. — Recorded from Syria in original description by Heckel (1843a: 1063) as *Systemus luteus* and *S. albus*; subsequently reported by Gruvel (1931); Beckman (1962: 107); Borkenhagen et al. (2011: 328); Ali (2003) as *Barbus luteus*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, MNHN, MS.

Status in Türkiye: [Native]. — Bizir. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Carasobarbus sublimus* (Coad & Najafpour 1997)*Common name:** Himri**Taxonomy:** Original description: *Barbus sublimus* Coad & Najafpour 1997: 274, fig. 1 [A'la River at Pol-e Tighen, 31°23.5'N, 49°53'E, Khuzestan Province, Iran; holotype: CMNFI 1995-0009].**Middle Eastern synonyms:** *Kosswigobarbus sublimus* (Coad & Najafpour 1997).**Revisions:** Borkenhagen and Krupp (2013: 42).**Illustrations:** Coad and Najafpour (1997: fig. 1); Mirza and Javed (1997: 274, fig. 1); Mohamed et al. (2016).**Distribution. General distribution:** Middle East: Tigris River basin.**Distribution in the Middle East:** Iran and Iraq.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits a wide range of streams, rivers, and lakes, including reservoirs. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Hemri Farsi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a) as *Kosswigobarbus sublimus*; Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 20-Zohreh. — Iran material: CMNFI, SMF, ZM-CBSU.**Status in Iraq:** [Native]. — Himri. — First record from Iraq by Mohamed et al. (2016); listed by Çiçek et al. (2023b). — Distribution in River Basin: 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.**Cyprininae Rafinesque 1815 (carps)*****Carassius auratus* (Linnaeus 1758)****Common name:** Goldfish**Taxonomy:** Original description: *Cyprinus auratus* Linnaeus 1758: 322 [China; Japanese rivers; no types known].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Guo (2021: 472, fig.).**Distribution. General distribution:** East Asia: China and Japan; introduced widely elsewhere; many cultivated goldfish varieties.**Distribution in the Middle East:** Iran, Iraq, Israel, Jordan Lebanon, Saudi Arabia, Syria, Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 439-Southwestern Arabian Coast, 440-Arabian Interior, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 443-Oman Mountains, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 631-Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.**Habitat:** This species inhabits rivers, lakes, reservoirs, ponds, and ditches with stagnant or slow-flowing water. It occurs in eutrophic fresh and brackish waters, well-vegetated ponds, and canals. — Freshwater.**Economic importance:** Valuable for the aquarium trade.**Reasons of introduction:** Ornamental fish industry.**Conservation:** Not relevant (introduced species).**Status in Iran:** [Exotic]. — Karas-e Talayi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022);

Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: Introduced and established in whole basins of the country. — Iran material: CMNFI, ZM-CBSU.

Status in Iraq: [Exotic]. — Karp thahabi. — First record from Iraq by Ali (1985); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Israel: [Exotic]. — None. — First record from Israel by Shefler and Ben-Tuvia (1982); confirmed by Goren and Ortal (1999); Golani and Mires (2000); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUI.

Status in Lebanon: [Exotic]. — Carp zahabi. — It is probable that this species introduced to the country. — Lebanon material: None.

Status in Saudi Arabia: [Exotic]. — None. — Possibility of its introduction to Arabia is proposed by Freyhof et al. (2020: 222). — Saudi Arabia material: None.

Status in Syria: [Exotic]. — Carp zahabi. — First record from Syria by Taha (2005); confirmed by Barakat et al. (2020); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 6-Coastal. — Syrian material: FMNH, MNHN, MSL.

Status in Türkiye: [Exotic]. — Kırmızı havuz balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: introduced many river basins viz., 1-Meriç-Ergene, 2-Marmara, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan. — Turkish material: None.

***Carassius carassius* (Linnaeus 1758)**

Common name: Crucian carp

Taxonomy: Original description: *Cyprinus carassius* Linnaeus 1758: 321 [European ponds; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Europe; widely introduced elsewhere.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species inhabits rivers, lakes, reservoirs, ponds, and ditches with stagnant or slow-flowing water. It occurs in eutrophic fresh and brackish waters, well-vegetated ponds, and canals. — Freshwater.

Economic importance: Locally commercially important.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Türkiye: [Exotic]. — Kahverengi havuz balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish materials: None.

***Carassius gibelio* (Bloch 1782)**

Common name: Gibel carp

Taxonomy: Original description: *Cyprinus gibelio* Bloch 1782: 71, pl. 12 [Olsche River pond, Odra River system, near Czech Teschen, 49°47'11"N, 18°35'24"E, Czech Republic; neotype: ZMB 33979].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jawad et al. (2012).

Distribution. General distribution: Eurasia: Eastern Europe, Russia to northeastern China; introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, Türkiye. **Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 439-Southwestern Arabian Coast, 440-Arabian Interior, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 443-Oman Mountains, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 631-Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species inhabits rivers, lakes, reservoirs, ponds, and ditches with stagnant or slow-flowing water. It occurs in eutrophic fresh and brackish waters, well-vegetated ponds, and canals. — Freshwater.

Economic importance: Locally commercially important.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Karas-e Noghrei. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: Introduced and established in whole basins of the country. — Iran material: None.

Status in Iraq: [Exotic]. — Himri gibelio. — First record from Iraq by Jawad et al. (2012); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Syria: [Exotic]. — Karp ahmar. — First record from Syria by Barakat et al. (2020); listed by Saad et al. (2023). Distribution in River Basin: 6-Coastal. — Syria materials: None.

Status in Türkiye: [Exotic]. — Çin sazanı-İsrail sazanı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 16-Konya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh, 24-Aras, 25-Van Lake. — Turkish materials: None.

Carassius langsdorfii Temminck & Schlegel 1846

Common name: Ginbuna

Taxonomy: Original description: *Carassius langsdorfii* Temminck & Schlegel 1846: 192, pl. 98 (figs. 1, 1a-b) [Japan; syntypes: (10 of the following) RMNH D1712 (1, stuffed), D1715-16 (1, 1) and D1718-19 (1, 1) all stuffed, 2369 (1), 2379 (10), 2387-88 (3, 1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Temminck and Schlegel (1846: pl. 98, figs. 1, 1a-b).

Distribution. General distribution: East Asia: Japan; introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits rivers, lakes, reservoirs, ponds, and ditches with stagnant or slow-flowing water. It occurs in eutrophic fresh and brackish waters, well vegetated ponds, and canals. — Freshwater, brackish.

Economic importance: Locally commercially important.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Kapor-e zard-noghrei. — Listed in previous checklists from Iran by Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Cyprinion acinaces* (Banister & Clarke 1977)**

Common name: Hadramaut lotak, Arabian lotak

Taxonomy: Original description: *Cyprinion acinaces* Banister & Clarke 1977: 123, fig. 13; Pls. 2, 5, 6 [Qasam area, Wadi Hadramut, southern Yemen; holotype: BMNH 1976.4.7.1].

Middle Eastern synonyms: *Cyprinion acinaces hijazi* Krupp 1983.

Revisions: None.

Illustrations: Banister and Clarke (1977: fig. 13; pls. 2, 5, 6).

Distribution. General distribution: Qasam area, Wadi Hadramut.

Distribution in the Middle East: Saudi Arabia and Yemen.

Distribution in Ecoregions: 443-Oman Mountains.

Habitat: This species is found in wadis, including small pools. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (Harrison, 2015).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Saudi Arabia: [Native]. — Lotak. — Listed in previous checklists from Saudi Arabia by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Status in Yemen: [Endemic]. — Lotak. — Recorded from Yemen in original description by Banister and Clarke (1977: 116); listed in previous checklists from Yemen by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Yemen material: BMNH.

***Cyprinion kais* Heckel 1843**

Common name: Kais kingfish

Taxonomy: Original description: *Cyprinion kais* Heckel 1843: 1066 [76] [Aleppo, Syria and Mosul, Iraq; lectotype: NMW 52803 (148.1 mm); lectotype selected by Banarescu and Herzig-Straschil (1995: 416)].

Middle Eastern synonyms: *Cyprinion cypris* Heckel 1843.

Revisions: Bănărescu and Herzig-Straschil (1995: 416).

Illustrations: Heckel (1843b: pl. 7, fig. 2).

Distribution. General distribution: Asia Minor and Middle East: Euphrates and Tigris River systems.

Distribution in the Middle East: Iran, Iraq Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits medium-sized and large rivers and streams. Known to inhabit canals but seem to be absent from reservoirs. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB, EUT. — Low sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Lotak-e dahan kochak. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Dunbuk. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris. — Iraq materials: NMW, RMNH.

Status in Syria: [Native]. — Shalami. — Recorded from Syria in original description by Heckel (1843a: 1067); subsequently reported by Gruvel (1931) as *Cyprinion cypris*; Beckman (1962:

120); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, MNHN, NMW, RMNH.

Status in Türkiye: [Native]. — Beni balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Cyprinion macrostomus Heckel 1843

Common name: Tigris kingfish

Taxonomy: Original description: *Cyprinion macrostomus* Heckel 1843: 1065 [75] [Aleppo, Syria or Mosul, Iraq; lectotype: NMW 52805-1; lectotype selected by Banărescu and Herzig-Straschil (1995: 414)].

Middle Eastern synonyms: *Cyprinion macrostomum* Heckel 1843; *Cyprinion neglectus* Heckel 1847.

Revisions: Bănărescu and Herzig-Straschil (1995: 414).

Illustrations: Heckel (1843b: pl. 7, fig. 1).

Distribution. General distribution: Asia Minor and Middle East: Euphrates and Tigris River systems.

Distribution in the Middle East: Iran, Iraq Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits medium-sized and large rivers and streams. Known to inhabit canals but seem to be absent from reservoirs. — Freshwater.

Economic importance: Locally commercially important.

Conservation: IUCN: LC (IUCN, 2023) as *C. macrostomum*.

Threats: There are many threats in the area none strong enough to impact this species seriously. — Low sensitivity to human activities. — No keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Lotak-e dahan bozorg. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Cyprinion macrostomum*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Dunbuk. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris. — Iraq materials: NMW, RMNH.

Status in Syria: [Native]. — Shalami abiad. — Recorded from Syria in original description by Heckel (1843a: 1066); subsequently reported by Gruvel (1931); Beckman (1962: 120); Ali (2003); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, MNHN, NMW, RMNH, MSL.

Status in Türkiye: [Native]. — Beni balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Cyprinion mhalense Alkahem & Behnke 1983

Common name: Dawasir lotak

Taxonomy: Original description: *Cyprinion mhalense* Alkahem & Behnke 1983: 556, fig. 6a [Permanent stream in Wadi (Valley) Almhaleh, southeast Abha City, Saudi Arabia; holotype: CSU coll. Arabia fishes No. 1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Alkahem and Behnke (1983: fig. 6a).

Distribution. General distribution: Wadi ad-Dawasir drainage.

Distribution in the Middle East: Saudi Arabia.

Distribution in Ecoregions: 440-Arabian Interior.

Habitat: This species is found in fragmented habitat in the upper reaches of wadis. It is reported from shallow, permanent, and slow running water, as well as intermittent rivulets in wadis. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Saudi Arabia: [Endemic]. — Dawasir lotak. — Recorded from Saudi Arabia in original description by Alkahem and Behnke (1983); subsequently listed by Freyhof et al. (2020; Esmaili and Hamidan (2023)). — Saudi Arabia material: CSU.

Status in Yemen: [Native]. — None. — Listed in previous checklists from Yemen by Freyhof et al. (2020; Esmaili and Hamidan (2023)). — Yemen material: None.

Cyprinion microphthalmum (Day 1880)

Common name: Smalleye lotak

Taxonomy: Original description: *Scaphiodon microphthalmum* Day 1880: 227 [Quetta, Pakistan; syntypes and/or Day specimens: (2) NMW 55897 (1)].

Middle Eastern synonyms: *Cyprinion microphthalmus* (Day 1880).

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 64, fig. 109).

Distribution. General distribution: Western Asia: Hormuz to Indus River systems.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 448-Kavir and Lut Deserts, 451-Northern Hormuz Drainages, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species inhabits freshwater streams, rivers, lakes, and reservoirs in both montane and submontane regions. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Lutak-e chesm kochak. — Recorded from Iran in the original description by Day (1880); listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 2-Hormuz, 11-Hamun-e Jaz Murian, 10-Hamun-e Mashkid, 3-Makran, 16-Sistan, 8-Dasht-e Lut, 8-Dasht-e Lut. — Iran material: NMW.

Cyprinion milesi (Day 1880)

Common name: Eastern lotak

Taxonomy: Original description: *Barbus milesi* Day 1880 [Trál, Afghanistan; syntypes: (2) ?NMW 52736 (1)].

Middle Eastern synonyms: *Scaphiodon daukesi* Zugmayer 1912; *Barbus baschakirdi* Holly 1929; *Barbus bampurensis* Nikolskii 1900.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 65, fig. 111).

Distribution. General distribution: Western Asia: Makran to Indus River systems.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan.

Habitat: This species inhabits freshwater streams, rivers, lakes, and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Lutak sharghi. — Recorded from Iran in the original description by Day (1880); listed by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 3-Makran. — Iran material: ZM-CBSU.

***Cyprinion muscatense* (Boulenger 1888)**

Common name: Muscat cyprinion, Hajar lotak

Taxonomy: Original description: *Scaphiodon muscatense* Boulenger 1888: 665 [Muscat, Oman, Gulf of Oman, Arabian Sea, northwestern Indian Ocean; syntypes: BMNH 1885.11.7.35-40 (6), 1887.11.11.289-291 (3)].

Middle Eastern synonyms: *Cyprinion acinaces hijazi* Krupp 1983.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Middle East: Hajar Mountains.

Distribution in the Middle East: Oman, UAE.

Distribution in Ecoregions: 439-Southwestern Arabian Coast, 440-Arabian Interior, 443-Oman Mountains.

Habitat: This species is found in wadis, including small pools. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — No keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Oman: [Native]. — Hajar lotak. — Recorded from Oman in original description by Boulenger (1888: 665); subsequently listed by Krupp (1983), Freyhof et al. (2020); Esmaili et al. (2022a); Esmaili and Hamidan (2023). — Oman material: CMN, FSJF.

Status in UAE: [Native]. — Hajar lotak. — Listed in previous checklists from UAE by Freyhof et al. (2020); Esmaili et al. (2022a) and Esmaili and Hamidan (2023). — UAE material: None.

***Cyprinion tenuiradius* Heckel 1847**

Common name: Qarah Aqaj lotak

Taxonomy: Original description: *Cyprinion tenuiradius* Heckel 1847: 261 [Araxes and Kara Agatsch rivers; lectotype: NMW 52814 (largest, 113 mm SL)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaili et al. (2017a: 45, fig. 27).

Distribution. General distribution: Asia Minor and Middle East: Aras, Tigris, and Persis River basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates,

Habitat: This species inhabits freshwater streams, rivers, lakes, and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Lotak Qarah Aqaj. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 1-Persis. — Iran material: NMW, ZM-CBSU.

Cyprinion watsoni* (Day 1872)*Common name:** Indus lotak**Taxonomy:** Original description: *Scaphiodon watsoni* Day 1872: 324 [rivers on Sind Hills, Pakistan and the Salt Range of the Punjab; syntypes and/or Day specimens: AMS B.7751 (1, syntype); BMNH 1889.2.1.370-379 (10) Bird I.; NMW 51671-73 (1, 1, 1); FMNH 2303 (4); RMNH 8704 [?=2552] (1); ZIN 8278 (4); ZMA 115924-25 (2, 1); ZMB 11042 (1); ZSI 2596 (1)].**Middle Eastern synonyms:** *Cirrhina afghana* Günther 1889; *Scaphiodon baluchiorum* Jenkins 1910; *Scaphiodon watsoni belense* Zugmayer 1912; *Semiplotus dayi* Fowler 1958; *Scaphiodon irregularis* Day 1872; *Cyprinion kirmanense* Nikolskii 1900; *Scaphiodon readingi* Hora 1923; *Cirrhina afghana nikolskii* Berg 1905; *Scaphiodon macmahoni* Regan 1906.**Revisions:** Bianco and Bănărescu (1982: 84).**Illustrations:** Bleher (2018: fig.).**Distribution. General distribution:** Western Asia: Western Asia: Jazmurian to Indus River systems.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** Might be limited to Pakistan waters.**Habitat:** This species is found only in the larger mountain wadis and tributaries that support relatively large, deep pools year-round. It is found in the shallow marginal zone of the pools. It is suspected to be an aufwuchs feeder; gut contents comprise more than 90% filamentous algae, and the remaining 10% is unicellular algae, aquatic insects, and sand grains. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** HAB, CON, ABS, EUT, CLI. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — None. — Not confirmed species but, listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: Might be limited to Pakistan waters. — Iran material: None.**Remarks.** Might be limited to Pakistan waters. Need confirmation.***Cyprinus carpio* Linnaeus 1758****Common name:** Common carp**Taxonomy:** Original description: *Cyprinus carpio* Linnaeus 1758: 320 [Europe; syntypes: BMNH 1853.11.12.139 (1, skin)].**Middle Eastern synonyms:** None.**Revisions:** Berg (1949: 831).**Illustrations:** Berg (1949: 833, fig. 572).**Distribution. General distribution:** Western Europe (native to Black Sea basin, possibly also Caspian and Aral seas basins), widely introduced worldwide, also many multicolor varieties.**Distribution in the Middle East:** Iran, Iraq, Israel, Jordan Lebanon, Syria, Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 439-Southwestern Arabian Coast, 440-Arabian Interior, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 443-Oman Mountains, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 631-Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.**Habitat:** This species inhabits warm, deep, slow-flowing, and still waters, such as lowland rivers and large, well-vegetated lakes. Introduced in all types of water bodies. Spawns along shorelines or in backwaters. Successful survival of larvae is only possible in very warm water among shallow submerged vegetation. — Freshwater, brackish.

Economic importance: Commercially important.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Exotic]. — Kapor-e mamoli. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: Widespread in all basins in the whole country. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — Samtee. — Introduced by the government of Iraq during the period 1960-1972 (Jawad, 2003); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Israel: [Exotic]. — Karpyon matzui. — First record from Israel by Tal and Shelubsky (1951); confirmed by Goren and Ortal (1999); Tadmor-Levi et al. (2022); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUI.

Status in Jordan: [Exotic]. — Carp. — It is probable that this species introduced to the country. — Jordan material: None.

Status in Lebanon: [Exotic]. — Carp. — It is probable that this species introduced to the country. — Lebanon material: None.

Status in Syria: [Exotic]. — Carp chaeh. — First record from Syria by Beckman (1962: 122); confirmed record from Syria based on MNHN material, collected in 1998, Barakat et al. (2020); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 6-Coastal. — Syrian material: MNHN, MSL.

Status in Türkiye: [Native]. — Sazan. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: all basins. — Turkish material: None.

Cyprinus rubrofuscus Lacépède 1803

Common name: Amur carp

Taxonomy: Original description: *Cyprinus rubrofuscus* Lacépède 1803:490, 530, pl. 16 (fig. 1) [China; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: East Asia: China and Russia; introduced elsewhere, also as ornamental carp varieties.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 447-Namak.

Habitat: This species inhabits warm, deep, slow-flowing, and still waters, such as lowland rivers and large, well-vegetated lakes. — Freshwater, brackish.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Kapor-e mamoli. — First record from Iran by Mousavi-Sabet et al. (2019); subsequently reported by Mousavi-Sabet et al. (2023). — Distribution in River Basin: 6-Caspian Sea, 15-Namak Lake. — Iran material: None.

Barbinae Bleeker 1859 (barbels)

Barbus anatolicus Turan, Kaya, Geiger & Freyhof 2018

Common name: Barbel

Taxonomy: Original description: *Barbus anatolicus* Turan, Kaya, Geiger & Freyhof 2018: 542, figs. 2-4, 5a, 6a, 7 [Kızılırmak River at Kesikköprü, Kırşehir province, Türkiye, 38°57'39"N, 34°11'57"E; holotype: FFR 08811].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2018a: 542, figs. 2).

Distribution. General distribution: Asia Minor: southern Black Sea basin: Kızılırmak and Yeşilirmak River drainages.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits streams and small rivers with fast, clear, and well-oxygenated water and gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Turan et al. (2018a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 14-Yeşilirmak, 15-Kızılırmak. — Turkish material: FFR.

***Barbus bergi* Chichkoff 1935**

Common name: Barbel

Taxonomy: Original description: *Barbus barbus bergi* Chichkoff 1935: 305 [Riesova Rieca, Bulgaria; syntypes: whereabouts unknown].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Southeastern Europe: Bulgaria and Türkiye.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species inhabits fast- to moderate-flowing rivers and streams. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Bıyıklı balık. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *Barbus barbus*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara. — Turkish material: None.

***Barbus cyclolepis* Heckel 1837**

Common name: Round-scaled barbel

Taxonomy: Original description: *Barbus cyclolepis* Heckel 1837: 155 [Maritza River, eastern Rumelia, Balkan region of Bulgaria; lectotype: NMW 54734].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eastern Europe: Aegean Sea and Black Sea basins.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 430-Northern Anatolia.

Habitat: This species inhabits streams and small rivers with fast, clear, and well-oxygenated water and gravel substrates. It is usually common in small streams and absent from large rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Büyük balık. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

***Barbus cyri* De Filippi 1865**

Common name: Kura barbel

Taxonomy: Original description: *Barbus cyri* De Filippi 1865: 358 [Kura River near Tiflis, Georgia, Eurasia; holotype (unique): MZUT 690].

Middle Eastern synonyms: *Barbus angustatus* Kamensky 1899; *Barbus armenicus* Kamensky 1899; *Barbus bortschalanicus* Kamensky 1899; *Barbus caucasicus* Kessler 1877; *Barbus cyri* var. *chaldanica* Kamensky 1899; *Barbus goktschaicus* Kessler 1877; *Barbus sursunicus* Kamensky 1899; *Barbus cyri* var. *tiflissica* Kamensky 1899; *Capoeta fundulus* var. *toporovanica* Kamensky 1897; *Barbus toporovanicus* (Kamensky 1897); *Barbus urmianus* Eagderi, Nikmehr, Çiçek, Esmaili, Vatandoust & Mousavi-Sabet 2019.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 34, fig. 51).

Distribution. General distribution: Eurasia: southern Caspian Sea basin: Kura and Aras (Araks) River systems, Lake Urmia and Transcaspian Atrek basins.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 445-Orumiyeh, 450-Turan Plain, 452-Caspian Marine, 446-Caspian Highlands.

Habitat: This species inhabits streams and small rivers with fast, clear, and well-oxygenated water and gravel substrates. It is usually common in small streams and absent from large rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Sas mahi-e Kura. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh. — Iran material: None.

Status in Türkiye: [Native]. — Büyük balık. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Barbus ercisianus* Karaman 1971**

Common name: Ercis barbel

Taxonomy: Original description: *Barbus plebejus ercisianus* Karaman 1971: 204 [Ercis, Lake Van and road from Ercis to Patnos, Türkiye; syntypes: ZMH H4208 and 3566 (5), H3567 (13)].

Middle Eastern synonyms: None.

Revisions: Khaefi et al. (2017).

Illustrations: None.

Distribution. General distribution: Van Gölü tributaries; Van and Bitlis provinces.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 444-Lake Van.

Habitat: This species inhabits streams and small rivers with fast, clear, and well-oxygenated water and gravel substrates. It is usually common in small streams and absent from large rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Karaman (1971); listed in previous checklists from Türkiye by Kuru (2004) as *Barbus plebejus ercisianus*; Geldiay and Balık (2007) as *Barbus plebejus ercisianus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: ZMH.

***Barbus escherichii* Steindachner 1897**

Common name: Ankara barbel

Taxonomy: Original description: *Barbus lacerta* var. *escherichii* Steindachner 1897: 688 [4], pl. 2 (figs. 1-1a) [Ankara [Angora], Türkiye; syntypes: (several) NMW 54086-87 (4, 4), 54158 (7), 54232-33 (1, 3), 78221 (1)].

Middle Eastern synonyms: *Luciobarbus escherichii* (Steindachner 1897).

Revisions: None.

Illustrations: Steindachner (1897: pl. 2, figs. 1-1a) as *Barbus lacerta* var. *escherichii*.

Distribution. General distribution: Asia Minor: northern Anatolian Black Sea watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits large rivers and medium-sized streams with gravel bottoms. Spawns in riffles and rapids. Inhabits reservoirs from which it migrates to inflowing streams or rivers to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Steindachner (1897); listed in previous checklists from Türkiye by Kuru (2004) as *Barbus plebejus escherichi*; Geldiay and Balık (2007) as *Barbus plebejus escherichi*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 12-Sakarya, 13-Batı Karadeniz. — Turkish material: NMW.

***Barbus ida* Güçlü, Kalayci, Özuluğ, Küçük & Turan 2021**

Common name: Ida barbel

Taxonomy: Original description: *Barbus ida* Güçlü, Kalayci, Özuluğ, Küçük & Turan 2021: 1, figs. 1-5 [Gönen and Biga streams, western Anatolia; holotype IFC-ESUF 03-0518].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Güçlü et al. (2021: 1, figs. 1-5).

Distribution. General distribution: Asia Minor: Aegean Sea and Marmara basins.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia.

Habitat: This species inhabits large rivers and medium-sized streams with gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.
Status in Türkiye: [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Güçlü et al. (2021); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk. — Turkish material: None.

***Barbus karunensis* Khaefi, Esmaili, Geiger & Eagderi 2017**

Common name: Karun barbel

Taxonomy: Original description: *Barbus karunensis* Khaefi, Esmaili, Geiger & Eagderi 2017: 106, figs. 9-11 [Bashar River at Talegah village 10 km north of Yasuj City, Karun River drainage, Kohgiluyeh and Boyer-Ahmad provinces, Iran, 30°47'27.5"N, 51°25'13.3"E; holotype: ZM-CBSU G1047].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Khaefi et al. (2017: 106, fig. 9).

Distribution. General distribution: Middle East: Karun River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits large rivers and medium-sized streams with gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Sas mahi-e Karun. — Recorded from Iran in the original description by Khaefi et al. (2017); listed in previous checklists from Iran by Esmaili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

***Barbus lacerta* Heckel 1843**

Common name: Lizard barbel

Taxonomy: Original description: *Barbus lacerta* Heckel 1843: 1044 [54] [Kueik (Qwaik) River near Aleppo, Syria; lectotype: NMW 54227-1; lectotype selected by Bogutskaya in Banarescu and Bogutskaya (2003: 251) but not at this time (Jan. 2004) acceptable according to the 1999 code].

Middle Eastern synonyms: *Barbus scincus* Heckel 1843; *Barbus kosswigi* Karaman 1971.

Revisions: Berg (1949: 695); Khaefi et al. (2017a).

Illustrations: Heckel (1843b: pl. 2, fig. 1); Khaefi et al. (2017a:102, figs. 6, 7).

Distribution. General distribution: Asia Minor and Middle East: Euphrates and Tigris River basins.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits mountain and piedmont zones in streams and small rivers with fast, clear, and well-oxygenated water and gravel substrates. It is usually common in small streams and absent from large rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Belizem, Zardeh par. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: Baghdad natural History Museum.

Status in Syria: [Native]. — Roumi. — Recorded from Syria in original description by Heckel (1843: 1045, 1049) as *Barbus lacerta* and *B. scincus*; subsequently reported by Beckman (1962: 103, 110) as *B. lacerta* and *B. scincus*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: MNHN, NMW, SMF, ZMB.

Status in Türkiye: [Native]. — Bıyıklı balık. — Listed in previous checklists from Türkiye by Kuru (2004) as *Barbus plebejus lacerta*; Geldiay and Balık (2007) as *Barbus plebejus lacerta*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Barbus miliaris De Filippi 1863

Common name: Namak barbel

Taxonomy: Original description: *Barbus miliaris* De Filippi 1863: 393 [Teheran, Iran; syntypes: MZUT 676 (3)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaeili et al. (2017a: 37, fig. 23).

Distribution. General distribution: Middle East: Namak Lake and Kavir basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 447-Namak, 448-Kavir and Lut Deserts.

Habitat: This species inhabits mountain and piedmont zones in streams and small rivers with fast, clear, and well-oxygenated water and gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Sas mahi-e Namak. — Recorded from Iran in the original description by De Filippi (1863); Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 15-Namak Lake, 7-Dasht-e Kavir. — Iran material: MZUT, ZM-CBSU.

Barbus niluferensis Turan, Kottelat & Ekmekçi 2009

Common name: Simav barbel

Taxonomy: Original description: *Barbus niluferensis* Turan, Kottelat & Ekmekçi 2009: 21, figs. 2b, 3b, 5 [Karaköprü Stream, entering Doganci Reservoir, Nilüfer River drainage, 40°04'N, 29°00'E, Orhangazi County, Bursa Province, Türkiye; holotype: FFR 381].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2009a: figs. 2b, 3b, 5).

Distribution. General distribution: Asia Minor: Nilüfer River basin (Marmara Sea tributary), Bursa Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species inhabits headwater streams with fast to moderately running water and gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Turan et al. (2009a); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk. — Turkish material: FFR.

***Barbus oligolepis* Battalgiç 1941**

Common name: Marmara barbel

Taxonomy: Original description: *Barbus tauricus oligolepis* Battalgiç 1941: 178 [Simav River at Bursa, Asia Minor; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Marmara Sea tributaries, Bursa Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species inhabits the lower part of rivers and streams with fast to moderately fast flowing water, riffles, and pool structures. It also inhabits reservoirs and lakes, from where it migrates to inflowing rivers to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area, but none seems to be strong enough to really threaten this species. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Battalgiç (1941); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk. — Turkish material: None.

***Barbus pergamonensis* Karaman 1971**

Common name: Bergama barbel

Taxonomy: Original description: *Barbus plebejus pergamonensis* Karaman 1971: 203 [Bergama, Türkiye; syntypes: ZMH H4209 and 3898 [not 3889] (5 or 6), J3602 (7 or 8)].

Middle Eastern synonyms: *Luciobarbus pergamonensis* (Karaman 1971).

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Greece and Türkiye.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits headwater streams with fast to moderately running water and gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Karaman (1971); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: ZMH.

Barbus rionicus* Kamensky 1899*Common name:** Barbel**Taxonomy:** Original description: *Barbus tauricus* var. *rionica* Kamensky 1899: 30 [Rioni River, Georgia, Eurasia; syntypes: (6) not at ZIN].**Middle Eastern synonyms:** *Barbus rionica* Kamensky 1899; *Barbus tauricus* var. *artvinica* Kamensky 1899; *Barbus tauricus* var. *artvinicus* Kamensky 1899; *Barbus tauricus* var. *artvinicus* Kamensky 1899.**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Eurasia: western Caucasus: Black Sea tributaries.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 433-Western Transcaucasia.**Habitat:** This species inhabits headwater streams with fast to moderately running water and gravel bottoms. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Bıyıklı balık. — Listed in previous checklists from Türkiye by Bayçelebi et al. 2015; Çiçek et al. (2016, 2020, 2023a). — Distribution in River Basin: 23-Çoruh. — Turkish material: None.***Barbus xanthos* Güçlü, Kalaycı, Küçük & Turan 2020****Common name:** Barbel**Taxonomy:** Original description: *Barbus xanthos* Güçlü, Kalaycı, Küçük & Turan 2020: 1310, figs. 1-4a, 5 [Eşen Stream at Ören-Seydikemer, Muğla province, Türkiye, 36°44'51"N, 29°23'15"E; holotype: IFC-ESUF 03-0512].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Güçlü et al. (2020: figs. 1-4a, 5 upper).**Distribution. General distribution:** Asia Minor: eastern Mediterranean river tributaries.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 429-Western Anatolia.**Habitat:** This species inhabits streams and small rivers with fast, clear, and well-oxygenated water and gravel substrates. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Güçlü et al. (2020); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes, 8-Batı Akdeniz. — Turkish material: IFC-ESUF.***Caecocypris basimi* Banister & Bunni 1980****Common name:** Haditha cavefish**Taxonomy:** Original description: *Caecocypris basimi* Banister & Bunni 1980: 151, figs. 1-5 [Natural well in the Sheik Hadid sink hole, outskirts of Haditha, Euphrates River system, Al Anbar Province, 34°04'N, 42°24'E, Iraq; holotype: BMNH 1979.8.3.1].**Middle Eastern synonyms:** None.**Revisions:** Proudlove (2006: 65).**Illustrations:** Banister and Bunni (1980: 151, figs. 1-5).**Distribution. General distribution:** Euphrates River system.

Distribution in the Middle East: Iraq.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species is a cave-dwelling species. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iraq: [Endemic]. — Smaka amia. — Recorded from Iraq in original description by Banister and Bunni (1980); listed by Çiçek et al. (2023b). — Distribution in River Basin: 2-Euphrates. — Iraq materials: BMNH.

***Capoeta aculeata* (Valenciennes 1844)**

Common name: Scraper

Taxonomy: Original description: *Chondrostoma aculeatum* Valenciennes 1844: 408 [Iran; lectotype: MNHN 0000-2357].

Middle Eastern synonyms: *Chondrostoma aculeata* Valenciennes 1844; *Varicorhinus bergi* Derjavin 1929.

Revisions: Coad and Krupp (1994: 64).

Illustrations: Coad and Krupp (1994: 64, fig. 1); Jouladeh-Roudbar et al. (2020: 38, fig.59).

Distribution. General distribution: Middle East: Namak Lake and Kavir basins.

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 447-Namak, 448-Kavir and Lut Deserts.

Habitat: This species inhabits a very wide range of all kinds of permanent waterbodies at least seasonally with gravel or running water. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e fals dorosht. — Recorded from Iran in the original description by Valenciennes (1844); listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 15-Namak Lake, 7-Dasht-e Kavir. — Iran material: MNHN, ZM-CBSU.

***Capoeta alborzensis* Jouladeh-Roudbar, Eagderi, Ghanavi & Doadrio 2016**

Common name: Alborz large scale scraper

Taxonomy: Original description: *Capoeta alborzensis* Jouladeh-Roudbar, Eagderi, Ghanavi & Doadrio 2016: 169, figs. 2-5 [Nam River, tributary of Hableh River, near Harandeh village, Tehran province, Iran, 35°42'41.1"N, 52°40'19.7"E; holotype: IMNRF-UT 1063-115].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2016: 169, fig. 2).

Distribution. General distribution: Middle East: Kavir basin, Tehran province.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 448-Kavir and Lut Deserts.

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Alborz. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2016); listed in previous checklists from Iran by

Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 15-Namak Lake, 7-Dasht-e Kavir. — Iran material: IMNRF.

***Capoeta antalyensis* (Battalgil 1944)**

Common name: Antalya barb

Taxonomy: Original description: *Varicorhinus antalyensis* Battalgil 1944: 132, fig. 4 [Antalya, southwestern Türkiye; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Battalgil (1944: fig. 4).

Distribution. General distribution: Asia Minor: Antalya province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits fast-flowing stretches of rivers and larger streams with gravel or rocky substrates, also known as reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Siraz balığı. — Recorded from Türkiye in the original description by Battalgil (1944); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: None.

***Capoeta aydinensis* Turan, Küçük, Kaya, Güçlü & Bektaş 2017**

Common name: Aydın barb

Taxonomy: Original description: *Capoeta aydinensis* Turan, Küçük, Kaya, Güçlü & Bektaş 2017: 437, figs. 1a-b, 2a-d, 3 [Aydın Province, Çine Stream, Büyük Menderes drainage, 37°25'N, 28°08', Türkiye; holotype: FFR 01926].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2017a: figs. 1a-b, 2a-d, 3).

Distribution. General distribution: Asia Minor: Büyük Menderes basin, western Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits a very wide range of all kinds of permanent waterbodies, at least seasonally, with gravel or running water. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Siraz balığı. — Recorded from Türkiye in the original description by Turan et al. (2017a); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes, 8-Batı Akdeniz. — Turkish material: FFR.

***Capoeta banarescui* Turan, Kottelat, Ekmekçi & Imamoglu 2006**

Common name: Colchic scraper

Taxonomy: Original description: *Capoeta banarescui* Turan, Kottelat, Ekmekçi & Imamoglu 2006: 427, fig. 5 [Çoruh drainage, stream Tortum, 100 kilometers north of Erzurum 40°34'N, 41°36'E, Tortum District, Artvin, Türkiye; holotype: ESFM-PISI/2004-072].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2006: fig. 5).

Distribution. General distribution: Eurasia: Çoruh River drainage.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species inhabits a wide range of habitats, mostly rivers and streams, but might also inhabit reservoirs from which it migrates to inflowing streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Siraz balığı. — Recorded from Türkiye in the original description by Turan et al. (2006); listed in previous checklists from Türkiye by Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 23-Çoruh. — Turkish material: ESFM-PISI.

***Capoeta bergamae* Karaman 1969**

Common name: Bergama barb

Taxonomy: Original description: *Capoeta capoeta bergamae* Karaman 1969: 29, pl. 1 (fig. 5), pl. 4 (fig. 3) [Southwestern Anatolia, Türkiye; syntypes: ZMH H4146 and 3897 (7), 3597 (5), 3603 (2)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Karaman (1969: pl. 1, fig. 5, pl. 4, fig. 3).

Distribution. General distribution: Asia Minor: Aegean Sea watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits a wide range of rivers and streams with clean, at least seasonally running water. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Siraz balığı. — Recorded from Türkiye in the original description by Karaman (1969); listed in previous checklists from Türkiye by Kuru (2004) as *Capoeta capoeta bergamae*; Geldiay and Balık (2007) as *Capoeta capoeta bergamae*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes. — Turkish material: ZMH.

***Capoeta birunii* Zareian & Esmaili 2017**

Common name: Esfahan small scale scraper

Taxonomy: Original description: *Capoeta birunii* Zareian & Esmaili 2017: 261, figs. 27-28 [Daran River near Daran, Zayandehrud basin, Esfahan Province, Iran, 32°49'25.8"N, 50°25'47.4"E; holotype: ZM-CBSU Z650].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Zareian and Esmaili (2017: 261, fig. 27).

Distribution. General distribution: Middle East: Zayandehrud basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 449-Esfahan

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Biruni. — Recorded from Iran in the original description by Zareian and Esmaili (2017); listed in previous checklists from Iran by Esmaili et al. (2018); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 9-Esfahan. — Iran material: ZM-CBSU.

Capoeta buhsei Kessler 1877

Common name: Namak scraper

Taxonomy: Original description: *Capoeta buhsei* Kessler 1877: 85 [Probably Karaj River near Tehran, Iran; syntypes: ZIN 2330 (2)].

Middle Eastern synonyms: *Varicorhinus nikolskii* Derjavin 1929.

Revisions: None.

Illustrations: Zareian and Esmaili (2017: 244, fig. 9).

Distribution. General distribution: Middle East: Namak Lake and Kavir basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 447-Namak.

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Probably not under any immediate threat. — High sensitivity to human activities. — Keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Namak. — Recorded from Iran in the original description by Kessler (1877); Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 15-Namak Lake. — Iran material: ZIN, ZM-CBSU.

Capoeta caelestis Schöter, Özuluğ & Freyhof 2009

Common name: Taurus scraper

Taxonomy: Original description: *Capoeta caelestis* Schöter, Özuluğ & Freyhof 2009: 230, figs. 1-4 [Göksu River at Göksu, below Göksu power station, approximately 80 kilometers northwest of Silifki, 37°02.74'N, 32°44.56'E, Karaman Province, Türkiye; holotype: IUSHM 37930-252].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Schöter et al. (2009: figs. 1-4).

Distribution. General distribution: Asia Minor: coastal streams between Dim Stream in the west to Göksu River in the east (Mediterranean drainages).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits a wide variety of stream and river habitats, from coastal streams up to mountain rivers with gravel substrates, often being the only fish species. Spawns in fast-flowing waters of rapids and riffles. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Siraz balığı. — Recorded from Türkiye in the original description by Schöter (2009); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 17-Doğu Akdeniz. — Turkish material: IUSHM.

***Capoeta capoeta* (Güldenstädt 1773)**

Common name: Transcaucasian barb

Taxonomy: Original description: *Cyprinus capoeta* Güldenstädt 1773: 508, pl. 8 [Tiflis, Caspian Sea; No types known].

Middle Eastern synonyms: *Varicorhinus capoeta* (Güldenstädt 1773); *Cyprinus fundulus* Güldenstädt 1787; *Capoeta hohenackeri* Kessler 1877; *Capoeta (Scaphiodon) steindachneri* Kessler 1872; *Capoeta gibbosa* Nikolskii 1897; *Capoeta ekmekciae* Turan, Kottelat, Kirankaya & Engin 2006.

Revisions: Berg (1949: 676 as *Varicorhinus capoeta*).

Illustrations: Berg (1949: fig. 432); Zareian et al. (2018: 384, fig. 12).

Distribution. General distribution: Eurasia: southeastern Black Sea watersheds, eastern Türkiye, and southern Caspian Sea watersheds.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia, 434-Kura-South Caspian Drainages.

Habitat: This species inhabits a very wide range of rivers, streams, and lakes, including reservoirs. From lakes and reservoirs, they migrate to rivers to spawn. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Siyah mahi-e Chafghazi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iranian material: ZM-CBSU.

Status in Türkiye: [Native]. — Siraz balığı, aptalca. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 23-Çoruh, 24-Aras. — Turkish material: None.

***Capoeta coadi* Alwan, Zareian & Esmaeili 2016**

Common name: Karun scraper-Coad's scraper

Taxonomy: Original description: *Capoeta coadi* Alwan, Zareian & Esmaeili 2016: 158, figs. 1-4 [Beshar (Bashar) River at Tale Gah village, Karun River drainage, Kohgiluyeh and Boyer-Ahmad provinces, Iran, 30°47'27"N, 51°25'13"E; holotype: ZM-CBSU Z190].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Alwan et al. (2016a: 158, fig. 1).

Distribution. General distribution: Middle East: Karun River drainage, Tigris River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Karun. — Recorded from Iran in the original description by Alwan et al. (2016a); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

***Capoeta damascina* (Valenciennes 1842)**

Common name: Mesopotamian barb

Taxonomy: Original description: *Gobio damascinus* Valenciennes in Cuvier & Valenciennes 1842: 314, pl. 482 [Damascus, Syria; lectotype: MNHN 0000-4494; lectotype selected by Krupp & Schneider (1989: 365)].

Middle Eastern synonyms: *Scaphiodon fratercula* Heckel 1843; *Scaphiodon socialis* Heckel 1843; *Scaphiodon peregrinorum* Heckel 1843; *Scaphiodon fratercula* Heckel 1843; *Capoeta syriaca* (Valenciennes 1844); *Varicorhinus capoeta angorae* Hankó 1925; *Capoeta angorae* (Hankó 1925); *Barbus belayewi* Menon 1960; *Capoeta capoeta kosswigi* Karaman 1969; *Capoeta kosswigi* Karaman 1969.

Revisions: Alwan et al. (2016b: 17).

Illustration: Valenciennes in Cuvier and Valenciennes (1842: pl. 482).

Distribution. General distribution: Asia Minor and Middle East: Levant, Mesopotamia, and southeastern Anatolia.

Distribution in the Middle East: Iran, Iraq, Israel, Jordan Lebanon, Syria, Türkiye.

Distribution in Ecoregions: 436-Coastal Levant, 437-Orontes, 438-Jordan River, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 444-Lake Van.

Habitat: This species inhabits a very wide range of all kinds of permanent waterbodies, at least seasonally, with gravel or running water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Siyah mahi-e Dameshghi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Coad (2010); confirmed by Agha et al. (2023); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: None.

Status in Israel: [Native]. — Hafaf Israeli. — First record from Israel by Günther (1865: 490); Tristram (1884: 104, 172, 173) as *Scaphiodon capoeta*, *Capoeta damascina*, *C. syriaca* and *C. socialis*; Lortet (1883: 151, 160) as *Capoeta syriaca* and *C. damascina*, and by Steinitz (1953: 209) as *Varicorhinus damascinus*; confirmed by Goren (1974: 88); Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUJ.

Status in Jordan: [Native]. — None. — It is probable that this species is naturally distributed in the country. — Iraq materials: None.

Status in Lebanon: [Native]. — Al -Buraq, Al-Samak al asfar. — This species naturally distributed in Lebanon (Alwan et al., 2016b). — Lebanon material: AUBM.

Status in Syria: [Native]. — Kallar abiad. — Recorded from Syria in original description of *Gobio damascinus* by Valenciennes (1842: 314); subsequently reported by Gruvel (1931); Beckman (1962: 146) as *Varicorhinus damascinus* and *Varicorhinus syriaca* by Beckman (1962: 148); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: MCZ, MNHN, SMNS, ZMUC, SMF.

Status in Türkiye: [Native]. — Kara balık-Siraz. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 25-Van Lake. — Turkish material: None.

***Capoeta ferdowsii* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017**

Common name: Zohreh scraper-Ferdowsi scraper

Taxonomy: Original description: *Capoeta ferdowsii* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017: 138, figs. 3-6, 8 [Tang-e Shiv River at Bekr sofla village, Zohreh River drainage, Tigris River basin, Fars Province, Iran, 30°25'26"N, 51°21'55"E; holotype: IMNRF-UT 1111-61].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2017: 138, fig. 3).

Distribution. General distribution: Middle East: Zohreh River drainage, Persian Gulf basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of all kinds of permanent waterbodies, at least seasonally, with gravel or running water. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Ferdowsi. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2017); listed in previous checklists from Iran by Esmaeili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 20-Zohreh. — Iran material: IMNRF, ZM-CBSU.

***Capoeta fusca* Nikolskii 1897**

Common name: Brown capoeta

Taxonomy: Original description: *Capoeta fusca* Nikolskii 1897: 340 [Mondechi and Kuss, probably Mandehi or Miandehi, 34°53'N, 58°38'E, Iran; syntypes: ZIN 11108-12 (2, ?, 5, 1, 1)].

Middle Eastern synonyms: *Capoeta nudiventris* Nikolskii 1897.

Revisions: None.

Illustrations: Zareian et al. (2018: 386, fig. 14-15).

Distribution. General distribution: Middle East: Hari, Kavir, Bedjestan, Sistan and Lut basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 448-Kavir and Lut Deserts, 631-Upper Amu Darya, 702-Helmand-Sistan.

Habitat: This species inhabits rivers, lakes, reservoirs, ponds, and ditches with stagnant or slow-flowing water. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Siyah mahi-e qanati. — Recorded from Iran in the original description by Nikolskii (1897); listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 19-Hari River, 7-Dasht-e Kavir, 5-Bejestan, 16-Sistan, 8-Dasht-e Lut8-Dasht-e Lut. — Iran material: ZIN, ZM-CBSU.

Capoeta gracilis* (Keyserling 1861)*Common name:** Esfahan large scale scraper**Taxonomy:** Original description: *Scaphiodon gracilis* Keyserling 1846: 201, pl. 100 (figs. 2, 2a-b) [Rivers near Esfahan, central Iran; syntypes: not saved].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Keyserling (1846: pl. 100, figs. 2, 2a-b) as *Scaphiodon gracilis*; Zareian et al. (2018: 389, fig. 17-18).**Distribution. General distribution:** Middle East: Zayandehrud basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 449-Esfahan.**Habitat:** This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Siyah mahi Esfahan. — Recorded from Iran in the original description by Keyserling (1846); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 9-Esfahan. — Iran material: ZM-CBSU.***Capoeta heratensis* (Keyserling 1861)****Common name:** Herat capoeta**Taxonomy:** Original description: *Scaphiodon heratensis* Keyserling 1861: 11 [15], pl. 6 [Heri-rud at Herat, Afghanistan; no types preserved].**Middle Eastern synonyms:** *Scaphiodon asmussii* Keyserling 1861.**Revisions:** Berg (1949: 681) as *Varicorhinus capoeta heratensis*.**Illustrations:** Keyserling (1861: pl. 6) as *Scaphiodon heratensis*; Berg (1949: 682, fig. 437) as *Varicorhinus capoeta heratensis*.**Distribution. General distribution:** Middle East, South Asia: Hari-rud River basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 631-Upper Amu Darya.**Habitat:** This species inhabits rivers, lakes, reservoirs, ponds, and ditches with stagnant or slow-flowing water. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Siyah mahi-e Harat. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 19-Hari River. — Iran material: None.***Capoeta kaput* Levin, Prokofiev & Roubenyan 2019****Common name:** Transcaucasian barb**Taxonomy:** Original description: *Capoeta kaput* Levin, Prokofiev & Roubenyan 2019: 35, figs. 1a-c, 2, 3a, 3e-f [Khoda Afarin Reservoir, Armenia, 39°08'34"N, 46°50'21"E; holotype: ZMMU P-23837].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Levin et al. (2019: figs. 1a-c, 2, 3a, 3e-f).**Distribution. General distribution:** Aras (Araxes) River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits a very wide range of rivers, streams, and lakes, including reservoirs. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Siraz balığı, aptalca. — First report from Türkiye by Kaya et al. (2020c); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Capoeta macrolepis* (Heckel 1847)**

Common name: Kor scraper

Taxonomy: Original description: *Scaphiodon macrolepis* Heckel 1847: 259 [Confluents of Araxes River at Persepolis, Iran [Sivand River, Fars near Persepolis]; syntypes: NMW 51653 (2), 55896 (2)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Zareian et al. (2018: 393, fig. 21-24).

Distribution. General distribution: Middle East: Kor and Tigris River basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Kor. — Recorded from Iran in the original description by Heckel (1847); Jouladeh-Roudbar et al. (2015: 867) as *Capoeta capoeta macrolepis*, Esmaeili et al. (2017a: 38) as *Capoeta capoeta macrolepis*, Esmaeili et al. (2018: 20). — Distribution in River Basin: 12-Kor River. — Iran material: NMW.

***Capoeta oguzelii* Elp, Osmanoğlu, Kadak & Turan 2018**

Common name: Oghuzs barb

Taxonomy: Original description: *Capoeta oguzelii* Elp, Osmanoğlu, Kadak & Turan 2018: 104, figs. 1-5 [Ezine Stream at Devrekani, Black Sea drainage, Kastamonu province, Türkiye, 41°44'02"N, 33°52'58"E; holotype: FCME 2017-05a].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Elp et al. (2018: figs. 1-5).

Distribution. General distribution: Asia Minor: Ezine Stream drainage, southern Black Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits streams and small rivers with fast, clear, and gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Siraz balığı. — Recorded from Türkiye in the original description by Elp et al. (2018); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 13-Batı Karadeniz. — Turkish material: FCME.

***Capoeta pestai* (Pietschmann 1933)**

Common name: Egirdir barb

Taxonomy: Original description: *Varicorhinus pestai* Pietschmann 1933: 21 [1] [Egridir Lake [sic, Eğirdir Gölü], Türkiye, Asia Minor; syntypes: (2) MSNM 34 [ex MSNM 4661 and ex NMW] (1) Egirdir Lake; RMNH 24395 (2)].

Middle Eastern synonyms: *Schizothorax prophylax* Pietschmann 1933; *Capoeta mauricii* Küçük, Turan, Şahin & Gülle 2009.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Eğirdir Gölü and Eğirdir Gölü tributaries, Isparta Province, and İbrala Stream, Karaman Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia, 432-Southern Anatolia.

Habitat: This species inhabits a very wide range of rivers, streams, and lakes, including reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Siraz balığı. — Recorded from Türkiye in the original description by Pietschmann (1933); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya, 16-Konya. — Turkish material: MSNM, RMNH.

***Capoeta pyragyi* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017**

Common name: Sezar scraper

Taxonomy: Original description: *Capoeta pyragyi* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017: 144, figs. 8-12 [Tire River at Kaghe Village, Sezar River drainage, Tigris River basin, Lorestan Province, Iran, 33°37'06"N, 48°58'13"E; holotype: IMNRF-UT 1109-141].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2017: 144, fig. 8).

Distribution. General distribution: Middle East: Tireh and Sezar Rivers, Tigris River basin, Persian Gulf basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Faraghi. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2017); listed in previous checklists from Iran by

Esmaeili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024) — Distribution in River Basin: 4-Tigris. — Iran material: IMNRF-UT.

***Capoeta raghazensis* Eagderi & Mousavi-Sabet 2021**

Common name: Raghaz scaper

Taxonomy: Original description: *Capoeta raghazensis* Eagderi & Mousavi-Sabet 2021: 38, figs. 1[sic 2]-3 [Canyon near Darab City, Hormuz basin, Hormuzgan province, Iran, 28°49'32"N, 54°18'02"E; holotype: IMNRF-UT 1105-4].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Eagderi and Mousavi-Sabet (2021: 38, fig. 1).

Distribution. General distribution: Middle East: Raghaz Canyon, Hormuz basin, Hormuzgan province.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Raghaz. — Recorded from Iran in the original description Eagderi and Mousavi-Sabet (2021); listed in previous checklists from Iran by Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz. — Iran material: IMNRF.

***Capoeta razii* Jouladeh-Roudbar, Eagderi, Ghanavi & Doadrio 2017**

Common name: Caspian scraper

Taxonomy: Original description: *Capoeta razii* Jouladeh-Roudbar, Eagderi, Ghanavi & Doadrio 2017: 144, figs. 4-7 [Kheyroud River, Caspian Sea basin, Chalus city, Mazandaran Province, Iran, 36°36'35"N, 51°33'45"E; holotype: IMNRF-UT 1072-9].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2017: 144, fig. 4).

Distribution. General distribution: Middle East: central and southern Caspian Sea basin and in north of the Kavir basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 448-Kavir and Lut Deserts.

Habitat: Inhabits a very wide range of rivers, streams and lakes including reservoirs. From lakes and reservoirs migrate to rivers to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Caspian. — Recorded from Iran in the original description Jouladeh-Roudbar et al. (2017); listed in previous checklists from Iran by Esmaeili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea, 7-Dasht-e Kavir. — Iran material: IMNRF.

Capoeta saadii* (Heckel 1847)*Common name:** Saadi scraper**Taxonomy:** Original description: *Scaphiodon saadii* Heckel 1847: 260 [Persepolis, Pulwar River, Kor River basin, ruins northeast of Shiraz, Iran; syntypes: NMW 51666 (18), RMNH 3166 [ex NMW] (1).].**Middle Eastern synonyms:** *Scaphiodon amir* Heckel 1847; *Scaphiodon chebisiensis* Keyserling 1861; *Capoeta capoeta intermedia* Temminck & Schlegel 1846; *Capoeta intermedia* Temminck & Schlegel 1846; *Scaphiodon niger* Heckel 1847.**Revisions:** None.**Illustrations:** Zareian and Esmaeili (2017: 254, fig. 19).**Distribution. General distribution:** Middle East: Kor, Persis, Hormuz, Kerman and Maharlou Lake basins.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates, 448-Kavir and Lut Deserts, 451-Northern Hormuz Drainages.**Habitat:** This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as springs with gravel bottom. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, COM, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Siyah mahi-e Saadi. — Recorded from Iran in the original description by Heckel (1847); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 12-Kor River, 1-Persis, 13-Lake Maharlou, 18-Kerman-Na'in, 2-Hormuz. — Iran material: NMW, ZM-CBSU.***Capoeta shajariani* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017****Common name:** Shajarian scraper**Taxonomy:** Original description: *Capoeta shajariani* Jouladeh-Roudbar, Eagderi, Murillo-Ramos, Ghanavi & Doadrio 2017: 148, figs. 8, 14-18 [Gamasiyab River near Doab Village, Tigris River drainage, Hamedan Province, Iran, 34°22'13"N, 47°54'26"E; holotype: IMNRF-UT 1107-21].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Jouladeh-Roudbar et al. (2017: 148, fig. 8).**Distribution. General distribution:** Middle East: Gamasiyab River drainage, Tigris River basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Siyah mahi-e Shajarian. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2017); listed in previous checklists from Iran by Esmaeili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: IMNRF.

Capoeta sieboldii* (Steindachner 1864)*Common name:** Colchic khramulya**Taxonomy:** Original description: *Scaphiodon sieboldii* Steindachner 1864: 224 [Amasya [Amasya], Kizil-Irsen River system, Türkiye; holotype (unique): NMW 55903].**Middle Eastern synonyms:** *Varicorhinus sieboldii* (Steindachner 1864).**Revisions:** Berg (1949: 685) as *Varicorhinus sieboldii*.**Illustrations:** Berg (1949: 686, fig. 440) as *Varicorhinus sieboldii*.**Distribution. General distribution:** Eurasia: Black Sea watersheds.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia, 433-Western Transcaucasia.**Habitat:** This species inhabits a wide range of rivers and larger streams. Also inhabits reservoirs, from which it migrates to rivers and streams to spawn. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** CON. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Native]. — Siraz balığı. — Recorded from Türkiye in the original description by Steindachner (1864); listed in previous checklists from Türkiye by Kuru (2004) as *Capoeta capoeta sieboldii*; Geldiay and Balık (2007) as *Capoeta capoeta sieboldii*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 12-Sakarya, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: NMW.***Capoeta tinca* (Heckel 1843)****Common name:** Anatolian khramulya**Taxonomy:** Original description: *Scaphiodon tinca* Heckel 1843: 1021 [Bursa, Nilüfer River basin, Türkiye; lectotype: NMW 55931: 1].**Middle Eastern synonyms:** *Varicorhinus tinca* (Heckel 1843); *Capoeta baliki* Turan, Kottelat, Ekmekçi & Imamoğlu 2006.**Revisions:** Berg (1949: 684) as *Varicorhinus tinca*.**Illustrations:** Berg (1949: 684, fig. 439) as *Varicorhinus tinca*.**Distribution. General distribution:** Asia Minor: Marmara Sea and Black Sea tributaries.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 430-Northern Anatolia.**Habitat:** This species inhabits a wide range of rivers and larger streams. Also inhabits reservoirs, from which it migrates to rivers and streams to spawn. — Freshwater.**Economic importance:** Locally commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Türkiye:** [Endemic]. — Siraz balığı. — Recorded from Türkiye in the original description by Heckel (1843); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak. — Turkish material: NMW.***Capoeta umbla* (Heckel 1843)****Common name:** Tigris scraper**Taxonomy:** Original description: *Scaphiodon umbla* Heckel 1843: 1060 [70] [Tigris River, Mosul, Iraq; syntypes: NMW 55932-33 (1, 1), 79373-74 (1, 1, both dry); SMF 6777 (1, dry)].**Middle Eastern synonyms:** None.**Revisions:** Esmaili et al. (2016b: 36); Zareian and Esmaili (2017, molecular phylogeny).

Illustrations: Heckel (1843b: pl. 5, fig. 3) as *Scaphiodon umbla*; Esmaili et al. (2016b: 37, figs. 1-3).

Distribution. General distribution: Asia Minor and Middle East: Levant, Mesopotamia, and southeastern Anatolia.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of all kinds of permanent waterbodies, at least seasonally, with gravel or running water. — Freshwater.

Economic importance: Locally commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, EUT, FIT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Siyah mahi-e Tigris. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — Recorded from Iraq in original description by Heckel (1843); subsequently reported by Agha et al. (2023). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: NMW, SMF.

Status in Syria: [Native]. — Kallar. — First record from Syria by Beckman (1962: 149) as *Varicorhinus umbla*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: None.

Status in Türkiye: [Native]. — Siraz balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Capoeta capoeta umbla*; Geldiay and Balık (2007) as *Capoeta capoeta umbla*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Labeo rohita* (Hamilton 1822)**

Common name: Roho labeo

Taxonomy: Original description: *Cyprinus rohita* Hamilton 1822: 301, 388, pl. 36 (fig. 85) [Gangetic provinces and Ava, India; No types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Bleher (2018: 592, fig.); Eagderi et al. (2019: 19, fig. 1).

Distribution. General distribution: South Asia; introduced widely in Asia.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species is the natural inhabitant of freshwater sections of the rivers. It is a bottom feeder and prefers to feed on plant matter including decaying vegetation. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Fisheries; aquaculture.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — First record from Iran by Eagderi et al. (2019) then listed in previous checklists from Iran by Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: IMNRF-UT.

***Luciobarbus barbulus* Heckel 1847**

Common name: Persis barbel

Taxonomy: Original description: *Barbus barbulus* Heckel 1847: 256 [Kara Agatsch River (Qarah Aqaj River) near Geré (Jereh), Iran, 29°15'N, 51°58'E; Qweik River at Aleppo, Syria; syntypes: NMW 6596 (1)].

Middle Eastern synonyms: None.

Revisions: Khaefi et al. (2017b); Valiollahi (2020: 59).

Illustrations: Khaefi et al. (2017b:837, 840, figs. 2, 3); Valiollahi (2020: 60, figs. 1-2); Esmaeili (2021:306, fig. 17.7a).

Distribution. General distribution: Asia Minor and Middle East: Qweik River system (Syria); Euphrates and Tigris River basins, Zoreh, Mond and Kol River basins.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of all kinds of permanent waterbodies, at least seasonally, with gravel or running water. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Sas mahi-e lab pahn. — Listed in previous checklists from Israel by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 1-Persis, 4-Tigris. — Iranian materials: ZM-CBSU.

Status in Iraq: [Native]. — Abu Baratum. — First record from Iraq by Heckel (1847); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: None.

Status in Syria: [Native]. — Karsin Asfar. — Recorded from Syria in original description by Heckel (1847: 256) as *Barbus barbulus*; subsequently reported by Gruvel (1931); Beckman (1962: 87); Krupp and Schneider (1991b: 73); Ali (2003) as *Barbus barbulus*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: MCZ, MNHN, SMNS, MSL.

Status in Türkiye: [Native]. — Bıyıklı balık. — Listed in previous checklists from Türkiye by Fricke et al. (2007) as *Barbus barbulus*; Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Firat-Dicle. — Turkish material: None.

Luciobarbus brachycephalus (Kessler 1872)

Common name: Aral barbel

Taxonomy: Original description: *Barbus brachycephalus* Kessler 1872: 52 [8], pl. 7, figs. 9-11 [Syr-Darya River, central Asia; syntypes: NMW 53971-73 (1, 2, 1); ZIN 5759 (1, not found in 2000), 5878 (1, not found in 1996 or 2000)].

Middle Eastern synonyms: *Barbus obtusirostris* Yakovlev 1870; *Barbus platyrostris* Kessler 1874.

Revisions: Berg (1949: 702) as *Barbus brachycephalus*.

Illustrations: Berg (1949: 703-704, figs. 457-459) as *Barbus brachycephalus*.

Distribution. General distribution: Aral Sea and western and southern Caspian Sea basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: This species lives in deep stretches with gravel or stone bottoms. Spawns in fast-flowing water at sites with a hard bottom, 1-2 m deep. Semi-anadromous and riverine populations. — Anadromous, freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: VU (IUCN, 2023).

Threats: FIT, CON, ABS. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Iran: [Native]. — Sas mahi-e sar kochak. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Luciobarbus capito* (Güldenstädt 1773)*Common name:** Bulatamai barbel**Taxonomy:** Original description: *Cyprinus capito* Güldenstädt 1773: 519, 520 [Kura River, Transcaucasia; no types known].**Middle Eastern synonyms:** *Barbus capito* (Güldenstädt 1773); *Cyprinus chalybeus* Walbaum (ex Hablizl) 1792; *Barbus bilkewitschi* Bulgakov 1923; *Cyprinus bulatmai* Hablizl 1783; *Cyprinus chalybatus* Pallas 1814; *Barbus lacertoides* Kessler 1872; *Barbus capito serratus* Sokolinskii 1927; *Barbus capito capito platycephalus* Abdurakhmanov 1960.**Revisions:** Berg (1949: 698) as *Barbus capito*; Karaman (1971: 211) as *Barbus capito capito*.**Illustrations:** Berg (1949: 699, fig. 455) as *Barbus capito*.**Distribution. General distribution:** Eurasia: Aral Sea and western and southern Caspian Sea basins.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain.**Habitat:** This species spawns in lowland streams and rivers on a sand-gravel bottom, usually in a strong current. Semi-anadromous but rarely landlocked in reservoirs. — Freshwater, brackish, marine.**Economic importance:** Locally commercially important.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** FIT, CON, ABS. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Sas mahi-e sar bozorg. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.**Status in Türkiye:** [Native]. — Bıyıklı balık. — Listed in previous checklists from Türkiye by Kuru (2004) as *Barbus capito capito*; Geldiay and Balık (2007) as *Barbus capito capito*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish materials: None.***Luciobarbus caspius* (Berg 1914)****Common name:** Caspian barbel**Taxonomy:** Original description: *Barbus brachycephalus caspius* Berg 1914: 612, Fig. 119, Caspian Sea basin; syntypes: ZIN 2982 (8), 3895 (10), 9108 (1, misidentified), 9109 (2), 9117-18 (11, 1), 9124 (8), 10619 (apparently lost).**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Berg (1914: 612, fig. 119) as *Barbus brachycephalus caspius*.**Distribution. General distribution:** Eurasia: southern and western Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.**Habitat:** This species spawns in lowland streams and rivers on a sand-gravel bottom, usually in a strong current. Semi-anadromous but rarely landlocked in reservoirs. — Freshwater, brackish, marine.**Economic importance:** Locally commercially important.**Conservation:** IUCN: NE (IUCN, 2023).**Threats:** FIT, CON, ABS. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Sas mahi-e khazar. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Luciobarbus conocephalus* (Kessler 1872)*Common name:** Turkestan barbel**Taxonomy:** Original description: *Barbus conocephalus* Kessler 1872: 50 [6], pl. 6, fig. 6, pl. 7, figs. 7-8 [Zeravshan River, Uzbekistan; syntypes: (6) ZMMU P-1513 (2), P-1518 (1)].**Middle Eastern synonyms:** None.**Revisions:** Berg (1949: 700) as *Barbus capito conocephalus*.**Illustrations:** Kessler (1872: pl. 6, fig. 6, pl. 7, figs. 7-8) as *Barbus conocephalus*.**Distribution. General distribution:** Eurasia: North Asia, Middle East.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 631-Upper Amu Darya.**Habitat:** This species lives in rivers and streams. — Freshwater, brackish, marine.**Economic importance:** Locally commercially important.**Conservation:** IUCN: NE (2023).**Threats:** HAB, EUT, FIT. — Low sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Zarde par-e Harirud. — Listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 19-Hari River. — Iran material: None.***Luciobarbus esocinus* Heckel 1843****Common name:** Pike barbel**Taxonomy:** Original description: *Luciobarbus esocinus* Heckel 1843: 1054 [64] [Tigris River, Mosul, Iraq; syntypes: NMW 54088 (2), 54091-92 (1, 1); SMF 454 (ex NMW) (1), 6785 (ex NMW) (1)].**Middle Eastern synonyms:** *Barbus esocinus* (Heckel 1843); *Labeobarbus euphrati* Sauvage 1882.**Revisions:** None.**Illustrations:** Heckel (1843: pl. 4, fig. 2); Esmaili (2021:307, fig. 17.9).**Distribution. General distribution:** Middle East: Euphrates and Tigris River basins.**Distribution in the Middle East:** Iran, Iraq, Syria, Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species occurs in large rivers and reservoirs from which they migrate to inflowing rivers to spawn. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** FIT. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Iran:** [Native]. — Song. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 19-Zohreh. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — First record from Syria by Beckman (1962: 100) as *Barbus esocinus*; confirmed by Ali (2003); listed by Çiçek et al. (2023b). — Distribution in River Basin: 4-Great Zab, 5-Little Zab. — Syrian materials: MSL.**Status in Syria:** [Native]. — Farkh Abiad. — First record from Syria by Beckman (1962:100) as *Barbus esocinus*; confirmed by Ali (2002); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian materials: MSL.**Status in Türkiye:** [Native]. — Cero-Fırat turnası. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: None.

Luciobarbus kersin* (Heckel 1843)*Common name:** Kersin barbel**Taxonomy:** Original description: *Barbus kersin* Heckel 1843: 1049 [59] [Syria; syntypes: NMW 54212-13 (1, 4), 54215 (1); SMF 610 (1), ZMB 3237 (1)].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Esmaili (2021: 306, fig. 17.8).**Distribution. General distribution:** Middle East: Euphrates and Tigris River basins.**Distribution in the Middle East:** Iran, Iraq, Syria, Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits large to medium-sized rivers, but its habitats are poorly known. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: DD (IUCN, 2023).**Threats:** There are many threats in the area, but it is unknown how and if the species is affected. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Dabe dogh, Berzom pahn. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 19-Zohreh. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — First record from Iraq by Heckel (1843). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: None.**Status in Syria:** [Native]. — Kersin asfar. — Recorded from Syria in original description by Heckel (1847: 212); subsequently reported by Gruvel (1931); Beckman (1962: 87); Ali (2003); Taha (2005) as *Barbus kersin*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: NMW, SMF, ZMB, MSL.**Status in Türkiye:** [Native]. — Kersin balığı. — Listed in previous checklists from Türkiye by Fricke et al. (2007) as *Barbus kersin*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.***Luciobarbus kottelati* Turan, Ekmekçi, İlhan & Engin 2008****Common name:** Menderes barbel**Taxonomy:** Original description: *Luciobarbus kottelati* Turan, Ekmekçi, İlhan & Engin 2008: 40, fig.3b, 5 [River Büyük Menderes, Dandalas Stream, Karacasu, 90 kilometers south of Aydın, Aydın Province, Türkiye; holotype: IUSHM 27300-879].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2008a: figs. 3b, 5).**Distribution. General distribution:** Asia Minor: Büyük Menderes River (Aegean Sea tributary).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 429-Western Anatolia.**Habitat:** This species inhabits large to medium-sized warm streams and rivers with moderate currents. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Turan et al. (2008a); listed in previous checklists from Türkiye by Kuru et

al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: IUSHM.

***Luciobarbus longiceps* (Valenciennes 1842)**

Common name: Jordan barbel

Taxonomy: Original description: *Barbus longiceps* Valenciennes 1842: 179, pl. 467 [Jordan River; syntypes: MNHN 0000-4309 (1, dry)].

Middle Eastern synonyms: None.

Revisions: Levin et al. (2012: 544).

Illustrations: Valenciennes (1842: pl. 467) as *Barbus longiceps*.

Distribution. General distribution: Middle East: Jordan River and Orontes River drainage.

Distribution in the Middle East: Israel, Jordan, and Syria.

Distribution in Ecoregions: 437-Orontes, 438-Jordan River.

Economic importance: Commercially important.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Israel: [Native]. — Binit arukat rosh. — Recorded from Israel in original description by Valenciennes (1842: 179) as *Barbus longiceps*; also reported by Günther (1865: 490); Lortet (1883: 163); Tristram (1884: 174); Steinitz (1953: 208) as *Barbus longiceps*; confirmed by Goren (1974: 90) as *Barbus longiceps*; Goren and Ortal (1999: 4) as *Barbus longiseps*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUI.

Status in Jordan: [Native]. — None. — It is probable that this species is naturally distributed in the country. — Jordan material: None.

Status in Lebanon: [Native]. — Samak alkhadri. — It is probable that this species is naturally distributed in the country. — Lebanon material: None.

Status in Syria: [Native]. — Abou shadak. — First record from Syria by Barrois (1894: 308) as *Barbus longiceps*; confirmed by Gruvel (1931); Beckman (1962: 105); Hourani (2005); Saad et al. (2009) as *Barbus longiceps*; listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 4-Orontes, 5-Barada and Awaj, 7-AI-Yarmouk. — Syrian material: MNHN, MSL.

***Luciobarbus lorteti* (Sauvage 1882)**

Common name: Lortet's barbel

Taxonomy: Original description: *Barbus lorteti* Sauvage 1882: 165 [Orontes River at Antakya (= Antiochia), 36°12'N, 36°13'E, Turkey; lectotype: MNHN A-3935. Type catalog: Bertin & Estève (1948: 43)].

Middle Eastern synonyms: None.

Revisions: Krupp (1985b: 64) as *Barbus lorteti*.

Illustrations: Krupp (1985: 65, fig. 1) as *Barbus lorteti*.

Remarks: According to Geiger et al. (2014) there is low genetic differences between *Luciobarbus lorteti* and *L. graecus*. Most probably, *L. lorteti* is the synonym of *Luciobarbus pectoralis* (Heckel 1843). Therefore, these situations should be clarified with detailed comparative studies.

Distribution. General distribution: Asia Minor: Asi Nehri basin (Orontes) (Mediterranean tributary).

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species spawns in lowland streams and rivers on sand-gravel bottoms, usually in strong currents. Semi-anadromous but rarely landlocked in reservoirs. — Freshwater.

Economic importance: Locally commercially important.

Conservation: IUCN: DD (IUCN, 2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Syria: [Native]. — Abou shadak. — First record from Syria by Gruvel (1931) as *Barbus lorteti*; confirmed by Beckman (1962: 105); Krupp (1985: 64) as *Barbus lorteti*; listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: None.

Status in Türkiye: [Native]. — Maya balığı. — Listed in previous checklists from Türkiye by Fricke et al. (2007) as *Barbus lorteti*; Kuru et al. (2014) as *Barbus lorteti*; Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: MNHN.

***Luciobarbus lydianus* (Boulenger 1896)**

Common name: Lydian barbel

Taxonomy: Original description: *Barbus lydianus* Boulenger 1896: 153 [Gediz River, Izmir Province, between north coast of Smyrna and Troy, Türkiye; syntypes: (several) BMNH 1893.1.14.9-12 (4), 1895.12.28.18 (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Aegean and Marmara Sea tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species inhabits large to medium sized streams and rivers with moderate currents. Also inhabits reservoirs, from which it is believed to migrate to inflowing streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Bıyıklı balık. — Recorded from Türkiye in the original description by Boulenger (1896); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: BMNH.

***Luciobarbus mursa* (Güldenstädt 1773)**

Common name: Mursa

Taxonomy: Original description: *Cyprinus mursa* Güldenstädt 1773: 513, pl. 9 [Kura River at Tiflis [= Tbilisi], Transcaucasia; syntypes: whereabouts unknown].

Middle Eastern synonyms: *Barbus mursa* (Güldenstädt 1773); *Barbus microphthalmus* Bonaparte 1846; *Barbus mursoides* Kessler 1877; *Barbus microphthalmus* Sauvage 1882; *Barbus kessleri* Derjavin 1929; *Barbus dagei* Fowler 1958.

Revisions: None.

Illustrations: Güldenstädt (1773: pl. 9 as *Cyprinus mursa*); Jouladeh-Roudbar et al. (2020: 85, fig. 151).

Distribution. General distribution: Eurasia: Kura-Aras River basin, Caspian Sea, and Lake Urmia basins.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 445-Orumiyeh.

Habitat: This species inhabits a wide range of streams and rivers with fast to moderately fast running water. Also inhabits lakes and reservoirs, from which it migrates to rivers and streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Sas mahi lab koloft. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Murzu. — Recorded from Türkiye in the original description by Güldenstädt (1773); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *Barbus mursa*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Luciobarbus pectoralis* (Heckel 1843)**

Common name: Heckel's Orontes barbel

Taxonomy: Original description: *Barbus pectoralis* Heckel 1843: 1045 [55] [Orontes River, Syria; holotype: ?NMW 54474].

Middle Eastern synonyms: *Barbus perniciosus* Heckel 1843; *Barbus schejch* (Heckel 1843); *Labeobarbus orontis* Sauvage 1882; *Barbus orontis* (Sauvage 1882).

Revisions: None.

Illustrations: Heckel (1843: pl. 2, fig. 2) as *Barbus pectoralis*.

Distribution. General distribution: Orontes River system, Mediterranean watersheds of Türkiye and Euphrates and Tigris River basins.

Distribution in the Middle East: Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a wide range of streams and rivers with fast to moderately fast running water. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area, especially in Asi drainage where this species has lost major part of its range due to massive pollution and water abstraction. However, these threats are not strong enough all over the range to really affect this species. — Low sensitivity to human activities. — Keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iraq: [Native]. — None. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: NMW.

Status in Syria: [Native]. — Abou shadak. — Recorded from Syria in original description by Heckel (1843a: 1047, 1048) as *Barbus pectoralis* and *B. perniciosus*; subsequently reported by Gruvel (1931) as *Barbus orontis*; Beckman (1962: 107-109) as *B. pectoralis* and *B. orontis*; listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: BMNH, MCZ, MNHN, NMW.

Status in Türkiye: [Native]. — Bıyıklı balık. — Listed in previous checklists from Türkiye by Kuru (2004) as *Barbus capito pectoralis*; Geldiay and Balık (2007) as *Barbus capito pectoralis*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 18-Seyhan, 19-Asi, 20-Ceyhan. — Turkish material: None.

***Luciobarbus subquincunciatus* (Günther 1868)**

Common name: Mesopotamian-Leopard barbel

Taxonomy: Original description: *Barbus subquincunciatus* Günther 1868: 86 [Mesopotamia?; holotype: BMNH 1869.3.19.1469 (skin)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 87, fig. 153).

Distribution. General distribution: Asia Minor and Middle East: Tigris and Euphrates River systems.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits large, free-flowing lowland rivers and migrates short distances to breed. Rarely recorded from lakes and reservoirs, which seem to represent largely unsuitable habitats. — Freshwater.

Economic importance: Locally commercially important.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CON, EUT, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Iran: [Native]. — Soleymani. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: None.

Status in Iraq: [Native]. — Jassan. — Recorded from Iraq in original description by Günther (1868); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Syria: [Native]. — Abou shadak. — First record from Syria by Beckman (1962: 112) as *Barbus subquincunciatus*; confirmed by Krupp and Schneider (1991b: 73) as *Barbus subquincunciatus*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: None.

Status in Türkiye: [Native]. — Komando-Leopar. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *Barbus subquincunciatus*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Luciobarbus xanthopterus* Heckel 1843**

Common name: Yellowfin barbel

Taxonomy: Original description: *Luciobarbus xanthopterus* Heckel 1843: 1053 [63] [Tigris River, Mosul, Iraq; syntypes: NMW 54786 (1), 54841 (10), 91215 (1, dry)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaili (2021: 306, fig. 17.7c).

Distribution. General distribution: Asia Minor and Middle East: Orontes, Euphrates, and Tigris River systems.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits large lowland rivers, lakes, and marshes. Also in reservoirs, from which it migrates to inflowing rivers to spawn. Spawns on gravel substrate in the shallows of large rivers in water depths of 30-150 cm. — Freshwater.

Economic importance: Locally commercially important.

Conservation: IUCN: VU (IUCN, 2023).

Threats: HAB, CON, ABS, EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Iran: [Native]. — Gatan. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Qattan. — Recorded from Iraq in original description Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: NMW

Status in Syria: [Native]. — Bunni kattan. — First record from Syria by Gruvel (1931); confirmed by Beckman (1962: 114) as *Barbus xanthopterus*; listed by Saad et al. (2023). —

Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: None.

Status in Türkiye: [Native]. — Maya balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi, 21-Fırat-Dicle. — Turkish material: None.

***Mesopotamichthys sharpeyi* (Günther 1874)**

Common name: Binni

Taxonomy: Original description: *Barbus sharpeyi* Günther 1874: 38 (3), pl. 9 [Tigris River near Baghdad, Iraq; syntypes: BMNH 1874.4.28.20 (1), 1874.4.28.27 (1), 1875.1.14.16 (1)].

Middle Eastern synonyms: *Barbus faoensis* Günther 1896.

Revisions: None.

Illustrations: Günther (1874: 38 (3), pl. 9) as *Barbus sharpeyi*.

Distribution. General distribution: Middle East: Tigris River system.

Distribution in the Middle East: Iran, Iraq, and Syria.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species occurs in large rivers, lakes, and marshes, mostly in standing waters and marshes with dense vegetation. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, COM, CON, EUT, FIT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Binni. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Bunni. — Recorded from Iraq in original description by Günther (1874); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: BMNH.

Status in Syria: [Native]. — Bunni. — First record from Syria by Beckman (1962: 112) as *Barbus sharpeyi*; confirmed by Ali and Saad (2002); Ali (2003); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Iraq materials: MSL.

***Paracapoeta anamisensis* (Zareian, Esmaili & Freyhof 2016)**

Common name: Minab scraper

Taxonomy: Original description: *Capoeta anamisensis* Zareian, Esmaili & Freyhof 2016: 133, figs. 3-5, 6a, 7a and 8 [Moradabad River at Ziarat Ali, Minab River drainage, Hormuzgan Province, Iran, 27°45'47.6"N, 57°14'31.8"E; holotype: ZM-CBSU Z131].

Middle Eastern synonyms: None.

Revisions: Turan et al. (2022a: 205).

Illustrations: Zareian et al. (2016: 133, fig. 3).

Distribution. General distribution: Middle East: Minab and Hasan Langi River drainages, Makran.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages, 701-Baluchistan,

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries, as well as some lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Minab. — Recorded from Iran in the original description by Zareian et al. (2016); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 3-Makran. — Iran material: ZM-CBSU.

***Paracapoeta barroisi* (Lortet 1894)**

Common name: Orontes scraper

Taxonomy: Original description: *Capoeta barroisi* Lortet in Barrois 1894: 308 [Lake Homs, at Schoummarieh Village, Orontes drainage, Hims District, Syria; Antioche (Antakya, Türkiye); syntypes: FMUL uncat. (several, probably lost), MHNL uncat. (1)].

Middle Eastern synonyms: None.

Revisions: Turan et al. (2022a).

Illustrations: Turan et al. (2008b: 267, fig. 5).

Distribution. General distribution: Asia Minor and Middle East: eastern Mediterranean watersheds, Tigris River, and Gulf basins.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits mostly lakes, reservoirs, and larger lowland rivers. Most likely, they migrate to rivers or streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CON, CLI, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iraq: [Native]. — None. — First record from Iraq by Coad (2010) as *Capoeta barroisi*. — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq material: None.

Status in Syria: [Native]. — Kallar Abiad. — Recorded from Syria in original description by Barrois (1894: 308); subsequently reported by Gruvel (1931); Beckman (1962: 143) as *Varicorhinus barroisi*. — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 4-Orontes. — Syrian material: BMNH, FMUL, MNHN, MSL.

Status in Türkiye: [Native]. — Siraz. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle. — Turkish material: FMUL, MHNL.

***Paracapoeta erhani* (Turan, Kottelat & Ekmekçi 2008)**

Common name: Ceyhan scraper

Taxonomy: Original description: *Capoeta erhani* Turan, Kottelat & Ekmekçi 2008: 264, figs. 1-2a [Ceyhan drainage, Menzelet Reservoir, Geçit stream on road from Kahramanmaraş to Adana, 37°37'N, 36°39'E, Kahramanmaraş Province, Türkiye; holotype: FFR 776].

Middle Eastern synonyms: None.

Revisions: Turan et al. (2022a).

Illustrations: Turan et al. (2008b).

Distribution. General distribution: Asia Minor: Ceyhan and Seyhan River drainages (Mediterranean Sea tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits many different lowland habitats, such as rivers and even small lowland streams. Also inhabits reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, CLI, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Türkiye: [Endemic]. — Siraz. — Recorded from Türkiye in the original description by Turan et al. (2008b: 264, fig. 1); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan, 20-Ceyhan. — Turkish material: FFR.

***Paracapoeta mandica* (Bianco & Bănărescu 1982)**

Common name: Mond scraper

Taxonomy: Original description: *Capoeta barroisi mandica* Bianco & Bănărescu 1982: 90, figs. 1C, 2C [Mond River, near Dasht-e-Arzhan, Persian Gulf basin, Iran; holotype: IZA 7890].

Middle Eastern synonyms: *Capoeta mandica* Bianco & Bănărescu 1982.

Revisions: Turan et al. (2022a: 205).

Illustrations: Bianco and Bănărescu (1982: figs. 1C, 2C); Jouladeh-Roudbar et al. (2020: 50, fig. 83).

Distribution. General distribution: Middle East: Mond River, Persis River drainage, Persian Gulf basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a wide range of habitats, mainly running waters of main rivers and tributaries. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Siyah mahi-e Mond. — Recorded from Iran in the original description by Bianco and Bănărescu (1982); listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2015, 2020) as *Capoeta mandica*; Esmaili et al. (2017a, 2018) as *Capoeta mandica*; Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: Persis basin. — Iran material: IZA, ZM-CBSU.

***Paracapoeta trutta* (Heckel 1843)**

Common name: Longspine scraper

Taxonomy: Original description: *Scaphiodon trutta* Heckel 1843: 1056 [66] [Aleppo, Syria; Tigris River, Mosul, Iraq; syntypes: NMW 55926 (1), 55928 (2), 55935-37 (2, 2, 1), 55939-42 (4, 1, 3, 1); ?RMNH 3164 (1) Aleppo; SMF 923 (1), 2567 (1); ZMB 8789 (1, dry)].

Middle Eastern synonyms: *Capoeta trutta* (Heckel 1843); *Varicorhinus capoetoides* Pellegrin 1938; *Capoeta barroisi persica* Karaman 1969.

Revisions: Turan et al. (2022a: 205).

Illustrations: Heckel (1843b: pl. 4, fig. 3); Turan et al. (2008b: 267, fig. 5).

Distribution. General distribution: Asia Minor and Middle East: Euphrates and Tigris River systems.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of habitats, at least some of which are seasonally connected to the running waters in which it spawns. Most abundant in lowland rivers, but also very common in reservoirs and marshes, and commonly found in streams in slow-current sections. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: While there are many threats in the area, none is so serious to threaten this species.
— Low sensitivity to human activities. — No keystone species. — Decline status: Stable.
— Low priority for conservation action.

Status in Iran: [Native]. — Siyah mahi-e bale boland. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 20-Zohreh. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Al Ramli. — Recorded from Iraq in original description by Heckel (1843); subsequently reported by Agha et al. (2023); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: NMW, RMNH.

Status in Syria: [Native]. — None. — Recorded from Syria in original description by Heckel (1843a: 1056); subsequently reported by Gruvel (1931); Beckman (1962: 148) as *Varicorhinus trutta*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, MNHN, NMW, RMNH, MSL.

Status in Türkiye: [Native]. — Lekeli siraz balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Schizocypris altidorsalis* Bianco & Bănărescu 1982**

Common name: Gorgak

Taxonomy: Original description: *Schizocypris altidorsalis* Bianco & Bănărescu 1982: 93, fig. 1D [Nahr-Taheri, near Zabol, about 31°02'N, 61°30'E, Sistan, Iran; holotype: IZA 8169].

Middle Eastern synonyms: None.

Revisions: Coad and Keyzer-de Ville (2005: 36).

Illustrations: Bianco and Bănărescu (1982: fig. 1D).

Distribution. General distribution: Middle East and South Asia: Afghanistan and Iran.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 702-Helmand-Sistan.

Habitat: This species is benthopelagic and has been reported from pools in dry riverbeds and still, reedy channels. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: HAB, EUT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Anjak, Gorgak. — Recorded from Iraq in original description by Bianco and Bănărescu (1982); subsequently reported by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 16-Sistan. — Iran material: IZA.

Schizopygopsinae (mountain barbels)

***Schizopygopsis stolickai* Steindachner 1866**

Common name: False osman

Taxonomy: Original description: *Schizopygopsis stolickai* Steindachner 1866: 786, pl. 16 [Hanle (eastern province Ladakh [Ladakh]) in a stream near Hanle monastery, elevation 15,200 feet, Kashmir, India; syntypes: NMW 9255-56 (1, 1), 51472-73 (9, 2)].

Middle Eastern synonyms: *Schizocypris stoliczkai* (Steindachner 1866); *Schizopygopsis sewerzowi* Herzenstein 1891; *Gymnocypris biswasi* Talwar 1977.

Revisions: Berg (1949: 729) as *Schizopygopsis stoliczkai*.

Illustrations: Steindachner (1866: pl. 16); Berg (1949: 730, figs. 489-490) as *Schizopygopsis stoliczkai*.

Distribution. General distribution: Middle East and South Asia.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 702-Helmand-Sistan.

Habitat: This species occurs in a variety of rivers and streams, including ones with fast, cold running water and stony beds, as well as high-altitude, cold-water lakes. Feeding habits are predatory and phytophagous, depending on the age and depth of the lake. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: FIT, CON, ABS, EUT, COM. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Kapur-e barfi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 16-Sistan. — Iran material: None.

***Schizothorax intermedius* McClelland & Griffith 1842**

Common name: Aral basin snowtrout

Taxonomy: Original description: *Schizothorax intermedius* McClelland & Griffith in McClelland, 1842: 579, pl. 12, fig. 1 [Cabul River at Jullalabad and Tarnuck River, Afghanistan; syntypes: (3) whereabouts unknown].

Middle Eastern synonyms: *Racoma intermedia* (McClelland 1842); *Schizothorax schumacheri* Fowler & Steinitz 1956.

Revisions: Berg (1949: 712).

Illustrations: Berg (1949: 713, fig. 465).

Distribution. General distribution: West and central Asia.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 702-Helmand-Sistan.

Habitat: This species inhabits a wide range of rivers and occasionally lakes, but it is usually found in flowing waters. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, FIT, ABS, COM, EUT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Khajoo. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 16-Sistan. — Iran material: ZM-CBSU.

***Schizothorax pelzami* Kessler 1870**

Common name: Transcaspian marinka

Taxonomy: Original description: *Schizothorax pelzami* Kessler 1870: 320, pl. 3, figs. 1-3 [Shahrud River, northeastern Iran; syntypes: (4) BMNH 1897.7.5.24 (ex ZIN) (1), ZIN 8036 (ex ZMMU) (1)].

Middle Eastern synonyms: *Schizothorax pelzami iranicus* Karaman 1969; *Schizothorax raulinsii* Günther 1889.

Revisions: Berg (1949: 717).

Illustrations: Berg (1949: 717, fig. 476).

Distribution. General distribution: Hari and Kavir drainages.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 448-Kavir and Lut Deserts, 631-Upper Amu Darya.

Habitat: This species inhabits a wide range of rivers and occasionally lakes, but it is usually found in flowing waters. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: HAB, EUT, ABS. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Shir mahi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 19-Hari River, 7-Dasht-e Kavir. — Iran material: ZM-CBSU.

***Schizothorax zarudnyi* (Nikolskii 1897)**

Common name: Zarudny's snowtrout

Taxonomy: Original description: *Aspiostoma zarudnyi* Nikolskii 1897: 346 [Neizar marsh in Seistan (Sistan), Iran; holotype: ZIN 11115].

Middle Eastern synonyms: *Oreinus anjac* Fowler & Steinitz 1956; *Barbus microlepis* Keyserling 1861.

Revisions: Bianco and Bănărescu (1982: 92) as *Schizopyge zarudnyi*; Coad and Keyser-de Ville (2005: 36).

Illustrations: None.

Distribution. General distribution: Middle East: Sistan Basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 702-Helmand-Sistan.

Habitat: This species inhabits rivers and streams. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Hamoun mahi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 16-Sistan. — Iran material: ZM-CBSU.

***Tariqilabeo adiscus* (Annandale 1919)**

Common name: Discless minnow

Taxonomy: Original description: *Discognathus adiscus* Annandale 1919: 68, pls. 10, fig. 2, 11, fig. 1 [Seistan, eastern Iran; holotype: ZSI F9763/1]. Type catalog: Menon and Yazdani 1968: 107].

Middle Eastern synonyms: *Crossocheilus adiscus* (Annandale 1919); *Gonorhynchus adiscus* (Annandale 1919).

Revisions: Sayyadzadeh et al. (2015: 353) as *Gonorhynchus adiscus*.

Illustrations: Annandale (1919: pl. 10, fig. 2, pl. 11, fig. 1); Sayyadzadeh et al. (2015: figs. 2-5) as *Gonorhynchus adiscus*.

Distribution. General distribution: East, South Asia: eastern Iran and Helmand River.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 702-Helmand-Sistan.

Habitat: This species occurs in streams. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Sanglis-e Sistani. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 16-Sistan. — Iran material: ZM-CBSU.

Tariqilabeo diplochilus* (Heckel 1838)*Common name:** Doublemouth minnow**Taxonomy:** Original description: *Barbus diplochilus* Heckel 1838: 53, pl. 10, fig. 1 [Kashmir; syntypes: NMW 48820 (7)].**Middle Eastern synonyms:** *Tylognathus barbatulus* Heckel 1844; *Crossocheilus diplochilus* (Heckel 1838); *Gonorhynchus diplochilus* (Heckel 1838); *Crossocheilus diplocheilus* (Heckel 1838); *Crossochilus latius punjabensis* Mukerji 1934.**Revisions:** Bănărescu (1986: 148) as *Crossocheilus latius diplochilus*; Sayyadzadeh et al. (2015: 356) as *Gonorhynchus diplochilus*; Kottelat (2016: 445).**Illustrations:** Sayyadzadeh et al. (2015: figs. 6-7) as *Gonorhynchus adiscus*.**Distribution. General distribution:** Indus, Sistan and Helmand Rivers.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 701-Baluchistan.**Habitat:** This species occurs in freshwater streams, rivers, canals, lakes, and Qantas, which are gently sloping man-made underground channels. It prefers lakes and main riverbanks in the least rapid reaches, where it shelters in pebbles and stones to avoid strong currents. It primarily feeds on filamentous algae, diatoms, and organic detritus. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** AQU, ABS, FIT, CON, COM, CLI, EUT, TOU. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Sanglis-e Keshmir. — Listed in previous checklists from Iran by Esmaeili et al. (2010a) as *Crossocheilus latius*; Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 10-Hamun-e Mashkid, 3-Makran. — Iran material: ZM-CBSU.**Danionidae Bleeker 1863 (danionids)****Chedrinae Bleeker 1863 (troutbarbs)*****Barilius mesopotamicus* Berg 1932****Common name:** Mesopotamian minnow**Taxonomy:** Original description: *Barilius mesopotamicus* Berg 1932: 333, fig. 1 [Gawi River, Tigris River basin, 33°20'N, 46°20'E, Iraq; holotype: ZIN 23955].**Middle Eastern synonyms:** None.**Revisions:** Bianco and Bănărescu (1982: 76); Liao et al. (2011).**Illustrations:** Berg (1932: fig. 1).**Distribution. General distribution:** Asia Minor and Middle East: Euphrates and Tigris River systems.**Distribution in the Middle East:** Iran, Iraq, Syria, and Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits the upper water column close to the surface of small to large rivers with slow to moderate currents. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Iran:** [Native]. — Sibil mahi-e Beinolnahrein. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — Recorded from Iraq in original description by Berg (1932); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates. — Iraq materials: ZIN.

Status in Syria: [Native]. — None. — First record from Syria by Beckman (1962: 116); confirmed by Coad and Krupp (1983:49); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, SMF.

Status in Türkiye: [Native]. — None. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Cabdio occidentalis* Jouladeh-Roudbar, Larlamniana, Vatandoust, Ghanavi & Freyhof 2023**

Common name: Waspi

Taxonomy: Original description: *Cabdio occidentalis* Jouladeh-Roudbar, Larlamniana, Vatandoust, Ghanavi & Freyhof 2023: 437, figs. 3-5 [Sistan and Baluchestan prov.: Sarbaz at Pirdan, 26.52831-61.20721, Iran; holotype: BIAUBM 2-H].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2023: figs. 3-5).

Distribution. General distribution: Middle East: Makran Region, and Mashkid River basin, Iran and possibly upper Indus River basin, Pakistan.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan.

Habitat: This species inhabits streams, rivers, and ponds in plains and mountainous regions. This is an oviparous species; they scatter their eggs after laying them and are externally fertilized. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Zanzbor mahi. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2023); listed in previous checklists from Iran by Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 3-Makran, 10-Hamun-e Mashkid. — Iran material: AJRPC, BIAUBM, FSJF, MNCN, MZLU.

Xenocyprididae Günther 1868 (East Asian minnows or sharpbellies)

***Ctenopharyngodon idella* (Valenciennes 1844)**

Common name: Grass carp

Taxonomy: Original description: *Leuciscus idella* Valenciennes in Cuvier & Valenciennes 1844: 362 (China; no types known).

Middle Eastern synonyms: None.

Revisions: Berg (1949: 597).

Illustrations: Berg (1949: 598, fig. 353).

Distribution. General distribution: East Asia: China and Russia; widely introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, Syria, Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 631-Upper Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species conducts its spawning and overwintering in the middle and lower stretches of large floodplain rivers (below 1,000 m altitude) within lakes, reservoirs, and backwaters during the feeding season, preferring warm, clear water with a high oxygen concentration. It is tolerant of a wide range of environmental variables. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Bio-control: to prevent eutrophication, aquatic plants, and pest control.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Amour, Kapor Alafkhar. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: Widespread in many parts of Iran. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — None. — Introduced by the Government of Iraq in 1968 to culture it in ponds (Coad 2010); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Syria: [Exotic]. — Carp acheb. — Introduced by the Government of Syria (Jehan and Egg, 1977); subsequently reported by Hussain (1981, 1988); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian materials: None.

Status in Türkiye: [Exotic]. — Ot sazanı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: 5-Gediz, 7-Büyük Menderes, 18-Seyhan, 20-Ceyhan. — Turkish materials: None.

Remarks. This specie does not reproduce naturally in the wild. It locally present due to specimen's release to some reservoir for aquatic vegetation control.

***Hemiculter leucisculus* (Basilewsky 1855)**

Common name: Sharpbelly

Taxonomy: Original description: *Culter leucisculus* Basilewsky 1855: 238 [Rivers flowing into Bay of Tschili (Chihli), Beijing (Peking), China; syntypes: ZIN 5272 (2)].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 808).

Illustrations: Berg (1949: 809, fig. 553); Esmaili et al. (2011: 3, fig. 2); Zareian et al. (2015: 15, fig. 5); Esmaili and Abbasi (2021: fig. 346: 18.52).

Distribution. General distribution: East Asia; introduced elsewhere.

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 447-Namak, 450-Turan Plain, 452-Caspian Marine.

Habitat: This species usually found in large and medium-sized rivers in shallow water over sandy bottoms, but sometimes occurs in pools along the bed of mountain streams, also abundant in ponds, lakes, and the backwaters of rivers. It is highly tolerant to water pollution. — Freshwater, brackish.

Economic importance: Locally commercially important.

Reasons of introduction: Fisheries: enhancement of wild stocks and sports fishing.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Tizeh koli. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh, 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — None. — First record from Iraq by Coad and Hussain (2007); confirmed by Abdullah and Abdullah (2018); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

***Hypophthalmichthys molitrix* (Valenciennes 1844)**

Common name: Silver carp

Taxonomy: Original description: *Leuciscus molitrix* Valenciennes in Cuvier & Valenciennes 1844: 360 [China; no types known].

Revisions: Berg (1949: 846).

Illustrations: Berg (1949: 847, fig. 579).

Distribution. General distribution: Asia: East Asia: Yangtze River basin, China, and Russia; widely introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, Lebanon, and Syria.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 631-Upper Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species migrates upstream for spawning, eggs, and larva float downstream to floodplain zones. In its natural range. An active species well known for its habit of leaping clear of the water when disturbed. Swims just beneath the water's surface. Very sensitive to low temperatures (below 5°C) and oxygen deficits. It feeds on phytoplankton and zooplankton. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Fisheries: enhancement of wild stocks and sports fishing.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Phytophag, Kapore noghreyi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: Widespread in many parts of Iran. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — None. — Introduced by the government of Iraq in 1968 (Jawad, 2003) and recorded from Shatt al-Arab River by Al-Hassan (1994); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Lebanon: [Exotic]. — Carp feddi. — First record from Lebanon by Nellen and Ruckes (1975). — Jordan materials: None.

Status in Syria: [Exotic]. — Carp feddi. — First record from Syria by Nellen and Ruckes (1975); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian materials: MSL.

***Hypophthalmichthys nobilis* (Richardson 1845)**

Common name: Asian carp, big head carp

Taxonomy: Original description: *Leuciscus nobilis* Richardson 1845: 140, pl. 63, fig. 3 [Canton, China; holotype: BMNH 1968.3.11.4].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Richardson (1845: pl. 63, fig. 3) as *Leuciscus nobilis*.

Distribution. General distribution: East Asia: Yangtze River basin (China); widely introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, Lebanon, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 434-Kura-South Caspian Drainages, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 631-Upper Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species occurs in both fast-running and standing streams in mainly shallow but also deep areas. It is an omnivore and is thought to have a moderate tolerance for habitat degradation. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Fisheries: enhancement of wild stocks and sports fishing.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Kapore sar gonde. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: Widespread in many parts of Iran. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — None. — Introduced by the government of Iraq in 1968 (Jawad, 2003); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Lebanon: [Exotic]. — Karp kabir alraas. — First record from Lebanon by Coad (1996b); confirmed by Beintema (2006). — Lebanon materials: None.

Status in Türkiye: [Exotic]. — Asya sazanı, kocabaş sazan. — This species has been producing in hatcheries for stocking inland waters, recently appear in Mazitza River (Çiçek et al. 2022a); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2020; 2022a, 2023a). — Distribution in River Basin: 1-Meriç-Ergene. — Turkish materials: None.

***Mylopharyngodon piceus* (Richardson 1846)**

Common name: Black carp

Taxonomy: Original description: *Leuciscus piceus* Richardson 1846: 298 [Canton, China; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Eagderi et al. (2017: 51, fig. 2).

Distribution. General distribution: East Asia: China, Russia; introduced widely elsewhere.

Distribution in the Middle East: Iran and Israel.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: In its natural distribution range, it inhabits large lowland river and lakes, preferably with clear water and high oxygen concentration. The main habitats are the slow-flow ducts near the accumulations of molluscs. On mollusc "fields" it stays all summer and only in winter leaves to the river mainstream. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture; Fisheries: enhancement of wild stocks and sports fishing.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Kapor-e siyah. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Mousavi-Sabet et al. (2023); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Israel: [Exotic]. — Karpyon shahor. — First record from Israel by Levanter (1984); listed by Çiçek et al. (2023c). — Distribution in River Basin: 3-Kinneret Basin. — Israel material: HUI.

Tincidae Jordan 1878 (tenches)

***Tinca tinca* (Linnaeus 1758)**

Common name: Tench

Taxonomy: Original description: *Cyprinus tinca* Linnaeus 1758: 321 [European lakes; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kottelat and Freyhof (2007: 296, fig.); Jouladeh-Roudbar et al. (2020: 101, fig. 179).

Distribution. General distribution: Most of Europe and Caspian Sea basin; introduced elsewhere.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 434-Kura-South Caspian Drainages.

Habitat: This species inhabits typically shallow, densely vegetated lakes and backwaters. Often, overwinters are buried in mud. Spawns among dense vegetation in still water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Lay mahi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Türkiye: [Native]. — Kadife, Kadife balığı, Kadife sazan. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 16-Konya. — Turkish material: None.

Acheilognathidae Bleeker 1863 (bitterlings)

***Rhodeus amarus* (Bloch 1782)**

Common name: European bitterling

Taxonomy: Original description: *Cyprinus amarus* Bloch 1782: 52, pl. 8 (fig. 3) [Müggelsee (lake) near Köpenick, Berlin, Germany; syntypes: ZMB 3393 (3)].

Middle Eastern synonyms: *Rhodeus genitalis* Walecki 1863; *Rhodeus lucinae* Walecki 1863.

Revisions: None.

Illustrations: Kottelat and Freyhof (2007: 83, figs.).

Distribution. General distribution: Northern and eastern Europe, Türkiye.

Distribution in the Middle East: Freshwater, brackish.

Distribution in Ecoregions: 423-Trache, 429-Western Anatolia, 430-Northern Anatolia.

Habitat: This species is mostly abundant in still or slow-flowing water with dense aquatic vegetation and a sand-silt bottom, such as lowland ponds, canals, slow-flowing rivers, backwaters, and oxbows, where mussels are present. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Acıbalık. — Listed in previous checklists from Türkiye by Kuru (2004) as *Rhodeus sericeus amarus*; Geldiay and Balık (2007) as *Rhodeus sericeus amarus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 13-Batı Karadeniz. — Turkish material: None.

***Rhodeus caspius* Esmaili, Sayyadzadeh, Japoshvili, Eagderi, Abbasi & Mousavi-Sabet 2020**

Common name: Caspian bitterling

Taxonomy: Original description: *Rhodeus caspius* Esmaili, Sayyadzadeh, Japoshvili, Eagderi, Abbasi & Mousavi-Sabet 2020: 322, figs. 2-11 [Anzali Lagoon drainage of the Shakhraz (= Shakhazar or Siahdarvishan) River, Caspian Sea basin, Tolamshahr, Guilan province, Iran, 37°16'3.98"N, 49°21'53.82"E; holotype: ZM-CBSU H1005].

Middle Eastern synonyms: None.

Revisions: Akai and Arai (1998: 105).

Illustrations: Esmaili et al. (2020b: 322, fig. 2).

Distribution. General distribution: Southern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 450-Turan Plain.

Habitat: This species is mostly abundant in still or slow-flowing water with dense aquatic vegetation and a sand-silt bottom, such as lowland ponds, canals, slow-flowing rivers, backwaters, and oxbows, where mussels are present. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Makhraj loleyi-e Parsi. — Recorded from Iran in the original description by Esmaili et al. (2020b); listed in previous checklists from Iran by Eagderi et al. (2022); Sayyadzadeh (2023). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh, 4-Tigris. — Iran material: ZM-CBSU.

Remarks. Translocated to the Tigris River drainage and Urmia Lake basin.

Gobionidae Bleeker 1863 (freshwater gudgeons)

***Gobio artvinicus* Turan, Japoshvili, Aksu & Bektaş 2016**

Common name: Gudgeon

Taxonomy: Original description: *Gobio artvinicus* Turan, Japoshvili, Aksu & Bektaş 2016: 6, figs. 3b, 5 [Artvin Prov., Aralık Stream, a drainage of Çoruh River, Black Sea basin, Türkiye; holotype: FFR 2507].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2016a: figs. 3b, 5).

Distribution. General distribution: Çoruh River basin (Black Sea tributary) and Aras River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia, 434-Kura-South Caspian Drainages.

Habitat: This species inhabits fast- to slow-flowing streams and rivers with sandy or gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Dere kayası. — Recorded from Türkiye in the original description by Turan et al. (2016a); listed in previous checklists from Türkiye by Çiçek et al. (2016, 2018a, 2020, 2023a). — Distribution in River Basin: 23-Çoruh, 24-Aras. — Turkish material: FFR.

***Gobio baliki* Turan, Kaya, Bayçelebi, Aksu & Bektaş 2017**

Common name: Gudgeon

Taxonomy: Original description: *Gobio baliki* Turan, Kaya, Bayçelebi, Aksu & Bektaş 2017: 285, figs. 1-2 [Stream Asar at Kaynaşlı, Düzce province, Türkiye, 40°46'52"N, 31°16'37"E; holotype: FFR 05966].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2017b; 285: figs. 1-2).

Distribution. General distribution: Asia Minor: Büyük Melen drainage, southern Black Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits fast- to slow-flowing streams and rivers with sandy or gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Turan et al. (2017b); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 13-Batı Karadeniz. — Turkish material: FFR.

***Gobio bulgaricus* Drensky 1926**

Common name: Gudgeon

Taxonomy: Original description: *Gobio gobio bulgarica* Drensky 1926: 131, fig. 2 [Maritsa, Bulgaria; syntypes: NMNHS].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Drensky (1926: fig. 2) as *Gobio gobio bulgarica*.

Distribution. General distribution: Eurasia: Aegean basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species inhabits fast- to slow-flowing streams and rivers with sandy or gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Dere kayası. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, ?4-Kuzey Ege. — Turkish material: None.

***Gobio fahrettini* Turan, Kaya, Bayçelebi, Aksu & Bektaş 2018**

Common name: Gudgeon

Taxonomy: Original description: *Gobio fahrettini* Turan, Kaya, Bayçelebi, Aksu & Bektaş 2018: 366, figs. 1-3 [Stream Cebisli at Ilgin County, Konya Province, Türkiye, 38°16'10"N, 31°42'13"E; holotype: FFR 05971].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2018b: figs. 1-3).

Distribution. General distribution: Asia Minor: Lake Ilgin basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits stretches of streams and rivers with moderate flow, usually sand bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Turan et al. (2018b); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 12-Sakarya. — Turkish material: FFR.

Gobio gymnostethus* Ladiges 1960*Common name:** Cappadocian gudgeon**Taxonomy:** Original description: *Gobio gobio gymnostethus* Ladiges 1960: 137, fig. 9 [Kizilcak creek, Nigde, Türkiye; holotype: ZMH H1131].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Ladiges (1960: fig. 9) as *Gobio gobio gymnostethus*.**Distribution. General distribution:** Asia Minor: eastern Tuz Gölü basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species occurs in streams with slow to moderately fast flowing waters on sand and gravel bottoms. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: CR (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004) as *Gobio gobio gymnostethus*; Geldiay and Balık (2007) as *Gobio gobio gymnostethus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: ZMH.***Gobio hettitorum* Ladiges 1960****Common name:** Anatolian gudgeon**Taxonomy:** Original description: *Gobio hettitorum* Ladiges 1960: 137, fig. 10 [Gök dere Karaman Türkiye; holotype: ZMH H1129].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Ladiges (1960: fig. 10).**Distribution. General distribution:** Asia Minor: southern Lake Tuz basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species inhabits a small stream with a gravel and sand bottom. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: CR (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: ZMH.***Gobio insuyanus* Ladiges 1960****Common name:** Cihanbeyli gudgeon**Taxonomy:** Original description: *Gobio gobio insuyanus* Ladiges 1960: 136, fig. 8 [Insuyu creek, Cihanbeyli, Türkiye; holotype: ZMH H1133 (missing)].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Ladiges (1960: fig. 8) as *Gobio gobio insuyanus*.**Distribution. General distribution:** Asia Minor: western Lake Tuz basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.

Habitat: This species inhabits streams with slow to moderately fast-flowing waters on sand and gravel bottoms, often in very dense aquatic vegetation. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004) as *Gobio gobio insuyanus*; Geldiay and Balık (2007) as *Gobio gobio insuyanus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: ZMH.

***Gobio intermedius* Battalgiç 1944**

Common name: Eber gudgeon

Taxonomy: Original description: *Gobio gobio intermedius* Battalgiç 1944: 130, fig. 3 [Eber Lake, Vilâyet Afyon Karahisar, western central Türkiye; lectotype: ZMH H1135].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Battalgiç (1944: fig. 3) as *Gobio gobio intermedius*.

Distribution. General distribution: Eber Gölü and Akşehir Gölü basins, Afyonkarahisar and Konya provinces.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits fast- to slow-flowing streams and rivers with sandy or gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Battalgiç (1944); listed in previous checklists from Türkiye by Kuru (2004) as *Gobio gobio intermedius*; Geldiay and Balık (2007) as *Gobio gobio intermedius*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 11-Akarçay. — Turkish material: ZMH.

***Gobio kizilirmakensis* Turan, Japoshvili, Aksu & Bektaş 2016**

Common name: Gudgeon

Taxonomy: Original description: *Gobio kizilirmakensis* Turan, Japoshvili, Aksu & Bektaş 2016: 3, figs. 1-2, 3a [Çankırı Prov., Ulusu Stream, Kızılırmak River drainage, Türkiye, 40°48'N, 32°53'E; holotype: FFR 05930].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2016a: figs. 1-2, 3a).

Distribution. General distribution: Asia Minor: Filyos River basin, southern Black Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits fast- to slow-flowing streams and rivers with sandy or gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Turan et al. (2016a); listed in previous checklists from Türkiye by Çiçek et al. (2016, 2018a, 2020, 2023). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: FFR.

***Gobio kovatschevi* Chichkoff 1937**

Common name: Varna gudgeon

Taxonomy: Original description: *Gobio gobio kovatschevi* Chichkoff 1937: 257 [Provadiiska River, entering the Black Sea, eastern Bulgaria; syntypes: whereabouts unknown].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kottelat and Freyhof (2007: 94, fig).

Distribution. General distribution: Southeastern Europe: Black Sea watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species is restricted to the upper and middle sections of a small, slowly flowing stream. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: EUT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Dere kayası. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara. — Turkish material: None.

***Gobio maeandricus* Naseka, Erk'akan & Küçük 2006**

Common name: Işıklı gudgeon

Taxonomy: Original description: *Gobio maeandricus* Naseka, Erk'akan & Küçük 2006: 188, fig. 8 [Great Menderes [Büyük Menderes] River at Isikli [Işıklı], Denizli Province, Türkiye; holotype: ZMH 1132].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Naseka et al. (2006: fig. 8).

Distribution. General distribution: Büyük Menderes River basin (Aegean Sea tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits fast- to slow-flowing streams and rivers with sandy or gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Naseka et al. (2006); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes. — Turkish material: ZMH.

Gobio microlepidotus* Battalgil 1942*Common name:** Beyşehir gudgeon**Taxonomy:** Original description: *Gobio gobio microlepidotus* Battalgil 1942: 294, fig. 5 [Beyşehir Lake, southern Anatolia, Türkiye; lectotype: ZMH H1127 (74.9 mm)].**Middle Eastern synonyms:** *Gobio battalgilae* Naseka, Erk'akan & Küçük 2006.**Revisions:** None.**Illustrations:** Battalgil (1942: fig. 5) as *Gobio gobio microlepidotus*.**Distribution. General distribution:** Asia Minor: Beyşehir Gölü and Beyşehir Gölü tributaries (Isparta and Konya provinces); Göksu River.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia, 432-Southern Anatolia.**Habitat:** This species inhabits fast- to slow-flowing streams, rivers, and lakes with sandy or gravel substrates. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS, CLI, CON, COM, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Yağlıca, Dere kayası. — Recorded from Türkiye in the original description by Battalgil (1942); listed in previous checklists from Türkiye by Kuru (2004) as *Gobio gobio microlepidotus*; Geldiay and Balık (2007) as *Gobio gobio microlepidotus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya, 17-Doğu Akdeniz. — Turkish material: ZMH.***Gobio nigrescens* (Keyserling 1861)****Common name:** Dusky gudgeon**Taxonomy:** Original description: *Bungia nigrescens* Keyserling 1861: 19 [22], pl. 8 [Harirud River at Herat, Afghanistan; no types preserved].**Middle Eastern synonyms:** None.**Revisions:** Mousavi-Sabet et al. (2016).**Illustrations:** Keyserling (1861: pl. 8) as *Bungia nigrescens*.**Distribution. General distribution:** Hari River basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 631-Upper Amu Darya.**Habitat:** This species inhabits a wide range of streams, rivers, and lakes, including canals and reservoirs. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Kapor kafzi-e Harirud. — Redescribed by Mousavi-Sabet et al. (2016c); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 19-Hari River. — Iran material: None.***Gobio sakaryaensis* Turan, Ekmekçi, Luskova & Mendel 2012****Common name:** Sakarya gudgeon**Taxonomy:** Original description: *Gobio sakaryaensis* Turan, Ekmekçi, Luskova & Mendel 2012: 57, figs. 1-2 [Tozman Stream, 40°04'N, 30°30'E, Bilecik Province, Türkiye; holotype: FFR 2504].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al (2012a: figs. 1-2).

Distribution. General distribution: Asia Minor: Sakarya River basin and Tozman Stream (Black Sea tributaries) and Lake Sapanca region (Marmara Sea tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia.

Habitat: This species inhabits fast- to slow-flowing streams and rivers with sandy or gravel substrates. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area, but none seems to be so strong to impact the species enough. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dere kayası. — Recorded from Türkiye in the original description by Turan et al. (2012a); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 12-Sakarya. — Turkish material: FFR.

Pseudorasbora parva (Temminck & Schlegel 1846)

Common name: Topmouth gudgeon

Taxonomy: Original description: *Leuciscus parvus* Temminck & Schlegel 1846: 215, pl. 102, figs. 3, 3a-b [Nagasaki, Kyushu, Japan; lectotype: RMNH 2634; lectotype selected by Boeseman (1947: 164)].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 636).

Illustrations: Berg (1949: 636, fig. 388).

Distribution. General distribution: East Asia: Japan and China; widely introduced in Europe and Asia.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 631-Upper Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species is a lacustrine species sometimes found in slow flowing streams and channels. — Freshwater.

Economic importance: No commercial importance.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Amorche. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Mousavi-Sabet et al. (2023); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 15-Namak Lake, 19-Hari River, 16-Sistan, 13-Lake Maharlu, 14-Lake Orumiyeh, 1-Persis, 4-Tigris, 10-Hamun-e Mashkid, 9-Esfahan. — Iran material: ZM-CBSU.

Status in Türkiye: [Exotic]. — Çakıl balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: Introduced all basins. — Turkish materials: None.

Romanogobio macropterus (Kamensky 1901)

Common name: South Caucasian gudgeon

Taxonomy: Original description: *Gobio macropterus* Kamensky 1901: 10 [Caucasus; syntypes: (14) ZMT and Kharkov Univ].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Caspian Sea basins.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits fast-flowing stretches of rivers and streams with gravel and rocky substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Iran: [Native]. — Kapor kafzi-e Caspian. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Türkiye: [Native]. — Derekayası. — Listed in previous checklists from Türkiye by Naseka and Freyhof, 2004; Kuru (2004) as *Gobio persus*; Geldiay and Balık (2007) as *Gobio persus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Romanogobio persus* (Günther 1899)**

Common name: Persian gudgeon

Taxonomy: Original description: *Gobio persa* Günther 1899: 386, pl. 23 (fig. B) [Ocksa in the Gader Chai, northwestern Iran; syntypes: BMNH 1899.9.30.90-96 (7)].

Middle Eastern synonyms: *Gobio persus* Günther 1899.

Revisions: None.

Illustrations: Günther (1899: pl. 23, fig. B) as *Gobio persa*; Jouladeh-Roudbar et al. (2020: 106, fig. 187).

Distribution. General distribution: Eastern Europe and Asia; Lake Urmia basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 445-Orumiyeh.

Habitat: This species inhabits fast-flowing stretches of rivers and streams with gravel and rocky substrates. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iran: [Endemic]. — Kapor kafzi-e Parsi. — Recorded from Iran in original description by Günther (1899); listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 14-Lake Orumiyeh. — Iran material: None.

Leuciscidae Bonaparte 1835 (minnows)

Leuciscinae Bonaparte 1835 (leuciscines)

***Abramis brama* (Linnaeus 1758)**

Common name: Freshwater bream

Taxonomy: Original description: *Cyprinus brama* Linnaeus 1758: 326 [European lakes; syntypes: BMNH 1853.11.12.147 (1, skin)].

Middle Eastern synonyms: *Abramis melaenus* Agassiz 1835; *Abramis vetula* Heckel 1836; *Abramis media* Koch 1840; *Abramis argyreus* Valenciennes 1844; *Abramis microlepidotus* Valenciennes 1844; *Abramis vulgaris* Mauduyt 1849; *Abramis gehini* Blanchard 1866; *Abramis*

brama var. *sinegorensis* Lukasch 1933; *Abramis brama bergi* Grib & Vernidub 1935; *Abramis brama orientalis* Berg 1949; *Abramis brama danubii* Pavlov 1956.

Revisions: Berg (1949: 768).

Illustrations: Berg (1949: 770, fig. 531); Kottelat and Freyhof (2007: 155, figs.).

Distribution. General distribution: Eurasia: central and eastern Europe and Caspian Sea basin. Introduced elsewhere.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 445-Orumiyeh, 450-Turan Plain.

Habitat: This species occurs in a wide variety of lakes and large to medium-sized rivers. Most abundant are backwaters, the lower reaches of slow-flowing rivers, brackish estuaries, and warm, shallow lakes. Semi-anadromous individuals enter freshened parts of the sea to forage. Usually spawns in densely vegetated backwaters, floodplains, or lake shores. Nearly all surfaces can be used for spawning. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Sim. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh. — Iran material: None.

Status in Türkiye: [Native]. — Çapak balığı-Tahta balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak. — Turkish materials: None.

Acanthobrama centisquama Heckel 1843

Common name: Orontes bream

Taxonomy: Original description: *Acanthobrama centisquama* Heckel 1843: 1074 (84) [Damascus, Syria (in error, was Asi River and Amik Lake); holotype: NMW 55339].

Middle Eastern synonyms: *Trachibrama centisquama* (Heckel 1843).

Revisions: Goren et al. (1973: 296); Coad (1984: 275).

Illustrations: Heckel (1843b: pl. 9, fig. 1).

Distribution. General distribution: Asia Minor and Middle East: Orontes River basin.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species is a lacustrine species restricted to shallow and marshy lakes. — Freshwater, brackish.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, HAB, EUT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Syria: [Native]. — Besbasi. — Recorded from Syria in original description by Heckel (1843a: 1074); subsequently reported by Gruvel (1931); Beckman (1962: 82); Goren et al. (1973); Coad (1984: 275); Taha (2005); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: MNHN, NMW, MSL.

Status in Türkiye: [Native]. — Tahta balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.

Acanthobrama hadiyahensis* Coad Alkahem & Behnke 1983*Common name:** Arabian bream**Taxonomy:** Original description: *Acanthobrama hadiyahensis* Coad Alkahem & Behnke 1983: 1, fig. 1 [Wadi Hadiyah, near Hadiyah, Saudi Arabia, about 25°33'N, 38°44'E; holotype: NMC 82-0110A].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Coad et al. (1983: fig. 1).**Distribution. General distribution:** Khaibar and northern Hijaz.**Distribution in the Middle East:** Saudi Arabia.**Distribution in Ecoregions:** 439-Southwestern Arabian Coast.**Habitat:** This species is found in wadis and springs. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: CR (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Saudi Arabia:** [Endemic]. — None. — Recorded from in original description by Alkahem and Behnke (1983); reported by Hamidan and Aloufi (2014); Hamidan and Shobrak (2019); Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: NMC.***Acanthobrama lissneri* Tortonese 1952****Common name:** Jordan bream**Taxonomy:** Original description: *Acanthobrama lissneri* Tortonese 1952: 271 [Lake Tiberias (Galilée), Israel; holotype: MIZT 3868].**Middle Eastern synonyms:** *Acanthobrama terraesanctae oligolepis* Karaman 1972.**Revisions:** Goren et al. (1973: 302); Freyhof and Özulug (2014: 8).**Illustrations:** Goren et al. (1973: 303, fig. 5).**Distribution. General distribution:** Middle East: Jordan River system.**Distribution in the Middle East:** Israel, Jordan, and Syria.**Distribution in Ecoregions:** 438-Jordan River.**Habitat:** This species is inhabiting in lakes and rivers. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NT (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Israel:** [Native]. — Lavnun lissner. — First record from Israel by Tortonese (1952); recorded by Steinitz (1953: 212) as *Acanthobrama terrae-sanctae* and *A. lissneri*; confirmed by Goren (1974: 70); Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUJ, MIZT.**Status in Jordan:** [Native]. — None. — First record from Jordan by Karaman (1972) as *Acanthobrama terraesanctae oligolepis*. — Jordan material: None.**Status in Syria:** [Native]. — Tarris. — First record from Syria by Goren et al. (1973: 303); confirmed by Freyhof and Özulug (2014: 8); listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syria material: BMNH, FSJF, MSL.

Acanthobrama marmid* Heckel 1843*Common name:** Mesopotamian bream**Taxonomy:** Original description: *Acanthobrama marmid* Heckel 1843: 1075 (85) [Kueik River at Aleppo, Syria; syntypes: NMW 55345-48 (2, 2, 2, 2), 79068 (2); RMNH 2537 (4) Aleppo, 2539 (2) Aleppo; SMF 543 (4) Aleppo].**Middle Eastern synonyms:** *Acanthobrama marmid marmid* Heckel 1843; *Acanthobrama arrhada* Heckel 1843; *Acanthobrama cupida* Heckel 1843; *Acanthobrama marmid morpha elata* Berg 1949.**Revisions:** Goren et al. (1973: 296).**Illustrations:** Heckel (1843b: pl. 9, fig. 2); Küçük et al. (2014: 101, figs. 5-6).**Distribution. General distribution:** Asia Minor and Middle East: Euphrates, Tigris, and Orontes River basins.**Distribution in the Middle East:** Iran, Iraq, Syria, and Türkiye.**Distribution in Ecoregions:** 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species is very ubiquitous, inhabiting all kinds of lowland water bodies with standing or slowly flowing waters, such as larger streams, rivers, springs, marshes, reservoirs, and lakes, as well as moderately polluted water bodies. Usually absent from fast-flowing and cold mountain streams. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are many threats throughout the large distribution area of this species, but none is serious enough to impact major parts of the populations. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.**Status in Iran:** [Native]. — Kalashpa, Shebeh Sardin, Mahi-e Sim Nama. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — Recorded from Iraq by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: None.**Status in Syria:** [Native]. — Besbasi. — Recorded from Syria in original description by Heckel (1843a: 1076); subsequently reported by Gruvel (1931); Goren et al. (1973); Saad et al. (2009). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 4-Orontes. — Syrian material: BMNH, MCZ, MNHN, NMW, RMNH, MSL.**Status in Türkiye:** [Native]. — Akçapak balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi, 21-Fırat-Dicle. — Turkish material: None.***Acanthobrama microlepis* (De Filippi 1863)****Common name:** Blackbrow bleak**Taxonomy:** Original description: *Abramis microlepis* DeFilippi, 1863: 393 [Kura River near Tiflis [T'bilisi], Georgia, Eurasia; holotype (unique): MZUT 673].**Middle Eastern synonyms:** *Acanthalburnus microlepis* (DeFilippi 1863); *Alburnus microlepis* (De Filippi 1863); *Alburnus brandtii* (non Dybowski 1872); *Alburnus punctulatus* Kessler 1877; *Acanthalburnus punctulatus* (Kessler 1877).**Revisions:** Küçük et al. (2014: 96).**Illustrations:** Küçük et al. (2014: 98, fig. 2); Jouladeh-Roudbar et al. (2020: 110, fig. 193).**Distribution. General distribution:** Eurasia: Kura-Aras River basin, Caspian Sea basin.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.

Habitat: This ubiquitous species inhabits all kinds of water bodies with standing or slowly flowing waters, such as larger streams, rivers, reservoirs, and lakes, as well as moderately polluted water bodies. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Morvaridmahi-e labnazok. — Listed in previous checklists from Iran by Esmaeili et al. (2010a) as *Acanthalburnus microlepis*; Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — İnci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Acanthalburnus microlepis*; Fricke et al. (2007) as *Acanthalburnus microlepis*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

Acanthobrama orontis Berg 1949

Common name: Orontes bream

Taxonomy: Original description: *Acanthobrama marmid orontis* Berg 1949: 839 [Lake Antioch [Anthioche], Türkiye; syntypes: ZIN 6720 (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Küçük et al. (2014: 102, fig. 8).

Distribution. General distribution: Asia Minor: Mediterranean Sea tributary.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits all kinds of water bodies with standing or slowly flowing waters, such as larger streams, rivers, lakes, and channels, as well as moderately polluted water bodies. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Akçapak. — Recorded from Türkiye in the original description by Berg (1949); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan. — Turkish material: ZIN.

Acanthobrama persidis (Coad 1981)

Common name: Persian bleak-Kor bleak

Taxonomy: Original description: *Pseudophoxinus persidis* Coad 1981: 2058, fig. 1 [Upper Shur River drainage, near Darab on Darab-Fasa road, 28°45.5'N, 54°24'E, Iran; holotype: NMC 79-0154A].

Middle Eastern synonyms: *Petroleuciscus persidis* (Coad 1981); *Leuciscus persidis* (Coad 1981); *Squalius persidis* (Coad 1981).

Revisions: Teimori et al. (2015).

Illustrations: Coad (1981: 2058, fig. 1).

Distribution. General distribution: Middle East: Kor, Persis, and Lake Maharlu drainages.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This ubiquitous species inhabits all kinds of water bodies with standing or slowly flowing waters, such as larger streams, rivers, reservoirs, and lakes, as well as moderately polluted water bodies. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Aroos mahi-e Parsi. — Recorded from Iran in the original description by Coad (1981); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 12-Kor River, 1-Persis, 13-Lake Maharlu. — Iran material: NMC, ZM-CBSU.

Acanthobrama telavivensis Goren Fishelson & Trewavas 1973

Common name: Yarkon bream

Taxonomy: Original description: *Acanthobrama telavivensis* Goren Fishelson & Trewavas 1973: 304, figs. 6B, 7 [Rosh Ha'Ayin, (Yarkon springs, near Tel Aviv), Israel: holotype: TAU 3001 (= SMNHTAU)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Goren et al. (1973: figs. 6B, 7).

Distribution. General distribution: Middle East: Mediterranean coastal plain.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 436-Coastal Levant.

Habitat: This is a coastal river species, now only existing in 10-12 rehabilitated natural habitats (including ponds), most of them artificial and semi natural. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Increasing. — Moderate priority for conservation action.

Status in Israel: [Endemic]. — Lavnun ha'yarkon. — Recorded from Israel in original description by Goren et al. (1973); subsequently reported by Goren (1974: 72); Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin. — Israel material: TAU, HUI.

Acanthobrama thisbeae Freyhof & Özuluğ 2014

Common name: Bream

Taxonomy: Original description: *Acanthobrama thisbeae* Freyhof & Özuluğ 2014: 2, figs. 1-3 [Adana province, Ceyhan River north of Sakarcalik, 37°11'36"N, 36°04'58", Türkiye; holotype: IUSHM 2010-992].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Özuluğ (2014: figs. 1-3).

Distribution. General distribution: Asia Minor: Ceyhan River basin (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits all kinds of water bodies with standing or slowly flowing waters, such as larger streams, rivers, lakes, and channels, as well as moderately polluted water bodies. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.
Status in Türkiye: [Endemic]. — Tahta balığı. — Recorded from Türkiye in the original description by Freyhof and Özuluğ (2014); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: IUSHM.

***Acanthobrama tricolor* (Lortet 1883)**

Common name: Damascus bream

Taxonomy: Original description: *Leuciscus tricolor* Lortet 1883: 166 [Lakes east of Damascus, Syria; no types known].

Middle Eastern synonyms: None.

Revisions: Freyhof and Özuluğ (2014).

Illustrations: None.

Distribution. General distribution: Lake Al-‘Utaybah drainage.

Distribution in the Middle East: Syria.

Distribution in Ecoregions: 440-Arabian Interior.

Habitat: This species inhabits freshwater lakes, marshes, and slowly flowing parts of streams. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: CR (IUCN, 2023). **Remarks.** This species disappeared (extinct) due to the desiccation of Lake Al-Otaiba, south of Damascus, where it was first described.

Threats: ABS, CON, CLI, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Syria: [Endemic]. — None. — Recorded from Syria in original description as *Leuciscus tricolor* by Lortet (1883: 166); subsequently reported by Beckman (1962: 138) as *Rutilus tricolor*; listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert. — Syrian material: BMNH, MNHN.

***Acanthobrama urmianus* (Günther 1899)**

Common name: Urmia bream

Taxonomy: Original description: *Abramis urmianus* Günther 1899: 389, pl. 23 (fig. A) [Ocksa River and Urmi River, Iran; syntypes: (7) BMNH 1899.9.30.116-117 (2), 1899.9.30.118 (1) Ocksa R., ?1899.9.30.119-126 (8)].

Middle Eastern synonyms: *Acanthalburnus urmianus* (Günther 1899).

Revisions: None.

Illustrations: Günther (1899: pl. 23, fig. A) as *Abramis urmianus*; Jouladeh-Roudbar et al. (2020: 113, fig. 197).

Distribution. General distribution: Middle East: Lake Urmia basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 445-Orumiyeh.

Habitat: This species inhabits all kinds of water bodies with standing or slowly flowing waters, such as larger streams, rivers, reservoirs, and lakes. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Aros mahi-e Oromiye. — Recorded from Iran in the original description by Günther (1899); listed in previous checklists from Iran by Esmaili et al. (2010a) as *Acanthalburnus urmianus*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 14-Lake Orumiyeh. — Iran material: BMNH.

Alburnoides coskuncelebii* Turan, Kaya, Aksu, Bayçelebi & Bektaş 2019*Common name:** Spirilin**Taxonomy:** Original description: *Alburnoides coskuncelebii* Turan, Kaya, Aksu, Bayçelebi & Bektaş 2019: 204 [4], figs. 2-3 [Stream Aksu at Gölköy, Düzce Province, Türkiye, 40°45'49"N, 30°57'43"E; holotype: FFR 07007].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2019b: figs. 2-3).**Distribution. General distribution:** Asia Minor: Büyük Melen River basin and coastal streams, southwestern Black Sea watershed.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia.**Habitat:** This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Turan et al. (2019b); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 13-Batı Karadeniz. — Turkish material: FFR.***Alburnoides damghani* Jouladeh-Roudbar, Eagderi, Esmaili, Coad & Bogutskaya 2016****Common name:** Damghan spirilin-Damghan riffle minnow**Taxonomy:** Original description: *Alburnoides damghani* Jouladeh-Roudbar, Eagderi, Esmaili, Coad & Bogutskaya 2016: 165, figs. 3-6 [Cheshmeh Ali, Damghan River tributary, near Damghan City, Dasht-e Kavir basin, Semnan Province, Iran, 36°16'45.6"N, 54°05'01.6"E, elevation 1569 meters; holotype: CMNFI 2015-0091].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Jouladeh-Roudbar et al. (2016: 165, fig. 3).**Distribution. General distribution:** Middle East: Kavir basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 448-Kavir and Lut Deserts.**Habitat:** This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. Spawns on gravel in swift current. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Khayateh-e Damghan. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2016); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 7-Dasht-e Kavir. — Iran material: CMNFI.***Alburnoides diclensis* Turan, Bektaş, Kaya & Bayçelebi 2016****Common name:** Tigris chub**Taxonomy:** Original description: *Alburnoides diclensis* Turan, Bektaş, Kaya & Bayçelebi 2016: 81, fig. 2 [Eziki stream, Tigris River drainage, Hakkari Province, Türkiye, 37°40'38"N, 43°51'84"E; holotype: FFR01118].**Middle Eastern synonyms:** None.

Revisions: None.

Illustrations: Turan et al. (2016b: fig. 2).

Distribution. General distribution: Asia Minor: upper Tigris River (Dicle Nehri) basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Turan et al. (2016b); listed in previous checklists from Türkiye by Çiçek et al. (2016, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

Alburnoides eichwaldii (De Filippi 1863)

Common name: Kura chub

Taxonomy: Original description: *Alburnus eichwaldii* DeFilippi, 1863: 392 [Kura River near Tiflis [T'bilisi], Georgia, Eurasia; syntypes: MZUT 677 (4), NMW 55516 (2)].

Middle Eastern synonyms: *Alburnoides bipunctatus eichwaldii* (DeFilippi 1863); *Alburnoides bipunctatus armeniensis* Dadikyan 1972.

Revisions: Bogutskaya and Coad (2009: 141); Jouladeh-Roudbar et al. (2020: 114, fig. 201).

Illustrations: None.

Distribution. General distribution: Eurasia: Kura-Aras River drainage, Caspian Sea basin.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. Spawns on gravel in swift current. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Khayateh-e Aras. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Noktalı inci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

Alburnoides emineae Turan, Kaya, Ekmekçi & Doğan 2014

Common name: Beyazsu chub

Taxonomy: Original description: *Alburnoides emineae* Turan, Kaya, Ekmekçi & Doğan 2014: 103, fig. 2 [Mardin Province, Beyazsu Stream, Euphrates River drainage, Türkiye, 37°10'30"N, 41°16'13"E; holotype: FFR 01026].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2014a: fig. 2).

Distribution. General distribution: Asia Minor: Euphrates River [Fırat Nehri] basin, Mardin Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Turan et al. (2014a); listed in previous checklist by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Alburnoides fasciatus* (Nordmann 1840)**

Common name: Transcaucasian spiralin

Taxonomy: Original description: *Aspius fasciatus* Nordmann 1840: 497, pl. 23 (fig. 2) [Rivières de la côte orientale du Pont-Euxin et habités par les Tcherkesses, Chapsoughes Abases, and Mingréliens [Rivers of west Transcaucasia]; syntypes: MNHN 0000-3897 (4, poor condition), NMW 10407-19 (13)].

Middle Eastern synonyms: *Alburnoides bipunctatus fasciatus* (Nordmann 1840).

Revisions: None.

Illustrations: Nordmann (1840: pl. 23, fig. 2) as *Aspius fasciatus*.

Distribution. General distribution: Eurasia: western Transcaucasia, rivers of the southern Black Sea basin from Aksu (Giresun, Türkiye) westward to Dagomys (Krasnodar, Russia).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Noktalı inci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

***Alburnoides freyhofi* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017**

Common name: Spiralin

Taxonomy: Original description: *Alburnoides freyhofi* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017: 569, figs. 2e, 4 [Stream Delice southeast of Yerköy, Yozgat Province, southern Black Sea basin, Türkiye, 39°37'19"N, 34°29'23"E; holotype: FFR 01065].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2017c: figs. 2e, 4).

Distribution. General distribution: Asia Minor: Kızılırmak River drainage, southern Black Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits streams and rivers, fast to slow-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Turan et al. (2017c); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: FFR.

***Alburnoides holciki* Coad & Bogutskaya 2012**

Common name: Spirlin

Taxonomy: Original description: *Alburnoides holciki* Coad & Bogutskaya 2012: 44, figs. 1-2 [Hari River at Herat, 34°20'N, 62°12'E, Afghanistan; holotype: SNMB 6788].

Middle Eastern synonyms: *Alburnoides parhami* Mousavi-Sabet, Vatandoust & Doadrio 2015.

Revisions: None.

Illustrations: Coad and Bogutskaya (2012: figs. 1-2).

Distribution. General distribution: Central Asia: Hari [= Tedzhen / Hariroud] River, Afghanistan, its western tributary in Iran, southern Turkmenistan, Uzbekistan, and western Tajikistan.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 450-Turan Plain, 631-Upper Amu Darya.

Habitat: This species lives in all kinds of streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Khayateh-e Holicik. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 19-Hari River, 6-Caspian Sea. — Iran material: None.

***Alburnoides idignensis* Bogutskaya & Coad 2009**

Common name: Tigris spirlin

Taxonomy: Original description: *Alburnoides idignensis* Bogutskaya & Coad 2009: 166, Fig. 13 [Bid Sorkh River between Sahneh and Kandgavar, Gav Masiab River drainage, ca. 34°23'N, 47°52'E, Kermanshahan, Iran, elevation 1370 m; holotype: CMNFI 2007-0118].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Bogutskaya and Coad (2009: 166, fig. 133).

Distribution. General distribution: Tigris River drainage basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. Spawns on gravel in swift current. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Mahi-e Khayateh. — Recorded from Iran in the original description by Bogutskaya and Coad (2009); listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: CMNFI.

Alburnoides kosswigi* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017*Common name:** Spirilin**Taxonomy:** Original description: *Alburnoides kosswigi* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017: 573, figs. 2f, 5 [Stream Porsuk about 3 km south of Hacıazizler, Kütahya Province, southern Black Sea basin, Türkiye, 39°20'59"N, 30°02'17"E; holotype: FFR 01064].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2017c: 573, figs. 2f, 5).**Distribution. General distribution:** Asia Minor: Sakarya River drainage, southern Black Sea basin and Ilgin Lake basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia.**Habitat:** This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Turan et al. (2017c); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 12-Sakarya. — Turkish material: FFR.***Alburnoides kurui* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017****Common name:** Spirilin**Taxonomy:** Original description: *Alburnoides kurui* Turan, Kaya, Bayçelebi, Bektaş & Ekmekçi 2017: 567, figs. 2a, 3 [Stream Tifi at Gökçebayır, Ordu Province, southern Black Sea basin, Türkiye, 40°47'57"N, 36°43'50"E; holotype: FFR 01041].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2017c: figs. 2a, 3).**Distribution. General distribution:** Asia Minor: Yeşilirmak River drainage, southern Black Sea basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia.**Habitat:** This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Turan et al. (2017c); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 14-Yeşilirmak. — Turkish material: FFR.***Alburnoides manyasensis* Turan, Ekmekçi, Kaya & Güçlü 2013****Common name:** Manyas spirilin**Taxonomy:** Original description: *Alburnoides manyasensis* Turan, Ekmekçi, Kaya & Güçlü 2013: 88, figs. 2-3 [Lake Manyas drainage, Koca Stream at outlet of Manyas Dam Lake, Balıkesir Province, Türkiye, 39°59'26"N, 27°47'58"E; holotype: FFR 01069].**Middle Eastern synonyms:** None.**Revisions:** None.

Illustrations: Turan et al. (2013a: figs. 2-3).

Distribution. General distribution: Asia Minor: Marmara Sea tributaries, Balıkesir Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species inhabits rivers and streams with fast running shallow water, often over gravel, pebbles, or rocks. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI; CON; EUT; HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Turan et al. (2013a); listed in previous checklists from Türkiye by Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk. — Turkish material: FFR.

***Alburnoides namaki* Bogutskaya & Coad 2009**

Common name: Namak spirilin-Namak riffle minnow

Taxonomy: Original description: *Alburnoides namaki* Bogutskaya & Coad 2009: 159, fig. 11 [Qanat at Taveh, 35°07'N, 49°02'E, Hamadan, Iran, elevation 1640 meters; holotype: CMNFI 1979-0461].

Middle Eastern synonyms: *Alburnoides coadi* Mousavi-Sabet, Vatandoust & Doadrio 2015.

Revisions: None.

Illustrations: Bogutskaya and Coad (2009: 159, fig. 11).

Distribution. General distribution: Qareh-Chay drainage, Namak Lake basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 447-Namak.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. Spawns on gravel in swift current. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Khayateh-e Namak. — Recorded from Iran in the original description by Bogutskaya and Coad (2009); listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2015); Jouladeh-Roudbar et al. (2020); Sayyadzadeh and Esmaili (2024) — Distribution in River Basin: 15-Namak Lake. — Iran material: CMNFI.

***Alburnoides nicolausi* Bogutskaya & Coad 2009**

Common name: Seimareh spirilin-Karkheh spirilin, Nicholas' riffle minnow

Taxonomy: Original description: *Alburnoides nicolausi* Bogutskaya & Coad 2009: 163, fig. 12 [Stream in Simareh River drainage, 5 kilometers south of Nurabad, 34°03'30"N, 47°57'30"E, Lorestan, Iran, elevation 2000 m; holotype: CMNFI 1979-0281].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Bogutskaya and Coad (2009: 163, fig. 12).

Distribution. General distribution: Middle East: Simareh River drainage, Tigris River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Khayateh-e Nicolaus. — Recorded from Iran in the original description by Bogutskaya and Coad (2009); listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2015, 2020); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: CMNFI.

Alburnoides petrubanarescui Bogutskaya & Coad 2009

Common name: Spirlin

Taxonomy: Original description: *Alburnoides petrubanarescui* Bogutskaya & Coad 2009: 154, fig. 10 [Qasemlou Chay, Orumiyeh [Urmia] Lake basin, ca. 37°21'N, 45°09'E, Azarbaijan-e Bakhtari, Iran; holotype: CMNFI 1970-0558].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Bogutskaya and Coad (2009: 154, fig. 10).

Distribution. General distribution: Middle East: Urmia Lake basin.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 445-Orumiyeh.

Habitat: This species inhabits streams and small rivers with clean waters. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Khayateh-e Orumiyeh. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 14-Lake Orumiyeh. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Noktalı inci balığı. — First record from Türkiye by Kaya (2020a); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 25-Van Lake. — Turkish material: None.

Alburnoides qanati Coad & Bogutskaya 2009

Common name: Kor spirlin-Qanat spirlin

Taxonomy: Original description: *Alburnoides qanati* Coad & Bogutskaya 2009: 68, fig. 1 [At source and along stream of a qanat at Naqsh-e Rostam, Pulvar River system, 29°59'30"N, 52°54'00"E, Fars, Iran, elevation 1660 m; holotype: CMNFI 1977-0509].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Bogutskaya and Coad (2009: 51, fig. 2).

Distribution. General distribution: Middle East: Kor River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. Spawns on gravel in swift current. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Khayateh-e qanati. — Recorded from Iran in the original description by Bogutskaya and Coad (2009); listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2015); Jouladeh-Roudbar et al.

(2020); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 12-Kor River, 16-Sirjan. — Iran material: CMNFI, ZM-CBSU.

***Alburnoides samiii* Mousavi-Sabet, Vatandoust & Doadrio 2015**

Common name: Sefidrud spiralin, Samii riffle minnow

Taxonomy: Original description: *Alburnoides samiii* Mousavi-Sabet, Vatandoust & Doadrio 2015: 321, figs. 17-19 [Tutkabon Stream, upper Sefidroud River drainage, Guilan Province, Iran, 36°50,756'N, 49°35.021'E; holotype: VMFC-ALS4-H].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet et al. (2015d: 147, fig. 9).

Distribution. General distribution: Middle East: south-eastern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species founds in clean streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Khayateh-e Samii. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2015d); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: VMFC.

***Alburnoides smyrnae* Pellegrin 1927**

Common name: Izmir spiralin

Taxonomy: Original description: *Alburnoides bipunctatus* var. *smyrnae* Pellegrin 1927: 37 [Mélès stream near Smyrna [Izmir], Türkiye; syntypes: BMNH 1927.5.7.6 (1) [ex MNHN]; MNHN 1927-0064 (16); MSNM 6 [ex MSNM 4412 and ex MNHN] (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Büyük Menderes basin, Aegean Sea tributary.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Pellegrin (1927); listed in previous checklists from Türkiye by Çiçek et al. (2016, 2018a, 2020, 2023). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: MSNM.

***Alburnoides tabarestanensis* Mousavi-Sabet, Anvarifar & Azizi 2015**

Common name: Tajan spiralin

Taxonomy: Original description: *Alburnoides tabarestanensis* Mousavi-Sabet, Anvarifar & Azizi 2015: 146, figs. 1-3 [Tajan River, southern Caspian Sea basin, Mazandaran Province, Iran, 36°11'N, 53°19'E; holotype: VMFC AL201MH].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet et al. (2015d: 146, fig. 1).

Distribution. General distribution: Middle East: Tajan River, south-eastern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: This species founds in clean streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Khayateh-e Tabarestani. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2015d); listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2015); Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: VMFC.

Alburnoides turani Kaya 2020

Common name: Spirlin

Taxonomy: Original description: *Alburnoides turani* Kaya 2020: 421, figs. 2-4 [Stream Bolu at Akçabey, Zonguldak province, Türkiye; holotype: FFR 07033].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kaya (2020b: figs. 2-4).

Distribution. General distribution: Asia Minor: Filyos River drainage, southwestern Black Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Kaya (2020b); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 13-Batı Karadeniz. — Turkish material: FFR.

Alburnoides tzanevi Chichkoff 1933

Common name: Western Black Sea spirilin

Taxonomy: Original description: *Alburnoides bipunctatus tzanevi* Chichkoff 1933: 376, fig. 1 [Riesova River, entering Black Sea at 42°N, Bulgaria; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Chichkoff (1933: fig. 1) as *Alburnoides bipunctatus tzanevi*.

Distribution. General distribution: Eurasia: Bulgaria, Thrace and Anatolia, Türkiye, southwestern Black Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.
Status in Türkiye: [Native]. — Noktalı inci balığı. — Listed in previous checklists from Türkiye by Çiçek et al. (2016, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

***Alburnoides velioglui* Turan, Kaya, Ekmekçi & Doğan 2014**

Common name: Velioglu's chub

Taxonomy: Original description: *Alburnoides velioglui* Turan, Kaya, Ekmekçi & Doğan 2014: 106, fig. 3 [Erzurum Province, Sirli Stream, Euphrates River drainage, 40°12'34"N, 41°4'30"E, Türkiye; holotype: FFR 01094].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2014a: 106, fig. 3).

Distribution. General distribution: Asia Minor: Euphrates River [Firat Nehri] basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams and rivers in the foothills with well-oxygenated, fast-flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Noktalı inci balığı. — Recorded from Türkiye in the original description by Turan et al. (2014a); listed in previous checklist by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: FFR.

***Alburnus adanensis* Battalgazi [Battalgil] 1944**

Common name: Adana bleak

Taxonomy: Original description: *Alburnus sellal adanensis* Battalgazi, 1944: 302 [Lower Seyhan River, near Adana, southern Türkiye; syntype: IUSHM 2017-1368. Author also seen as Battalgazi].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Seyhan River basin (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species is found in streams, rivers, and lakes with moderate to slow currents. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Battalgil (1944); listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan. — Turkish material: IUSHM.

Alburnus akili* Battalgil 1942*Common name:** Beyşehir bleak**Taxonomy:** Original description: *Alburnus akili* Battalgil 1942: 288, fig. 2 [Beyşehir Lake, Central Anatolia, Türkiye; holotype: ZMH H1107].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Battalgil (1942: fig. 2).**Distribution. General distribution:** Asia Minor: Beyşehir Gölü.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species was a lacustrine open water species. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: EX (IUCN, 2023).**Threats:** COM, FIT. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unspecified. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Gövce. — Recorded from Türkiye in the original description by Battalgil (1942); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: ZMH.***Alburnus alburnus* (Linnaeus 1758)****Common name:** Bleak**Taxonomy:** Original description: *Cyprinus alburnus* Linnaeus 1758: 325 [Europe; no types known].**Middle Eastern synonyms:** *Leuciscus alburnus* (Linnaeus 1758).**Revisions:** None.**Illustrations:** Kottelat and Freyhof (2007: 164, fig.).**Distribution. General distribution:** Eurasia, east to the Black Sea region.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace.**Habitat:** This species is found in the open waters of large lakes and medium- to large rivers. Forages close to the surface. In winter, large aggregations form in backwaters and other still waters. Spawns in shallow riffles or along stony shores of lakes, occasionally above submerged vegetation. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Türkiye:** [Native]. — İnci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.***Alburnus atropatenae* Berg 1925****Common name:** None**Taxonomy.** Original description: *Alburnus atropatenae* Berg 1925: 213 [Rivers of Lake Urmia, Iran; syntypes: (46) BMNH 1899.9.30.127 (1), 1899.9.30.128-130 (3); not at ZIN].**Middle Eastern synonyms:** *Chalcalburnus atropatenae* (Berg 1925); *Petroleuciscus atropatenae* (Berg 1925).**Revisions:** Mouludi-Saleh et al. (2022).**Illustrations:** Mouludi-Saleh et al. (2022: 292, fig. 1).**Distribution. General distribution:** Middle East: Lake Urmia basin (Azarbayjan province, Iran; Türkiye).

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 445-Orumiyeh.

Habitat: This species is a resident species that inhabits moderately fast flowing streams. Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Morvarid mahi-e Orumiyeh. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 14-Lake Orumiyeh. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — None. — First report from Türkiye by Kaya (2020b) as *Alburnus atropatenae*; listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 25-Van Lake. — Turkish material: None.

Alburnus attalus Özuluğ & Freyhof 2007

Common name: Bakir shemaya

Taxonomy: Original description: *Alburnus attalus* Özuluğ & Freyhof 2007: 235, figs. 1-3 [River Bakir at Karadere, 39°06.033'N, 27°24.027'E, Türkiye; holotype: ZMB 33733].

Middle Eastern synonyms: *Alburnus battalgilae* Özuluğ & Freyhof 2007.

Revisions: None.

Illustrations: Özuluğ and Freyhof (2007: figs. 1-3).

Distribution. General distribution: Asia Minor: Bakır, Gediz and Koca River systems (Aegean Sea tributary), Izmir and Manisa Provinces.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits moderately fast-flowing and warm streams and rivers with some gravel sections. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Özuluğ and Freyhof (2007); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege. — Turkish material: ZMB.

Alburnus baliki Bogutskaya, Küçük & Ünlü 2000

Common name: Antalya bleak

Taxonomy: Original description: *Alburnus baliki* Bogutskaya, Küçük & Ünlü 2000: 57, fig. 1 [Manavgat Reservoir, Manavgat River, Antalya, Türkiye; holotype: DUM 63].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Bogutskaya et al. (2000: fig. 1).

Distribution. General distribution: Asia Minor: Manavgat River (Mediterranean tributary), Antalya Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits slowly flowing sections of streams and rivers, often with submerged vegetation. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Bogutskaya et al. (2000); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: DUM.

***Alburnus caeruleus* Heckel 1843**

Common name: Black spotted bleak

Taxonomy: Original description: *Alburnus caeruleus* Heckel 1843: 1084 (94) [Aleppo, Syria; syntypes: NMW 16688 (4), 55511-13 (2, 2, 2), 57161 (3); ?RMNH 2656 (4); SMF 100 (4)].

Middle Eastern synonyms: *Alburnoides recepi* Turan, Kaya, Ekmekçi & Doğan 2014.

Revisions: None.

Illustrations: Heckel (1843b: pl. 11, fig. 3); Zareian et al. (2015: 16, fig. 8).

Distribution. General distribution: Asia Minor and Middle East: Tigris, Euphrates and Qweik River drainages.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species is found in streams, rivers, and lakes with moderate to slow currents. Also inhabits reservoirs. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area inhabited by this species, but none is so strong to considerably impact the global population of this fish. — Low sensitivity to human activities. — Keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Morvarid mahi-e khal dar. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Samnan. — First record from Iraq by Freyhof et al. (2021a); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Syria: [Native]. — Daffaf. — Recorded from Syria in original description by Heckel (1843a: 1085); subsequently reported by Gruvel (1931); Beckman (1962: 87); Ali (2003); Taha (2005); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, NMW, MSL.

Status in Türkiye: [Native]. — İnci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Alburnus carianorum* Freyhof, Kaya, Bayçelebi, Geiger & Turan 2019**

Common name: Antalya bleak

Taxonomy: Original description: *Alburnus carianorum* Freyhof, Kaya, Bayçelebi, Geiger & Turan 2019: 595, fig. 1 [Dalaman River north of Dalaman, Muğla Province, Türkiye, 36.815°N, 28.802°E; holotype: FFR 04677].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2019: fig. 1).

Distribution. General distribution: Asia Minor: lower Dalaman and Büyük Menderes River drainages, Aegean Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species is found in streams, rivers, and lakes with moderate to slow currents. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Freyhof et al. (2019); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes, 8-Batı Akdeniz. — Turkish material: FFR.

***Alburnus carinatus* Battalgi 1941**

Common name: Manyas shemaya

Taxonomy: Original description: *Alburnus (Chalcalburnus) chalcoides carinatus* Battalgi 1941: 179 [Lake Manyas, Türkiye; syntypes: whereabouts unknown].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Manyas Gölü and Uluabat Gölü (Marmara Sea tributaries), Balıkesir and Bursa provinces.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This is a lacustrine species that migrates to inflowing rivers and streams to spawn in fast-flowing water. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Battalgi (1941); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk. — Turkish material: None.

***Alburnus chalcoides* (Güldenstadt 1772)**

Common name: Caspian shemaya

Taxonomy: Original description: *Cyprinus chalcoides* Güldenstädt 1772: 540, pl. 16 [Rivers of southern Russia; No types known].

Middle Eastern synonyms: *Chalcalburnus chalcoides* (Güldenstadt 1772); *Cyprinus clupeoides* Pallas 1776; *Leuciscus albuloides* Valenciennes 1844; *Alburnus longissimus* Warpakhovskii 1892; *Alburnus latissimus* Kamensky 1901.

Revisions: None.

Illustrations: Heckel (1843b: pl. 11, fig. 3).

Distribution. General distribution: Eurasia: Caspian Sea basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: This species is found in lower parts of rivers, coastal lakes, estuaries, and adjacent areas of seas where salinity is lowered by large inflow of freshwater. In estuaries, lives close to surface and tolerates salinities up to 12 ‰. Earlier migrated for long distances upstream, up to upper reaches of streams in piedmont and montane zones. Spawns in

small rivers or streams with heavy current on gravel bottom. Landlocked populations in reservoirs spawn in reservoir tributaries. — Freshwater, brackish.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (Freyhof, 2014ct).

Threats: Currently overfishing and pollution in the Caspian Sea could be a threat to the species. — Low sensitivity to human activities. — Keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Shah Kuli. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Alburnus demiri Özuluğ & Freyhof 2008

Common name: Eastern Aegean bleak

Taxonomy: Original description: *Alburnus demiri* Özuluğ & Freyhof 2008: 308, figs. 1-2 [Stream Tahtalı at Saşal village, 38°11.948'N, 27°08.148'E, Izmir Province, Türkiye; holotype: ZMB 33768].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Özuluğ and Freyhof (2008: figs. 1-2).

Distribution. General distribution: Asia Minor: Tahtaçay (Aegean Sea tributary), Izmir Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits rivers and streams, including reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Özuluğ and Freyhof (2008); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: ZMB.

Alburnus derjugini Berg 1923

Common name: Georgian shemaya

Taxonomy: Original description: *Alburnus chalcoides* var. *derjugini* Berg 1923: 272, 507 [River Çoruh basin, south Caucasus, Georgia; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: streams of eastern Black Sea basin, from Ashe drainage (Russia) to River Harsit.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species inhabits a wide range of streams and rivers, including those with reservoirs. Most populations are resident or forage in the lower parts of rivers and streams and migrate upriver to spawn. Populations in reservoirs migrate to inflowing streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — İnci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Remarks. Parin et al. (2014) suggested that the species of *A. derjugini* is a synonym of *A. mento*. However, Bektaş et al. (2020) claimed that *A. derjugini* is distributed along the entire Black Sea coast of Türkiye. Therefore, these situations should be clarified with detailed comparative studies.

***Alburnus doriae* De Filippi 1865**

Common name: Doria bleak

Taxonomy: Original description: *Alburnus doriae* De Filippi 1865:360 [Probably south of Shiraz, Iran; lectotype: MZUT N.720].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 126, fig. 225).

Distribution. General distribution: Zayandeh River drainage, Lake Namak basin and Karun River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 42-Upper Tigris and Euphrates, 447-Namak, 449-Esfahan.

Habitat: This species inhabits a wide range of stream and river habitats, including lakes and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Aroos mahi. — Recorded from Iran in the original description by De Filippi (1865); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 15-Namak Lake, 9-Esfahan, 4-Tigris. — Iran material: MZUT.

***Alburnus escherichii* Steindachner 1897**

Common name: Sakarya bleak

Taxonomy: Original description: *Alburnus escherichii* Steindachner 1897: 692 [8], pl. 4 (fig. 3) [Tabakane-Su and Tschibuk-Tschai, Türkiye; syntypes: (several) NMW 55517-18 (3, 8), 55520-21 (3, 3)].

Middle Eastern synonyms: *Alburnus kosswigi* Battalgiç 1941; *Alburnus nasreddini* Battalgiç 1944.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Sakarya and Kızılırmak basins (Black Sea tributaries), Anatolia; Eskişehir Province (Türkiye); introduced in Manavgat River and Beyşehir Lake basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia.

Habitat: This species inhabits a wide range of stream and river habitats, including lakes and reservoirs. Lacustrine populations migrate to inflowing rivers or streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area, but none impact the species to a degree, that it really threatens it. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 16-Konya. — Turkish material: None.

***Alburnus filippii* Kessler 1877**

Common name: Kura bleak

Taxonomy: Original description: *Alburnus filippii* Kessler 1877: 153 [Upper Kura River near Tbilisi, Georgia, Eurasia; lectotype: ZIN 2926].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 127, fig. 227).

Distribution. General distribution: Eurasia: Kura-Aras River drainage, Caspian Sea Basin.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits a wide range of stream and river habitats, including lakes and reservoirs. Lacustrine populations migrate to inflowing rivers or streams to spawn. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Kuli-ye Kura. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Türkiye: [Native]. — İnci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Alburnus goekhani* Özuluğ, Geiger & Freyhof 2018**

Common name: Bleak

Taxonomy: Original description: *Alburnus goekhani* Özuluğ, Geiger & Freyhof 2018: 34, figs. 3-5 [Kızılırmak River at Ortatopaç northwest of Şarkışla, Sivas Province, Türkiye, 39.381N, 36.250E; holotype: IUSHM 2017-1375].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Kızılırmak and Yeşilirmak basins, southern Black Sea tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits a wide range of streams, rivers, and lakes, including reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Özuluğ et al. (2018); listed in previous checklists from Türkiye by Çiçek et

al. (2018a, 2020, 2023a). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: IUSHM.

***Alburnus hohenackeri* Kessler 1877**

Common name: Transcaucasian bleak

Taxonomy: Original description: *Alburnus hohenackeri* Kessler 1877: 156 [Karabakh, Azerbaijan; holotype (unique): ZIN 2339 (not 2839)].

Middle Eastern synonyms: *Alburnus charusini hohenackeri* (Kessler 1877); *Alburnus alburnus hohenackeri* (Kessler 1877); *Alburnus charusini* Herzenstein, 1889; *Alburnus lucidus* var. *macropterus* Kamensky 1901.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 128, fig. 229).

Distribution. General distribution: Eurasia: Kura-Aras River drainage, Caspian Sea Basin.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 447-Namak, 450-Turan Plain, 631-Upper Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.

Habitat: This species inhabits water bodies with slow to fast current and prefers places where the current is slowed down, commonly in shallows near the bottom. Abundant in the middle and lower reaches of large rivers and their tributaries, reservoirs, and swampy creeks; also, in brackish water at river mouths, in estuaries, and in coastal lakes. — Freshwater, brackish.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Morvarid mahi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea, 4-Tigris, 19-Hari River, 14-Lake Orumiyeh, 16-Sistan, 3-Makran. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — İnci balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Alburnus alburnus hohenackeri*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Alburnus istanbulensis* Battalgil 1941**

Common name: Marmara shemaya

Taxonomy: Original description: *Alburnus (Chalcalburnus) chalcoides istanbulensis* Battalgil 1941: 180 [Kâathane [Kagithane] stream, draining to Bosphorus River, near Istanbul, Türkiye; syntypes: whereabouts unknown].

Middle Eastern synonyms: *Alburnus (Chalcalburnus) chalcoides sapancae* Battalgil 1941.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Marmara Sea and Black Sea tributaries, coastal streams of eastern Thrace.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species inhabits riverine and lacustrine habitats. Migrates to the upper reaches of tributaries to spawn. Spawns in riffles with heavy current on gravel bottom. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Battalgil (1941); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara. — Turkish material: None.

***Alburnus kotschy* Steindachner 1863**

Common name: Arsuz bleak

Taxonomy: Original description: *Alburnus kotschy* Steindachner 1863: 193 [Arsuz (Arsus), Hatay Province, Türkiye, Mediterranean watershed; neotype: IUSHM 37900-253].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2018b).

Illustrations: Freyhof et al. (2018b).

Distribution. General distribution: Asia Minor: southern Türkiye, Mediterranean Sea tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species is a ubiquitous inhabitant of all kinds of streams, springs, and rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Steindachner (1863); listed in previous checklists from Türkiye by Fricke et al. (2007); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan, 20-Ceyhan. — Turkish material: IUSHM.

***Alburnus kurui* (Bogutskaya 1995)**

Common name: Yüksekova chub

Taxonomy: Original description: *Leuciscus kurui* Bogutskaya 1995: 150, fig. 1 [Yüksekova suyu in Upper Tigris River [Dicle Nehri] basin, east of Hakkâri, Hakkâri Province, southeastern Türkiye; holotype: ZMH 7361].

Middle Eastern synonyms: *Squalius kurui* (Bogutskaya 1995); *Petroleuciscus kurui* (Bogutskaya 1995).

Revisions: Bogutskaya (2002); Freyhof et al. (2018c).

Illustrations: Freyhof et al. (2018c).

Distribution. General distribution: Asia Minor: Yüksekova wetland, upper Tigris River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species has only been recorded from an endorheic basin, a close drainage basin with no outflowing tributaries. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: Threats to this species are unknown, but it is endemic to a little uninhabited high altitude endorheic basin where impacts from human activities are unlikely. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yüksekova inci balığı. — Recorded from Türkiye in the original description by Bogutskaya (1995); listed in previous checklists from Türkiye by

Kuru (2004) as *Leuciscus kurui*; Geldiay and Balık (2007) as *Leuciscus kurui*; Fricke et al. (2007) as *Petroleuciscus kurui*; Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: ZMH.

***Alburnus magnificus* Freyhof & Turan 2019**

Common name: Bleak

Taxonomy: Original description: *Alburnus magnificus* Freyhof & Turan 2019: 374, figs. 2-4 [Stream Afrin about 5 km east of Kocabeyli, Kilis province, Türkiye, 36.806°N 36.982°E; holotype: FFR 998].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Turan (2019: figs. 2-4).

Distribution. General distribution: Asia Minor and Middle East: Lower Orontes River drainage.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species inhabits all kinds of lowland water bodies with standing or slowly flowing waters, such as larger streams, rivers, springs, marshes, reservoirs, and lakes. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Syria: [Native]. — Daffaf. — This species recorded from Syria by Freyhof and Turan (2019: 375); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: None.

Status in Türkiye: [Native]. — İnci balığı. — Recorded from Türkiye in the original description by Freyhof and Turan (2019); listed in previous checklist by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: FFR.

***Alburnus nicaeensis* Battalgil 1941**

Common name: Iznik shemaya

Taxonomy: Original description: *Alburnus (Chalcalburnus) chalcoides nicaeensis* Battalgil 1941: 179 [Lake Iznik, Anatolia, Türkiye; syntypes: whereabouts unknown].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Marmara Sea region, Iznik Gölü, Bursa Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species is a pelagic, lacustrine species that most likely spawned in lake tributaries. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EX (IUCN, 2023).

Threats: COM. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Battalgil (1941); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 2-Marmara. — Turkish material: None.

Alburnus orontis* Sauvage 1882*Common name:** Orontes bleak**Taxonomy:** Original description: *Alburnus orontis* Sauvage 1882: 168 [Hammah (Hamáh), Syria; syntypes: MNHN A-3907 (2)].**Middle Eastern synonyms:** None.**Revisions:** Freyhof and Turan (2019: 380).**Illustrations:** Freyhof and Turan (2019: 379, fig. 6).**Distribution. General distribution:** Asia Minor and Middle East: Orontes River basin.**Distribution in the Middle East:** Syria.**Distribution in Ecoregions:** 437-Orontes.**Habitat:** This species inhabits a wide range of rivers and even canals and reservoirs. Usually, most abundantly in large springs that bring clean, freshwater to the river. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB, EUT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Syria:** [Native]. — Daffaf. — Recorded from Syria in original description by Sauvage (1882: 168); subsequently reported by Gruvel (1931); Beckman (1962: 89); Saad et al. (2006); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: BMNH, MNHN, MSL.**Status in Türkiye:** [Native]. — İnci balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.***Alburnus qalilus* Krupp 1992****Common name:** Syrian spotted bleak**Taxonomy:** Original description: *Alburnus qalilus* Krupp 1992a: 326 [Nahr al-Hawaiz, 35°22'N, 35°58'E, Mediterranean coastal drainage, Syria; holotype: SMF 24480].**Middle Eastern synonyms:** None.**Revisions:** Freyhof and Turan (2019: 380).**Illustrations:** Freyhof and Turan (2019: 378, fig. 5).**Distribution. General distribution:** Orontes River system and Mediterranean coastal drainages of Syria.**Distribution in the Middle East:** Syria.**Distribution in Ecoregions:** 436-Coastal Levant, 437-Orontes.**Habitat:** This species inhabits small streams with dense shoreline vegetation and moderately fast flowing or standing water. It also occurs in reservoirs. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB, EUT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Syria:** [Endemic]. — Daffaf. — Recorded from Syria in original description by Krupp (1992a); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: SMF.***Alburnus schischkovi* (Drensky 1943)****Common name:** Black Sea bleak**Taxonomy:** Original description: *Chalcalburnus chalcoides schischkovi* Drensky 1943: 353, figs. 1 [Mouth of rivers Resowska (Rezovska) and Weleka (Veleka), Bulgaria; syntypes: whereabouts unknown].**Middle Eastern synonyms:** None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Black Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species is riverine. Migrates to the upper reaches of tributaries to spawn. Spawns in riffles with heavy current on gravel bottom. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: CLI, FIT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Tatlı su kolyoz balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara. — Turkish material: None.

Alburnus sellal Heckel 1843

Common name: Sellal bleak

Taxonomy: Original description: *Alburnus sellal* Heckel 1843: 1082 [92] [Kueik (Qweik River), Aleppo, Syria; syntypes: NMW 55664-67 (1, 2, 4, 2); RMNH 2666 (2)].

Middle Eastern synonyms: *Chalcalburnus sellal* (Heckel 1843); *Alburnus capito* Heckel 1843; *Alburnus hebes* Heckel 1843; *Alburnus microlepis* Heckel 1843; *Alburnus mossulensis* Heckel 1843; *Chalcalburnus mossulensis* (Heckel 1843); *Alburnus pallidus* Heckel 1843; *Leuciscus maxillaris* Valenciennes 1844; *Alburnus maxillaris* (Valenciennes 1844); *Alburnus caudimacula* Heckel 1847; *Alburnus iblis* Heckel 1847; *Alburnus megacephalus* Heckel 1847; *Alburnus schejtan* Heckel 1847; *Alburnus mossulensis delineatus* Battalgil 1942; *Alburnus heckeli* Battalgil 1944; *Alburnus zagrosensis* Coad 2009; *Alburnus selcuklui* Elp, Şen & Özuluğ 2015.

Revisions: Bogutskaya (1997: 167); Mohammadian-Kalat et al. (2017); Birecikligil et al. (2016: 47).

Illustrations: Heckel (1843b: pl. 11, fig. 1).

Distribution. General distribution: Asia Minor and Middle East: Euphrates, Tigris, Zoreh, Persis and Hormuz River basins.

Distribution in the Middle East: Iran, Iraq, Israel, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 449-Esfahan, 451-Northern Hormuz Drainages.

Habitat: This species inhabits lakes, reservoirs, and all kinds of streams and rivers from the cold Anatolian highlands down to the subtropical Shatt al Arab and Iranian Gulf rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area, but this species is very resistant and can cope with most of them. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Shah kuli-e jonubi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a) as *Alburnus mossulensis* and *Alburnus zagrosensis*; Esmaeili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 9-Esfahan, 4-Tigris, 12-Kor River, 13-Lake Maharlou, 1-Persis, 2-Hormuz. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Samnan. — First record from Iraq by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Syria: [Native]. — Daffaf. — Recorded from Syria in original description by Heckel (1843a: 1083, 1084, 1086) as *Alburnus sellal*, *A. microlepis*, *A. pallidus*, and *A. hebes*;

subsequently reported by Beckman (1962: 87) as also *A. capito*, *A. mossulensis*, and *A. pallidus*; Ali (2003); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, MNHN, NMW, RMNH, SMNS, MSL.

Status in Türkiye: [Native]. — Gümüş balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Chalcarburnus sellal*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Alburnus taeniatus Kessler 1874

Common name: Striped bystryanka

Taxonomy: Original description: *Alburnus taeniatus* Kessler 1874: 26 [Syr-daria River, Turkestan (Kazakhstan); no types at ZIN].

Middle Eastern synonyms: *Alburnoides taeniatus* (Kessler 1874); *Chalcalburnus chalcoides schischkovi* Drensky 1943; *Chalcalburnus schischkovi* Drensky 1943.

Revisions: Berg (1949: 760) as *Alburnoides taeniatus*.

Illustrations: Berg (1949: 760-76, figs. 520-523) as *Alburnoides taeniatus*.

Distribution. General distribution: North Asia, Middle East: Amu Darya basin and rivers.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 631-Upper Amu Darya.

Habitat: The main biotope of this species is river margins with slow water flow and developed underwater vegetation on a clay-silty bottom. Spawning grounds are in coastal strips of lakes with abundant flooded vegetation. Spawning occurs at shallow depths. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: CON, HAB, EUT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Morvarid mahi-e navar dar. — Listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 19-Hari River. — Iran material: None.

Alburnus tarichi (Güldenstädt 1814)

Common name: Van bleak

Taxonomy: Original description: *Cyprinus tarichi* Güldenstädt in Pallas 1814: 335 [Lake Gotscha, Armenia [erroneous, is Lake Van, Türkiye]; no types known].

Middle Eastern synonyms: *Chalcalburnus tarichi* (Güldenstädt 1814); *Leuciscus vanensis* Günther 1868.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Van Gölü endemic, Van and Bitlis provinces.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 444-Lake Van.

Habitat: Lacustrine, pelagic species which migrates about 15 km up inflowing rivers to spawn. The lake is a saline lake, so invasive have not been introduced. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NT (IUCN, 2023).

Threats: EUT, FIT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Van inci balığı. — Recorded from Türkiye in the original description by Pallas (1814); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) *Chalcarburnus tarichi*; Fricke et al. (2007); Kuru et al. (2014); Çiçek

et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 25-Van Lake. — Turkish material: None.

***Alburnus timarensis* Kuru 1980**

Common name: Karasu sha kuli

Taxonomy: Original description: *Alburnus timarensis* Kuru 1980: 97, fig. 1 [Karasu River, Yumrutepe-Timar, Van Lake tributary, Türkiye; holotype: Zoology Museum Hacettepe Univ. no. 1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Van Gölü tributary endemic, Karasu, Van Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 444-Lake Van.

Habitat: This species is a resident species that inhabits moderately fast flowing streams. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: CR (IUCN, 2023).

Threats: CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — İnci balığı. — Recorded from Türkiye in the original description by Kuru (1980); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 25-Van Lake. — Turkish material: None.

***Ballerus sapa* (Pallas 1814)**

Common name: White-eye bream

Taxonomy: Original description: *Cyprinus sapa* Pallas 1814: 328 [Volga River and tributaries; No types known].

Middle Eastern synonyms: *Abramis sapa bergi* Belyaev, 1929; *Abramis sapa* (Pallas 1814); *Cyprinus cleveza* Pallas (ex Güldenstädt) 1814; *Abramis sapa aralensis* Tiapkin 1939; *Cyprinus brama minor* Forster 1767; *Abramis schreibersii* Heckel 1836.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Eastern Europe and Russia east to Caspian Sea drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits large lowland rivers and estuaries. Spawns in fast-flowing water on gravel bottom or submerged vegetation. — Freshwater, brackish.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Mahi sim kondpuzeh. — Listed in previous checklists from Iran by Esmaeili et al. (2010a) as *Abramis sapa*; Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Blicca bjoerkna* (Linnaeus 1758)*Common name:** White bream**Taxonomy:** Original description: *Cyprinus bjoerkna* Linnaeus 1758: 326 [Greifswald, Mecklenburg-Vorpommern, 54°05'N, 13°23'E, Germany; neotype: SMNS 12668].**Middle Eastern synonyms:** *Abramis bjoerkna* (Linnaeus 1758).**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Eurasia: Europe and Caspian Sea basin; introduced elsewhere.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 434-Kura-South Caspian Drainages, 450-Turan Plain.**Habitat:** This species inhabits a wide variety of shallow, warm lowland lakes and the slow-flowing lower reaches of large rivers and canals. Often, they are abundant on the bottom of large sandy rivers. Spawns along shores on submerged vegetation, roots, or even shallow gravel bottoms. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** Unknown. — Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Simnama. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.**Status in Türkiye:** [Native]. — Tahta balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *Abramis bjoerkna*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 24-Aras. — Turkish material: None.***Chondrostoma angorense* Elvira 1987****Common name:** Ankara nase**Taxonomy:** Original description: *Chondrostoma nasus angorense* Elvira 1987: 117 [Eskishir, Türkiye; holotype: NMW 52234: 1].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Asia Minor: Sakarya and Kızılırmak basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia.**Habitat:** This species inhabits moderately to fast-flowing large to medium sized rivers with rock or gravel bottoms. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON, EUT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Türkiye:** [Endemic]. — Kababurun. — Recorded from Türkiye in the original description by Elvira (1987); listed in previous checklists from Türkiye by Kuru (2004) as *Chondrostoma nasus angorense*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 12-Sakarya, 15-Kızılırmak. — Turkish material: NMW.

Chondrostoma beysehirense* Bogutskaya 1997*Common name:** Beyşehir nase**Taxonomy:** Original description: *Chondrostoma beysehirense* Bogutskaya 1997: 153, fig. 1 [Beyşehir Lake, central Anatolia, Türkiye; holotype: ZMH 8812].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Asia Minor: Beyşehir Gölü and tributaries.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species inhabits streams with moderately fast flowing water, clear water, and often submerged vegetation. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** ABS, CON, COM, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Kababurun. — Recorded from Türkiye in the original description by Bogutskaya (1997); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: ZMH.***Chondrostoma ceyhanense* Küçük, Turan, Güçlü, Mutlu & Çiftçi 2017****Common name:** Ceyhan nase**Taxonomy:** Original description: *Chondrostoma ceyhanensis* Küçük, Turan, Güçlü, Mutlu & Çiftçi 2017: 798, figs. 4b, 5c, 6b, 7, 8 [Sır Dam Lake, Ceyhan River, Kahramanmaraş Province, Türkiye, 38°32.239'N, 33°10.887'E; holotype: IFC-ESUF 03-1555].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Küçük et al. (2017: 798, figs. 4b, 5c, 6b, 7, 8).**Distribution. General distribution:** Asia Minor: Ceyhan, Seyhan and Berdan River basins.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species inhabits moderately to fast-flowing large to medium sized rivers with rock or gravel bottoms. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Kababurun. — Recorded from Türkiye in the original description by Küçük et al. (2017); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan, 20-Ceyhan. — Turkish material: IFC-ESUF.***Chondrostoma colchicum* Derjugin 1899****Common name:** Transcaucasian nase**Taxonomy:** Original description: *Chondrostoma colchicum* Derjugin (ex Kessler) 1899: 164 [17], pl. 9 (figs. 2-3) [Rion River and Tchoroch River and tributary near Batumi, Georgia, Eurasia; syntypes: ZIN 5298-99 (2, 3), 11505 (1), 11517 (1)].**Middle Eastern synonyms:** *Chondrostoma awhasicum* Kamensky 1901; *Chondrostoma colchicum* var. *tschorochica* Kamensky 1901.**Revisions:** None.**Illustrations:** Derjugin (1899: 164, pl. 9, figs. 2-3).

Distribution. General distribution: Eurasia: Eastern Black Sea watersheds.
Distribution in the Middle East: Türkiye.
Distribution in Ecoregions: 430-Northern Anatolia, 433-Western Transcaucasia.
Habitat: This species inhabits a wide range of slowly to fast flowing rivers and streams with gravel or rocky substrates. — Freshwater.
Economic importance: Locally consumed, but of no commercial importance.
Conservation: IUCN: LC (IUCN, 2023).
Threats: CON. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.
Status in Türkiye: [Native]. — Kababurun. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 14-Yeşilirmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Chondrostoma cyri Kessler 1877

Common name: Kura nase

Taxonomy: Original description: *Chondrostoma cyri* Kessler 1877: 137, pl. 5 (fig. 21) [Kura River, Tbilisi, Georgia, Eurasia; syntypes: (8) BMNH 1897.7.5.27 [ex St. Petersburg Univ.] (1), ZIN 10919 (2)].

Middle Eastern synonyms: *Chondrostoma leptosoma* (non Berg 1914).

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 135, fig. 241).

Distribution. General distribution: Eurasia: Kura-Aras River basin, Caspian Sea basin.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Economic importance: Locally consumed, but of no commercial importance.

Habitat: This species inhabits piedmont and mountain rivers with strong currents and rock to gravel bottoms. — Freshwater.

Economic importance: Locally commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Shekamsiah-e Aras. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Kababurun. — Listed in previous checklists from Türkiye by Kuru (2004) as *Chondrostoma oxyrhynchum cyri*; Geldiay and Balık (2007) as *Chondrostoma oxyrhynchum*; Fricke et al. (2007); Kuru et al. (2014) as *Chondrostoma oxyrhynchum*; Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

Chondrostoma esmaeilii Eagderi, Jouladeh-Roudbar, Birecikligil, Çiçek & Coad 2017

Common name: Tigris nase

Taxonomy: Original description: *Chondrostoma esmaeilii* Eagderi, Jouladeh-Roudbar, Birecikligil, Çiçek & Coad 2017: 126, figs. 1, 2, 3B, 4 [Sarab-e Ravansar stream, Ravansar, Kermanshah Province, Iran, 34°42'38"N, 46°39'14"E; holotype: IMNRF-UT 1045-1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Eagderi et al. (2017: 126, fig. 2).

Distribution. General distribution: Middle East: Sarab-e Ravansar stream, Tigris River system.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits medium-sized streams to large rivers with rocky or gravel substrates and swift to moderately fast currents. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Kapor-e poze dar-e Esmaeili. — Recorded from Iran in the original description by Eagderi et al. (2017); listed in previous checklists from Iran by Esmaeili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: IMNRF-UT.

Chondrostoma holmwoodii (Boulenger 1896)

Common name: Izmir nase

Taxonomy: Original description: *Capoeta holmwoodii* Boulenger 1896: 153 [Between north coast of Smyrna (Izmir) and Troy, Türkiye; syntypes: BMNH 1893.1.14.7-8 (2)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Aegean Sea tributaries, western Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits medium-sized streams to large rivers with rocky or gravel substrates and swift to moderately fast currents. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kababurun. — Recorded from Türkiye in the original description by Boulenger (1896); listed in previous checklists from Türkiye by Kuru (2004) as *Chondrostoma holmwoodii meandrense*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: BMNH.

Chondrostoma kinzelbachi Krupp 1985

Common name: Orontes nase

Taxonomy: Original description: *Chondrostoma kinzelbachi* Krupp 1985: 27, fig. 1 [tributary of Karasu Çayı near Tahtaköprü dam, Türkiye, 36°52'N, 36°40'E; holotype: SMF 17127].

Middle Eastern synonyms: None.

Revisions: Bogutskaya (1997: 170); Robalo et al. (2007: 370).

Illustrations: Krupp (1985d: fig. 1).

Distribution. General distribution: Asia Minor, Middle East: Orontes River basin.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species inhabits medium-sized streams and large rivers with a rocky or gravel substrate and swift to moderately fast currents. It inhabits a large reservoir from which it is believed to migrate to inflowing streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Syria: [Native]. — Arous. — Recorded from Syria in original description by Krupp (1985d: 27); subsequently reported by Saad et al. (2009); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: MSL.

Status in Türkiye: [Native]. — Kababurun. — Recorded from Türkiye in the original description by Krupp (1985d); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: SMF.

Chondrostoma meandrense Elvira 1987

Common name: Menderes nase

Taxonomy: Original description: *Chondrostoma holmwoodii meandrensis* Elvira 1987: 120 [Isikli, Türkiye; holotype: ZMH 6720 [ex 2487: 1]].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Aegean Sea tributary, Büyük Menderes River.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits medium-sized streams and springs to large rivers with rocky or gravel substrates and swift to moderately fast currents. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Kababurun. — Recorded from Türkiye in the original description by Elvira (1987); listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes. — Turkish material: ZMH.

Chondrostoma nasus (Linnaeus 1758)

Common name: Sneep

Taxonomy: Original description: *Cyprinus nasus* Linnaeus 1758: 325 [Rhine River; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Europe; Asia Minor: western Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species inhabits moderate to fast-flowing large to medium sized rivers with a rock or gravel bottom. Spawns in fast-flowing water on shallow gravel beds, often in small tributaries. May show a strong size-related longitudinal distribution in smaller rivers, with adults inhabiting more upper river stretches. — Freshwater.

Economic importance: Locally commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Kababurun, Çime. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

Chondrostoma orientale* Bianco & Bănărescu 1982*Common name:** Kor nase**Taxonomy:** Original description: *Chondrostoma cyri orientalis* Bianco & Bănărescu 1982: 80, figs. 1A, 2A [Pulwar River near Persepolis, Iran; holotype: IZA 8170; paratypes: (85) ANSP 150985 (2), ISBB uncat. (10), IZA 7833 (orig. 75, ? now 19), FMNH 94519 (2), NMC 82-365 (6), USNM 227934 (1)].**Middle Eastern synonyms:** *Chondrostoma orientalis* Bianco & Bănărescu 1982.**Revisions:** None.**Illustrations:** Bianco and Bănărescu (1982: 80, fig. 1).**Distribution. General distribution:** Middle East: Kor River basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits a wide range of habitats, from medium-sized streams to large lowland rivers. Inhabits marshes and reservoirs, from which it migrates to rivers and streams to spawn. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Kapor-e poze dar-e Kor. — Recorded from Iran in the original description by Bianco and Bănărescu (1982); subsequently reported by Sayyadzadeh and Jouladeh-Roudbar (2014); listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 12-Kor River. — Iran material: ZM-CBSU.***Chondrostoma regium* (Heckel 1843)****Common name:** King nase**Taxonomy:** Original description: *Chondochilus regius* Heckel 1843: 1077 (87) [Orontes and Tigris rivers; syntypes: NMW 52532-35 (2, 2, 2, 1) Kueik (Qweik River) near Aleppo, 52536-38 (2, 1, 2) Tigris near Mosul].**Middle Eastern synonyms:** None.**Revisions:** Elvira (1987: 127); Küçük et al. (2023).**Illustrations:** Heckel (1843b: pl. 9, fig. 3) as *Chondochilus regius*; Küçük et al. (2023: 9, fig. 6d).**Distribution. General distribution:** Asia Minor, Middle East: Euphrates and Tigris River systems.**Distribution in the Middle East:** Iran, Iraq, Syria, and Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 449-Esfahan.**Habitat:** This species inhabits a wide range of habitats, from medium-sized streams to large lowland rivers. Inhabits marshes and reservoirs, from which it migrates to rivers and streams to spawn. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are many threats in the area but none serious enough to threaten this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Iran:** [Native]. — Nazok, Dom Siyah. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 20-Zohreh, 9-Esfahan. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — Recorded from Syria in original description by Heckel (1843a: 1078) as *Chondochilus regius*; listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: None.

Status in Syria: [Native]. — Arous. — Recorded from Syria in original description by Heckel (1843a: 1078) as *Chondrochilus regius*; subsequently reported by Gruvel (1931); Beckman (1962: 118); Ali (2003); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 4-Orontes. — Syrian material: BMNH, MCZ, MNHN, NMW, NRM, MSL.

Status in Türkiye: [Native]. — Kababurun balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Chondrostoma smyrnae* Küçük, Çiftçi, Güçlü & Turan 2021**

Common name: Nase

Taxonomy: Original description: *Chondrostoma smyrnae* Küçük, Çiftçi, Güçlü & Turan 2021: 240, figs. 3a-c, 4a, 5a, 6a, 7a-b [Tahtali reservoir about 2 km north of Değirmendere, İzmir Province, Türkiye, 38°08'19"N, 27°07'10"E; holotype: IFC-ESUF 03-1566].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Küçük et al. (2021: 240, figs. 3a-c, 4a, 5a, 6a, 7a-b).

Distribution. General distribution: Asia Minor: Tahtali reservoir and possibly the Küçük Menderes River drainage.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits a wide range of habitats, from medium-sized streams to large lowland rivers also found in marshes and reservoirs, from which it migrates to rivers and streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kababurun. — Recorded from Türkiye in the original description by Küçük et al. (2021); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 6-Küçük Menderes. — Turkish material: IFC-ESUF.

***Chondrostoma toros* Küçük, Turan, Güçlü, Mutlu & Çiftçi 2017**

Common name: Nase

Taxonomy: Original description: *Chondrostoma toros* Küçük, Turan, Güçlü, Mutlu & Çiftçi 2017: 796, figs. 2-3, 4a, 5a, 6a [Göksu River, Hamamköy Village, Mut County, Mersin (İçel) Province, Türkiye, 38°32.239'N, 33°10.887'E; holotype: IFC-ESUF 03-1555].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Küçük et al. (2017: 796, figs. 2-3, 4a, 5a, 6a).

Distribution. General distribution: Asia Minor: Göksu River drainage.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits moderately to fast-flowing large to medium-sized rivers with rock or gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kababurun. — Recorded from Türkiye in the original description by Küçük et al. (2017); listed in previous checklists from Türkiye by Çiçek et

al. (2018a, 2020, 2023a). — Distribution in River Basin: 17-Doğu Akdeniz. — Turkish material: IFC-ESUF.

***Chondrostoma turnai* Güçlü, Çiftçi, Küçük, Turan & Mutlu 2018**

Common name: Nase

Taxonomy: Original description: *Chondrostoma turnai* Güçlü, Çiftçi, Küçük, Turan & Mutlu 2018: 316, fig. 1 [Çine Stream, Büyük Menderes River, 37°45'47"N, 27°50'03"E, Aydın Province, Türkiye; holotype: IFC-ESUF 03-1557].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Güçlü et al. (2018: 316, fig. 1).

Distribution. General distribution: Asia Minor: Büyük Menderes River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits moderately to fast-flowing large to medium sized rivers with rock or gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kababurun balığı. — Recorded from Türkiye in the original description by Güçlü et al. (2018); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes. — Turkish material: IFC-ESUF.

***Egirdira nigra* (Kosswig & Geldiay 1952)**

Common name: Egirdir minow

Taxonomy: Original description: *Pararhodeus niger* Kosswig & Geldiay 1952: 12, fig. 5 [Lake Eğirdir, Türkiye; syntypes: ESFM PISI/1950-007 (1), PISI/1951-003 (28)].

Middle Eastern synonyms: *Phoxinellus egridiri* Karaman 1972; *Pseudophoxinus egridiri* (Karaman 1972).

Revisions: Freyhof (2022: 589).

Illustrations: None.

Distribution. General distribution: Asia Minor: Eğirdir Gölü and Eğirdir Gölü tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits lakes and streams with dense vegetation and standing or slowly flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023) as *Pseudophoxinus egridiri*.

Threats: ABS, CLI, CON, COM, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Eğirdir yağbalığı. — Recorded from Türkiye in the original description by Kosswig and Geldiay (1952); listed in previous checklists from Türkiye by Kuru (2004) as *Pseudophoxinus egridiri*; Geldiay and Balık (2007) as *Phoxinellus egridiri*; Fricke et al. (2007) as *Pseudophoxinus egridiri*; Kuru et al. (2014) as *Pseudophoxinus egridiri*; Çiçek et al. (2015, 2018a, 2020) as *Pseudophoxinus egridiri*; Çiçek et al. (2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: ESFM.

Ladigesocypris mermere* (Ladiges 1960)*Common name:** Izmir minnow**Taxonomy:** Original description: *Leucaspius irideus mermere* Ladiges 1960: 139, fig. 12 [Gediz (Hermos), Türkiye; holotype: ZMH H1087].**Middle Eastern synonyms:** *Pseudophoxinus mermere* (Ladiges 1960).**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Asia Minor: Gediz River (Aegean Sea tributary).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 429-Western Anatolia.**Habitat:** This species inhabits streams with dense vegetation and standing or slowly flowing water. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: DD (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — None. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004) as *Ladigeocypris ghigii mermere*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: ZMH.***Leucalburnus satunini* (Berg 1910)****Common name:** Mountain dace**Taxonomy:** Original description: *Phoxinus satunini* Berg 1910: 127 [Upper Kura River, Türkiye. On p. 1 of separate; no types known].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Asia Minor: Upper Kura River system.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.**Habitat:** This species inhabits high mountain streams with moderately fast flowing waters. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are no obvious threats for this species in the area. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Native]. — None. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.***Leucaspius delineatus* (Heckel 1843)****Common name:** Sunbleak**Taxonomy:** Original description: *Squalius delineatus* Heckel 1843: 1041 [Marchfelds near Vienna and Mähren, Austria; syntypes: NMW 49783 (7), 50794 (6), 50796 (1)].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Jouladeh-Roudbar et al. (2020: 138, fig. 249).**Distribution. General distribution:** Europe and western Asia; also introduced.**Distribution in the Middle East:** Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 434-Kura-South Caspian Drainages.

Habitat: This species inhabits lowland riverine habitats, especially oxbows and other water bodies only connected to rivers during floods. Often found in ponds, steppe lakes, and small water bodies not connected to rivers, may occur in any habitat with few or no predators. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Mahi-e noghreyi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — None. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish materials: None.

***Leuciscus aspius* (Linnaeus 1758)**

Common name: Asp

Taxonomy: Original description: *Cyprinus aspius* Linnaeus 1758: 325 [Swedish lakes; no types known].

Middle Eastern synonyms: *Aspius aspius* (Linnaeus 1758).

Revisions: Berg (1949: 603) as *Aspius aspius*.

Illustrations: Berg (1949: 604, figs. 357-359) as *Aspius aspius*.

Distribution. General distribution: Europe to western Asia.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: This species is found in open water in large and mid-sized lowland rivers and large lakes. Spawns on gravel or submerged vegetation in fast-flowing water. Lake populations migrate to tributaries. — Freshwater, brackish.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB. — Low sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Mash, Kasham. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Aspius aspius*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Kurt balığı-Kocaagız balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Aspius aspius*; Geldiay and Balık (2007) as *Aspius aspius*; Fricke et al. (2007) as *Aspius aspius*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 24-Aras. — Turkish materials: None.

***Leuciscus vorax* (Heckel 1843)**

Common name: Mesopotamian asp

Taxonomy: Original description: *Aspius vorax* Heckel 1843: 21 (24), pl. 9 [Heri Rud River near Herat, Syria; syntypes: NMW 16527 (1, dry), 76776 (1)].

Middle Eastern synonyms: None.

Revisions: Lelek (1987: 150) as *Aspius vorax*; Perea et al. (2011: 15).

Illustrations: Heckel (1843b: pl. 10, fig. 3) as *Aspius vorax*.

Distribution. General distribution: Asia Minor and Middle East: Orontes, Euphrates, and Tigris River basins.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits large rivers, lakes, and reservoirs. Migrates from lakes and reservoirs into inflowing rivers or streams to spawn. Sensitive to pollution. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: EUT, FIT. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Shelej. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Aspius vorax*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Shilik. — First record from Iraq by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Syria: [Native]. — Brak. — First record from Syria by Gruvel (1931); as *Aspius vorax*; confirmed by Beckman (1962: 93); Krupp and Schneider (1991b: 73); Ali (2003); Saad et al. (2006) as *Aspius vorax*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 4-Orontes. — Syrian material: BMNH, MNHN, MSL.

Status in Türkiye: [Native]. — Sis balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Aspius vorax*; Geldiay and Balık (2007) as *Aspius vorax*; Fricke et al. (2007) as *Aspius vorax*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi, 21-Fırat-Dicle. — Turkish material: None.

***Mirogrex hulensis* Goren Fishelson & Trewavas 1973**

Common name: Hula bream

Taxonomy: Original description: *Mirogrex terraesanctae hulensis* Goren Fishelson & Trewavas 1973: 310, fig. 11 [Lake Huleh, Israel, about 33°08'N, 35°37'E; holotype: BMNH 1936.4.6.20].

Middle Eastern synonyms: *Acanthobrama hulensis* (Goren Fishelson & Trewavas 1973); *Mirogrex terraesanctae hulensis* Goren Fishelson & Trewavas 1973.

Revisions: None.

Illustrations: Goren et al. (1973: fig. 11).

Distribution. General distribution: Middle East: Jordan Valley system.

Distribution in the Middle East: Israel and Jordan.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species lived in Lake Hula and its adjacent marshes. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EX (IUCN, 2023).

Threats: ABS, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Extincted. — High priority for conservation action.

Status in Israel: [Endemic]. — Lavnun ha'hula. — Recorded from Israel in original description by Goren et al. (1973); subsequently reported by Goren (1974: 74) as *Microgrex terraesanctae hulensis*; Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: BMNH.

***Mirogrex terraesanctae* (Steinitz 1952)**

Common name: Kinneret bream

Taxonomy: Original description: *Acanthobrama terraesanctae* Steinitz 1952: 295, fig. 1 [Lake Tiberias [Galilée], Israel; holotype: HUJ 976].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Steinitz (1952: fig. 1) as *Acanthobrama terraesanctae*.

Distribution. General distribution: Jordan Valley system.

Distribution in the Middle East: Israel and Jordan.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species is pelagic, lacustrine species is small. Its spawning season last six months and peak in winter (January-February). It spawns in the shallow littoral zone on algae-free stones. Breeding success depends on the extent of rise of water level in winter. It is a zooplankton feeder. — Freshwater.

Economic importance: Locally commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, CLI, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Israel: [Endemic]. — Lavnun ha'kinneret. — Recorded from Israel in original description by Steinitz (1952); subsequently reported by Goren (1974: 74) as *Microgrex terraesanctae terraesanctae*; Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 3-Kinneret Basin. — Israel material: HUIJ.

***Pelecus cultratus* (Linnaeus 1758)**

Common name: Sichel

Taxonomy: Original description: *Cyprinus cultratus* Linnaeus 1758: 326 [Helgeån River; holotype: ZMUU Linn. Coll. 224 (poor condition)].

Middle Eastern synonyms: *Pelecus cultratus kurensis* Smirnov 1943; *Clupea ziga* Wulff 1765.

Revisions: Berg (1949: 810).

Illustrations: Berg (1949: 811, figs. 554-555).

Distribution. General distribution: Eurasia.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits the open waters of large rivers and lakes. Semi-anadromous individuals forage and spawn in pelagic environments. — Freshwater, brackish.

Economic importance: Commercial important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Shamshir mahi abe shirin. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Petroleuciscus borysthenicus* (Kessler 1859)**

Common name: Dnjepr chub

Taxonomy: Original description: *Squalius borysthenicus* Kessler 1859: 545 [An arm of the Dnieper River at Aleschki, Ukraine; syntypes: none found at ZIN].

Middle Eastern synonyms: *Leuciscus borysthenicus* (Kessler 1859); *Leuciscus heterandrius* Battalgi 1940; *Telestes leucoides* De Filippi 1863.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Black Sea, Sea of Azov, and Sea of Marmara watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species inhabits lowland rivers, the lower reaches of montane rivers, limans, lakes, deltas, and backwaters with moderate to no current. Quite resistant to low oxygen concentrations, sometimes in marshes and water bodies with dense vegetation. A freshwater species, but tolerant of brackish waters. Prefers sand, sand-mud, or mud bottoms. Prefers shallow places with slow current along banks, in backwaters, in small lakes, and similar calm-water sites. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Tatlı su kefali. — Listed in previous checklists from Türkiye by Kuru (2004) as *Leuciscus borystenicus*; Geldiay and Balık (2007) as *Leuciscus borystenicus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 12-Sakarya, 13-Batı Karadeniz, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

***Petroleuciscus ninae* Turan, Kalayci, Kaya, Bektaş & Küçük 2018**

Common name: Chub

Taxonomy: Original description: *Petroleuciscus ninae* Turan, Kalayci, Kaya, Bektaş & Küçük 2018: (3) 877, fig. 2 [Akçay stream, 3 km west of Beğerli, Aydın Province, Türkiye, 37°45'34"N, 28°20'07"E; holotype: FFR 03856].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2018c; 877, fig. 2).

Distribution. General distribution: Asia Minor: Büyük Menderes River drainage, southwestern Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits a wide range of lowland rivers, canals, streams, reservoirs, and lakes. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — None. — Recorded from Türkiye in the original description by Turan et al. (2018c); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: FFR.

***Petroleuciscus smyrnaeus* (Boulenger 1896)**

Common name: Izmir chub

Taxonomy: Original description: *Leuciscus smyrnaeus* Boulenger 1896: 154 [Izmir [Smyrna], Türkiye; syntypes: (several) BMNH 1895.12.28.19-28 (10)].

Middle Eastern synonyms: *Squalius smyrnaeus* (Boulenger 1896).

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Aegean Sea watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia,

Habitat: This species inhabits a wide range of lowland rivers, canals, streams, reservoirs, and lakes. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CLI, EUT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — None. — Recorded from Türkiye in the original description by Boulenger (1896); listed in previous checklists from Türkiye by Kuru (2004) as *Leuciscus smyrnaeus*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: BMNH.

Petroleuciscus ulanus (Günther 1899)

Common name: Bleak

Taxonomy: Original description: *Leuciscus ulanus* Günther 1899: 387, pl. 24 (fig. A) [Ula on the Zola Chai, northwestern Iran; syntypes: BMNH 1984.10.10.1-2 (2)].

Middle Eastern synonyms: *Squalius ulanus* (Günther 1899); *Alburnus ulanus* (Günther 1899); *Leuciscus gaderanus* Günther 1899.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Middle East: Lake Urmia basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 445-Orumiyeh.

Habitat: This species is a resident species that inhabits moderately fast flowing streams. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Shah kuli-e Oromiyeh. — Recorded from Iran in the original description by Günther (1899); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 14-Lake Orumiyeh. — Iran material: BMNH.

Pimephales promelas Rafinesque 1820

Common name: Fathead minnow

Taxonomy: Original description: *Pimephales promelas* Rafinesque 1820: 299 [Pond near Lexington, Kentucky, U.S.A; holotype (unique): whereabouts unknown].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: U.S.A., Canada, and northern Mexico; introduced in Europe and Iran.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 447-Namak.

Habitat: This species is known to inhabit lakes, muddy pools of headwaters, ponds, creeks, small rivers, ditches, reservoirs, and residual pools of intermittent streams (where sometimes very abundant); usually in sluggish or still water with abundant floating and submerged vegetation; tolerant of high temperature, turbidity, low oxygen, and high salinity. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Eagderi et al. (2022). — Distribution in River Basin: 15-Namak Lake. — Iran material: None.

Remarks. No recent report of this fish is available, its presence for Iran needs confirmation by specimen (Sayyadzadeh & Esmaili, 2023).

***Pseudophoxinus alii* Küçük 2007**

Common name: Pamphylian spring minnow

Taxonomy: Original description: *Pseudophoxinus alii* Küçük 2007: 2, figs. 1, 3 [Ilica Stream, Manavgat, Antalya, Türkiye; holotype: ESFM-PISI/2005-015].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Manavgat River basin (Mediterranean tributary), Antalya Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits lowland streams with riparian vegetation and sand and gravel bottoms. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Küçük (2007); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 8-Batı Akdeniz, 9-Antalya. — Turkish material: ESFM-PISI.

***Pseudophoxinus anatolicus* (Hankó 1925)**

Common name: Anatolian minnow

Taxonomy: Original description: *Acanthorutilus anatolicus* Hankó 1925: 141, pl. 3 (fig. 2) [Eregli, probably Lake Ak (Akgöl), Türkiye; syntypes: (21) MNHN 1928-0221 (ex MNSB (1))].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Akgöl, Karaman Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits lakes and streams with dense vegetation and standing or slowly flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Hankó (1925); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Phoxinellus anatolicus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: MNHN.

Pseudophoxinus antalyae* Bogutskaya 1992*Common name:** Antalya minnow**Taxonomy:** Original description: *Pseudophoxinus antalyae* Bogutskaya 1992: 274, fig. 2b [Stream Kirkgöz near Antalya, Türkiye; holotype: ZMH 1114].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Asia Minor: Stream Kirkgöz near Antalya,**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species inhabits springs and spring-fed streams with clear waters and dense vegetation. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB, TOU. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Bogutskaya (1992); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: ZMH.***Pseudophoxinus battalgilae* Bogutskaya 1997****Common name:** Beyşehir minnow**Taxonomy:** Original description: *Pseudophoxinus battalgili* Bogutskaya 1997: 175 [Central Anatolia, Beyşehir Lake basin, Konya endorheic basin, Türkiye; holotype: AMH 8861].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Asia Minor: Beyşehir Gölü and Beyşehir Gölü tributaries, Isparta and Konya provinces.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species inhabits springs and spring-fed streams with clear waters and dense vegetation. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Bogutskaya (1997); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: AMH.***Pseudophoxinus burduricus* Küçük, Gülle, Güçlü, Çiftçi & Erdoğan 2013****Common name:** Burdur spring minnow**Taxonomy:** Original description: *Pseudophoxinus burduricus* Küçük, Gülle, Güçlü, Çiftçi & Erdoğan 2013: 32, figs. 2-3 [Burdur Province, Değirmendere Creek, Karamanlı, Lake Burdur drainage; 37°24'18"N, 29°49'06"E, Türkiye; holotype: IFC-ESUF 0427].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Küçük et al. (2013: 32, figs. 2-3).**Distribution. General distribution:** Asia Minor: Burdur Gölü tributaries, Burdur Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits lakes, springs, and small streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Küçük et al. (2013); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 10-Burdur. — Turkish material: IFC-ESUF.

***Pseudophoxinus caralis* (Battalgil 1942)**

Common name: Beyşehir minnow

Taxonomy: Original description: *Acanthorutilus anatolicus caralis* Battalgil 1942: 288, fig. 1 [Beyşehir Lake, Türkiye; holotype: ZMH H1082].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Beyşehir Gölü and Beyşehir Gölü tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits lakes, springs, and small streams. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Battalgil (1942); listed in previous checklists from Türkiye by Bogustkaya et al. (2006), Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan, 20-Ceyhan. — Distribution in River Basin: 16-Konya. — Turkish material: ZMH.

***Pseudophoxinus cilicicus* Saç, Özuluğ, Geiger & Freyhof 2019**

Common name: Arsuz minnow

Taxonomy: Original description: *Pseudophoxinus cilicicus* Saç, Özuluğ, Geiger & Freyhof 2019: 111, figs. 3-7 [River Seyhan below water regulation doors at Yüreyir, south of Adana, Adana province, Türkiye, 36.9757°N, 35.3354°E; holotype: IUSHM 2018-1405].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Saç et al. (2019: 111, figs. 3-7).

Distribution. General distribution: Asia Minor: Lower Seyhan and Ceyhan River drainages and Arsuz Stream, Mediterranean coast.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits lakes, springs, and small streams. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Saç et al. (2019); listed in previous checklists from Türkiye by Çiçek et al.

(2020, 2023a). — Distribution in River Basin: 18-Seyhan, 20-Ceyhan. — Turkish material: IUSHM.

***Pseudophoxinus crassus* (Ladiges 1960)**

Common name: Fat spring minnow

Taxonomy: Original description: *Acanthorutilus crassus* Ladiges 1960: 134, fig. 6 [Insuyu stream, near Cihanbeyli, Lake Tuz basin, Türkiye; holotype: ZMH H1149].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Ladiges (1960: 134, fig. 6).

Distribution. General distribution: Asia Minor: Tuz Gölü tributary, Konya Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits springs and spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Phoxinellus crassus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: ZMH.

***Pseudophoxinus drusensis* (Pellegrin 1933)**

Common name: Drusian spring minnow

Taxonomy: Original description: *Phoxinellus (Pararhodeus) drusensis* Pellegrin 1933: 368 [Al-Mazra'a, 32°46'N, 36°29'E, Syria; lectotype: MNHN 1932-163; lectotype selected by Krupp and Schneider (1989: 375)].

Middle Eastern synonyms: None.

Revisions: Krupp and Schneider (1989: 375).

Illustrations: Krupp and Schneider (1989: 376, fig. 23); Freyhof et al. (2020: 166).

Distribution. General distribution: Jordan River system.

Distribution in the Middle East: Israel, Jordan and Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species lives in slow-flowing streams and among stones and vegetation in streams and stream pools. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Israel: [Native]. — Lavnunit ha'golan. — Reported from Israel by Tristram (1884: 175) as *Leuciscus zeregi* (non Heckel 1843); Steinitz (1953: 213) with question as *Phoxinellus zeregi* (non Heckel 1843); first record from Israel by Tortonese (1938) as *Phoxinnellus (Pararhodes) drusensis* as *Pseudophoxinus zeregi drusensis* from the Golan Heights; confirmed by Goren (1972; 1974) as *Pseudophoxinus zeregi drusensis*; Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUJ.

Status in Syria: [Native]. — None. — Recorded from Syria in original description by Pellegrin (1933: 368); subsequently reported by Beckman (1962: 133) as *Phoxinellus drusensis*; listed

by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: MNHN.

***Pseudophoxinus elizavetae* Bogutskaya, Küçük & Atalay 2006**

Common name: Sultan Sazlığı minnow

Taxonomy: Original description: *Pseudophoxinus elizavetae* Bogutskaya, Küçük & Atalay 2006: 336, figs. 1, 4a [Kayseri Province, Sultansazligi (Sultan Swamps, 38.2°-36.6°N, 35.2°-35.5°E), Türkiye; holotype: SCFK-SDU 174].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Sultan Marsh basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits spring-fed streams with clear waters and dense vegetation but is also found in turbid field canals. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Ak balık. — Recorded from Türkiye in the original description by Bogutskaya et al. (2006); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: SCFK-SDU.

***Pseudophoxinus evliya* Freyhof & Özuluğ 2010**

Common name: Lycian spring minnow

Taxonomy: Original description: *Pseudophoxinus evliya* Freyhof & Özuluğ 2010: 310, figs. 1-3 [Small canal south of Kirkpınar, north of Kizilcadağ, 37°08.356'N, 29°55.083'E, Antalya Province, Türkiye; holotype: IUSHM 37960-315].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: by Freyhof and Özuluğ (2010a: 310, figs. 1-3)

Distribution. General distribution: Asia Minor: Yazır Gölü tributary, Antalya and Burdur provinces.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits lakes, springs, and spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Freyhof and Özuluğ (2010a); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya, 10-Burdur. — Turkish material: IUSHM.

***Pseudophoxinus fahrettini* Freyhof & Özuluğ 2010**

Common name: Pisidian spring minnow

Taxonomy: Original description: *Pseudophoxinus fahrettini* Freyhof & Özuluğ 2010: 326, figs. 1-3 [Stream at Bağilli, 37°45.82'N, 31°02.01'E, upper Köprü River drainage, Isparta Province, Türkiye; holotype: IUSHM 37970-324].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Özuluğ (2010b: 326, figs. 1-3).

Distribution. General distribution: Asia Minor: Upper Köprüçay basin (Mediterranean tributaries),

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits lakes, springs, and spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Freyhof and Özuluğ (2010b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: IUSHM.

***Pseudophoxinus firati* Bogutskaya, Küçük & Atalay 2006**

Common name: Euphrates spring minnow

Taxonomy: Original description: *Pseudophoxinus firati* Bogutskaya, Küçük & Atalay 2006: 340, figs. 3, 4c [Euphrates River drainage, Tohma Çayı at Yazıyurdu (38.80°N, 36.93°E), Türkiye; holotype: SCFK-SDU 187].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Bogutskaya et al. (2006: 340, figs. 3, 4c).

Distribution. General distribution: Asia Minor: Euphrates River (Firat Nehri) drainage.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits lakes, springs, and spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: AQU. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Bogutskaya et al. (2006); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: SCFK-SDU.

***Pseudophoxinus handlirschi* (Pietschmann 1933)**

Common name: Handlirsch's minnow

Taxonomy: Original description: *Acanthorutilus handlirschi* Pietschmann 1933: 21 [1] [Lake Eğirdir, Türkiye; syntypes: (4) MSNM 5 [ex MSNM 4662 and ex NMW] (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Eğirdir Gölü and Eğirdir Gölü tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species is a pelagic lacustrine species restricted to the lake itself. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EX (IUCN, 2023).

Threats: COM. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Kavinne. — Recorded from Türkiye in the original description by Pietschmann (1933); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: MSNM.

***Pseudophoxinus hasani* Krupp 1992**

Common name: Marqiyah spring minnow

Taxonomy: Original description: *Pseudophoxinus hasani* Krupp 1992: 23, figs. 3-4 [Nahr Marqiya, 35°02'N, 35°54'E, Mediterranean coastal drainage, Syria; holotype: SMF 24564].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Krupp (1992a: figs. 3-4); Freyhof et al. (2020: 172).

Distribution. General distribution: Mediterranean coastal drainage.

Distribution in the Middle East: Syria.

Distribution in Ecoregions: 436-Coastal Levant.

Habitat: This species occurs in springs and spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Syria: [Endemic]. — Bakhsoon. — Recorded from Syria in original description by Krupp (1992a); listed by Saad et al. (2023). — Distribution in River Basin: 6-Coastal. — Syrian material: SMF.

***Pseudophoxinus hittitorum* Freyhof & Özuluğ 2010**

Common name: Hittitic spring minnow

Taxonomy: Original description: *Pseudophoxinus hittitorum* Freyhof & Özuluğ 2010: 240, figs. 1-3 [Spring Eflatunpınar Sadikhaci, 37°49'51"N, 31°40'46"E, Lake Beyşehir basin, Konya Province, Central Anatolia, Türkiye; holotype: IUSHM 37970-608].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Özuluğ (2010c: 240, figs. 1-3).

Distribution. General distribution: Asia Minor: Beyşehir Gölü tributary, Konya Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits lakes, springs, and spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Freyhof and Özuluğ (2010c); listed in previous checklists from Türkiye Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: None.

Pseudophoxinus iconii* Küçük, Gülle & Güçlü 2016*Common name:** Minnow**Taxonomy:** Original description: *Pseudophoxinus iconii* Küçük, Gülle & Güçlü 2016: 284, figs. 2, 3 [rainage ditches and canals near Gölyazi Village, Cihanbeyli District, Konya Province, Türkiye, 38°32.24'N, 33°10.89'E, elevation 919 meters; holotype: IFC-ESUF 03-1022].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Küçük et al. (2016: 284, figs. 2, 3).**Distribution. General distribution:** Asia Minor: Tuz Gölü basin, central Anatolia.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species inhabits lakes, springs, and spring-fed streams with clear waters and dense vegetation. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Küçük et al. (2016); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: IFC-ESUF.***Pseudophoxinus kervillei* (Pellegrin 1911)****Common name:** Orontes minnow**Taxonomy:** Original description: *Phoxinellus kervillei* Pellegrin 1911: 109 [Orontes River near its outlet from Lake Homs (Lake Qattinah), Syria, elevation 490 metres, ca. 34°39'47.7"N 36°37'12.4"E; lectotype: MNHN 1910-0018 (36 mm SL, poor condition); lectotype selected by Krupp and Schneider (1989: 377)]. **Remarks.** Both *Pseudophoxinus kervillei* and *Pseudophoxinus libani* are distributed in the Orontes basin in Türkiye. It is probable that *kervillei* is a synonym of *P. libani* based on the molecular findings given by Geiger et al. (2014). Indeed, Bariche and Freyhof (2016) threatened *P. kervillei* synonym of *Pseudophoxinus libani*. Therefore, these situations should be clarified with detailed comparative studies.**Middle Eastern synonyms:** None.**Revisions:** Krupp and Schneider (1989: 377); Saad et al. (2006, 2009).**Illustrations:** Krupp and Schneider (1989: 377, fig. 24).**Distribution. General distribution:** Asia Minor and Middle East: Orontes River basin and Jordan River system.**Distribution in the Middle East:** Israel, Syria, and Türkiye.**Distribution in Ecoregions:** 437-Orontes, 438-Jordan River.**Habitat:** This species is found in springs, streams, and rivers, usually with clear waters and dense vegetation. It is also found in the littoral zone of Lake Kinneret. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Israel:** [Native]. — Lavnunit ha'galil. — First record from Israel by Steinitz (1951) as *Phoxinellus (Pararhdeus) kervillei*; confirmed by Steinitz (1953: 212) as *Phoxinellus kervillei*; Goren (1974: 78); Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HJ.**Status in Syria:** [Native]. — Bakhsoon. — Recorded from Syria in original description by Pellegrin (1911: 109) subsequently reported by Beckman (1962: 133) as *Phoxinellus kervillei*, Saad et al. (2006, 2009); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: BMNH, MNHN, MSL.

Status in Türkiye: [Native]. — Ot balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Phoxinellus zeregi kervillei*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.

***Pseudophoxinus libani* (Lortet 1883)**

Common name: Levantine minnow

Taxonomy: Original description: *Phoxinellus libani* Lortet 1883: 164, pl. 11, fig. 4 [Lake Yammouni (Yamuni or Lammouni or Yammouneh), elevation 1650 metres, Lebanon; syntypes: MCZ 25546 (28), MHNG 611.24 (10), SMF 804 (19), SMNS 3214 (several, not found), USNM 48012 (2)].

Middle Eastern synonyms: None.

Revisions: Bariche and Freyhof (2016: 204).

Illustrations: Lortet (1883: 164, pl. 11, fig. 4) as *Phoxinellus libani*.

Distribution. General distribution: Asia Minor and Middle East: Orontes and Litani Rivers drainages and Jordan River system.

Distribution in the Middle East: Jordan Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 437-Orontes, 438-Jordan River.

Habitat: This species is found in springs, streams, and rivers, usually with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Lebanon: [Native]. — Bakhsoon. — Recorded from Lebanon in original description by Lortet (1883: 164) subsequently reported by Bariche and Freyhof (2016) and Saç et al. (2019). — Lebanon material: MCZ, MHNG, SMF, SMNS, USNM, FSJF.

Status in Syria: [Native]. — Bakhsoon. — First record from Syria by Beckman (1962: 135) as *Phoxinellus libani* and *P. rutiloides*; confirmed by Bariche and Freyhof (2016: 205); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: FSJF, MCZ, MNHN.

Status in Türkiye: [Native]. — Ot balığı. — First record from Türkiye by Bayçelebi (2020); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.

***Pseudophoxinus maeandri* (Ladiges 1960)**

Common name: Apamean spring minnow

Taxonomy: Original description: *Pararhodeus maeandri* Ladiges 1960: 140, fig. 13 [Headwaters of Menderes River near Isikli, Türkiye; holotype: ZMH H1093].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Ladiges (1960: 140, fig. 13).

Distribution. General distribution: Asia Minor: Büyük Menderes River (Aegean Sea tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species is found in springs, streams, and rivers, usually with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Phoxinellus zeregi meandri*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes. — Turkish material: ZMH.

***Pseudophoxinus maeandricus* (Ladiges 1960)**

Common name: Menderes brook minnow

Taxonomy: Original description: *Acanthorutilus maeandricus* Ladiges 1960: 133, fig. 5 [Menderes River near Isikli, Türkiye; holotype: ZMH H1077].

Middle Eastern synonyms: *Acanthorutilus maeandricus* Ladiges 1960; misspelled *meandricus* by authors.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Büyük Menderes River (Aegean Sea tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species is found in springs, streams, and rivers, usually with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes. — Turkish material: ZMH.

***Pseudophoxinus mehmeti* Ekmekçi, Atalay, Yogurtçuoğlu, Turan & Küçük 2015**

Common name: Minnow

Taxonomy: Original description: *Pseudophoxinus mehmeti* Ekmekçi, Atalay, Yogurtçuoğlu, Turan & Küçük 2015: 119, figs. 2-3, 4a, 5a, 6a [Burdur Province, Yeşilova District: Alanköy reservoir, 54 km southwest from Burdur, Türkiye, 37°40'58"N, 29°50'46"E; holotype: FFR 03274].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Ekmekçi et al. (2015: 119, figs. 2-3, 4a, 5a, 6a).

Distribution. General distribution: Asia Minor: Akgöl tributary, Burdur Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species is found in springs, streams, and rivers, usually with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Ekmekçi et al. (2015); listed in previous checklists from Türkiye by Çiçek et

al. (2016, 2018a, 2020, 2023a). — Distribution in River Basin: 10-Burdur. — Turkish material: FFR.

***Pseudophoxinus ninae* Freyhof & Özuluğ 2006**

Common name: Onaç spring minnow

Taxonomy: Original description: *Pseudophoxinus ninae* Freyhof & Özuluğ 2006: 257, figs. 1-2 [Stream Onaç north of Bucak on main road to Burdur, 37°30.757'N, 30°32.456'E, Burdur Province, Türkiye; holotype: ZMB 33740].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof and Özuluğ (2006: 257, figs. 1-2).

Distribution. General distribution: Asia Minor: upper Aksu Çayı basin (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits pools, slow-flowing streams, and springs. It is usually found among vegetation or under shore cover. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Yağ balığı. — Recorded from Türkiye in the original description by Freyhof and Özuluğ (2006); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: ZMB.

***Pseudophoxinus syriacus* (Lortet 1883)**

Common name: Barada spring minnow

Taxonomy: Original description: *Rhodeus syriacus* Lortet 1883: 21 [24], pl. 9 [Lakes east of Damascus, Syria; syntypes: ?MCZ 25539 (3), MHNG 611.22 (2), USNM 48029 (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Lortet (1883: pl. 9) as *Rhodeus syriacus*.

Distribution. General distribution: Nahr al Barada valley.

Distribution in the Middle East: Syria.

Distribution in Ecoregions: 437-Orontes, 438-Jordan River.

Habitat: This species inhabits springs and spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Syria: [Endemic]. — Bakhsoon. — Recorded from Syria in original description as *Rhodeus syriacus* by Lortet (1883: 21); subsequently reported by Beckman (1962: 137) as *Phoxinellus syriacus*; listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: MCZ, MNHN, USNM.

Pseudophoxinus turani* Küçük & Güçlü 2014*Common name:** Turan's minnow**Taxonomy:** Original description: *Pseudophoxinus turani* Küçük & Güçlü 2014: 60, figs. 2-3 [Hatay Province, Hassa Country, İncesu Spring, Asi River drainage, 36°47.36'N, 36°30.48'E, Türkiye; holotype: IFC-ESUF 03-1002].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Küçük and Güçlü (2014: 60, figs. 2-3).**Distribution. General distribution:** Asia Minor: Asi Nehri basin (Orontes) (Mediterranean tributary).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 437-Orontes.**Habitat:** This species inhabits pools, slow-flowing streams, and springs. It is usually found among vegetation or under shore cover. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Ot balığı. — Recorded from Türkiye in the original description by Küçük and Güçlü (2014); listed in previous checklists from Türkiye by Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: IFC-ESUF.***Pseudophoxinus zekayi* Bogutskaya, Küçük & Atalay 2006****Common name:** Ceyhan spring minnow**Taxonomy:** Original description: *Pseudophoxinus zekayi* Bogutskaya, Küçük & Atalay 2006: 339, figs. 2, 4b [Ceyhan River drainage, Aksu River system east of Kahramanmaraş, Kahramanmaraş Province at Çöçelli, Türkiye; holotype: SCFK-SDU 181].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Bogutskaya et al. (2006: 339, figs. 2, 4b).**Distribution. General distribution:** Asia Minor: Ceyhan River basin (Mediterranean tributary).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species inhabits lakes, slow-flowing streams, and springs. It is usually found among vegetation or under shore cover. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS, CLI, CON, COM, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Ot balığı. — Recorded from Türkiye in the original description by Bogutskaya et al. (2006); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: SCFK-SDU.***Pseudophoxinus zeregi* (Heckel 1843)****Common name:** Levantine spring minnow**Taxonomy:** Original description: *Phoxinellus zeregi* Heckel 1843: 1063 [73] [Aleppo, Syria, and Turkey; syntypes: NMW 51068-69 (1, 3)].**Middle Eastern synonyms:** None.

Revisions: Goren (1972: 145) as *Phoxinellus zeregi zeregi*; Perea et al. (2010: 4).

Illustrations: Heckel (1843b: pl. 6, fig. 3) as *Phoxinellus zeregi*.

Distribution. General distribution: Asia Minor and Middle East: Orontes and Quwayq river systems.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes, 441-Lower Tigris and Euphrates.

Habitat: This species is a riverine species. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Syria: [Native]. — Bakhsoon. — Recorded from Syria in original description by Heckel (1843a: 1064); subsequently reported by Beckman (1962: 138) as *Phoxinellus zeregi*, Goren (1972: 142); Saad et al. (2009). — Distribution in River Basin: 4-Orontes. — Syrian material: BMNH, MCZ, MNHN, NMW, SMNHATAU, MSL.

Status in Türkiye: [Native]. — Yağ balığı. — Listed in previous checklists from Türkiye by Geldiay and Balık (2007); Fricke et al. (2007) as *Phoxinellus zeregi*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi, 21-Fırat-Dicle. — Turkish material: None.

***Rutilus frisii* (Nordmann 1840)**

Common name: Black Sea roach

Taxonomy: Original description: *Leuciscus frisii* Nordmann 1840: 487 [Market in Odessa, Danube, Bug, Dniester, and Dnieper rivers; syntypes: ?NMW 50456].

Middle Eastern synonyms: *Leuciscus frisii caspius* Lönnberg 1900; *Rutilus frisii velecensis* Chichkoff 1932; *Gardonus wyrozub* Walecki 1863.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Black, Azov and Caspian Sea basins.

Distribution in the Middle East: Iran, Türkiye.

Distribution in Ecoregions: 423-Trache, 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: This species inhabits large brackish estuaries and their large, freshened plume waters, coastal lakes connected to rivers, and lowland stretches of large rivers. Landlocked populations inhabit lakes or reservoirs. Spawns in small rivers or streams with heavy current on gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Mahi sefid. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Status in Türkiye: [Native]. — Levkit balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

***Rutilus lacustris* (Pallas 1814)**

Common name: Roach, Vobla

Taxonomy: Original description: *Cyprinus lacustris* Pallas 1814: 314 [European lakes; possible syntypes: LS 44 (1, right half-skin)].

Middle Eastern synonyms: *Rutilus rutilus aralensis* Berg 1916; *Rutilus rutilus schelkovnikovi* Derjavin 1926; *Leuciscus rutilus* var. *fluviatilis* Jakovlev 1870.

Revisions: Berg (1949: 493).

Illustrations: Berg (1949: 494, fig. 291).

Distribution. General distribution: Eurasia: Ponto-Caspian basin to Siberia.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: This species inhabits large brackish estuaries and their large, freshened plume waters, coastal lakes connected to rivers and lowland stretches of large rivers. In estuaries, in deep layers, down to 20 m. Tolerates salinities up to 7-12 ‰. Landlocked populations inhabit lakes or reservoirs. Spawns in small rivers or streams with heavy current on gravel bottom. — Freshwater, brackish.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Kolmeh. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Rutilus rutilus* (Linnaeus 1758)**

Common name: Roach

Taxonomy: Original description: *Cyprinus rutilus* Linnaeus 1758: 324 [European lakes; possible syntypes: LS 44 (1, right half-skin)].

Middle Eastern synonyms: *Leuciscus rutilus* (Linnaeus 1758).

Revisions: Berg (1949: 493).

Illustrations: Berg (1949: 494, fig. 291).

Distribution. General distribution: Europe and western Asia; widely introduced elsewhere.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia.

Habitat: This species occurs in a wide variety of habitats, mainly in lowland areas. Most are abundant in nutrient-rich lakes, large to medium-sized rivers, and backwaters. Known also from small lowland streams and brackish coastal lagoons. Spawns among dense submerged vegetation in backwaters or lakes, flooded meadows, or shallow, fast-flowing river habitats on a plant or gravel bottom. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Kızılöz balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 12-Sakarya, 13-Batı Karadeniz. — Turkish materials: None.

***Scardinius elmaliensis* Bogutskaya 1997**

Common name: Antalya rudd

Taxonomy: Original description: *Scardinius erythrophthalmus elmaliensis* Bogutskaya 1997: 180 [Elmalı, in Vilayet Antalya, southern Türkiye; holotype: ZMH 8863].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Karagöl tributary (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species is a lacustrine species, inhabiting also canals and springs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kızılkanaat. — Recorded from Türkiye in the original description by Bogutskaya (1997); listed in previous checklists from Türkiye by Kuru (2004) as *Scardinius erythrophthalmus elmaliensis*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 8-Batı Akdeniz, 9-Antalya. — Turkish material: ZMH.

***Scardinius erythrophthalmus* (Linnaeus 1758)**

Common name: Rudd

Taxonomy: Original description: *Cyprinus erythrophthalmus* Linnaeus 1758: 324 [northern Europe; no types known].

Middle Eastern synonyms: *Leuciscus apollonitis* Richardson 1857.

Revisions: Berg (1949: 593).

Illustrations: Berg (1949: 593, fig. 350).

Distribution. General distribution: Eurasia. Introduced elsewhere.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 434-Kura-South Caspian Drainages.

Habitat: This species inhabits mainly nutrient-rich, well-vegetated lowland rivers, backwaters, oxbows, ponds, and lakes. It spawns on roots or submerged plants. — Freshwater, brackish.

Economic importance: Locally commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Sorkhe par. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Kızılkanaat. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 12-Sakarya, 13-Batı Karadeniz. — Turkish materials: None.

***Squalius adanaensis* Turan, Kottelat & Doğan 2013**

Common name: Adana chub

Taxonomy: Original description: *Squalius adanaensis* Turan, Kottelat & Doğan 2013: 310, figs. 2, 3 [Üçürge Stream at Karaisalı, Seyhan River drainage, Adana Province, Türkiye; holotype: FFR 1994].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2013b: 310, figs. 2, 3).

Distribution. General distribution: Asia Minor: Seyhan River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits lowland rivers and lower parts of streams. This species also inhabits the reservoir, a large dam lake, but it is expected to migrate from there into inflowing rivers to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Turan et al. (2013b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan. — Turkish material: FFR.

Squalius agdamicus Kamensky 1901

Common name: Agdam chub

Taxonomy: Original description: *Squalius agdamicus* Kamensky 1901: 49 [Near Agdam, Kuyra River basin, Azerbaijan; holotype (unique): ?ZMT (not at ZIN)].

Middle Eastern synonyms: *Leuciscus agdamicus* (Kamensky 1901).

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Kura basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits rivers and the lower parts of streams. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Akdam tatlı su kefali. — First report from Türkiye by Kaya et al. (2020c); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

Squalius anatolicus (Bogutskaya 1997)

Common name: Beyşehir dace

Taxonomy: Original description: *Leuciscus lepidus anatolicus* Bogutskaya 1997: 173 [Beyşehir Gölü, central Türkiye; holotype: ZMH 8864].

Middle Eastern synonyms: *Leuciscus anatolicus* Bogutskaya 1997.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Beyşehir Gölü and Beyşehir Gölü tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia, 432-Southern Anatolia.

Habitat: This species inhabits lakes and rivers, as well as reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: COM. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Bogutskaya (1997); listed in previous checklists from Türkiye by Kuru (2004) as *Leuciscus lepidus anatolicus*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya, 16-Konya. — Turkish material: ZMH.

Squalius aristotelis* Özuluğ & Freyhof 2011*Common name:** Tuzla chub**Taxonomy:** Original description: *Squalius aristotelis* Özuluğ & Freyhof 2011: 118, figs. 8-10 [Stream Behramkale north of Assos, Biga Peninsula, 39°29.91'N, 26°19.99'E, Çanakkale Province, Türkiye; holotype: IUSHM 2009-944].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Özuluğ and Freyhof (2011: 118, figs. 8-10).**Distribution. General distribution:** Asia Minor: Aegean Sea tributary Çanakkale Province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 429-Western Anatolia.**Habitat:** This species inhabits lakes and rivers, as well as reservoirs. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Tatlı su kefalı. — Recorded from Türkiye in the original description by Özuluğ and Freyhof (2011); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 4-Kuzey Ege. — Turkish material: IUSHM.***Squalius berak* Heckel 1843****Common name:** Mesopotamian chub**Taxonomy:** Original description: *Squalius berak* Heckel 1843: 1078 (88) [Aleppo, Syria; syntypes: NMW 48915 (6), SMF 469 (ex NMW) (3)].**Middle Eastern synonyms:** *Squalius orientalis* Heckel 1847.**Revisions:** Khaefi et al. (2016); Esmaili et al. (2016c: 119).**Illustrations:** Heckel (1843b: pl. 10, fig. 1); Esmaili et al. (2016c: 120-123, figs. 1-5).**Distribution. General distribution:** Asia Minor and Middle East: Euphrates and Tigris River basin.**Distribution in the Middle East:** Iran, Iraq, Syria, and Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species lives in small to medium-sized streams, mostly in mountains and hilly areas. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are many threats in the area, but none is serious enough to significant impact this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Sefid-e rodhaneyi. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — First record from Iraq by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates. — Iraq materials: None.**Status in Syria:** [Native]. — None. — Recorded from Syria in original description by Heckel (1843a: 1079) as *Squalius berak*; subsequently reported by Beckman (1962: 130) as *Leuciscus cephalus orientalis*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, NMW, SMNS, MSL.**Status in Türkiye:** [Native]. — Tatlı su kefalı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al.

(2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

***Squalius cappadocicus* Özuluğ & Freyhof 2011**

Common name: Cappadocian chub

Taxonomy: Original description: *Squalius cappadocicus* Özuluğ & Freyhof 2011: 119, figs. 11-13 [Stream Melendiz at Ihlara, 38°14.15'N, 34°18.71'E, Aksaray Province, Türkiye; holotype: IUSHM 2011-1035].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Özuluğ and Freyhof (2011: 119, figs. 11-13).

Distribution. General distribution: Asia Minor: Melendiz River and some other tributaries in Lake Tuz Basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits streams with slow to moderately fast flowing waters on sand and gravel bottoms. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Özuluğ and Freyhof (2011); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: IUSHM.

***Squalius carinus* Özuluğ & Freyhof 2011**

Common name: Chocolate chub

Taxonomy: Original description: *Squalius carinus* Özuluğ & Freyhof 2011: 123, figs. 14-16 [Spring Işikli, 38°19.29'N, 29°51.07'E, Denizli Province, Türkiye; holotype: IUSHM 2009-947].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Özuluğ and Freyhof (2011: 123, figs. 14-16).

Distribution. General distribution: Asia Minor: Büyük Menderes River system, Aegean Sea tributary.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits streams, springs, and lakes, from which it migrates to streams for spawning. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, COM, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Özuluğ and Freyhof (2011); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene. — Turkish material: IUSHM.

Squalius cephalus* (Linnaeus 1758)*Common name:** European chub**Taxonomy:** Original description: *Cyprinus cephalus* Linnaeus 1758: 322 [Northern Europe; syntypes: NRM 51 (1), ZMUU Linn. coll. 213 (1)].**Middle Eastern synonyms:** *Leuciscus cephalus* (Linnaeus 1758).**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Europe and Middle East.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace.**Habitat:** This species is most abundant in small rivers and large streams in barbel zones with riffles and pools, also, along shores of slow-flowing lowland rivers, even in very small mountain streams. Also in large lakes, undertaking spawning migrations to inflowing streams. Spawns in fast-flowing water above gravel bottom, rarely among submerged vegetation. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** FIT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Türkiye:** [Native]. — Tatlı su kefali. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.***Squalius cii* (Richardson 1857)****Common name:** Marmara chub**Taxonomy:** Original description: *Leuciscus cii* Richardson 1857: 375 [Gemlek [Gemelik] River, north of Bursa, northwestern Türkiye; lectotype: BMNH 1865.5.2.8-9 (99.5 mm SL specimen)].**Middle Eastern synonyms:** *Leuciscus cephaloides* Battalgil 1942; *Squalius cephaloides* (Battalgil 1942).**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Eurasia: southern Marmara Sea basin and (Kara) Menderes River (northwestern Anatolia).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia.**Habitat:** This species inhabits a wide range of streams and rivers and colonises lakes and reservoirs, from which it migrates to inflowing streams to spawn. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Türkiye:** [Native]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Richardson (1857); listed in previous checklists from Türkiye Stoumboudi et al. (2006); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 4-Kuzey Ege. — Turkish material: BMNH.***Squalius fellowesii* (Günther 1868)****Common name:** Aegean chub**Taxonomy:** Original description: *Leuciscus fellowesii* Günther 1868: 224, fig. [Xanthos, Türkiye; syntypes: BMNH 1845.7.9.58-59 (2)].**Middle Eastern synonyms:** None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Eşen Çayı (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 432-Southern Anatolia.

Habitat: This species inhabits a wide range of streams and rivers, including lakes and reservoirs, from which it migrates to inflowing streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, EUT. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Günther (1868); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya. — Turkish material: BMNH.

***Squalius irideus* (Ladiges 1960)**

Common name: Anatolian ghizani

Taxonomy: Original description: *Leucaspius irideus* Ladiges 1960: 138, fig. 11 [Marmaris Mugla-arasi, Türkiye; holotype: ZMH H1085].

Middle Eastern synonyms: *Pseudophoxinus irideus* (Ladiges 1960); *Ladigesocypris irideus* (Ladiges 1960).

Revisions: None.

Illustrations: Ladiges (1960: 138, fig. 11).

Distribution. General distribution: Asia Minor: Mediterranean Sea tributary, Muğla Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits springs and small, slow-flowing streams. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NT (IUCN, 2023) as *Ladigesocypris irideus*.

Threats: ABS, CLI, CON, COM, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2016, 2018a, 2020, 2023a). — Distribution in River Basin: 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz. — Turkish material: ZMH.

***Squalius kosswigi* (Karaman 1972)**

Common name: Striped chub

Taxonomy: Original description: *Leuciscus kosswigi* Karaman 1972: 146, fig. 12 [Gumuldur [Gümüldür], south from Izmir, Türkiye; holotype: ZMH H4555].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Karaman (1972: 146, fig. 12).

Distribution. General distribution: Asia Minor: Aegean Sea tributary.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits streams and rivers and is believed to also inhabit reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Karaman (1972); listed in previous checklists from Türkiye by Geldiay and Balık (2007) as *Leucalburnus kosswigi*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 6-Küçük Menderes. — Turkish material: ZMH.

Squalius kottelati Turan, Yılmaz & Kaya 2009

Common name: Cilician pike chub

Taxonomy: Original description: *Squalius kottelati* Turan, Yılmaz & Kaya 2009: 54, figs. 1, 2b [Tahtaköprü Reservoir, Orontes River drainage, Gaziantep Province, Türkiye; holotype: FFR 1991].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2009b: 54, figs. 1, 2b).

Distribution. General distribution: Asia Minor: Asi and Ceyhan River basins.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia, 437-Orontes.

Habitat: This species inhabits a wide range of streams, rivers, lakes, and reservoirs. It is a migratory species. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Turan et al. (2009b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 19-Asi, 20-Ceyhan. — Turkish material: FFR.

Squalius latus Keyserling 1861

Common name: Hari asp, Esatern asp

Taxonomy: Original description: *Squalius latus* Keyserling 1861: 21 [24], pl. 9 [Heri Rud River near Herat, Afghanistan; holotype: no types preserved].

Middle Eastern synonyms: *Squalius transcaspensis* Berg 1898; *Leuciscus latus* (Keyserling 1861).

Revisions: Berg (1949: 549) as *Leuciscus latus*.

Illustrations: Berg (1949: 549, fig. 316) as *Leuciscus latus*.

Distribution. General distribution: Middle East and South Asia: Hari River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 631-Upper Amu Darya.

Habitat: This species is a riverine species. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023) as *Leuciscus latus*.

Threats: No information is available on threats to this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Aroos Mahi-e Harirud. — Listed in previous checklists from Iran by Esmaeili et al. (2010a) as *Leuciscus latus*; Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar

et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 19-Hari River. — Iran material: None.

***Squalius lepidus* Heckel 1843**

Common name: Mesopotamian pike chub

Taxonomy: Original description: *Squalius lepidus* Heckel 1843: 21 (24), pl. 9 [Tigris River, Mosul, Iraq; lectotype: NMW 49342 (spec. 1); lectotype selected by Bogutskaya (1994: 603)].

Middle Eastern synonyms: *Leuciscus lepidus* (Heckel 1843).

Revisions: Khaefi et al. (2016).

Illustrations: Heckel (1843b: pl. 10, fig. 2).

Distribution. General distribution: Asia Minor and Middle East: Asi Nehri (Orontes), Quwayq, Euphrates and Tigris River basins.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species lives in large to medium-sized rivers, lakes, and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area, non seem to be serious enough to strongly impact this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Kawar, Aroos mahi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates. — Iraq materials: NMW.

Status in Syria: [Native]. — None. — First record from Syria by Pellegrin (1911: 108); confirmed by Gruvel (1931); Beckman (1962: 130) as *Leuciscus lepidus*; Krupp and Schneider (1991b: 73); Saad et al. (2009) as *Leuciscus lepidus*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MNHN, MSL.

Status in Türkiye: [Native]. — Akbalık. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi, 21-Fırat-Dicle. — Turkish material: None.

***Squalius namak* Khaefi, Esmaili, Sayyadzadeh, Geiger & Freyhof 2016**

Common name: Namak Lake chub

Taxonomy: Original description: *Squalius namak* Khaefi, Esmaili, Sayyadzadeh, Geiger & Freyhof 2016: 148, figs. 2-4, 5c, 6, 9 [Spring Bolagh (Cheshmeh Bolagh) at Shazand, east of Anjirak, Markazi province, Iran, 34°00'38"N, 49°50'51"E; holotype: ZM-CBSU G121].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Khaefi et al. (2016: 148, fig. 2).

Distribution. General distribution: Middle East: Namak Lake basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 447-Namak.

Habitat: This species lives in large to medium-sized rivers, lakes, and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Mahi sefid-e Namak. — Recorded from Iran in the original description by Khaefi et al. (2016); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 15-Namak Lake. — Iran material: ZM-CBSU.

***Squalius orientalis* (Nordmann 1840)**

Common name: Dace

Taxonomy: Original description: *Leuciscus orientalis* Nordmann 1840: 484 [Abkhazia (Abasie), Georgia (Asia); no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Blacksea and Caspian Sea region.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species lives in large to medium-sized rivers, lakes, and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Tatlı su kefali. — Listed in previous checklists from Türkiye by Geldiay and Balık (2007); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 23-Çoruh. — Turkish material: None.

***Squalius orpheus* Kottelat & Economidis 2006**

Common name: Orpheus dace

Taxonomy: Original description: *Squalius orpheus* Kottelat & Economidis 2006: 182, fig. 1 [Evros drainage, stream Ardas at ford between Kastanies and Marasia, 41°39'05"N, 26°28'23"E, Thrace, Greece; holotype: MHNG 2659.021].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kottelat and Economidis (2006: 182, fig. 1).

Distribution. General distribution: Southeastern Europe: Black Sea watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species lives in streams and rivers with moderate currents. Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Kottelat and Economidis (2006); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

Squalius pursakensis* (Hankó 1925)*Common name:** Sakarya chub**Taxonomy:** Original description: *Leuciscus orientalis* var. *pursakensis* Hankó 1925: 140, pl. 3 (fig. 1) [Kara-Chehir, Kötschke-Kissik and Eski-Chehir, Türkiye; syntypes: (2) lost].**Middle Eastern synonyms:** *Leuciscus pursakensis* Hankó 1925.**Revisions:** None.**Illustrations:** Hankó 1925: 140, pl. 3 (fig. 1).**Distribution. General distribution:** Asia Minor: Sakarya River drainage, Black Sea tributaries.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia.**Habitat:** This species inhabits a very wide range of habitats, from small streams to large rivers, lakes, and reservoirs. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are many threats in the area (dams, pollution) but none seem to be strong enough to seriously impact this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Türkiye:** [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Hankó (1925); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak. — Turkish material: None.***Squalius recurvirostris* Özuluğ & Freyhof 2011****Common name:** Akşehir chub**Taxonomy:** Original description: *Squalius recurvirostris* Özuluğ & Freyhof 2011: 143, figs. 35-37 [Stream at Ortaköy, north of Akşehir, 38°26.84'N, 31°31.05'E, Konya Province, Türkiye; holotype: IUSHM 2011-1012].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Özuluğ and Freyhof (2011: 143, figs. 35-37).**Distribution. General distribution:** Asia Minor: Akşehir Gölü tributary, Konya Province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species inhabits streams and lakes. Lake populations migrate to inflowing streams to spawn. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Akşehir tatlı su kefali. — Recorded from Türkiye in the original description by Özuluğ and Freyhof (2011); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 11-Akarçay, 12-Sakarya. — Turkish material: IUSHM.***Squalius semae* Turan, Kottelat & Bayçelebi 2017****Common name:** Chub**Taxonomy:** Original description: *Squalius semae* Turan, Kottelat & Bayçelebi 2017: 3, fig. 1a-b [Serçeme Stream (tributary of Karasu Stream), Erzurum Province, Türkiye, 39°56.85'N, 40°48.24'E; holotype: FFR 724].**Middle Eastern synonyms:** None.

Revisions: None.

Illustrations: Turan et al. (2017d: 3, fig. 1a-b).

Distribution. General distribution: Asia Minor: Karasu Stream, Upper Euphrates (Firat Nehri).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams and lakes. Lake populations migrate to inflowing streams to spawn. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Turan et al. (2017d); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Firat-Dicle. — Turkish material: FFR.

Squalius seyhanensis Turan, Kottelat & Doğan 2013

Common name: Seyhan dace

Taxonomy: Original description: *Squalius seyhanensis* Turan, Kottelat & Doğan 2013: 313, figs. 1, 3b, 5-6 [Satiz Stream, Seyhan River drainage, Kayseri Province, Türkiye; holotype: FFR 1992].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2013b: 313, figs. 1, 3b, 5-6).

Distribution. General distribution: Asia Minor: Zamanti Stream, upper Seyhan River Basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits headwater streams and small rivers. It is unknown if it also might inhabit reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: ABS, CLI, CON, EUT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Turan et al. (2013b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan. — Turkish material: FFR.

Squalius spurius Heckel 1843

Common name: Orontes dace

Taxonomy: Original description: *Squalius spurius* Heckel 1843: 1081 [91] [Aleppo, Syria; syntypes: NMW 49572 (2)].

Middle Eastern synonyms: *Leuciscus spurius* (Heckel 1843).

Revisions: Bogutskaya (1997: 174) as *Leuciscus spurius*.

Illustrations: None.

Distribution. General distribution: Asia Minor and Middle East: Qweik River basin.

Distribution in the Middle East: Syria and Türkiye.

Distribution in Ecoregions: 437-Orontes.

Habitat: This species lives in large to medium-sized rivers, lakes, and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Syria: [Native]. — None. — Recorded from Syria in original description by Heckel (1843a: 1081); subsequently reported by Beckman (1962: 130); Saad et al. (2006) as *Leuciscus spurius*. — Distribution in River Basin: 4-Orontes. — Syrian material: NMW, MSL.

Status in Türkiye: [Native]. — Tatlı su kefali. — Listed in previous checklists from Türkiye by Kuru (2004) as *Leuciscus spurius*; Fricke et al. (2007) as *Leuciscus spurius*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.

***Squalius turcicus* De Filippi 1865**

Common name: Transcaucasian chub

Taxonomy: Original description: *Squalius turcicus* De Filippi 1865: 359 [River Arax [Aras Nehri] near Erzurum, Türkiye; holotype: ?MZUT].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Khaefi et al. (2016: 148, fig. 8a); Jouladeh-Roudbar et al. (2020: 152, fig. 278).

Distribution. General distribution: Asia Minor and Middle East: Kura-Aras River and southern Caspian Sea basins.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 445-Orumiyeh, 446-Caspian Highlands, 450-Turan Plain,

Habitat: This species inhabits a very wide range of habitats, from streams to rivers, lakes, and reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area but non is believed to be so strong to affect this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Sefid-e rodkhaneyi. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Tatlı su kefali. — Recorded from Türkiye in the original description by De Filippi (1865); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: ?MZUT.

***Squalius verepi* Turan 2022**

Common name: Dace

Taxonomy: Original description: *Squalius verepi* Turan 2022: 337, figs. 1-3, 5d [Stream Behremas at Lake Hazar, Elazığ Province, Türkiye, 38.501°N, 39.508°E; holotype: FFR 06296].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan (2022: 337, figs. 1-3, 5d).

Distribution. General distribution: Asia Minor: Lake Hazar and upper Tigris River basins.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of habitats, from streams to rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kefali. — Recorded from Türkiye in the original description by Turan (2022); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Turcichondrostoma fahirae* (Ladiges 1960)**

Common name: Tefenni minnow

Taxonomy: Original description: *Phoxinellus fahirae* Ladiges 1960: 141, fig. 14 [Kirkpunar, near Tefenni, southwestern Burdur Province, Türkiye; holotype: ZMH H1104].

Middle Eastern synonyms: *Chondrostoma fahirae* (Ladiges 1960); *Pseudophoxinus fahirae* (Ladiges 1960); *Telestes fahirae* (Ladiges 1960).

Revisions: Turan et al. (2021a).

Illustrations: Ladiges (1960: 141, fig. 14).

Distribution. General distribution: Asia Minor: springs near Karamusa and Karamanlı, Burdur Gölü tributary, Kirkpinar, Burdur Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species inhabits springs and streams. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — İnci levrek balığı. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004) as *Pseudophoxinus fahirae*; Geldiay and Balık (2007) as *Phoxinellus zereği fahirae*; Fricke et al. (2007) as *Pseudophoxinus fahirae*; Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020) as *Pseudophoxinus fahirae*; Çiçek et al. (2023a). — Distribution in River Basin: 10-Burdur. — Turkish material: ZMH.

***Vimba melanops* (Heckel 1837)**

Common name: Macedonian vimba

Taxonomy: Original description: *Abramis melanops* Heckel 1837: 154, pl. 8 (fig. 3) [Maritza [Marizza] River, eastern Rumelia, Balkan region of Bulgaria; syntypes: NMW 55270 (1)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Heckel 1837: 154, pl. 8 (fig. 3).

Distribution. General distribution: Eurasia: Aegean Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species inhabits predominantly riverine species that are also present in reservoirs. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — None. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

Vimba mirabilis* (Ladiges 1960)*Common name:** Menderes bream**Taxonomy:** Original description: *Acanthobrama mirabilis* Ladiges 1960: 132, fig. 4 [Menderes River at Sarayköyn [Saraköy], Denizli Province, Türkiye; holotype: ZMH H1085].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Ladiges (1960: 132, fig. 4).**Distribution. General distribution:** Asia Minor: Büyük Menderes River, Aegean Sea tributary.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 429-Western Anatolia.**Habitat:** This species inhabits large and medium-sized lowland rivers and lakes. It is quite resistant to habitat modifications and occurs in reservoirs, where it might build up large populations. — Freshwater.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Ulubat balığı. — Recorded from Türkiye in the original description by Ladiges (1960); listed in previous checklists from Türkiye by Kuru (2004) as *Acanthobrama mirabilis*; Geldiay and Balık (2007) as *Acanthobrama mirabilis*; Fricke et al. (2007) as *Acanthobrama mirabilis*; Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes, 8-Batı Akdeniz. — Turkish material: ZMH.***Vimba persa* (Pallas 1814)****Common name:** Persian vimba, Caspian vimba**Taxonomy:** Original description: *Cyprinus persa* Pallas 1814: 310 [Iran in lakes along the Kura River; no types known].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Jouladeh-Roudbar et al. (2020: 153, fig. 281).**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain.**Habitat:** This species inhabits predominantly riverine species that are also present in reservoirs. — Freshwater, brackish.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Siyah koli. — Recorded from Iran in original description by Pallas (1914) and listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.***Vimba vimba* (Linnaeus 1758)****Common name:** Baltic vimba**Taxonomy:** Original description: *Cyprinus vimba* Linnaeus 1758: 325 [Lakes of Sweden; no types known].**Middle Eastern synonyms:** *Abramis vimba* (Linnaeus 1758); *Abramis asianus* var. *elongatus* Steindachner 1897.

Revisions: Berg (1949: 789).

Illustrations: Kottelat and Freyhof (2007: 292, figs.).

Distribution. General distribution: Northern, central, and eastern Europe and Asia Minor: basins of North Sea, Baltic Sea; Sea of Marmara, Black Sea, Sea of Azov.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia.

Habitat: This species inhabits brackish estuaries, large to medium rivers, and some large subalpine lakes. Sedentary populations occur even in small rivers in the barbel zone. Spawns on gravel in riffles in shallow, fast-flowing streams, and rivers. — Freshwater.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Türkiye: [Native]. — Eğrez, karaburun balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Vimba vimba tenella*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak. — Turkish material: None.

Phoxininae Bleeker 1863 (phoxinines)

***Phoxinus abanticus* Turan, Bayçelebi, Özuluğ, Gaygusuz & Aksu 2023**

Common name: Minnow

Taxonomy: Original description: *Phoxinus abanticus* Turan, Bayçelebi, Özuluğ, Gaygusuz & Aksu 2023: Figs. 4 and 8-10 [outlet of Abant Lake, Bolu Province, Türkiye, 40.664722 N, 31.425000 E; holotype: FFR 2322].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2023c: Figs. 4 and 8-10).

Distribution. General distribution: Asia Minor: Lake Abant basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species inhabits a wide range of cold and well oxygenated habitats, from small, fast-flowing streams to large rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Ot balığı. — Recorded from Türkiye in the original description by Turan et al. (2023c); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 12-Sakarya. — Turkish material: None.

***Phoxinus colchicus* Berg 1910**

Common name: Minnow

Taxonomy: Original description: *Phoxinus colchicus* Berg 1910: 169 [Bachvis Tzchali [Bachwis-tzchali] River in Ozurgety District, Georgia, Eurasia; holotype (unique): ZMT 141a].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 591) as *Phoxinus phoxinus colchicus*.

Illustrations: Berg (1949: 591, fig. 348) as *Phoxinus phoxinus colchicus*.

Distribution. General distribution: Eurasia: Caucasian Black Sea basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species inhabits a wide range of cold and well-oxygenated habitats, from small, fast-flowing streams to large rivers. Associated with salmonid fishes or cyprinids of barbel zone. Spawns over clean gravel areas in flowing water. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Ot balığı. — Recorded from Türkiye in the original description by Berg (1910); listed in previous checklists from Türkiye by Bayçelebi et al. (2015); Çiçek et al. (2016, 2020, 2023a). — Distribution in River Basin: 23-Çoruh. — Turkish material: None.

Phoxinus strandjae Drensky 1926

Common name: Bulgarian minnow

Taxonomy: Original description: *Phoxinus phoxinus strandjae* Drensky 1926: 137 [Strandscha (Istrandzhha) range, Bulgaria; syntypes: NMNHS].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kottelat and Freyhof (2007: 230, fig.).

Distribution. General distribution: Southeastern Europe: Black Sea watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace.

Habitat: This species inhabits small streams with clear, well-oxygenated water over gravel or stone bottoms. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Ot balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.

Characiformes

Characoidei

Serrasalminae Bleeker 1859 (piranhas and allies)

Piaractus brachypomus (Cuvier 1818)

Common name: Pirapitinga

Taxonomy: Original description: *Myletes brachypomus* Cuvier 1818: 452, pl. 22 (fig. 1) [Brazil; holotype (unique): MNHN A-8627].

Middle Eastern synonyms: None.

Revisions: Escobar et al. (2019: 1).

Illustrations: Esmaeili et al. (2017ab: 129, fig. 4).

Distribution. General distribution: South America: Amazon River basin (Brazil, Bolivia, Ecuador, Colombia, and Peru); introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 442-Upper Tigris and Euphrates, 631-Upper Amu Darya.

Habitat: This species is mostly solitary, but it migrates in large schools. During the non-breeding season, adults stay in flooded forests of white, clear and blackwater rivers. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — Listed in previous checklists from Iran by Esmaeili et al. (2018); Eagderi et al. (2022); Mousavi-Sabet et al. (2023); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 6-Caspian Sea, 19-Hari River. — Iran material: IMNRF-UT.

Serrasalmus maculatus Kner 1858

Common name: Maculatus piranha

Taxonomy: Original description: *Serrasalmus maculatus* Kner 1858: 166 (6) [Rio Guaporé, Mato Grosso, Brazil; lectotype: NMW 17995].

Middle Eastern synonyms: None.

Revisions: Jégu and Santos (2001: 119).

Illustrations: Jégu and Santos (2001: 122, fig. 1B).

Distribution. General distribution: South America: Amazon and Paraguay-Paraná River basin (Argentina, Bolivia, Brazil, Colombia, Paraguay, Peru, and Uruguay).

Distribution in the Middle East: Iraq.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species occurs usually in small groups of up to 20 individuals, which appear to have a definite range within a pond or a creek. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iraq: [Exotic]. — None. — First record from Iraq by Jawad and Qasim (2019); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Siluriformes

Loricarioidei

Loricariidae Rafinesque 1815 (suckermouth armored catfishes)

Hypostominae Kner 1853 (suckermouth catfishes)

Hypostomus plecostomus (Linnaeus 1758)

Common name: Suckermouth catfish

Taxonomy: Original description: *Acipenser plecostomus* Linnaeus 1758:238 [Suriname River, Suriname; lectotype: NRM 32].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Burgess (1989: 385, fig.).

Distribution. General distribution: South America: Orinoco River basin (Colombia, Guyana, and Suriname). Introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species is found in tidally influenced small creeks, swamps, and rivers, generally over mud in slow water. The stomach is enlarged, probably for air breathing, and takes up approximately one half to three quarters of the abdominal cavity. The species is probably a scraper of algae and detritus. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — First record from Iran by Mousavi-Sabet et al. (2023). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Pterygoplichthys disjunctivus* (Weber 1991)**

Common name: Vermiculated sailfin catfish

Taxonomy: Original description: *Liposarcus disjunctivus* Weber 1991: 638 [Rio Madeira, Amazon River system, Restauracao, Amazonas, Brazil; holotype: MZUSP 28360].

Middle Eastern synonyms: None.

Revisions: Weber (1992: 12).

Illustrations: Weber (1992: 12, pl. 9).

Distribution. General distribution: South America: Orinoco River basin (Colombia, Guyana, and Suriname). Introduced elsewhere.

Distribution in the Middle East: Israel, Saudi Arabia, and Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 436-Coastal Levant, 439-Southwestern Arabian Coast.

Habitat: This species is frequent and abundant in lentic environments, including anthropized ones. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Israel: [Exotic]. — None. — First record from Israel by Golani and Snovsky (2013); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin. — Israel material: HUI.

Status in Saudi Arabia: [Exotic]. — None. — Listed in previous checklists from Saudi Arabia by Freyhof et al. 2020 and Esmaili and Hamidan (2023) based on hybrids of *Pterygoplichthys disjunctivus* X *Pterygoplichthys pardalis*. — Saudi Arabia material: None.

Status in Türkiye: [Exotic]. — None. — Listed in previous checklists from Türkiye by Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: 12-Sakarya, 19-Asi. — Turkish material: None.

Remarks: Probably both reports are based on hybrids of *Pterygoplichthys disjunctivus* X *Pterygoplichthys pardalis* (see Emiroglu et al. 2016; Godwin et al. 2016).

***Pterygoplichthys joselimaianus* (Weber 1991)**

Common name: Gold-spot butterfly pleco

Taxonomy: Original description: *Glyptoperichthys joselimaianus* Weber 1991: 640 [Rio Araguaia, affluent of Tocantins, Amazon system, Arunanã, Goiás State, Brazil; holotype: MZUSP 4873].

Middle Eastern synonyms: None.

Revisions: Weber (1992: 20).

Illustrations: Weber (1992: 20, pl. 15).

Distribution. General distribution: Tocantins River basin, Goiás, Brazil. Introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species is frequent and abundant in lentic environments, including anthropized ones. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — First record from Iran by Mousavi-Sabet et al. (2023). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Pterygoplichthys pardalis* (Castelnau 1855)**

Common name: Amazon sailfin catfish

Taxonomy: Original description: *Hypostomus pardalis* Castelnau 1855: 42, pl. 20 (fig. 3) [Amazon River, Brazil; holotype (unique): MNHN A-9574].

Middle Eastern synonyms: None.

Revisions: Isbrücker (1980: 42); Weber (1992: 10).

Illustrations: Weber (1992: 10-11, pls. 7-8).

Distribution. General distribution: South America: Amazon River basin (Brazil, Ecuador, Colombia, Bolivia, and Peru). Introduced in Italy, Türkiye, and Asia; established in Florida and Puerto Rico (U.S.A.), Central America (Guatemala, Costa Rica), Colombia and Sri Lanka.

Distribution in the Middle East: Israel, Saudi Arabia, and Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 436-Coastal Levant, 438-Jordan River, 439-Southwestern Arabian Coast, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species is frequent and abundant in lentic environments, including anthropized ones. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iraq: [Exotic]. — Samaka sheraia. — First record from Iraq by Qasim and Jawad (2022; listed by Çiçek et al. (2023b)). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

Status in Israel: [Exotic]. — None. — First record from Israel by Golani and Snovsky (2013); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 3-Kinneret Basin. — Israel material: HJJ.

Status in Saudi Arabia: [Exotic]. — None. — Listed in previous checklists from Saudi Arabia by Freyhof et al. (2020); Esmaili and Hamidan (2023) based on hybrids of *Pterygoplichthys disjunctivus* X *Pterygoplichthys pardalis*. — Saudi Arabia material: None.

Status in Türkiye: [Exotic]. — None. — Listed in previous checklists from Türkiye by Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: 12-Sakarya. — Turkish material: None.

Remarks: Probably both reports are based on hybrids of *Pterygoplichthys disjunctivus* X *Pterygoplichthys pardalis* (see Emiroglu et al. 2016; Godwin et al. 2016).

Pangasiidae Bleeker 1858 (pangasid catfishes)

***Pangasianodon hypophthalmus* (Sauvage 1878)**

Common name: Striped catfish

Taxonomy: Original description: *Helicophagus hypophthalmus* Sauvage 1878: 235 [3] [Bangkok, Thailand; holotype: ANSP 67902].

Middle Eastern synonyms: *Pangasius hypophthalmus* (Sauvage 1878).

Revisions: Roberts and Vidthayanon (1991: 121).

Illustrations: Roberts and Vidthayanon (1991: 122, fig. 9).

Distribution. General distribution: Southeast Asia: Mekong basin, and Chao Phraya, Thailand; introduced elsewhere in southern Asia, Colombia, Costa Rica, and Puerto Rico (U.S.A.).

Distribution in the Middle East: Iraq and Israel.

Distribution in Ecoregions: 438-Jordan River, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits the main channels and floodplains of large rivers and seasonally moves up to floodplains and marshland for feeding and nursing. It is an omnivore, feeding primarily on algae, plants, zooplankton, insects, fruits, crustaceans, and fish. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iraq: [Native]. — Djerry. — First record from Iraq by Khamees et al. (2013); confirmed by Al-Faisal et al. (2014; listed by Çiçek et al. (2023b)). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq material: None.

Status in Israel: [Native]. — None. — First record from Israel by Snovsky and Golani (2012); listed by Çiçek et al. (2023c). — Distribution in River Basin: 3-Kinneret Basin. — Israel materials: HUI.

***Pangasius sanitwongsei* Smith 1831**

Common name: Giant pangasius

Taxonomy: Original description: *Pangasius sanitwongsei* Smith 1831: 26 [Menam Chao Phraya River at Koh Yai, central Thailand; holotype (unique): Siam. Dept. Fish. (apparently lost)].

Middle Eastern synonyms: None.

Revisions: Roberts and Vidthayanon (1991: 137).

Illustrations: Roberts and Vidthayanon (1991: 137, fig. 22).

Distribution. General distribution: Southeast Asia: Mekong and Chao Phraya River basins, Thailand, Cambodia, Laos, Vietnam, and Yunnan (China).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species is a benthopelagic, potamodromous species which inhabits large rivers surrounded by rainforest. It uses deep pools as refuges in the dry season. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — First record from Iran by Mousavi-Sabet et al. (2023). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Siluroidei

Bagridae Bleeker 1858 (bagrid catfishes)

***Mystus cyrusi* Esmaili, Sayyadzadeh, Zarei, Eagderi & Mousavi-Sabet 2022**

Common name: Cyrus catfish

Taxonomy: Original description: *Mystus cyrusi* Esmaili, Sayyadzadeh, Zarei, Eagderi & Mousavi-Sabet 2022: 327, figs. 2-6 [Qalatooyeh Spring, Kol River drainage, Qalatooyeh (Ghalatooye) village, Forg region, Darab city, Fars Province, Iran, 28°10'16.8"N, 55°14'42.5"E; holotype: ZM-CBSU J2901].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaili et al. (2022b: 327, fig. 2).

Distribution. General distribution: Middle East: Kol River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: This species inhabits large rivers and reservoirs. It feeds on invertebrates and small fish. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gorbemahi-e Korosh. — Recorded from Iran in the original description by Esmaili et al. (2022b). — Distribution in River Basin: 2-Hormuz. — Iran material: ZM-CBSU.

Mystus misrai* Anuradha 1986*Common name:** Catfish**Taxonomy:** Original description: *Mystus misrai* Anuradha 1986: 292, figs. 1-2 [Lake Antioche, Syria; holotype: MHNG 603.95].**Middle Eastern synonyms:** None.**Revisions:** Freyhof and Yoğurtçuoğlu (2023).**Illustrations:** Freyhof and Yoğurtçuoğlu (2023: 449).**Distribution. General distribution:** Orontes River basin.**Distribution in the Middle East:** Syria and Türkiye.**Distribution in Ecoregions:** 437-Orontes.**Habitat:** This species lives in large rivers and reservoirs. It feeds on invertebrates and small fish. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Low sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Syria:** [Native]. — None. — Recorded from Syria in original description by Anuradha 1986 (1794); subsequently reported by Freyhof and Yoğurtçuoğlu (2023; listed by Saad et al. (2023)). — Distribution in River Basin: 4-Orontes. — Syrian material: SMF.**Status in Türkiye:** [Native]. — Kedi balığı. — Recorded from Lake Antioche in the original description by Anuradha 1986 (1794); subsequently reported by Freyhof and Yoğurtçuoğlu (2023); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 19-Asi. — Turkish material: MHNG.***Mystus pelusius* (Solander 1794)****Common name:** Zigzag catfish**Taxonomy:** Original description: *Silurus pelusius* Solander in Russell, 1794: 210, pl. 7, fig. 1 [Qweik River, Aleppo, Syria; syntype: BMNH 1955.6.25.1 (1)].**Middle Eastern synonyms:** *Bagrus halepensis* Valenciennes 1840; *Macrones colvillii* Günther 1874; *Mystus colvillii* (Günther 1874); *Mystus halepensis* (Valenciennes 1840); *Macrones aleppensis* (Valenciennes 1840).**Revisions:** Roberts (1994:243); Esmaili et al. (2022b).**Illustrations:** Hamilton (1822: pl. 3, fig. 61) as *Pimelodus tengara*; Esmaili et al. (2022a:338, fig. 10); Esmaili et al. (2022a:339, fig. 11).**Distribution. General distribution:** Asia Minor and Middle East: Euphrates and Tigris River basins.**Distribution in the Middle East:** Iran, Iraq, Syria, and Türkiye.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits large rivers and reservoirs. It feeds on invertebrates and small fish. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — Low sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Gorbemahi-e Tajdar. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — Abu Al-Zumair. — First record from Iraq by Günther (1874); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. Iraq materials: Fish collection of the Marine Science Centre, University of Basrah, Basrah, Iraq.

Status in Syria: [Native]. — None. — Recorded from Syria in original description by Solander in Russell (1794:210); subsequently reported by Beckman (1962:46), Ali (2002) and Taha (2005); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, MNHN, MSL.

Status in Türkiye: [Native]. — Mezopotamya kedi balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Mystus colvillii*; Geldiay and Balık (2007) as *Mystus colvillii*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Sisoridae Bleeker 1858 (sisorid catfishes)

Glyptosterninae Gill 1861 (Asian sucker catfishes)

Glyptothorax armeniacus (Linnaeus 1766)

Common name: Tigris catfish

Taxonomy: Original description: *Glyptosternum armeniacum* Berg 1918: 146 [Mukhlasi-darasi River, Upper Euphrates River system, Türkiye (possibly stream Habib at Oyuklu Mahallesi, Çat district, 39.6050, 40.9764); syntypes: (5) ZMT (?4, lost), ZSI [ex ZIN 20806] F11319/1 (1), ZIN 20806 (5, now 4)].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2021d: 461).

Illustrations: Freyhof et al. (2021d: 461, fig. 5); Sayyadzadeh et al. (2022).

Distribution. General distribution: Asia Minor and Middle East: Tigris-Euphrates River basin.

Distribution in the Middle East: Iraq, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This is a freshwater species that occurs in slow-running and standing streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iraq: [Native]. — Sagangoor. — First record from Iraq by Berg (1931b); confirmed by Coad (2010); listed by Çiçek et al. (2023b). — Distribution in River Basin: 4-Great Zab, 5-Littrel Zab. — Iraq materials: None.

Status in Türkiye: [Native]. — İğneli küçük yayın balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Glyptothorax* sp.; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: None.

Glyptothorax cous (Linnaeus 1766)

Common name: Catfish

Taxonomy: Original description: *Silurus cous* Linnaeus 1766: 504 [Qweik River, at Aleppo, Syria; holotype: BMNH 1955.6.25.2].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2021d: 465), Sayyadzadeh et al. (2022).

Illustrations: Freyhof et al. (2021d: figs. 10-17); Sayyadzadeh et al. (2022: 22, fig. 9).

Distribution. General distribution: Asia Minor and Middle East: Tigris-Euphrates River basin.

Distribution in the Middle East: Iran, Iraq, and Syria.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species occurs in slow running and standing streams. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Gorbemahi. — First record from Iran by Sayyadzadeh et al. (2022). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Sagangoor. — First record from Iraq by Berg (1931b); confirmed by Coad (2010); listed by Çiçek et al. (2023b). — Distribution in River Basin: 4-Great Zab, 5-Littrel Zab. — Iraq materials: None.

Status in Syria: [Native]. — Balouj. — Recorded from Syria in original description by Linnaeus (1766: 504); subsequently reported by Beckman (1962: 178); Ali (2003); Taha (2005). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, MCZ, MSL.

Status in Türkiye: [Native]. — Vantuzlu yayın balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR, ZMH.

***Glyptothorax daemon* Freyhof, Kaya, Abdullah & Geiger 2021**

Common name: Ghost catfish

Taxonomy: Original description: *Glyptothorax daemon* Freyhof, Kaya, Abdullah & Geiger 2021: 482, figs. 31-36 [Stream Dilektaş, 16 km northeast of Yüksekova, Hakkari province, 37.6664, 44.1393, Türkiye; holotype: FFR 3928].

Middle Eastern synonyms: None.

Revisions: Sayyadzadeh et al. (2022, molecular systematics).

Illustrations: Freyhof et al. (2021d: 482, figs. 31-36).

Distribution. General distribution: Asia Minor and Middle East: upper Tigris and Great Zab River basins.

Distribution in the Middle East: Iraq and Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat. All species of this genus in the Middle East inhabit fast-running sections of streams and rivers. — Freshwater.

Economic importance. No commercial importance.

Conservation. — IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iraq. [Native] — None. — First record from Iraq by Freyhof et al. (2021d). — Distribution in River Basin: 1- Tigris, 4-Great Zab. — Iraq materials: None.

Status in Türkiye. [Native] — Vantuzlu yayın balığı. — First record from Türkiye in original description by Freyhof et al. (2021d). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish materials: FFR, FSJF.

***Glyptothorax kurdistanicus* (Berg 1931)**

Common name: Mesopotamian sucking catfish

Taxonomy: Original description: *Glyptosternum kurdistanicum* Berg 1931b: 384 [Serdesht, at Little Zab (36°N), River Bané basin, Iran, elevation 1500 metres; holotype: ZIN 20780].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2021d: 472); Sayyadzadeh et al. (2022, molecular systematics).

Illustrations: Freyhof et al. (2021d: 473, figs. 18).

Distribution. General distribution: Asia Minor and Middle East: Tigris River basin.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: All species of this genus in the Middle East inhabit fast running sections of streams and rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: ABS, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iran: [Native]. — Gorbemahi-e Kurdistan. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Sagangoor. — First record from Iraq by Berg 1931; confirmed by Jawad et al. (2009); listed by Çiçek et al. (2023b). — Distribution in River Basin: 4-Great Zab, 5- Littrel Zab, 8- Shatt al-Garaaf. — Iraq materials: Fish Collection of the Department of Fisheries and Marine Resources, College of Agriculture, University of Basrah, Basrah, Iraq.

Status in Syria: [Native]. — Balouj. — First record from Syria by Krupp and Schneider (1991b: 73); listed by Saad et al. (2023). Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: None.

Status in Türkiye: [Native]. — Vantuzlu yayın balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Glyptothorax* sp.; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Glyptothorax pallens Mousavi-Sabet, Eagderi, Vatandoust & Freyhof, 2021

Common name: Pallens sucking catfish

Taxonomy: Original description: *Glyptothorax pallens* Mousavi-Sabet, Eagderi, Vatandoust & Freyhof, 2021: 472, figs. 19-22 [Stream Zemkan 3 km north of Zamkan-e Olya, Kermanshah Province, Iran, 34.6452, 46.2856; holotype: GUIC GTI-H].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Mousavi-Sabet et al. (2021: 472, fig. 19).

Distribution. General distribution: Middle East: Sirvan River drainage, Tigris basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: All species of this genus in the Middle East inhabit fast running sections of streams and rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gorbemahi-e Sirvan. — Recorded from Iran in the original description by Mousavi-Sabet et al. (2021); listed in previous checklists from Iran by Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: GUIC.

Glyptothorax sardashtensis Jokar, Kamangar, Ghaderi & Freyhof 2023

Common name: Sardasht sucking catfish

Taxonomy: Original description: *Glyptothorax sardashtensis* Jokar, Kamangar, Ghaderi & Freyhof 2023:482, Figs. 5B, D, F, H, 6 - 12 [Lesser Zab at bridge east of Nalas, Sardasht County, West Azerbaijan Province, Iran, 36.2688, 45.5012; holotype: FCFUK 300].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jokar et al. (2023: 482, figs. 5, 6, 12).

Distribution. General distribution: Middle East: upper reaches of the Lesser Zab drainage, Iran.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: All species of this genus in the Middle East inhabit fast running sections of streams and rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gorbemahi-e Sardasht. — Recorded from Iran in the original description by Jokar et al. (2023). — Distribution in River Basin: 4-Tigris. — Iran material: FCFUK.

Glyptothorax silviae Coad 1981

Common name: Southern catfish

Taxonomy: Original description: *Glyptothorax silviae* Coad 1981: 291, figs. 1-3 [Stream 3 kilometers south of Bagh-e Malek, Khuzestan, Iran, 31°29'00"N, 49°54'30"E, elevation 660 m; holotype: NMC 1979-0390A].

Middle Eastern synonyms: *Glyptothorax alidaei* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021; *Glyptothorax galaxias* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021; *Glyptothorax hosseinpanahii* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021; *Glyptothorax shapuri* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021.

Revisions: Sayyadzadeh et al. (2022).

Illustrations: Coad (1981: 291, fig. 1).

Distribution. General distribution: Middle East: Jarrahi River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: All species of this genus in the Middle East inhabit fast running sections of streams and rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gorbemahi-e Jonob. — Recorded from Iran in the original description by Coad (1981) and listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: NMC, ZM-CBSU.

Glyptothorax steindachneri (Pietschmann 1913)

Common name: Steindachner's cat

Taxonomy: Original description: *Glyptosternum steindachneri* Pietschmann 1913: 93 [Tigris River, Mosul, Iraq; syntypes: (2, NMW?)].

Middle Eastern synonyms: None.

Revisions: Freyhof et al. (2021d: 479); Sayyadzadeh et al. (2022, molecular systematics).

Illustrations: Freyhof et al. (2021d: 480, fig. 28).

Distribution. General distribution: Asia Minor and Middle East: Tigris and Euphrates River basins.

Distribution in the Middle East: Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: All species of this genus in the Middle East inhabit fast running sections of streams and rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Iraq: [Native]. — Sagangoor. — Recorded from Iraq in original description by Pietschmann (1913); listed by Çiçek et al. (2023b). — Distribution in River Basin: 4-Great Zab, 5-Littrel Zab. — Iraq materials: NMW.

Status in Syria: [Native]. — Balouj. — First record from Syria by Freyhof et al. (2021d: 479); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: BMNH, SMF.

Status in Türkiye: [Native]. — Vantuzlu yayın balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); Coad (2015); Ünlü (2021); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Glyptothorax vatandousti Jouladeh-Roudbar, Ghanavi & Freyhof 2023

Common name: Catfish

Taxonomy: Original description: *Glyptothorax vatandousti* Jouladeh-Roudbar, Ghanavi & Freyhof 2023: 37, figs. 4-7 [Kangavar stream at Kangavar Kohne, Kermanshah prov., 34.34849, 47.98972, Iran: holotype: BIAUBM 1-H, 1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2023: 37, figs. 4-7).

Distribution. General distribution: Middle East: Kangavar stream, Iran.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: All species of this genus in the Middle East inhabit fast running sections of streams and rivers. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Gorbemahi-e Vatandoust. — Recorded from Iran in the original description by Jouladeh-Roudbar et al. (2023). — Distribution in River Basin: 4-Tigris. — Iran material: BIAUBM.

Siluridae Rafinesque 1815 (sheatfishes)

Silurus glanis Linnaeus 1758

Common name: Wels catfish

Taxonomy: Original description: *Silurus glanis* Linnaeus 1758: 304 [Orient, less frequently in European lakes; syntypes: BMNH 1853.11.12.168 (1, skin), NRM 59 (1)].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 904).

Illustrations: Berg (1949: 904-905, figs. 656-657); Jawad et al. (2021a).

Distribution. General distribution: North America; Eastern Europe to central Asia. Widely introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 434-Kura-South Caspian Drainages, 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 450-Turan Plain.

Habitat: This species inhabits large and medium-sized lowland rivers, backwaters, and well-vegetated lakes. Spawns in shallow, warm, and well-vegetated riverine habitats without current. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

- Threats:** HAB. — Low sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.
- Status in Iran:** [Native]. — Esbele. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh. — Iran material: ZM-CBSU.
- Status in Iraq:** [Exotic]. — Djerry. — First record from Iraq by an anecdotal reports of *S. glanis* in an unspecified locality in Iraq exist; confirmed by Jawad et al. (2021b); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None
- Status in Syria:** [Exotic]. — Sallour furati. — First record from Syria by Beckman (1962: 176); listed in FishBase by Bartley (2006); confirmed by confirmed by Saad et al. (2006). — Distribution in River Basin: 4-Orontes. — Syrian materials: None.
- Status in Türkiye:** [Native]. — Yayın balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 16-Konya, 17-Doğu Akdeniz, 18-Seyhan, 20-Ceyhan, 22-Doğu Karadeniz, 23-Çoruh, 24-Aras, 25-Van Lake. — Turkish materials: None

***Silurus triostegus* Heckel 1843**

Common name: Mesopotamian catfish

Taxonomy: Original description: *Silurus triostegus* Heckel 1843: 1090 (100) [Tigris River, near Mosul, Iraq; syntypes: (4) NMW, SMF 2623 (1, dry)].

Middle Eastern synonyms: *Parasilurus triostegus* (Heckel 1843).

Revisions: Coad & Holčík (2000: 139).

Illustrations: Heckel (1843: pl. 13, fig. 1); Esmaili (2021: 309, fig. 17.12).

Distribution. General distribution: Tigris and Euphrates River basins.

Distribution in the Middle East: Iran, Iraq, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits large rivers, marshes, lakes, and reservoirs. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area affection this species, but none seem to be strong enough to let the species decline so fast, that it qualifies for a threat category. — Low sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Iran: [Native]. — Esbele-e Tigris. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Djerry. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: NMW, SMF, Fish Collection of the Department of Fisheries and Marine Resources, College of Agriculture, University of Basrah, Basrah, Iraq.

Status in Syria: [Native]. — Sallour. — First record from Syria by Beckman (1962: 176); confirmed by Krupp & Schneider (1991b: 73); Ali (2003); Saad et al. (2009). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: MSL.

Status in Türkiye: [Native]. — Fırat yayın balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Clariidae Bonaparte 1845 (airbreathing or labyrinth catfishes)***Clarias batrachus* (Linnaeus 1758)****Common name:** Philippine catfish**Taxonomy:** Original description: *Silurus batrachus* Linnaeus 1758: 305 [Java, vicinity of Bandung, Indonesia; neotype: NRM 54718].**Middle Eastern synonyms:** None.**Revisions:** Jayaram (2006: 304).**Illustrations:** Jayaram (2006: 305, fig. 140).**Distribution. General distribution:** Southeast Asia. Known only from river drainages in Java; introduced elsewhere.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia.**Habitat:** This species inhabits primarily lowland freshwaters, including rivers, lakes, ponds, and reservoirs. — Freshwater.**Economic importance:** Valuable for the aquarium trade.**Reasons of introduction:** Ornamental fish industry.**Conservation:** Not relevant (introduced species).**Status in Türkiye:** [Exotic]. — Kedi balığı. — Listed in previous checklists from Türkiye by Çiçek et al. (2022a, 2023a). — Distribution in River Basin: 12-Sakarya. — Turkish material: None.***Clarias gariepinus* (Burchell 1822)****Common name:** North African catfish**Taxonomy:** Original description: *Silurus (Heterobranchus) gariepinus* Burchell 1822: 425, fig. on p. 445 [Vaal River, at Smidtsdrift, above confluence with Riet River, Cape Province, South Africa (28°42'10"S, 24°04'29"E); neotype: SAIAB 520; neotype evidently selected by Bruton and Teugels (1982) but first published in Skelton and Teugels (1992) (see Seegers (1996: 206)].**Middle Eastern synonyms:** *Clarias lazera* Valenciennes 1840; *Clarias orontis* Günther 1864.**Revisions:** Teugels (1982: 442).**Illustrations:** Skelton and Teugels (1992: figs. 1-2).**Distribution. General distribution:** Widespread in Africa, Asia Minor and Middle East. Widely introduced elsewhere.**Distribution in the Middle East:** Israel, Jordan Lebanon, Syria, Saudi Arabia, and Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 439-Southwestern Arabian Coast.**Habitat:** This species is a benthopelagic (living and feeding near the bottom as well as in midwaters or near the surface), potamodromous (migratory), and freshwater fish species. — Freshwater, brackish.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** This species is of major economic importance all over its range and it is even an important aquaculture species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Israel:** [Native]. — Sfamnun matzui. — First record from Israel by Günther (1865: 490); Lortet (1883: 151); Tristram (1884: 169) as *Clarias macracanthus* (non Günther 1864); Steinitz (1953: 214) as *Clarias lazera*; confirmed by Goren (1974: 92) as *Clarias lazera*; Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUI.**Status in Jordan:** [Native]. — Kute afriki or salloor afriki. — It is probable that this species is naturally distributed in the country. — Jordan material: None.**Status in Lebanon:** [Native]. — Sallour aswad. — It is probable that this species is naturally distributed in the country. — Lebanon material: None.

Status in Saudi Arabia: [Exotic]. — Salloor afriki. — Recorded from Saudi Arabia by Siddiqui et al. (1992); confirmed by Freyhof et al. (2020) and Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Status in Syria: [Native]. — Sallour aswad. — First record from Syria by Sauvage (1882: 163) as *Clarias orontis*; confirmed by Gruvel (1931); Beckman (1962: 173) as *Clarias lazera*, Ali (2003); Al-Horani (2005); Saad et al. (2006); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: BMNH, MNHN, MSL.

Status in Türkiye: [Native]. — Karabalık, sekiz bıyık. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 9-Antalya, 12-Sakarya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan. — Turkish material: None.

Heteropneustidae Hora 1936 (airsac catfishes)

***Heteropneustes fossilis* (Bloch 1794)**

Common name: Singee

Taxonomy: Original description: *Silurus fossilis* Bloch 1794: 46, pl. 370, fig. 2 [Tranquebar (Tharangambadi), India; lectotype: ZMB 3074; lectotype selected by Paepke (1999: 87)].

Middle Eastern synonyms: None.

Revisions: Diogo et al. (2003: 380); Ratmuangkhwang et al. (2014: 82).

Illustrations: Bloch (1794: 46, pl. 370, fig. 2).

Distribution. General distribution: South Asia: Pakistan, India, Sri Lanka, Bhutan, Nepal, Bangladesh, Myanmar, Thailand, Laos, and China Introduced in the Middle East.

Distribution in the Middle East: Iran, Iraq, and Syria.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits freshwater and, rarely, brackish waters as well. This is primarily a fish of ponds, ditches, creeks, swamps, and marshes, but it is sometimes found in muddy rivers. Its air-breathing apparatus enables it to exist in almost any kind of water quality. Generally, during the dry season, *Heteropneustes fossilis* lives in semi-liquid and semi-dry mud, and, even when the mud dries, they take their bodies to the bottom of fissures and crevices formed by the cracking mud. Fertilized eggs are adhesive, demersal, and spherical in form. In bodies of water, this species will move and feed in schools that are active through the day and night, and normally it occupies the lower quarter of the water column. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Eshlambo. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020) and Eagderi et al. (2022) but needs confirmation by specimens for Iran (Sayyadzadeh and Esmaili, 2023). — Distribution in River Basin: 4-Tigris. — Iran material: None.

Status in Iraq: [Exotic]. — Abu Al-Hakam. — First record from Iraq by Khalaf (1961). This species has been introduced in Iraq in late 1950s (Jawad, 2015) and Al-Hassan and Muhsin (1986) from the marine waters of Iraq; confirmed by Al-Hassan and Muhsin (1986); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: Fish Collection of the Department of Fisheries and Marine Resources, College of Agriculture, University of Basrah, Basrah, Iraq.

Status in Syria: [Exotic]. — Sallour. — First record from Syria by Ali et al. (2015: 1); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: MNHN, MSL.

Esociformes**Esocidae Rafinesque 1815 (pikes)*****Esox lucius* Linnaeus 1758****Common name:** Northern pike**Taxonomy:** Original description: *Esox lucius* Linnaeus 1758: 314 [Europe; possible syntypes: BMNH 1853.11.12.114 (1, skin)]. Type catalog: Wheeler 1958: 209].**Middle Eastern synonyms:** None.**Revisions:** Berg (1948: 458).**Illustrations:** Berg (1948: 459, fig. 274).**Distribution. General distribution:** Circumpolar in Northern Hemisphere: North America, Europe, and northern Asia; widely introduced elsewhere.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 447-Namak, 450-Turan Plain.**Habitat:** This species usually occurs in clear small lakes, shallow vegetated areas of larger lakes, marshes, creeks, and small to large rivers. It moves to deeper, cooler water in the summer. Spawning occurs in shallow flooded marshes associated with lakes, inlet streams to those lakes, or rivers; spawning habitat is basically a flooded area with emergent vegetation. — Freshwater.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** No major threats are known. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Stable. — Moderate priority for conservation action.**Status in Iran:** [Native]. — Ordak mahi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea, introduced in some lakes and reservoirs of Iran. — Iran material: None.**Status in Türkiye:** [Native]. — Turna. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 16-Konya, 17-Doğu Akdeniz, 18-Seyhan, 20-Ceyhan, 22-Doğu Karadeniz, 23-Çoruh, 24-Aras, 25-Van Lake. — Turkish materials: None.**Salmoniformes****Salmonidae Jarocki/Schinz 1822 (salmonids)****Coregoninae Bonaparte 1845 (whitefishes)*****Coregonus albula* (Linnaeus 1758)****Common name:** Vendace**Taxonomy:** Original description: *Salmo albula* Linnaeus 1758: 310 [Europe; no types known].**Middle Eastern synonyms:** None.**Revisions:** Berg (1948: 317).**Illustrations:** Kottelat and Freyhof (2007: 387, figs.).**Distribution. General distribution:** Central Europe east to North Asia (Siberia, Russia), including Baltic Sea; introduced elsewhere.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.**Habitat:** This species is lacustrine and marine in open water. — Freshwater, brackish, marine.**Economic importance:** Commercially important.**Reasons of introduction:** Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Türkiye: [Exotic]. — None. — First reported from Türkiye Yerli (2018); listed in previous checklists from Türkiye by Çiçek et al. (2022a, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Coregonus lavaretus* (Linnaeus 1758)**

Common name: European whitefish

Taxonomy: Original description: *Salmo lavaretus* Linnaeus 1758: 310 [Lake Bourget, France; neotype: MHNG 2583.51].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 317).

Illustrations: Kottelat and Freyhof (2007: 352, fig.).

Distribution. General distribution: Europe: Lakes Bourget and Geneva, France, and Switzerland. Formerly most European and some North American species were identified as *lavaretus*. Introduced in some lakes elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 447-Namak.

Habitat: Lacustrine. Spawns on gravel, near shore, in shallow water, in December. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Fisheries: enhancement of wild stocks and sports fishing.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Sefid mahi-e orupae. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 15-Namak Lake. — Iran material: None.

Salmoninae Jarocki/Schinz 1822 (salmons, trouts, chars, and allies)

***Oncorhynchus keta* (Walbaum 1792)**

Taxonomy: Original description: *Salmo keta* Walbaum 1792: 72 [Rivers of Kamchatka, Russia; no types known].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 173).

Illustrations: Lee et al. (1980: 93, fig.).

Distribution. General distribution: North Pacific and Arctic; introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species usually occurs in cold streams, rivers, and lakes, but is also found in various habitats. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Azad mahi keta. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022) but needs confirmation by specimens for Iran (Sayyadzadeh and Esmaeili, 2023). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

***Oncorhynchus kisutch* (Walbaum 1792)**

Common name: Coho salmon

Taxonomy: Original description: *Salmo kisutch* Walbaum 1792: 70 [Rivers and Lakes of Kamchatka, Russia; no types known].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 196).

Illustrations: Berg (1948: 197, fig. 123).

Distribution. General distribution: North Pacific and Arctic; introduced elsewhere.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species usually occurs in cold streams, rivers, and lakes, but is also found in various habitats. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Israel: [Exotix]. — Iltit ksufa. — First record from Israel by Golani and Shefler (1985); confirmed by Goren and Ortal (1999); Golani and Mires (2000); listed by Çiçek et al. (2023c). — Distribution in River Basin: 3-Kinneret Basin. — Israel materials: HUI.

***Oncorhynchus mykiss* (Walbaum 1792)**

Common name: Rainbow trout

Taxonomy: Original description: *Salmo mykiss* Walbaum 1792: 59 [Kamchatka, Russia; no types known].

Middle Eastern synonyms: *Salmo gairdnerii* Richardson 1836.

Revisions: Berg (1948: 267) as *Salmo mykiss*; Stearley and Smith (1993: 21) as *Oncorhynchus mykiss mykiss*.

Illustrations: Berg (1948: 268, fig. 155) as *Salmo mykiss*.

Distribution. General distribution: North Pacific and adjacent basins; widely introduced elsewhere.

Distribution in the Middle East: Israel, Jordan Lebanon, Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 437-Orontes, 438-Jordan River, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 444-Lake Van, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, Helmand-Sistan.

Remarks. This species is the main cultured fish in freshwater, in both cold spring waters and reservoirs. It cannot breed in wild water. Therefore, it can find itself around a fish farming facility because escapement is established in suitable habitats.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Ghezel ala-e rangin kaman. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh, 4-Tigris, 12-Kor River, 9-Esfahan, 7-Dasht-e Kavir, 15-Namak Lake. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — Salmon. — First record from Iraq by Abdulrahman et al. (2017); confirmed by Jawad et al. (2019); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab, 5-Little Zab. — Iraq materials: Fish collection at the Marine Science Centre, University of Basrah, Basrah, Iraq.

Status in Israel: [Exotic]. — Trutat ein ha'keshet. — First record from Israel by Hornell (1935); confirmed by Goren and Ortal (1999); Golani and Mires (2000). — Distribution in River Basin: 3-Kinneret Basin. — Israel materials: HUI.

Status in Jordan: [Exotic]. — Truite kaous kazah. — It is probable that this species introduced to the country. — Jordan material: None.

Status in Lebanon: [Exotic]. — Truite kaous kazah. — It is probable that this species introduced to the country. — Lebanon material: None.

Status in Syria: [Exotic]. — Truite kaous kazah. — First record from Syria by Saad et al. (2006); confirmed by Saad et al. (2009); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian materials: MSL.

Status in Türkiye: [Exotic]. — Gökkuşuğu alabalığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 16-Konya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh, 24-Aras, 25-Van Lake. — Turkish materials: None.

***Salmo abanticus* Tortonese 1954**

Common name: Abant trout

Taxonomy: Original description: *Salmo abanticus* Tortonese 1954: 19, pl. 1 (fig. 3); figs. 2, 3a-b [Lake Abant, northern Anatolia, Asiatic Türkiye; holotype (unique): MSNM 1 [ex MSNM 5031]].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Tortonese (1954: 19, pl. 1 (fig. 3); figs. 2, 3a-b).

Distribution. General distribution: Asia Minor: Abant Gölü, Bolu Province, northwestern Anatolia (Türkiye); introduced in Black Sea watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species is a lacustrine species that seems to spawn in intralacustrine springs. It may also spawn in tributaries, as juveniles are regularly found there. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: VU (IUCN, 2023).

Threats: COM. — High sensitivity to human activities. — Keystone species. — Decline status: Stable. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Abant alası. — Recorded from Türkiye in the original description by Tortonese (1954); listed in previous checklists from Türkiye by Kuru (2004) as *Salmo trutta abanticus*; Geldiay and Balık (2007) as *Salmo trutta abanticus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 12-Sakarya, introduced some lakes in Blacksea Region. — Turkish material: MSNM.

***Salmo araxensis* Turan, Kottelat & Kaya 2022**

Common name: Trout

Taxonomy: Original description: *Salmo araxensis* Turan, Kottelat & Kaya 2022: 51, figs. 5-6 [Kırkpınar Stream, Kars Stream drainage, Aras River basin, Susuz district, Kars Province, Türkiye, 40°51'N, 43°01'E; holotype: FFR 3224].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2022b: 51, figs. 5-6).

Distribution. General distribution: Eurasia: Kars Stream drainage, Aras River basin, Kars Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2022b); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 24-Aras. — Turkish material: FFR.

***Salmo ardahanensis* Turan, Kottelat & Kaya 2022**

Common name: Trout

Taxonomy: Original description: *Salmo ardahanensis* Turan, Kottelat & Kaya 2022: 48, fig. 4 [Stream Toros, Kura River drainage, Ardahan Province, Türkiye, 41°06'N, 42°26'E; holotype: FFR 3239].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2022b: 48, fig. 4).

Distribution. General distribution: Eurasia: upper Kura River drainage, Ardahan Province, eastern Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2022b); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 24-Aras. — Turkish material: FFR.

***Salmo baliki* Turan, Aksu, Oral, Kaya & Bayçelebi 2021**

Common name: Trout

Taxonomy: Original description: *Salmo baliki* Turan, Aksu, Oral, Kaya & Bayçelebi 2021: 474, figs. 2-4 [Stream Sinek, tributary of Murat River at Taşlıçay, Ağrı Province, Türkiye, 39.758749°N, 43.464480°E; holotype: FFR 3242].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2021b: 474, figs. 2-4).

Distribution. General distribution: Asia Minor: Murat River drainage, upper Euphrates River basin, Ağrı Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2021b); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

Salmo caspius* Kessler 1877*Common name:** Caspian trout**Taxonomy:** Original description: *Salmo caspius* Kessler 1877: 62, pl. 2 (fig. 15) [Kura River near Bozhii Promysel fishing grounds, Azerbaijan; syntypes: (3) not at ZIN].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Kessler (1877: 62, pl. 2, fig. 15).**Distribution. General distribution:** Eurasia: Kura River drainage and southern and southwestern Caspian Sea watersheds.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain.**Habitat:** This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater, brackish, marine.**Economic importance:** Commercially important.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Iran:** [Native]. — Mahi azad. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.**Status in Türkiye:** [Native]. — Hazar alası. — Listed in previous checklists from Türkiye by Kuru (2004) as *Salmo trutta caspius*; Geldiay and Balık (2007) as *Salmo trutta caspius*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.***Salmo chilo* Turan, Kottelat & Engin 2012****Common name:** Chilo trout**Taxonomy:** Original description: *Salmo chilo* Turan, Kottelat & Engin 2012: 224, fig. 2b, 5 [Akdere Stream at Gürün county, Euphrates River drainage (Firat Nehri), Sivas province, Türkiye; holotype: FFR 3054].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2012b: 224, fig. 2b, 5).**Distribution. General distribution:** Asia Minor: upper Euphrates River (Firat Nehri) basin (Persian Gulf tributary), Sivas Province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits hilly streams that are usually fed by springs. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** CLI, CON, COM, EUT, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2012b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.***Salmo ciscaucasicus* Dorofeeva 1967****Common name:** Caspian salmon**Taxonomy:** Original description: *Salmo trutta ciscaucasicus* Dorofeeva 1967: 15 [Keyranchay River, Samur delta, eastern Ciscaucasia, Russia; holotype: ZIN 26244].**Middle Eastern synonyms:** None.**Revisions:** None.

Illustrations: Kottelat and Freyhof (2007: 427, fig.).

Distribution. General distribution: Eurasia: Terek River and rivers flowing into the Caspian Sea from the north and northwest.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Hazar somonu. — Listed in previous checklists from Türkiye by Kaya (2020c); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.

***Salmo coruhensis* Turan, Kottelat & Engin 2010**

Common name: Choruck trout

Taxonomy: Original description: *Salmo coruhensis* Turan, Kottelat & Engin 2010: 345, figs. 4b, 5b, 7, 8, 14b [Çoruh River drainage, Pehlivanli Stream at Pehlivanli village, 40°30.42'N, 41°29.17'E, Erzurum Province, Türkiye; holotype: FFR 3036].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2010: 345, figs. 4b, 5b, 7, 8, 14b).

Distribution. General distribution: Asia Minor: Çoruh Nehri and Marmara Sea basins (Black Sea tributaries).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species inhabits the lower parts of rivers and migrates to the sea to forage. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: NT (IUCN, 2023).

Threats: CON, EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Türkiye: [Native]. — Çoruh alası. — Recorded from Türkiye in the original description by Turan et al. (2010); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 23-Çoruh. — Turkish material: None.

***Salmo duhani* Turan & Aksu 2021**

Common name: Trout

Taxonomy: Original description: *Salmo duhani* Turan & Aksu 2021: 232, fig. 1 [stream Zeytinli about 9 km east of Kazdağı National Park, Çanakkale Province, Türkiye, 39.750N 27.017E, 28.11.2006; holotype: FFR 3183].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan and Aksu (2021: 232, fig. 1).

Distribution. General distribution: Asia Minor: southern Marmara Sea drainages.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan and Aksu (2021); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 4-Kuzey Ege. — Turkish material: FFR.

***Salmo euphrataeus* Turan, Kottelat & Engin 2014**

Common name: Euphrates trout

Taxonomy: Original description: *Salmo euphrataeus* Turan, Kottelat & Engin 2014: 281, fig. 4 [Erzurum Province, Kuzgun Stram, Euphrates River drainage, 40°13'11.1"N, 41°06'18.3"E, Türkiye; holotype: FFR 1219].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2014b: 281, fig. 4).

Distribution. General distribution: Asia Minor: upper Euphrates River (Firat Nehri) basin (Persian Gulf tributary), Erzurum province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Fırat alası. — Recorded from Türkiye in the original description by Turan et al. (2014b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Salmo fahrettini* Turan, Kalayci, Bektaş, Kaya & Baycelebi 2020**

Common name: Euphrates trout

Taxonomy: Original description: *Salmo fahrettini* Turan, Kalayci, Bektaş, Kaya & Baycelebi 2020: 1456, figs. 1-2 [Stream Ömertepesuyu at Palandöken, Erzurum Province, Türkiye, 39°47'44.88"N, 40°56'39.84"E; holotype: FFR 03231].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2020: 1456, figs. 1-2).

Distribution. General distribution: Asia Minor: upper Euphrates River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2020); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

Salmo kottelati* Turan, Doğan, Kaya & Kanyılmaz 2014*Common name:** Antalya trout**Taxonomy:** Original description: *Salmo kottelati* Turan, Doğan, Kaya & Kanyılmaz 2014: 138, fig. 1 [Antalya Province: Altınyaka village; Alakır Stream (36°35'14.57"N, 30°18'54.87"E), Türkiye; holotype: FFR 03180].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2014c: 138, fig. 1).**Distribution. General distribution:** Asia Minor: Alakır Stream (Mediterranean tributary), Antalya province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Alakır alası. — Recorded from Türkiye in the original description by Turan et al. (2014c); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 8-Batı Akdeniz. — Turkish material: FFR.***Salmo labecula* Turan, Kottelat & Engin 2012****Common name:** Seyhan trout**Taxonomy:** Original description: *Salmo labecula* Turan, Kottelat & Engin 2012: 226, fig. 2c, 6 [Nigde province, Ecemis Stream at Çamardı county, Seyhan River drainage, Türkiye; holotype: FFR 3056].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2012b: 226, fig. 2c, 6).**Distribution. General distribution:** Asia Minor: Seyhan River basin (Mediterranean tributary), Nigde province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species inhabits hilly streams that are usually fed by springs. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** CLI, CON, COM, EUT, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2012b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan. — Turkish material: FFR.***Salmo labrax* Pallas 1814****Common name:** Black Sea salmon**Taxonomy:** Original description: *Salmo labrax* Pallas 1814: 346 [Sivastopol and Biyuk-ozen River; Chersones; and Ochakov, Crimea, Ukraine; syntypes: whereabouts unknown].**Middle Eastern synonyms:** None.**Revisions:** Berg (1948: 239 as *Salmo trutta labrax*).**Illustrations:** Kottelat and Freyhof (2007: 428, fig.).**Distribution. General distribution:** Black Sea and adjacent watersheds.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species inhabits coasts at depths of up to 50 m at sea. Migrates to hill streams. Resident part of populations in streams and uppermost reaches with fast current, cold clear water and stone or gravel bottom. Spawns in upper reaches with fast current. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Türkiye: [Native]. — Denizalası. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Salmo trutta labrax* Geldiay and Balık (2007) as *Salmo trutta labrax*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

***Salmo munzuricus* Turan, Kottelat & Kaya 2017**

Common name: Munzur trout

Taxonomy: Original description: *Salmo munzuricus* Turan, Kottelat & Kaya 2017: 56, figs. 1-2 [Munzur stream, Ovacik village, Tunceli province, Türkiye, 39°20'50"N, 39°08'03"E; holotype: FFR 03161].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2017e: 56, figs. 1-2).

Distribution. General distribution: Asia Minor: Munzur and Murat Rivers, upper Euphrates River (Firat Nehri) drainage, Tunceli province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Munzur alası. — Recorded from Türkiye in the original description by Turan et al. (2017e); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Salmo murathani* Turan, Kottelat & Kaya 2022**

Common name: Trout

Taxonomy: Original description: *Salmo murathani* Turan, Kottelat & Kaya 2022: 44, figs. 1-2 [Keklik Stream, Kars Stream drainage, Sarıkamış District, Aras River basin, Kars Province, Türkiye, 40°17'N, 42°39'E; holotype: FFR 3240].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2022b: 44, figs. 1-2).

Distribution. General distribution: Eurasia: Kars Stream drainage, upper Aras River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2022b); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 24-Aras. — Turkish material: FFR.

***Salmo okumusi* Turan, Kottelat & Engin 2014**

Common name: Okumus trout

Taxonomy: Original description: *Salmo okumusi* Turan, Kottelat & Engin 2014: 277, fig. 1 [Malatya Province, Sürgü Stream, Euphrates River drainage, 37°59'51.1"N, 37°57'29.9"E, Türkiye; holotype: FFR 1251].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2014b: 277, fig. 1).

Distribution. General distribution: Asia Minor: upper Euphrates River (Firat Nehri) basin; Malatya and Sivas provinces.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2014b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Salmo opimus* Turan, Kottelat & Engin 2012**

Common name: Opimus trout

Taxonomy: Original description: *Salmo opimus* Turan, Kottelat & Engin 2012: 230, fig. 2d, 7 [Antalya province: Alara Stream at Gündoğmus, Türkiye; holotype: FFR 3047].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2012b: 230, fig. 2d, 7).

Distribution. General distribution: Asia Minor: Alara Stream (Mediterranean tributary), Antalya Province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, COM, FIT. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2012b); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: FFR.

Salmo pelagonicus* Karaman 1938*Common name:** Trout**Taxonomy:** Original description: *Salmo pelagonicus* Karaman 1938: 133, fig. 1 [Mountain brooks, former Yugoslavian Republic of Macedonia; syntypes: (3) whereabouts unknown].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Karaman (1938: 133, fig. 1).**Distribution. General distribution:** Southeastern Europe: Macedonia and Greece east to Çanakkale Province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia.**Habitat:** This species inhabits mountain streams. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: VU (IUCN, 2023).**Threats:** COM, FIT. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Türkiye:** [Native]. — Kırmızı benekli alabalık. — First record from Türkiye by Turan and Bayçelebi (2020); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 4-Kuzey Ege. — Turkish material: None.***Salmo platycephalus* Behnke 1968****Common name:** Flathead trout**Taxonomy:** Original description: *Salmo platycephalus* Behnke 1968: 2, figs. 1-2 [Tributary of Seyhan River basin, about 30 kilometers south of Pinarbasi, Türkiye; holotype: ZMH H4089].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Behnke (1968: 2, figs. 1-2).**Distribution. General distribution:** Asia Minor: Upper Seyhan River basin, Mediterranean tributary.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species inhabits hilly streams that are usually fed by springs. — Freshwater.**Economic importance:** Commercially important.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** ABS, CLI, CON, COM, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Stable. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Zamantı alası. — Recorded from Türkiye in the original description by Behnke (1968); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 18-Seyhan. — Turkish material: ZMH.***Salmo rizeensis* Turan, Kottelat & Engin 2010****Common name:** Rize trout**Taxonomy:** Original description: *Salmo rizeensis* Turan, Kottelat & Engin 2010: 338, figs. 2, 3, 4a, 5a, 14a [Stream at Ovit Mountain, Çoruh River drainage, 40°35.32'N, 40°51.50'E, Erzurum Province, Türkiye; holotype: FFR 3000].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Turan et al. (2010: 338, figs. 2, 3, 4a, 5a, 14a).**Distribution. General distribution:** Asia Minor: Çoruh basin, Black Sea tributary.**Distribution in the Middle East:** Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species inhabits mountain streams. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Threats: CON. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Native]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2010); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: FFR.

***Salmo tigridis* Turan, Kottelat & Bektaş 2011**

Common name: Tigris trout

Taxonomy: Original description: *Salmo tigridis* Turan, Kottelat & Bektaş 2011: 24, fig. 1 [Çatak Stream, Tigris River drainage, Van Province, Türkiye; holotype: FFR 1250].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Turan et al. (2011: 24, fig. 1).

Distribution. General distribution: Asia Minor and Middle East: upper Tigris River [Dicle Nehri] basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species inhabits streams and small rivers. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: DD (IUCN, 2023).

Threats: Threats to the species or the only known site where it is known to occur are unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Kırmızı benekli alabalık. — Recorded from Türkiye in the original description by Turan et al. (2011); listed in previous checklists from Türkiye by Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: FFR.

***Salmo trutta* Linnaeus 1758**

Common name: Brown trout

Taxonomy: Original description: *Salmo trutta* Linnaeus 1758: 308 [European rivers; no types known].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 235); Schöffmann (2021: 35); Segherloo et al. (2021: 10).

Illustrations: Berg (1948: 238, figs. 143-144).

Distribution. General distribution: Northeastern Atlantic: Norway south to Iberian Peninsula; Baltic Sea; North Sea; Mediterranean Sea; Europe: northeastern Atlantic watersheds and upper Danube basin, south to Sicily; introduced widely elsewhere.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 434-Kura-South Caspian Drainages, 438-Jordan River, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 447-Namak.

Habitat: This species lives in cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. Lacustrine populations migrate to tributaries and lake outlets, rarely spawning on stone or wave-washed lake shores. Spawning sites are usually characterised by the downward movement of water into gravel. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Stable. — High priority for conservation action.

Status in Iran: [Exotic]. — Ghezel ala-e khal ghermez. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea, 15-Namak Lake, 14-Lake Orumiyeh. — Iran material: None.

Status in Lebanon: [Exotic]. — Salamon truit, truit fario. — Listed in previous checklists from Lebanon by Saad et al. (2006); Al Zein (2020). — Lebanon material: None.

Status in Türkiye: [Native]. — Kırmızı benekli alabalık. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: All basins. — Turkish materials: None.

***Salvelinus fontinalis* (Mitchill 1814)**

Common name: Brook trout

Taxonomy: Original description: *Salmo fontinalis* Mitchill 1814:12 [Connetquot River, Connetquot River State Park, Long Island, New York, U.S.A., 40°47.1714'N, 73°10.1134'W; neotype: PSU 11387].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Lee et al. (1980: 114, fig.).

Distribution. General distribution: Atlantic slope of northern North America (Canada, U.S.A.); widely introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 447-Namak.

Habitat: This species lives in cold streams, rivers, and lakes. Spawns in rivers and streams with swift water. Lacustrine populations migrate to tributaries and lake outlets, rarely spawning on stone or wave-washed lake shores. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Ghezel ala-e joybari. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Eagderi et al. (2022) but needs confirmation by specimens (Sayyadzadeh & Esmaeili, 2023). — Distribution in River Basin: 15-Namak Lake. — Iran material: None.

***Stenodus leucichthys* (Güldenstädt 1772)**

Common name: Inconnu-Sheefish

Taxonomy: Original description: *Salmo leucichthys* Güldenstädt 1772: 533 [Volga and Ural rivers from Caspian Sea, Kamtchatka, Russia; No types known].

Middle Eastern synonyms: None.

Revisions: Berg (1948: 308).

Illustrations: Lee et al. (1980: 119, fig.).

Distribution. General distribution: Caspian Sea basin endemic. Arctic basin, Bering Sea, Alaska, and western Canada records are based on *Stenodus nelma* (Pallas 1773).

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species is anadromous. At sea, throughout basin in pelagic zone with temperatures below 18°C and 20-50 m deep. Juveniles and adults overwinter and forage at sea. Large lowland rivers during migration. Prior to the construction of dams, migration route was over 3000 km long, reaching up to uppermost reaches of Ufa and Belaya drainages (Kama tributaries). Spawns on gravel shallows. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: EW (IUCN, 2023).

Threats: ABS, COM, CON, FIT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Unspecified. — High priority for conservation action.

Status in Iran: [Native]. — Azad mahi-e Volga. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Remarks. This species can not reach to Turkish parts of Aras River because of dam contractions on the rivers.

Gadiformes

Gadidae Rafinesque 1810 (cods and haddocks)

Lota lota (Linnaeus 1758)

Common name: Burbot

Taxonomy: Original description: *Gadus lota* Linnaeus 1758: 255 [European lakes; Linnaean specimens: LS 37 and 38 (2, left half-skins)].

Middle Eastern synonyms: None.

Revisions: Coad (2016).

Illustrations: Coad (2016, 231, fig. 2).

Distribution. General distribution: Europe to Asia and North America; northern U.S.A.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species occurs in cold waters of lakes, reservoirs, and large rivers. In summer, stays in deep cold waters but may move into shallower water at night. Life history may be confined to lakes or rivers or may migrate between lake and riverine habitats; all three patterns may occur within a single river basin. Spawns usually in lakes but may move into rivers to spawn. River-spawning populations prefer low-velocity areas in main channels or inside channels behind deposition bars. — Freshwater.

Economic importance: This species is of economic importance in the former U.S.S.R. and the flesh is said to be excellent as is the liver. The eggs have been used as caviar but are also reported as toxic. However, it is too rare in Iran to be a food fish and a potential health hazard (Coad 2016).

Conservation: IUCN: LC (IUCN, 2023).

Threats: Localized threats may exist, but on a range-wide scale no major threats are known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Charb mahi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Syngnathiformes

Syngnathoidei

Syngnathidae Bonaparte 1831 (pipefishes and seahorses)

Nerophis ophidion (Linnaeus 1758)

Common name: Straight-nose pipefish

Taxonomy: Original description: *Syngnathus ophidion* Linnaeus 1758: 337 [Europe; syntypes: BMNH 1853.11.12.185 [Gronovius coll.] (1, skin)].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 978).

Illustrations: Berg (1949: 978, fig. 709).

Distribution. General distribution: Baltic Sea; North Sea; Mediterranean Sea; Sea of Marmara; Black Sea; Sea of Azov; northeastern Atlantic: Norway south to Morocco, including Madeira.

Distribution in the Middle East: Lebanon and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 436-Coastal Levant, 437-Orontes.

Habitat: This species inhabits marine neritic areas with seagrasses to depths of about 15 metres. — Brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: AQU, CLI, EUT, TOU. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Lebanon: [Native]. — Samak anboubi. — First record from Lebanon by Saida (2010). — Lebanon material: AUBM.

Status in Türkiye: [Native]. — Deniz iğnesi. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 23-Çoruh. — Turkish material: None.

Syngnathus abaster Risso 1827

Common name: Blackstripe pipefish

Taxonomy: Original description: *Syngnathus abaster* Risso 1827: 182 [probably Nice, France, northwest Mediterranean Sea; no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Dawson in Whitehead et al. (1986: 635, fig.).

Distribution. General distribution: Mediterranean Sea; Sea of Marmara; Black Sea; eastern Atlantic: Bay of Biscay south to Portugal, including Azores.

Distribution in the Middle East: Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 436-Coastal Levant, 437-Orontes.

Habitat: This species inhabits a wide range of marine, brackish, and freshwater habitats and is mostly associated with dense submerged vegetation but is also found on open mud bottom substrates. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are no major threats known to be impacting this species. — Low sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Lebanon: [Native]. — Alsamak al'unbubiat dhat alsharit al'aswad. — First record from Lebanon by Mouneimné (1977); confirmed by Mouneimné (2002). — Lebanon material: AUBM, USNM.

Status in Syria: [Native]. — Alsamak al'unbubiat dhat alsharit al'aswad. — First record from Syria by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 6-Coastal. — Syrian material: MSL.

Status in Türkiye: [Native]. — İğne balığı-deniz iğnesi. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 23-Çoruh. — Turkish material: None.

Syngnathus caspius* Eichwald 1831*Common name:** Caspian pipefish**Taxonomy:** Original description: *Syngnathus* Eichwald 1831: 61 [Balkhan Bay, Caspian Sea; syntypes: whereabouts unknown].**Middle Eastern synonyms:** None.**Revisions:** Zarei et al. (2020).**Illustrations:** Zarei et al. (2021a: 2, fig. 1).**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.**Habitat:** This species inhabits a wide range of marine, brackish, and freshwater habitats and is mostly associated with dense submerged vegetation but is also found on open mud bottom substrates. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: DD (IUCN, 2023).**Threats:** The threats to this species are unknown. Synganthid species are often threatened by being caught as bycatch and habitat loss, but further research is needed. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Soozan mahi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.**Gobiiformes****Eleotridae Bonaparte 1835 (sleepers)****Butinae Bleeker 1874 (gudgeons)*****Ophiocara porocephala* Valenciennes 1837****Common name:** Spangled gudgeon**Taxonomy:** Original description: *Eleotris porocephala* Valenciennes in Cuvier & Valenciennes 1837: 237 [Seychelles; lectotype: MNHN 2020-0477 (ex MNHN IC-A-1573)].**Middle Eastern synonyms:** *Gobius percivali* Boulenger 1901.**Revisions:** None.**Illustrations:** Akihito in Masuda et al. (1984: pl. 235 D-E).**Distribution. General distribution:** Indian Ocean: KwaZulu-Natal (South Africa), East Africa, Seychelles, Comoros, Madagascar, and western Mascarenes (La Réunion, Mauritius), western Sumatra, southern Java, and southern Bali (Indonesia).**Distribution in the Middle East:** Oman.**Distribution in Ecoregions:** 443-Oman Mountains.**Habitat:** This species is epibenthic (lives on the surface of sediments at the bottom of the sea) and it is usually found in estuaries, mangroves, and the lower parts of rivers, often upstream from the tidal zone. Young are usually found while wading in rocky creeks near the coast. Adults feed mainly on large benthic crustaceans and small fishes. Juveniles and adults may enter urban drainage ditches and canals. — Freshwater, brackish, marine.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON, EUT, HAB, TOU. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Moderate priority for conservation action.**Status in Oman:** [Native]. — None. — First record from Oman by Esmaeili et al. (2022a); confirmed by Esmaeili and Hamidan (2023). — Oman material: ZM-CBSU.

Eleotrinae Bonaparte 1835 (spinycheek sleepers or bullies)***Eleotris acanthopomus* (Bleeker 1853)****Common name:** Spine-cheek gudgeon**Taxonomy:** Original description: *Eleotris acanthopomus* Bleeker 1853: 275 [Western Sumatra, Indonesia; holotype (unique): RMNH 25934].**Middle Eastern synonyms:** *Eleotris acanthopoma* Bleeker 1853.**Revisions:** None.**Illustrations:** Akihito in Masuda et al. (1984: pl. 235 G as *Eleotris acanthopoma*).**Distribution. General distribution:** Indo-West Pacific: southern Oman, Comoros, Seychelles; Indonesia east to Micronesia and French Polynesia, north to Jeju Island (Korea) and Ibaraki Prefecture (Japan), south to northern Australia and New Caledonia.**Distribution in the Middle East:** Oman.**Distribution in Ecoregions:** 443-Oman Mountains.**Habitat:** This species inhabits shallow brackish estuaries, the lower reaches of freshwater rivers and creeks, swamps, and marshes as well as agricultural fields. — Brackish, marine.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CON, COM, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Moderate priority for conservation action.**Status in Oman:** [Native]. — None. — First record from Oman by Esmaili et al. (2022a); confirmed by Esmaili et al. (2023); Esmaili and Hamidan (2023). — Oman material: ZM-CBSU.**Gobiidae Cuvier 1816 (gobies)****Gobiinae Cuvier 1816 (gobies)*****Anatirostrum profundorum* (Berg 1927)****Common name:** Duckbill pugolovka**Taxonomy:** Original description: *Benthophilus profundorum* Berg 1927: 335, figs. 5-8 [Southern Caspian Sea, 37°58'N, 52°22'E, depth 294 meters; syntypes: ZIN 23134 (now 14)].**Middle Eastern synonyms:** None.**Revisions:** Berg (1949: 1123) as *Benthophilus profundorum*.**Illustrations:** Zarei et al. (2022a: 163, fig. 7).**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.**Habitat:** This species occurs in the Caspian Sea. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** The threats to this species are unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Gav mahi-e nok ordaki. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.***Babka gymnotrachelus* (Kessler 1857)****Common name:** Racer goby**Taxonomy:** Original description: *Gobius gymnotrachelus* Kessler 1857: 464 [Dniester River and tributaries, especially Slutsch River, Ukraine; syntypes: ZIN 2105 (1, not present in 1996)].**Middle Eastern synonyms:** *Mesogobius gymnotrachelus* (Kessler 1857); *Neogobius gymnotrachelus* (Kessler 1857); *Ponticola gymnotrachelus* (Kessler 1857).

Revisions: None.

Illustrations: None.

Distribution. General distribution: Eurasia: Black Sea, Sea of Azov, and Caspian Sea basins; invasive in Germany, Bosnia and Hercegovina, and Greece; introduced elsewhere in eastern Europe.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species inhabits mainly freshwater and brackish water with low salinity (< 2 ‰). Estuaries, brackish- and fresh-water lagoons and lakes, large rivers up to small, fast-flowing streams on sand or mud bottoms mostly found in well vegetated or high-complexity habitats. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Küçük kaya balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Gobius (Babka) gymnotrachelus*; Geldiay and Balık (2007) as *Gobius (Babka) gymnotrachelus*; Fricke et al. (2007) as *Neogobius gymnotrachelus*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

***Benthophilus baeri* Kessler 1877**

Common name: Baer pugolovka

Taxonomy: Original description: *Benthophilus baeri* Kessler 1877: 52, pl. 4 (fig. 10) [Mangyshlak Peninsula, Kazakhstan; southern Caspian Sea, depth 49-266 feet (7-38 Russian fathoms); lectotype: ZISP 2239, lectotype selected by Boldyrev & Bogutskaya (2007: 82)].

Middle Eastern synonyms: *Benthophilus magistri lencoranicus* Ragimov 1982.

Revisions: Berg (1949: 1118); Zarei et al. (2022).

Illustrations: Zarei et al. (2022a: 165, fig. 9).

Distribution. General distribution: Eurasia: southern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species occurs in shallow coastal areas of the Caspian Sea. Its biology is not well known. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: The threats to this species are unknown, but there are probably no or very few threats within its range. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e tokmehsar. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Benthophilus ctenolepidus* Kessler 1877**

Common name: Transparent tadpole goby

Taxonomy: Original description: *Benthophilus ctenolepidus* Kessler 1877: 48, pl. 4 (fig. 11) [Caspian Sea, 40°08'N, 0°26'E of Baku, Azerbaijan; lectotype: ZIN 10897, lectotype selected by Ragimov (1982: 48)].

Middle Eastern synonyms: *Benthophilus magistri lencoranicus* Ragimov 1982.

Revisions: None.

Illustrations: Kessler (1877: 48, fig. 11).

Distribution. General distribution: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: This species inhabits shallow sites of the Caspian Sea in summer and migrates to deeper water. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: The threats to this species are unknown, but there are probably no or very few threats within its range. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e shafaf. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Benthophilus granulatus* Kessler 1877**

Common name: Granulated tadpole-goby

Taxonomy: Original description: *Benthophilus granulatus* Kessler 1877: 57, pl. 5 (fig. 14) [Baku Bay, Caspian Sea, Azerbaijan; lectotype: ZISP [= ZIN] 2242; syntypes: (7 + 1) BMNH 1897.7.5.14 [ex ZIN] (1), ZIN 10898 (1, damaged); lectotype selected by Boldyrev and Bogutskaya (2007: 51)].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 1119); Zarei et al. (2022).

Illustrations: Zarei et al. (2022a: 166, fig. 10).

Distribution. General distribution: Eurasia: southern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: Both fresh and marine waters; prefers brackish and slightly saline zones in deltas and estuaries. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e Zegildar. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Benthophilus leobergius* Berg 1949**

Common name: Caspian stellate tadpole goby

Taxonomy: Original description: *Benthophilus stellatus leobergius* Berg 1949: 1116, figs. 858-859 [Astrabadskiy Bay, Caspian Sea, Iran; lectotype: ZISP 23128].

Middle Eastern synonyms: *Benthophilus aculeatus* Baer 1984.

Revisions: None.

Illustrations: Berg (1949: 1116, figs. 858-859); Zarei et al. (2022a: 167, fig. 12).

Distribution. General distribution: Eurasia: Caspian Sea basin and Volga River Delta.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: Fresh, brackish, rarely marine waters, prefers salinity below 9 ‰. In still or slowly flowing water over mud bottom. At depths around 0.5-10 m in summer, moves to deeper places in winter. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: EUT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e vazaghi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Benthophilus macrocephalus* (Pallas 1787)**

Common name: Caspian tadpole goby, bighead tadpole goby

Taxonomy: Original description: *Gobius macrocephalus* Pallas 1787: 352, pl. 10 (figs. 4-6) [Mare Caspicum (Caspian Sea); No types known].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 1109); Zarei et al. (2022).

Illustrations: Pallas (1787: 352, figs. 4-6).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: Shallow coastal waters and estuaries, usually at 0.5-10 m depth, over mud bottom; lower reaches of rivers. Widely distributed but rare. During warm seasons prefers coastal waters down to 10 m. In northern Caspian Sea, moves to deeper areas (20-25 m) in winter. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e sar bozorg. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Benthophilus persicus* Kovačić, Esmaili, Zarei, Abbasi & Schliewen 2021**

Common name: Persian goby

Taxonomy: Original description: *Benthophilus persicus* Kovačić, Esmaili, Zarei, Abbasi & Schliewen 2021:47, Figs. 2-7 [Anzali, southern Caspian Sea, Gilan Province, Iran, 37°29'N, 49°29'E; holotype: ZSM 47595].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Zarei et al. (2022a: 168, fig. 13).

Distribution. General distribution: Eurasia: southwestern Caspian Sea.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 452-Caspian Marine.

Habitat: This species is abundant on sandy bottoms in coastal areas of western South Caspian Sea. Eurybathic, depth ranges usually from 6-70 m. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: NE (IUCN, 2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Gavmahi-e Parsi. — Recorded from Iran in the original description by Kovačić et al. (2021); listed in previous checklists from Iran by Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Benthophilus pinchuki* Ragimov 1982*Common name:** Granulated tadpole-goby**Taxonomy:** Original description: *Benthophilus ctenolepidus pinchuki* Ragimov 1982: 49 [Off Belyy Bugor, 37°40'N, southeastern Caspian Sea, Turkmenistan, depth 30 meters; holotype: ZISP 53569 (ex IZA)].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Zarei et al. (2022a: 169, fig. 14).**Distribution. General distribution:** Eurasia: southern Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 452-Caspian Marine.**Habitat:** This species has been observed at depths of 20-284 m and a salinity of 12.4-13.2 ppm. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: DD (IUCN, 2023).**Threats:** The threats to this species are unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Gavmahi-e Pinchuk. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.***Cryptocentroides arabicus* (Gmelin 1789)****Common name:** Rock goby**Taxonomy:** Original description: *Gobius arabicus* Gmelin (ex Forsskål), 1789: 1198 [M Jeddah, Saudi Arabia, Red Sea; No types known].**Middle Eastern synonyms:** *Amblycentrus arabicus* (Gmelin 1789); *Gobius anguillaris* Linnaeus 1758; *Gobius bimaculatus* Valenciennes 1837; *Gobius djiddensis* Bonnaterre 1788.**Revisions:** None.**Illustrations:** Esmaili et al. (2022: 482, fig. 36).**Distribution. General distribution:** Gulf of Aden and Socotra (Yemen) to Persian Gulf.**Distribution in the Middle East:** Oman and Saudi Arabia.**Distribution in Ecoregions:** 439-Southwestern Arabian Coast, 443-Oman Mountains.**Habitat:** This species is a demersal, marine species that inhabits shallow soft substrate at depths of less than 2 m. It is usually found living in a burrow within the sediment and is thought to be associated with alpheid shrimp. — Brackish, marine.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are no major threats to this species. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Oman:** [Native]. — Kobion alsakhar. — First record from Oman by Jawad et al. (2021c); listed in previous checklists by Esmaili et al. (2022a), Esmaili and Hamidan (2023). — Oman material: ZM-CBSU.**Status in Saudi Arabia:** [Native]. — Kobion alsakhar. — Listed in previous checklists from Saudi Arabia Esmaili et al. (2022a); Esmaili and Hamidan (2023). — Saudi Arabia material: None.***Favonigobius melanobranchus* Fowler 1934****Common name:** Rock goby**Taxonomy:** Original description: *Rhinogobius melanobranchus* Fowler 1934: 82, figs. 24-25 [Den Pasar, southern Bali, Indonesia; holotype (unique): ANSP 56333].

Middle Eastern synonyms: *Papillogobius melanobranchus* (Fowler 1934); *Acentrogobius chaimi* (Goren 1978).

Revisions: None.

Illustrations: Akihito in Masuda et al. (1984: pl. 240 F-G).

Distribution. General distribution: Red Sea; Indo-West Pacific: KwaZulu-Natal (South Africa), East Africa, Persian Gulf and Seychelles east to Indonesia and Papua New Guinea, north to Amami Islands (southern Japan), south to northern Australia. Eastern Mediterranean Sea immigrant.

Distribution in the Middle East: Oman.

Distribution in Ecoregions: 439-Southwestern Arabian Coast, 443-Oman Mountains.

Habitat: This species is a demersal, marine species that inhabits shallow soft substrate at depths of less than 2 m. It is usually found living in a burrow within the sediment. — Brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: NT (IUCN, 2023).

Threats: There are no major threats to this species. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unspecified. — Moderate priority for conservation action.

Status in Oman: [Native]. — Kobion alsakhar. — First record from Oman by Freyhof et al. (2020); confirmed by Esmaeili et al. (2022a); Esmaeili and Hamidan (2023). — Oman material: ZM-CBSU.

Remarks. This species is marine species. Rarely enter to freshwaters.

***Favonigobius reichei* (Bleeker 1854)**

Common name: Indo-pacific tropical sand goby

Taxonomy: Original description: *Gobius reichei* Bleeker 1854: 509 [Padang, Sumatra (Sumatera Barat, Indonesia, eastern Indian Ocean); holotype (unique): RMNH 4672].

Middle Eastern synonyms: *Oplopomus reichei* (Bleeker 1854); *Papillogobius reichei* (Bleeker 1854).

Revisions: None.

Illustrations: None.

Distribution. General distribution: Red Sea; Indo-West Pacific: KwaZulu-Natal (South Africa), East Africa, Persian Gulf, Seychelles, Madagascar, and Mascarenes (Mauritius) east to Vietnam, Marshall Islands and New Guinea, north to southern Japan, south to northern Australia and New Caledonia.

Distribution in the Middle East: Oman.

Distribution in Ecoregions: 439-Southwestern Arabian Coast, 443-Oman Mountains.

Habitat: This species is found over sandy and muddy bottoms, often in weedy areas of the intertidal zone, as well as in mangroves, estuaries, lagoons, and rivers. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are no known threats to this species. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Oman: [Native]. — None. — First record from Oman by Esmaeili and Hamidan (2023). — Oman material: ZM-CBSU.

***Glossogobius giuris* (Hamilton 1822)**

Common name: Tang goby

Taxonomy: Original description: *Gobius giuris* Hamilton 1822: 51, 366, pl. 33 (fig. 15) [Ganges River, India; lectotype: whereabouts unknown].

Middle Eastern synonyms: None.

Revisions: Hoesé and Hammer (2021).

Illustrations: Hoese and Hammer (2021: 94, figs. 15-30).

Distribution. General distribution: Southern Red Sea; Indo-West Pacific: KwaZulu-Natal (South Africa), East Africa, Socotra (Yemen), Seychelles, Madagascar, and western Mascarenes (La Réunion, Mauritius) east to Society Islands (French Polynesia), north to Philippines, south to Pilbara (Western Australia), Queensland (Australia) and New Caledonia.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages, 701-Baluchistan.

Habitat: This species generally inhabits clear to turbid freshwater to estuarine habitats in rivers and streams with sand, gravel or rock substrate and freshwater river systems that extend well inland but is also found in marine habitats. In Australia and Southern Africa, it is found in shallow sandy streams as well as floodplain lagoons, penetrating inland more than 300 km. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CON, EUT, HAB, TOU. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Gav mahi-e cheshm navari. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz, 3-Makran. — Iran material: ZM-CBSU.

***Glossogobius tenuiformis* Fowler 1934**

Common name: Bareye goby

Taxonomy: Original description: *Glossogobius tenuiformis* Fowler 1934: 496, fig. 49 [St. Lucia Lake, 20 miles up, northern Zululand, KwaZulu-Natal, South Africa; holotype: ANSP 60250].

Middle Eastern synonyms: None.

Revisions: Jufaili et al. (2022).

Illustrations: Jufaili et al. (2022, figs 2-10).

Distribution. General distribution: Western Indian Ocean: KwaZulu-Natal (South Africa).

Distribution in the Middle East: Oman.

Distribution in Ecoregions: 439-Southwestern Arabian Coast, 443-Oman Mountains.

Habitat: This species generally inhabits clear to turbid freshwater to estuarine habitats in rivers and streams with sand, gravel or rock substrate and freshwater river systems that extend well inland but is also found in marine habitats. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, EUT, HAB, TOU. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Oman: [Native]. — None. — First record from Wadi Shab, Oman by Freyhof et al. (2020); confirmed by Esmaeili et al. (2022a); Esmaeili and Hamidan (2023). — Oman material: ZM-CBSU.

***Gobius paganellus* Linnaeus 1758**

Common name: Rock goby

Taxonomy: Original description: *Gobius paganellus* Linnaeus 1758: 263 [Mediterranean Sea; no types known].

Middle Eastern synonyms: None.

Revisions: Kovačić et al. (2022: 61).

Illustrations: Kovačić et al. (2022: 61, figs.).

Distribution. General distribution: Mediterranean Sea; Sea of Marmara; Black Sea; southern North Sea; eastern Atlantic: Scotland south to Senegal, including Azores, Madeira, and Canary Islands; Red Sea (Mediterranean Sea immigrant).

Distribution in the Middle East: Israel, Lebanon, and Syria.

Distribution in Ecoregions: 432-Southern Anatolia, 436-Coastal Levant.

Habitat: This species is benthic and predominantly marine; it occurs inshore and intertidal, under stones and in pools on sheltered rocky shores with dense weed cover. However, it occasionally enters freshwater. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats are known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Lebanon: [Native]. — Kobion alsakhar. — First record from Lebanon by George et al. (1964); confirmed by Mouneimné (1977), Mouneimné (2002); Bariche et al. (2007, 2009). — Lebanon material: AUBM, USNM.

Status in Syria: [Native]. — Kobion alsakhar. — First record from Syria by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 6-Coastal. — Syrian material: MSL.

***Mesogobius batrachocephalus* (Pallas 1814)**

Common name: Toad goby

Taxonomy: Original description: *Gobius batrachocephalus* Pallas 1814: 149 [Black Sea near Chersonesus (Kherson) and Balaklava, Crimea, Ukraine; syntypes: whereabouts unknown].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 1096).

Illustrations: Kottelat and Freyhof (2007: 575, fig.).

Distribution. General distribution: Eurasia: Black Sea and Sea of Azov basins.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species inhabits inshore habitats, estuaries, and brackish- and fresh-water lagoons on sand or rock bottoms. Often very deep in summer (down to 100 m). Rarely in pure freshwater. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Native]. — Kurbağa kayası-Yassıkafa kaya balığı. — Listed in previous checklists from Türkiye by Bilecenoglu et al. (2002, 2014); Kuru (2004) as *Gobius (Mesogobius) batrachocephalus*; Geldiay and Balık (2007) as *Gobius (Mesogobius) batrachocephalus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

***Mesogobius nonultimus* (Iljin 1936)**

Common name: Oriental river goby

Taxonomy: Original description: *Gobius nonultimus* Iljin 1936: 337 [24 miles southwest of Ulsky Bank, Caspian Sea, depth 24 meters over bottom depth of 54 meters, Turkmenistan; no types known].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 1097).

Illustrations: Zarei et al. (2022a: 173, fig. 20).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: This species is a brackish water species that inhabits sandy and rocky bottoms of estuaries, lagoons, and coastal areas. — Brackish.

Economic importance: No commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Vazagh mahi-e Caspian. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Neogobius bathybius* (Kessler 1877)**

Common name: Deepwater Goby

Taxonomy: Original description: *Gobius bathybius* Kessler 1877:17, pl. 1 (fig. 3) [Svinoi Island, south of Baky, Caspian Sea, Azerbaijan, 756 feet (108 Russian fathoms); holotype (unique): No types at ZIN].

Middle Eastern synonyms: *Chasar bathybius* (Kessler 1877); *Ponticola bathybius* (Kessler 1877).

Revisions: Berg (1949: 1094); Zarei et al. (2021).

Illustrations: Zarei et al. (2022a: 174, fig. 21).

Distribution. General distribution: Eurasia: Caspian Sea basin; introduced in Aral Sea.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 452-Caspian Marine.

Habitat: This species is a brackish water species that inhabits sandy and rocky bottoms of estuaries, lagoons, and coastal areas. — Brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e kafzi. — Listed in previous checklists from Iran by Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Neogobius caspius* (Eichwald 1831)**

Common name: Caspian goby

Taxonomy: Original description: *Gobius caspius* Eichwald 1831: 76 [Caspian Sea; No types known].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 1094); Zarei et al. (2021a).

Illustrations: Zarei et al. (2022a: 175, fig. 23).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 452-Caspian Marine.

Habitat: This species is a brackish water species that inhabits sandy and rocky bottoms of estuaries, lagoons, and coastal areas. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There seem to be no major threats currently impacting this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e Khazari. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Neogobius fluviatilis* (Pallas 1814)**

Common name: Monkey goby

Taxonomy: Original description: *Gobius fluviatilis* Pallas 1814: 162 [Mouths of rivers entering Black Sea; Caspian Sea; no types known].

Middle Eastern synonyms: *Gobius sordidus* Bennett 1835.

Revisions: Berg (1949: 1091).

Illustrations: Kottelat and Freyhof (2007: 579, figs.).

Distribution. General distribution: Eurasia: Black Sea and Caspian Sea basins; introduced elsewhere in central and eastern Europe.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species inhabits inshore habitats, estuaries, brackish- and fresh-water lagoons, and lakes, large to medium-sized rivers and streams, and sand or mud bottoms. Mostly found on open sand or mud bottoms. One of the most abundant fish species in lowland rivers. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Endemic]. — Tatlı su kayası. — Listed in previous checklists from Türkiye by Geldiay and Balık (2007) as *Gobius* (*Neogobius*) *fluviatilis*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 3-Susurluk, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

***Neogobius melanostomus* (Pallas 1814)**

Common name: Round goby

Taxonomy: Original description: *Gobius melanostomus* Pallas 1814: 151 [Sevastopol, Crimea, Ukraine; Balaklava, Ukraine; syntypes: whereabouts unknown].

Middle Eastern synonyms: *Apollonia melanostoma* (Pallas 1814).

Revisions: Berg (1949: 1083); Zarei et al. (2021a).

Illustrations: Zarei et al. (2022a: 175, fig. 24).

Distribution. General distribution: Eurasia: basins of the Black, Azov, and Caspian seas; introduced elsewhere (including Baltic Sea, central Europe, Italy, U.S.A., and Canada).

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 452-Caspian Marine.

Habitat: This species inhabits inshore habitats, estuaries, brackish- and fresh-water lagoons and lakes, large rivers, harbours, and sand or rock bottoms. To 50-60 m deep in the Black Sea during the winter. Mostly found on well-vegetated or rock bottom. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e domgerd. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022);

Zarei et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Kocabaş kaya balığı-Kum kaya balığı; listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Gobius (Apollonia) melanostomus*; Geldiay and Balık (2007) as *Gobius melanostomus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

***Neogobius pallasii* (Berg 1916)**

Common name: Caspian sand goby

Taxonomy: Original description: *Gobius fluviatilis pallasii* Berg 1916: 417 [Caspian Sea; syntypes: ZISP 2195, 2204, 23137, 30729, 30736, 30738, 30919, 30920, 30924-26. 33182, 34276, 34277].

Middle Eastern synonyms: None.

Revisions: Zarei et al. (2021a).

Illustrations: Zarei et al. (2022a: 176, fig. 25).

Distribution. General distribution: Eurasia: Caspian Sea basin, Aral Sea (introduced).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 452-Caspian Marine.

Habitat: Inshore habitats, estuaries, brackish- and fresh-water lagoons, and lakes, large to medium-size rivers, on sand or mud bottom. Usually on open sand or sand-shell bottom. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e sheni. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Pomatoschistus anatoliae* Engin & Innal 2017**

Common name: Göksu river goby

Taxonomy. Original description: *Pomatoschistus anatoliae* Engin & Innal 2017:2, figs. 1-2 [Göksu River estuary, Anatolia, Turkey; holotype: IKC.PIC.1027].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Engin and Innal (2017: figs. 1-2).

Distribution. General distribution: Asia Minor: Göksu River estuary, Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits brackish lagoons, estuaries, and the lower parts of large rivers. Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Türkiye: [Endemic]. — Kaya balığı. — Recorded from Türkiye in original description by Engin and Innal (2017); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 17-Doğu Akdeniz. — Turkish material: IKC.PIC.

Ponticola constructor* (Nordmann 1840)*Common name:** Blackbelly river goby**Taxonomy:** Original description: *Gobius constructor* Nordmann 1840: 427, pl. 9 (fig. 2) [Black Sea, rapid torrents in Abasie, Drandarium, Ghouriel; syntypes: ?MNHN A-1196 (1) from Abasie, ZMB 2096 (1)].**Middle Eastern synonyms:** *Neogobius constructor* (Nordmann 1840); *Neogobius cephalarges constructor* (Nordmann 1840).**Revisions:** Berg (1949: 1087) as *Neogobius cephalarges constructor*.**Illustrations:** Nordmann (1840: 427, pl. 9, fig. 2); Kottelat and Freyhof (2007: 577, fig.).**Distribution. General distribution:** Eurasia: eastern Black Sea basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 433-Western Transcaucasia.**Habitat:** This species inhabits a wide variety of flowing waters, from cold hill streams to foothill streams. Never found in marine water. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Türkiye:** [Native]. — Kaya balığı. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Gobius (Ponticola) cephalarges constructor*; Geldiay and Balık (2007); Fricke et al. (2007) as *Neogobius constructor*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.***Ponticola cyrius* (Kessler 1874)****Common name:** Kura goby**Taxonomy:** Original description: *Gobius cyrius* Kessler 1874: 273 [83] [Kura River near Borzhomi, Georgia, Eurasia; syntypes: ZIN 2235 (3)].**Middle Eastern synonyms:** *Gobius weidemanni* Kessler 1874; *Gobius weidemani* Kessler 1874; *Neogobius cyrius* (Kessler 1874).**Revisions:** None.**Illustrations:** None.**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.**Habitat:** This species inhabits a very wide range of streams, rivers, and lake shores. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** While there are many threats in the area, this species is quite ubiquitous and is not believed to be strongly impacted. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.**Status in Türkiye:** [Native]. — Kaya balığı. — Listed in previous checklists from Türkiye by Fricke et al. (2007) as *Neogobius cyrius*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 24-Aras. — Turkish material: None.***Ponticola eurycephalus* (Kessler 1874)****Common name:** Mushroom goby**Taxonomy:** Original description: *Gobius eurycephalus* Kessler 1874: 281 [91] [Enikale near Kerch, Crimea, Ukraine; lectotype: ZIN 2234].**Middle Eastern synonyms:** *Neogobius eurycephalus* (Kessler 1874).**Revisions:** None.**Illustrations:** Miller in Whitehead et al. (1986: 1059, fig.) as *Neogobius eurycephalus*.

Distribution. General distribution: Eurasia: Black Sea basin and Sea of Azov.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia.

Habitat: This species inhabits brackish lagoons, estuaries, and the lower parts of large rivers, usually associated with rock bottoms. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Türkiye: [Native]. — Kaya balığı. — Listed in previous checklists from Türkiye by Bilecenoglu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *Neogobius eurycephalus*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a); confirmed by Engin et al. (2016). — Distribution in River Basin: 2-Marmara, 13-Batı Karadeniz. — Turkish material: None.

***Ponticola goebelii* (Kessler 1874)**

Common name: Caspian ratan or rotan goby

Taxonomy: Original description: *Gobius goebelii* Kessler 1874: 249 [59] [Baku, Azerbaijan; syntypes: (3) NMW 33910 (1), ZIN 2229-30 (1, 1)].

Middle Eastern synonyms: *Neogobius ratan goebelii* (Kessler 1874).

Revisions: None.

Illustrations: Zarei et al. (2022a: 178, fig. 28).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: This species inhabits brackish lagoons, estuaries, and the lower parts of large rivers, usually associated with rock bottoms. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e ratan. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Ponticola gorlap* (Iljin 1949)**

Common name: Caspian bighead goby

Taxonomy: Original description: *Neogobius kessleri gorlap* Iljin in Berg 1949: 1091 [Caspian Sea and tributary rivers; syntypes: not at ZIN].

Middle Eastern synonyms: *Neogobius gorlap* Iljin 1949.

Revisions: Zarei et al. (2021a).

Illustrations: Zarei et al. (2022a: 179, fig. 29).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: This species found in inshore habitats, estuaries, brackish- and fresh-water lagoons and lakes, large rivers, harbours, on rock bottom. Mainly found on well vegetated or rock bottom. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.
Status in Iran: [Native]. — Gavmahi-e sar bozorg. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Ponticola hircaniaensis* Zarei, Esmaili, Kovacic, Schliewen & Abbasi 2022**

Common name: Hircaniaen bighead goby

Taxonomy: Original description: *Ponticola hircaniaensis* Zarei, Esmaili, Kovacic, Schliewen & Abbasi 2022: 408, figs. 1, 5-7a-d [Kaboudval stream, Golestan Province, Iran, 36°53'11.0"N, 54°53'37.8"E; holotype: ZM-CBSU S101-6].

Middle Eastern synonyms: None.

Revisions: Zarei et al. (2021a).

Illustrations: Zarei et al. (2022: 408, fig. 1).

Distribution. General distribution: Middle East: Kaboudval stream, Caspian Sea watersheds.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 450-Turan Plain.

Habitat: This species found in inshore habitats, estuaries, brackish- and fresh-water lagoons and lakes, large rivers, harbours, on rock bottom. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Gavmahi-e Hircani. — Recorded from Iran in the original description by Zarei et al. (2022). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Ponticola iranicus* Vasil'eva, Mousavi-Sabet & Vasil'ev 2015**

Common name: Persian goby

Taxonomy: Original description: *Ponticola iranicus* Vasil'eva, Mousavi-Sabet & Vasil'ev 2015: 191, figs. 2-4 [Upper Sefid-Rud River basin, Tutkabon Stream, Iran, 36°50.756'N, 49°35.021'E; holotype: ZMMU P-23677].

Middle Eastern synonyms: None.

Revisions: Zarei et al. (2021a).

Illustrations: Zarei et al. (2022a: 180, fig. 31).

Distribution. General distribution: Middle East: southern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species found in inshore habitats, estuaries, brackish- and fresh-water lagoons and lakes, large rivers, harbours, on rock bottom. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Endemic]. — Gavmahi-e Irani. — Recorded from Iran in the original description by Vasil'eva et al. (2015); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZMMU, ZM-CBSU.

Ponticola patimari* Eagderi, Nikmehr & Poorbagher 2020*Common name:** Patimar goby**Taxonomy:** Original description: *Ponticola patimari* Eagderi, Nikmehr & Poorbagher 2020: 25, figs. 2-4 [Kheirud River at Najar-deh Village, Caspian Sea basin, Mazandaran province, Iran, 36°36'46"N, 51°34'03"E; holotype: IMNRF-UT 1088].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Zarei et al. (2022a: 181, fig. 32).**Distribution. General distribution:** Middle East: Kheirud, Chalous and Tonekabon River drainages, southern Caspian Sea basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.**Habitat:** This species found in inshore habitats, estuaries, brackish- and fresh-water lagoons and lakes, large rivers, harbours, on rock bottom. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Endemic]. — Gavmahi-e Patimar. — Recorded from Iran in the original description by Eagderi et al. (2020); listed in previous checklists from Iran by Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.***Ponticola ratan* (Nordmann 1840)****Common name:** Ratan goby**Taxonomy:** Original description: *Gobius ratan* Nordmann 1840: 416, pl. 11 (fig. 2) [Odessa, Ukraine; syntypes: MNHN A-1125 (2), ZMB 2098 (1?)].**Middle Eastern synonyms:** None.**Revisions:** Berg (1949: 1086) as *Neogobius ratan*; Zarei et al. (2022).**Illustrations:** Nordmann (1840: 416, pl. 11, fig. 2).**Distribution. General distribution:** Eurasia: Black Sea, Sea of Azov, and Caspian Sea watersheds.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 430-Northern Anatolia.**Habitat:** This species is typically found in inshore waters over coarse sediments. This was commonly considered in pure coastal species in water salinity of 6-16 ppt that did not occur in freshwater habitats. However, it has been recorded from freshwater rivers and reservoirs. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** There are no known species-specific threats. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.**Status in Türkiye:** [Native]. — Kaya balığı. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Gobius* (*Ponticola*) *ratan*; Geldiay and Balık (2007) as *Gobius ratan*; Fricke et al. (2007) as *Neogobius ratan*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 13-Batı Karadeniz. — Turkish material: None.

Ponticola rizensis* (Kovacic & Engin 2008)*Common name:** İyidere goby**Taxonomy:** Original description: *Neogobius rizensis* Kovacic & Engin 2008: 74, figs. 2-3 [Rize, the İyidere stream, northeastern Türkiye; holotype: FFR 1014].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Kovacic and Engin (2008: 74, figs. 2-3).**Distribution. General distribution:** Asia Minor: Black Sea tributary, Rize Province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 433-Western Transcaucasia.**Habitat:** This species inhabits the lower sections of streams. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: EN (IUCN, 2023).**Threats:** CON. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.**Status in Türkiye:** [Endemic]. — Kaya balığı. — Recorded from Türkiye in the original description by Kovacic and Engin (2008); listed in previous checklists from Türkiye by Bilecenoğlu et al. (2014); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: FFR.***Ponticola syrman* (Nordmann 1840)****Common name:** Syrman goby**Taxonomy:** Original description: *Gobius syrman* Nordmann 1840: 419, Ppl. 12 (fig. 1) [Odessa, Ukraine; Kryni, Ukraine; syntypes: ?BMNH 1872.5.30.35 (1) Odessa; MNHN A-1126 (1) Odessa, NMW 30099 (1). Type catalog: Bauchot et al. 1991: 40].**Middle Eastern synonyms:** *Neogobius syrman* (Nordmann 1840).**Revisions:** Berg (1949: 1089) as *Neogobius syrman*; Zarei et al. (2021a).**Illustrations:** Zarei et al. (2022a: 181, fig. 33).**Distribution. General distribution:** Eurasia: Black, Azov and Caspian Sea watersheds.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.**Habitat:** This species found in inshore habitats, estuaries, brackish- and fresh-water lagoons, large rivers on mud bottom. Restricted to coastal areas. In Caspian Sea does not enter rivers. — Brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Gavmahi-e Syrman. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.***Ponticola turani* (Kovacic & Engin 2008)****Common name:** Aksu goby**Taxonomy:** Original description: *Neogobius turani* Kovacic & Engin 2008: 77, figs. 4-5 [Giresun, Aksu stream, northeastern Türkiye; holotype: FFR 1017].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Kovacic and Engin (2008: 77, figs. 4-5).**Distribution. General distribution:** Asia Minor: Black Sea tributary, Giresun Province.**Distribution in the Middle East:** Türkiye.

Distribution in Ecoregions: 433-Western Transcaucasia.

Habitat: This species inhabits streams and small rivers. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: CON. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Türkiye: [Endemic]. — Kaya balığı. — Recorded from Türkiye in the original description by Kovacic and Engin (2008); listed in previous checklists from Türkiye by Bilecenoğlu et al. (2014); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: FFR.

***Proterorhinus nasalis* (De Filippi 1863)**

Common name: Eastern tubenose goby

Taxonomy: Original description: *Gobius nasalis* De Filippi 1863: 390 [Caspian Sea near Baku; syntypes: BMNH 1869.3.4.34 (1); MSNG 12655 (2), 36228 (3); MZUT 672 (7); NMW 33894-96 (1, 1, 1); ZMB 5015 (3)].

Middle Eastern synonyms: *Gobius blennioides* Kessler 1877.

Revisions: Zarei et al. (2021a).

Illustrations: Zarei et al. (2022a: 182, fig. 34).

Distribution. General distribution: Eurasia: Southern Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 452-Caspian Marine.

Habitat: A variety of slow-flowing or still waters. Usually associated with dense vegetation or coarse rocks. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e marmari, Gavmahi-e bini loleyi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Proterorhinus semilunaris* (Heckel 1837)**

Common name: Western tubenose goby

Taxonomy: Original description: *Gobius semilunaris* Heckel 1837: 152, pl. 8 (figs. 5-6) [Marizza [Marizza] River, near Plovdiv, eastern Rumelia, Balkan region of Bulgaria; syntypes: NMW 58144 (3)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Heckel (1837: 152, pl. 8, figs. 5-6).

Distribution. General distribution: Black Sea basin. Introduced/invaded in elsewhere in Europe, in Minnesota and Michigan (Lake Erie, U.S.A.) and Canada (from ship's ballast).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia.

Habitat: This species as a variety of slow-flowing or still waters from estuarine to small, slowly flowing premontane streams. Usually associated with dense vegetation or coarse rocks. Often very abundant in backwaters and lakes, proliferates in reservoirs and channels. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Low priority for conservation action.

Status in Türkiye: [Native]. — Kaya balığı. — Listed in previous checklists from Türkiye by Bilecenoglu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007) as *P. marmoratus*; Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege. — Turkish material: None.

Gobionellinae Bleeker 1874 (oxudercids)

***Awaous jayakari* (Boulenger 1888)**

Common name: Oman Sea longsnout goby

Taxonomy: Original description: *Gobius jayakari* Boulenger 1888: 663, pl. 54 (fig. 2) [Fresh waters near Muscat, Oman, Gulf of Oman, Arabian Sea, northwestern Indian Ocean; syntypes: BMNH 1887.11.11.234-237 (4)].

Middle Eastern synonyms: *Gobius percivali* Boulenger 1901.

Revisions: None.

Illustrations: Boulenger (1888: pl. 54, fig. 2) as *Gobius jayakari*.

Distribution. General distribution: Northwestern Indian Ocean: southern Yemen and Gulf of Oman east to Iran. Possibly introduced in Pakistan.

Distribution in the Middle East: Oman, UAE, and Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast, 443-Oman Mountains.

Habitat: The species is amphidromous; its normal life cycle includes an extended pelagic or nektonic larval stage. This species is present in fresh and brackish waters, most rivers, and estuaries. It is found in pools and running water, usually over sandy substrate into which it may bury itself with only the head and eyes exposed. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Oman: [Native]. — Jayakar's goby. — Recorded from Oman in original description by Boulenger (1888); confirmed by Freyhof et al. (2020); Al Jufaili et al. (2021); Esmaili et al. (2022a); Esmaili and Hamidan (2023). — Oman material: CMN, FSJF, ZM-CBSU.

Status in UAE: [Native]. — None. — Listed in previous checklists from UAE by Freyhof et al. (2020); Esmaili et al. (2022a); Esmaili and Hamidan (2023). — UAE material: None.

Status in Yemen: [Native]. — None. — Listed in previous checklists from Yemen by Freyhof et al. (2020); Esmaili et al. (2022a); Esmaili and Hamidan (2023). — Yemen material: None.

***Hyracanogobius bergi* Iljin 1928**

Common name: Volga dwarf goby

Taxonomy: Original description: *Hyracanogobius bergi* Iljin 1928:44, Figs. 7-11 [Northern Caspian Sea, near mouths of rivers Volga, Ural, and Emba, Russia and Kazakhstan; syntypes: (many) ZIN 25417 (5) Volga].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 1069); Zarei et al. (2022).

Illustrations: Zarei et al. (2022a: 171, fig. 15).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 450-Turan Plain, 452-Caspian Marine.

Habitat: This species is a brackish water species that inhabits sandy and rocky bottoms of estuaries, lagoons, and coastal areas. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e kotole-e Volga. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Knipowitschia byblisia* Ahnelt 2011**

Common name: Byblis goby

Taxonomy: Original description: *Knipowitschia byblisia* Ahnelt 2011: 23, figs. 1-2 [Lake Köyceğiz, 36°55'N, 28°40'E, southwest Türkiye; holotype: ZMH 2175].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Ahnelt (2011: 23, figs. 1-2).

Distribution. General distribution: Asia Minor: Köyceğiz Gölü (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits fresh and slightly brackish waters. Prefers lowland rivers, deltas, and coastal lakes. In rivers, usually abundant in mainstream. Usually on silty sand with mollusc shells. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Situated mostly in a protected area, there seem to be no or very few threats in Lake Köyceğiz affecting this species. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kaya balığı. — Recorded from Türkiye in the original description by Ahnelt (2011); listed in previous checklists from Türkiye by Çiçek et al. (2016, 2018, 2020, 2023a). — Distribution in River Basin: 8-Batı Akdeniz. — Turkish material: ZMH.

***Knipowitschia caucasica* (Berg 1916)**

Common name: Caucasian dwarf goby

Taxonomy: Original description: *Pomatoschistus causicus* Berg 1916: 409 [Swamp near Batum and Inkit Lake near Pitzunda, Lake Temirgorje, Georgia, Eurasia; syntypes: BMNH 1896.3.28.26-28 (ex Tiflis Mus.) (3)].

Middle Eastern synonyms: *Gobius causicus* Kavraiskii in Radde 1899; *Bubyr causicus* kosswigii Sözer 1941.

Revisions: Berg (1949: 1065) as *Pomatoschistus causicus*; Zarei et al. (2021a).

Illustrations: Zarei et al. (2022a: 172, fig. 17).

Distribution. General distribution: Mediterranean Sea; Sea of Marmara; Black Sea; Sea of Azov; Caspian Sea; Aral Sea.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 434-Kura-South Caspian Drainages, 452-Caspian Marine.

Habitat: This species inhabits fresh to hypersaline waters (salinity up to 5.5 ‰) of lakes, estuaries, and lagoons. Most abundant in shallow, well-vegetated habitats. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e qafqazi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Kaya balığı. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 8-Batı Akdeniz, 9-Antalya, 11-Akarçay, 16-Konya. — Turkish materials: None.

***Knipowitschia caunos* Ahnelt 2011**

Common name: Caunos goby

Taxonomy: Original description: *Knipowitschia caunos* Ahnelt 2011: 25, figs. 1, 3 [Lake Köyceğiz, 36°55'N, 28°40'E, southwest Türkiye; holotype: ZMH 25904].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Ahnelt (2011: 25, figs. 1, 3).

Distribution. General distribution: Asia Minor: Köyceğiz Gölü (Mediterranean tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits fresh and slightly brackish waters. Prefers lowland rivers, deltas, and coastal lakes. In rivers, usually abundant in mainstream. Usually on silty sand with mollusc shells. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Situated mostly in a protected area, there seem to be no or very few threats in Lake Köyceğiz affecting this species. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Kaya balığı. — Recorded from Türkiye in the original description by Ahnelt (2011); listed in previous checklists from Türkiye by Çiçek et al. (2016, 2018, 2020, 2023a). — Distribution in River Basin: 8-Batı Akdeniz. — Turkish material: ZMH.

***Knipowitschia iljini* Berg 1931**

Common name: Iljin's dwarf goby

Taxonomy: Original description: *Knipowitschia iljini* Berg 1931a: 1271, pl. 1; figs. 1-2 [Middle part of Caspian Sea; syntypes: (many) ZIN 22052 (65), 24370 (16), ?24424 (6+)].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 1068).

Illustrations: Zarei et al. (2022a: 172, fig. 18).

Distribution. General distribution: Eurasia: Caspian Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 452-Caspian Marine.

Habitat: This species is a brackish water species that inhabits estuaries. The Caspian Sea, where this species occurs, has a salinity of 1.2 ppt. — Brackish.

Economic importance: No commercial importance.

Conservation: IUCN: DD (IUCN, 2023).

Threats: EUT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e kotoleh. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

***Knipowitschia longicaudata* (Kessler 1877)**

Common name: Long-tailed dwarf goby

Taxonomy: Original description: *Gobius longicaudatus* Kessler 1877: 35, pl. 3 (fig. 8) [Southern and middle Caspian Sea; syntypes: BMNH 1897.7.5.10 [ex ZIN, var. C] (1), ZIN (lost)].

Middle Eastern synonyms: *Knipowitschia longicaudata* (Kessler 1877); *Knipowitschia georghievi* Pinchuk 1978.

Revisions: Berg (1949: 1066).

Illustrations: Zarei et al. (2022a: 173, fig. 19).

Distribution. General distribution: Eurasia: Black Sea, Sea of Azov, and Caspian Sea basins.

Distribution in the Middle East: Iran and Türkiye.

Distribution in Ecoregions: 423-Thrace, 430-Northern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 452-Caspian Marine.

Habitat: This species inhabits fresh to hypersaline waters (salinity up to 5.5‰) of lakes, estuaries, and lagoons. Most abundant in shallow, well-vegetated habitats. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Gavmahi-e dom deraz. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Zarei et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Türkiye: [Native]. — Kaya balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Pomatoschistus longicaudatus*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 2-Marmara, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.

***Knipowitschia mermere* Ahnelt 1995**

Common name: Marmara goby

Taxonomy: Original description: *Knipowitschia mermere* Ahnelt 1995: 160, fig. 3 [Mermere (Lake Marmara), western Anatolia, Türkiye, 38°41'N, 28°00'E (is 38°37'N, 28°00'E); holotype: ZMH 2176.1].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Ahnelt (1995: 160, fig. 3).

Distribution. General distribution: Asia Minor: Marmara Sea tributary, northwestern Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species inhabits fresh to hypersaline waters (salinity up to 5.5‰) of lakes, estuaries, and lagoons. Most abundant in shallow, well-vegetated habitats. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: CLI, EUT, HAB. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Mermer kaya balığı. — Recorded from Türkiye in the original description by Ahnelt (1995); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 5-Gediz. — Turkish material: ZMH.

Knipowitschia ricasolii* (Di Caporiacco 1935)*Common name:** Goby**Taxonomy:** Original description: *Gobius ricasolii* Di Caporiacco 1935: 258 [Kuyuncu Lake (Aya Selçuk), Küçük Menderes River drainage, İzmir Province, western Anatolia, Türkiye; syntypes: MZUF 5551-55 (5)].**Middle Eastern synonyms:** *Knipowitschia ephesi* Ahnelt 1995.**Revisions:** None.**Illustrations:** Çiçek et al. (2019: 333, fig. 1).**Distribution. General distribution:** Kuyuncu Lake, near Aya Selçuk, Maendri valley (Aegean Sea tributary), Izmir province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 429-Western Anatolia.**Habitat:** This species inhabits fresh to hypersaline waters (salinity up to 5.5 ‰) of lakes, estuaries, and lagoons. Most abundant in shallow, well-vegetated habitats. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: CR (IUCN, 2023) as *Knipowitschia ephesi*.**Threats:** CLI, EUT, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.**Status in Türkiye:** [Endemic]. — Kaya balığı. — Recorded from Türkiye in the original description by Di Caporiacco (1935); listed in previous checklists from Türkiye by Çiçek et al. (2020, 2023a). — Distribution in River Basin: 6-Küçük Menderes. — Turkish material: MZUF.***Oxyurichthys omanensis* Zarei, Al Jufaili & Esmaili 2022****Common name:** Rock goby**Taxonomy:** Original description: *Oxyurichthys omanensis* Zarei, Al Jufaili & Esmaili 2022: 365, figs. 2-6 [Yeti (Yiti) mudflat/estuary at Yeti village, Muscat, Oman, 23°31'52"N, 58°39'51"E; holotype: ZM-CBSU S105-19].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Zarei et al. (2022: figs. 2-6).**Distribution. General distribution:** Gulf of Oman: Muscat area.**Distribution in the Middle East:** Oman.**Distribution in Ecoregions:** 443-Oman Mountains.**Habitat:** This species is a demersal, marine species that inhabits shallow soft substrate at depths of less than 2 m. It is usually found living in a burrow within the sediment. — Brackish, marine.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — No keystone species. — Decline status: Unknown. — High priority for conservation action.**Status in Oman:** [Endemic]. — None. — Recorded from Oman in original description by Zarei et al. (2022). — Oman material: ZM-CBSU.***Rhinogobius cheni* (Nichols 1931)****Common name:** Chinese goby**Taxonomy:** Original description: *Gobius cheni* Nichols 1931:1 [Hokou (Chaoshan), northeastern Kiangsi Province, China; holotype: AMNH 9694].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** None.

Distribution. General distribution: East Asia: Jiangxi Province (China); introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 450-Turan Plain.

Habitat: This species inhabits freshwater lakes and rivers. It lives in shallow areas of rivers with a weak current and rocky or sandy soil, in shallow water with sandy bottoms. This species feeds on small crustaceans, insect larvae, and fish eggs. — Freshwater.

Economic importance: No commercial importance.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Gavmahi. — First record from Iran by Mousavi-Sabet et al. (2023). — Distribution in River Basin: 6-Caspian Sea. — Iran materials: None.

Remarks. Previously, *Rhinogobius lindbergi* was reported in many studies. However status of *Rhinogobius* need revision in Iran (Mousavi-Sabet et al., 2023).

Rhinogobius lindbergi Berg 1933

Common name: Lindberg's goby

Taxonomy: Original description: *Rhinogobius similis lindbergi* Berg 1933: 654, fig. 612 [Amur River and Ussuri River, Russia; no types known].

Middle Eastern synonyms: None.

Revisions: Berg (1949: 1078) as *Rhinogobius similis lindbergi*.

Illustrations: Berg (1933: fig. 612) as *Rhinogobius similis lindbergi*.

Distribution. General distribution: East Asia: Amur River basin (Russia and Heilongjiang, China); introduced elsewhere.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species inhabits freshwater lakes and rivers. It lives in shallow areas of rivers with a weak current and rocky or sandy soil, in shallow water with sandy bottoms. This species feeds on small crustaceans, insect larvae, and fish eggs. Larvae of the goby are often found in the summer in planktonic gatherings when they are caught in mouth sections of the rivers. — Freshwater, brackish.

Economic importance: No commercial importance.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Türkiye: [Exotic]. — Kaya balığı. — First report from Türkiye by Kaya (2022); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 24-Aras. — Turkish materials: None.

Rhinogobius sp.

Common name: Goby

Taxonomy: This species has yet to be identified to species level.

Middle Eastern synonyms: None.

Revisions: Zarei et al. (2021, 2022)

Illustrations: Zarei et al. (2022, fig. 35).

Distribution. General distribution: Introduced in the Hari River, South Caspian Sea, Namak, Urmia and Tigris River basins. The population that settled in Iran also has penetrated Azerbaijan and Georgia, and likely occurs in Armenian and the Black Sea basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 447-Namak, 450-Turan Plain, 631-Upper Amu Darya.

Habitat: This species inhabits freshwater lakes and rivers. It lives in shallow areas of rivers with a weak current and rocky or sandy soil, in shallow water with sandy bottoms. This species feeds on small crustaceans, insect larvae, and fish eggs. Larvae of the goby are often found in the summer in planktonic gatherings when they are caught in mouth sections of the rivers. — Freshwater

Economic importance: No commercial importance.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Gavmahi. — Recorded from Iran by Zarei et al. (2021, 2022). — Distribution in River Basin: 6-Caspian Sea, 14-Lake Orumiyeh, 19-Hari River, 15-Namak Lake, 4-Tigris. — Iran material: ZM-CBSU.

Oxudercinae Günther 1861 (mudskippers and allies)

***Boleophthalmus dussumieri* Valenciennes 1837**

Common name: Dussumier's mudskipper

Taxonomy: Original description: *Boleophthalmus dussumieri* Valenciennes in Cuvier & Valenciennes 1837: 207, pl. 354 [Mumbai, India; holotype (unique): MNHN A-1468].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Jouladeh-Roudbar et al. (2020: 231, fig. 426).

Distribution. General distribution: Northwest Indian Ocean: East coast of Africa, Persian Gulf.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages, 452-Caspian Marine, 701-Baluchistan.

Habitat: This species is a demersal, amphidromous, and amphibious species that inhabits the marine, brackish and estuarine waters of intertidal mudflats. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Gel khorak. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 2-Hormuz, 3-Makran. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Mohamed & Abood (2017a); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

***Periophthalmus waltoni* Koumans 1941**

Common name: Walton's mudskipper

Taxonomy: Original description: *Periophthalmus waltoni* Koumans 1941: 288 [Iraq and Pakistan; syntypes: RMNH 17004 (2), ZSI (4, not found)].

Middle Eastern synonyms: None.

Revisions: Murdy (1989: 44).

Illustrations: Randall (1995: 341, fig.).

Distribution. General distribution: Northwestern Indian Ocean: Persian Gulf and Gulf of Oman.

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages, 452-Caspian Marine, 701-Baluchistan.

Habitat: This species is a demersal species that occurs in brackish to marine waters, found in open mudflats and nearby stunted mangroves. The individuals of this species are amphibious air-breathers and are usually found in burrows or under rocks on mudflats. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Gel khorak-e Walton. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 2-Hormuz, 3-Makran. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Khalaf (1961); confirmed by Mohamed and Abood (2017a); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: RMNH.

Scartelaos tenuis (Day 1876)

Common name: Slender mudskipper

Taxonomy: Original description: *Boleophthalmus tenuis* Day 1876: 305, pl. 65 (fig. 1) [Estuaries of Karachi, Sind, Pakistan; lectotype: AMS B.7618].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Day (1876: pl. 65, fig. 1) as *Boleophthalmus tenuis*; Jouladeh-Roudbar et al. (2020: 248, fig. 456).

Distribution. General distribution: Northwestern Indian Ocean: Persian Gulf and Gulf of Oman.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages, 452-Caspian Marine, 701-Baluchistan.

Habitat: This benthic species is found burrowed in mud and sand flats along the coast. It can be found in sandy/silt/clay substrate, where there are moderate to strong tidal conditions, and the wave action is weak to moderate. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are no known major threats to this species; although, pollution, over-fishing, and other human activity in the Persian Gulf of Iran potentially influences the health of local populations. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Gel khorak-e deraz. — Listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 2-Hormuz, 3-Makran. — Iran material: ZM-CBSU.

Synbranchiformes

Mastacembeloidei

Mastacembelidae Swainson 1839 (freshwater spiny-eels)

Mastacembelus mastacembelus (Banks & Solander in Russell 1794)

Common name: Mesopotamian spiny eel

Taxonomy: Original description: *Ophidium mastacembelus* Banks & Solander in Russell 1794: 209, pl. 6 [locality unknown; no types known].

Middle Eastern synonyms: *Rhynchobdella haleppensis* Bloch & Schneider 1801; *Macrognathus caudatus* McClelland 1842; *Macrognathus hamiltonii* McClelland 1843; *Mastacembelus manipurensis* Hora 1921; *Mastacembelus marmoratus* Cuvier in Cuvier & Valenciennes 1832;

Rhynchobdella polyacantha Bloch & Schneider 1801; *Mastacembelus ponticerianus* Cuvier in Cuvier & Valenciennes 1832; *Mastacembelus venosus* Valenciennes in Jacquemont 1838.

Revisions: Gholamhosseini et al. (2022).

Illustrations: Banks and Solander in Russell (1794: 209, pl. 6).

Distribution. General distribution: Asia Minor and Middle East: Tigris River, Kor River, and Persian Gulf basins.

Distribution in the Middle East: Iran, Iraq, Syria, and Türkiye.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a wide range of habitats, from reservoirs and large rivers to small mountain streams. Often very abundant in rapids and riffles. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: EUT. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Iran: [Native]. — Marmahi-e khardar. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 12-Kor River, 1-Persis. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Salbooh Sian. — First record from Iraq by Mahdi (1962); confirmed by Jawad et al. (2016); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Syria: [Native]. — Haiet alsamak/thoaban al maa. — Recorded from Syria in the original description of *Rhynchobdella haleppensis* by Bloch and Schneider (1801: 480); confirmed by Beckman (1962: 154); Ali and Saad (2002); Ali (2003); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: ANSP, BMNH, MCZ, MSL.

Status in Türkiye: [Native]. — Dikenli yılan balığı. — Listed in previous checklists from Türkiye by Kuru (2004) as *Mastacembelus simack*; Geldiay and Balık (2007) as *Mastacembelus simack*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Carangiformes

Pleuronectoidei

Pleuronectidae Rafinesque 1815 (righteye flounders)

Pleuronectinae Rafinesque 1815 (true flounders)

Platichthys flesus (Linnaeus 1758)

Common name: Mediterranean flounder

Taxonomy: Original description: *Pleuronectes flesus* Linnaeus 1758: 270 [European seas; lectotype: BMNH 1853.11.12.133 (skin)].

Middle Eastern synonyms: *Pleuronectes flesus* Linnaeus 1758.

Revisions: Berg (1949: 1185) as *Pleuronectes flesus*.

Illustrations: Kottelat and Freyhof (2007: 594, fig.).

Distribution. General distribution: Northeastern Atlantic and adjacent Arctic Ocean: Baltic Sea, North Sea, eastern North Atlantic and western Europe; introduced elsewhere.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 433-Western Transcaucasia.

Habitat: This species is typically found resting on the muddy substrate of estuaries. It has been found at a depth range of 1-100 m. It migrates into the open sea to breed from March to June, and the young then return to estuarine waters. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dere pisisi. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Anabantiformes

Channoidei

Channidae Fowler 1934 (1831) (snakeheads)

Channa gachua (Hamilton 1822)

Common name: Dwarf snakehead

Taxonomy: Original description: *Ophicephalus gachua* Hamilton 1822: 68, 367, pl. 21, fig. 21 [Ponds and ditches of Bengal; no types known].

Middle Eastern synonyms: *Ophiocephalus aurantiacus* Hamilton 1822; *Ophicephalus coramota* Cuvier in Cuvier & Valenciennes 1831; *Ophicephalus fuscus* Cuvier in Cuvier & Valenciennes 1831; *Ophicephalus marginatus* Cuvier 1829; *Ophicephalus montanus* McClelland 1842.

Revisions: None.

Illustrations: Hamilton (1822: pl. 21, fig. 21) as *Ophiocephalus gachua*; Britz (2019: pl. 43).

Distribution. General distribution: South Asia: introduced in Yunnan (China).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 701-Baluchistan.

Habitat: This species is present in almost all wetlands. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Threats are not expected, but further investigation is required following taxonomic revision. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Mahi-e sar mari. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 11-Hamun-e Jaz Murian, 10-Hamun-e Mashkid, 3-Makran. — Iran material: ZM-CBSU.

Channa micropeltes (Cuvier 1831)

Common name: Giant snakehead

Taxonomy: Original description: *Ophicephalus micropeltes* Cuvier (ex Kuhl & van Hasselt) in Cuvier & Valenciennes 1831: 427 [Java, Indonesia; syntypes: RMNH D2318 (1, dry). Possible syntypes: RMNH D1131 (1, dry), D1132 (1, dry)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Rainboth (1996: 220, fig., pl. 26).

Distribution. General distribution: Southeast Asia: Sundaland to Laos and Vietnam. Introduced elsewhere.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages.

Habitat: This species founds in large rivers, lakes, reservoirs, ponds, and disturbed forest streams. It is a pelagic, midwater, mainly diurnal predator which often aggregate in schools. Prey include small birds, frogs, and fish. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Unknown: Inadvertently introduced by transboundary waterways

for no known reason or method.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — First record from Iran by Mousavi-Sabet et al. (2023). —

Distribution in River Basin: 6-Caspian Sea. — Iran material: None.

Cichliformes

Ambassidae Klunzinger 1870 (Asiatic glassfishes)

Ambassis gymnocephalus (Lacepède 1802)

Common name: Bald glassy

Taxonomy: Original description: *Lutjanus gymnocephalus* Lacepède 1802: 181, 216 [from Le grand Océan équinoxal or dans les parties de ce grand Océan voisines des tropiques" (Indo-Pacific); No types known].

Middle Eastern synonyms: *Chanda gymnocephalus* (Lacepède 1802).

Revisions: None.

Illustrations: Rainboth (1996: 181, fig.).

Distribution. General distribution: Indo-West Pacific: East Africa and South Africa east to Philippines and New Guinea, north to Taiwan, south to Cairns (Queensland, Australia).

Distribution in the Middle East: Oman.

Distribution in Ecoregions: 443-Oman Mountains.

Habitat: This species inhabits seas and estuaries, but it is also found in rivers within tidal influence. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Oman: [Native]. — Bald glassy. — First record from Oman by Esmaeili et al. (2022a). — Oman material: ZM-CBSU.

Cichlidae Bonaparte 1835 (cichlids)

Amatitlania nigrofasciata (Günther 1867)

Common name: Convict cichlid

Taxonomy: Original description: *Heros nigrofasciatus* Günther 1867: 601 [Lake Amatitlán, Guatemala; lectotype: BMNH 1865.4.29.76].

Middle Eastern synonyms: *Cichlasoma nigrofasciatum* (Günther 1867); *Archocentrus nigrofasciatus* (Günther 1867); *Cryptoheros nigrofasciatus* (Günther 1867).

Revisions: Schmitter-Soto (2007: 49).

Illustrations: Lee et al. (1980: 767, fig.) as *Cichlasoma nigrofasciatum*.

Distribution. General distribution: Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama; introduced in Puerto Rico, Hawaiian Islands, Mexico, Réunion, in Middle East, Philippines and Australia.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 438-Jordan River, 447-Namak, 451-Northern Hormuz Drainages.

Habitat: This species prefers rocky and sandy habitats with tree branches and leaf litter, finding sanctuary in the various cracks and crevices provided by this type of environment, or among roots and debris. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Cichlid-e gore khari. — First record from Iran by Esmaeili et al. (2013b); subsequently recorded by Mousavi-Sabet et al. (2016d); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 15-Namak Lake, 2-Hormuz. — Iran material: ZM-CBSU.

Status in Israel: [Exotic]. — None. — First record from Israel by Goren (1984) as *Cichlasoma nigrofasciatum*; confirmed by Goren and Ortal (1999); Golani et al. (2022) as *Cichlasoma nigrofasciatum*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUJ.

***Astatotilapia flavijosephi* (Lortet 1883)**

Common name: Redbelly tilapia

Taxonomy: Original description: *Chromis flavijosephi* Lortet 1883: 141, pl. 8, fig. 2 [Aun Nudauwara, Syria, 32°50'N, 35°28'E; lectotype: MGHN 4056].

Middle Eastern synonyms: *Haplochromis flavijosephi* (Lortet 1883).

Revisions: Lee et al. (1980: 763, fig.).

Illustrations: Lortet (1883: p. 8, fig. 2) as *Chromis flavijosephi*; Krupp and Schneider (1989: 395, fig. 49).

Distribution. General distribution: Middle East: Jordan River system.

Distribution in the Middle East: Israel, Jordan, and Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species lives in the shallow zones of lakes, springs, and streams, where it may be found among stones or vegetation. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: VU (IUCN, 2023) as *Haplochromis flavijosephi*.

Threats: ABS, CLI, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Israel: [Native]. — Amnunit yosef. — Recorded from Israel in original description by Lortet (1883); confirmed by Lortet (1883: 141); Tristram (1884: 167) as *Chromis flavijosephi*; Steinitz (1953: 220) as *Haplochromis flavii-josephi*; Goren (1974: 103) as *Haplochromis flavijosephi*; Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUJ.

Status in Syria: [Native]. — None. — Recorded from Syria in original description by Lortet (1883: 141); subsequently reported by Beckman (1962: 54) as *Haplochromis flavi-josephi*; listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 7-Al-Yarmouk. — Syrian material: MGHN.

***Astronotus ocellatus* (Agassiz 1831)**

Common name: Oscar

Taxonomy: Original description: *Lobotes ocellatus* Agassiz in Spix & Agassiz 1831: 129, pl. 68 [Atlantic (in error): no types known].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Silvano et al. (2020: 329, fig.).

Distribution. General distribution: South America: Amazon River basin, Brazil, Bolivia, Colombia, French Guiana, and Peru. Introduced elsewhere, including southern Florida and Puerto Rico (U.S.A.).

Distribution in the Middle East: Iraq.

Distribution in Ecoregions: 441-Lower Euphrates.

Habitat: This species prefers to inhabit quiet, shallow waters in mud-bottomed and sand-bottomed canals and ponds. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iraq: [Exotic]. — None. — First record from Iraq by Jawad et al. (2022) from one of the branches of the Euphrates River to the east of Barnun city, ca. 5 km to the NW of Hilla city in Babylon Province in central Iraq; listed by Çiçek et al. (2023b). — Distribution in River Basin: 2-Euphrates. — Iraq materials: None.

***Aulonocara* sp.**

Common name: Peacock cichlids

Taxonomy. This species has yet to be identified to species level.

Distribution. General distribution: *Aulonocara* is a genus of haplochromine cichlids endemic to Lake Malawi in East Africa. Introduced elsewhere.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 436-Coastal Levant.

Habitat: This species inhabits over sand in intermediate habitats. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Israel: [Native]. — None. — First record from Israel by Golani et al. (2022). — Distribution in River Basin: 1-Western Basin. — Israel material: HUI.

Remarks. This species has yet to be identified to species level.

***Cichla kelberi* Kullander & Ferreira 2006**

Common name: Kelberi peacock bass

Taxonomy: Original description: *Cichla kelberi* Kullander & Ferreira 2006: 324, figs. 28-32 [Tucuruí, Pará, Brazil; holotype: MZUSP 92397].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Kullander and Ferreira (2006: figs. 28-32).

Distribution. General distribution: Araguaia River and lower Tocantins River drainages (Brazil). Introduced elsewhere.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species occurs in rivers and lakes. — Freshwater.

Economic importance: Commercially important.

Reasons of introduction: Unknown.

Conservation: Not relevant (introduced species).

Status in Israel: [Exotic]. — None. — First record from Israel by Golani et al. (2019); confirmed by Golani et al. (2019). — Distribution in River Basin: 3-Kinneret Basin. — Israel material: HUI.

***Coptodon rendalli* (Boulenger 1897)**

Common name: Redbreast tilapia

Taxonomy: Original description: *Chromis randalli* Boulenger 1897: 915, fig. 1 [Upper Shiré River, British Central Africa; lectotype: BMNH 1896.10.5.9].

Middle Eastern synonyms: *Tilapia rendalli* (Boulenger 1897).

Revisions: None.

Illustrations: Boulenger (1897: 915, fig. 1) as *Chromis rendalli*.

Distribution. General distribution: Southern-central Africa. Introduced elsewhere.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits a very wide range of habitats with flowing water, from fast-flowing headwaters and reservoirs to polluted canals and large lowland rivers. It is an environmentally tolerant species, tolerating lack of oxygen, pollution, salinity, etc. — Freshwater, brackish.

Economic importance: Locally commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Türkiye: [Native]. — Tilapya, Israil çipurası, tatlı su çipurası. — Listed in previous checklists from Türkiye by Geldiay and Balık (2007) as *Tilapia rendalli*; Çiçek et al. (2015, 2020, 2021, 2022a). — Distribution in River Basin: 18-Seyhan. — Turkish material: None.

***Coptodon zillii* (Gervais 1848)**

Common name: Redbelly tilapia

Taxonomy: Original description: *Acerina zillii* Gervais 1848: 203 [Artesian well, Tuggurth, Algeria; syntypes: MNHN (lost)].

Middle Eastern synonyms: *Tilapia zillii* (Gervais 1848); *Chromis andreae* Günther 1865.

Revisions: Dunz and Schliewen (2013: 73).

Illustrations: Krupp and Schneider (1989: 400, fig. 52); Esmaili (2021:309, fig. 17.13).

Distribution. General distribution: North Africa: Morocco east to Egypt, south to Nigeria and Central African Republic; Middle East: Syria south to Israel and Jordan. Introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, Israel, Jordan Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of habitats with flowing water, from fast-flowing headwaters and reservoirs to polluted canals and large lowland rivers. It is the most environmentally tolerant of all tilapia species, tolerating lack of oxygen, pollution, salinity, etc. Low water temperatures (below 10-13°C) limit its occurrence. — Freshwater, brackish.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: IUCN: LC (IUCN, 2023).

Threats: ABS, CON, CLI, EUT, FIT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Exotic]. — Tilapia-e shekam ghermez. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022), Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — Bulti. — First record from Iraq by Saleh (2007) (Tigris River); Al-Saadi et al. (2012) (Euphrates River); confirmed by Jawad et al. (2018b) (Shatt al-Arab River). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: Fish Collection of the Department of Fisheries and Marine Resources, College of Agriculture, University of Basrah, Basrah, Iraq; Fish collection at the Marine Science Centre, University of Basrah, Basrah, Iraq.

Status in Israel: [Native]. — Amnun matzui. — First record from Israel by Günther (1865: 490), Lortet (1883: 142); Tristram (1884: 165) as *Chromis andreae*; confirmed by Steinitz (1953: 217) as *Tilapia zillii*; Goren (1974: 103) as *Tilapia zillii*; Goren and Ortal (1999: 4) as *Tilapia zillii*. — Distribution in River Basin: 1-Western Basin. — Israel material: HUU.

Status in Jordan: [Native]. — Bulti mosambiki. — It is probable that this species is naturally distributed in the country. — Jordan material: None.

Status in Lebanon: [Native]. — Mesht mosambiki. — First record from Lebanon by Chervinski (1983). — Lebanon material: None.

Status in Syria: [Native]. — Mesht zili, marmour. — First record from Syria by El Bolock and Koura (1961); confirmed by Beckman (1962: 60) as *Tilapia zilli*, Saad et al. (2006), and Barakat et al. (2020). — Distribution in River Basin: 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: MNHN, MSL.

Status in Türkiye: [Exotic]. — Tilapya-Israil çipurası-Tatlı su çipurası. — Listed in previous checklists from Türkiye by Kuru (2004) as *Tilapia zillii*; Geldiay and Balık (2007) as *Tilapia*

zillii; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2021, 2022a). — Distribution in River Basin: 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan. — Turkish material: None.

***Dimidiochromis compressiceps* (Boulenger 1908)**

Common name: Malawi eyebiter

Taxonomy: Original description: *Paratilapia compressiceps* Boulenger 1908: 240 [Lake Malawi [Lake Nyasa], southeastern Africa; holotype (unique): BMNH 1908.10.27.59].

Middle Eastern synonyms: None.

Revisions: Eccles and Trewavas (1989: 95).

Illustrations: Eccles and Trewavas (1989: 96, fig. 42).

Distribution. General distribution: Eastern Africa: Lakes Malawi and Malombe and upper Shiré River.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species occurs in vegetated areas in shallow water of lakes, slow flowing rivers and is sometimes also observed in rocky habitats. It is an ambush predator feeding on small fishes. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Israel: [Exotic]. — None. — First record from Israel by Golani et al. (2022). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUIJ.

***Iranocichla hormuzensis* Coad 1982**

Common name: Hormuz cichlid

Taxonomy: Original description: *Iranocichla hormuzensis* Coad 1982: 29, figs. 1-3 [Mehran River, Hormozdgan Province, southern Iran, 27°04'N, 54°35'E; holotype: NMC 79-0408A].

Middle Eastern synonyms: None.

Revisions: Esmaeili et al. (2016d).

Illustrations: Coad (1982: 29, fig. 1); Esmaeili et al. (2016d: 155, Fig. 11).

Distribution. General distribution: Middle East: Hormuz.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: Streams are 1 to 50 m wide and consist of alternating riffles and pools with occasional backwaters. The bottom is pebbles, sand, or mud. Aquatic vegetation is restricted to encrusting algae (Coad 2021). — Freshwater, brackish.

Economic importance: Esmaeili et al. (2009) note that it is eaten by local people when available in large numbers in spring. It is now an aquarium fish in Germany (Coad 2021).

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Cichlid-e Hormuz. — Recorded from Iran in the original description by Coad (1982) and listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022), Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz. — Iran material: NMC, ZM-CBSU.

***Iranocichla persa* Esmaeili, Sayyadzadeh & Seehausen 2016**

Common name: Persis cichlid

Taxonomy: Original description: *Iranocichla persa* Esmaeili, Sayyadzadeh & Seehausen 2016: 144, Figs. 3-5 [Hormuzgan province, Shur River approx. 30 km east of Bandar Abbas, Iran, 27°17'40.10"N, 56°29'15.68"E; holotype: ZM-CBSU IP66].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaeili et al. (2016d: 144, Figs. 3-5).

Distribution. General distribution: Middle East: Shur, Hasanlangi and Minab river drainages flowing to the Persian Gulf at the Strait of Hormuz (Iran).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages, 701-Baluchistan.

Habitat: Streams are 1 to 50 m wide and consist of alternating riffles and pools with occasional backwaters. The bottom is pebbles, sand, or mud. Aquatic vegetation is restricted to encrusting algae. — Freshwater, brackish.

Economic importance: Locally commercially important. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Cichlid-e Parsi. — Recorded from Iran in the original description by Esmaeili et al. (2016d) and listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Eagderi et al. (2022), Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 3-Makran. — Iran material: ZM-CBSU.

***Iranocichla* sp.**

Common name: Kol cichlid

Taxonomy: Remarks. This species has yet to be identified to species level (see Schwarzer et al., 2016)

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaeili et al. (2016d: 154, Fig. 10).

Distribution. General distribution: Middle East: Hormuz (Kol River drainages (Iran)).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: Streams are 1 to 50 m wide and consist of alternating riffles and pools with occasional backwaters. The bottom is pebbles, sand, or mud. Aquatic vegetation is restricted to encrusting algae. — Freshwater, brackish.

Economic importance: Locally commercially important. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Cichlid-e kol. — Recorded from Iran by Esmaeili et al. (2016d); Schwarzer et al. (2016); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz. — Iran material: ZM-CBSU.

***Labidochromis caeruleus* Fryer 1956**

Common name: Blue streak hap

Taxonomy: Original description: *Labidochromis caeruleus* Fryer 1956: 88, figs. 8-9 [Nkata Bay, Lake Malawi [Lake Nyasa], southeastern Africa; holotype: BMNH 1956.9.4.9].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Fryer (1956: figs. 8-9).

Distribution. General distribution: Eastern Africa: Lake Malawi.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 436-Coastal Levant.

Habitat: This species is a rock dwelling cichlid occurring at the greatest depth of all other species in the genus (average depth occurrence of 25 m). It is rarely found in waters less than 10 m. It feeds on invertebrates, small crustaceans as well as small snails. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Israel: [Exotic]. — None. — First record from Israel by Golani et al. (2022); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin. — Israel material: HUI.

***Oreochromis aureus* (Steindachner 1864)**

Common name: Blue tilapia

Taxonomy: Original description: *Chromis aureus* Steindachner 1864: 229, pl. 8, fig. 5 [locality unknown; no types known].

Middle Eastern synonyms: *Tilapia aurea* (Steindachner 1864).

Revisions: Trewavas (1965: 265) as *Tilapia aurea*; Trewavas (1982: 12).

Illustrations: Steindachner (1864: 229, pl. 8, fig. 5); Esmaili (2021: 310, fig. 17.4).

Distribution. General distribution: Middle East and Africa. Introduced widely elsewhere.

Distribution in the Middle East: Iran, Iraq, Israel, Jordan Lebanon, Saudi Arabia, Syria, Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 432-Southern Anatolia, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of flowing water habitats, from fast-flowing headwaters and reservoirs to polluted canals and large lowland rivers. It is the most environmentally tolerant of all tilapia species, tolerating lack of oxygen, pollution, salinity, etc. Low water temperatures (below 10-13°C) limit its occurrence. — Freshwater, brackish.

Economic importance: Locally commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Exotic]. — Tilapi-e Abi. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: IMNRF-UT.

Status in Iraq: [Exotic]. — Bulti. — First record from Iraq by Mutlak and Al-Faisal (2009); confirmed by Al-Faisal et al. (2014); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: MSCUB.

Status in Israel: [Native]. — Amnun ha'yarden. — First record from Israel by Günther (1869) as *Tilapia aurea*; confirmed by Goren (1974: 102) as *Tilapia aurea*; Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUI.

Status in Jordan: [Exotic]. — Bulti azrak. — It is probable that this species introduced to the country. — Jordan material: None.

Status in Lebanon: [Exotic]. — Mesht azrak. — It is probable that this species introduced to the country. — Lebanon material: None.

Status in Saudi Arabia: [Exotic]. — Balti azrak. — First record from Saudi Arabia by Al-Kahem-Al-Balawi et al. (2008); confirmed by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Status in Syria: [Exotic]. — Mesht azrak. — According to Coad (1996a, b), this species recorded from Syria by F. Krupp (1988) reports capture of a specimen from the Khabour River in Syria, presumably an escape from a fish farm in the basin of this tributary of the Euphrates River. Subsequently recorded Ali (2003); Saad et al. (2006); Saad (2010); listed

by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: MSL.

Status in Türkiye: [Exotic]. — Tilapya-İsrail çipurası-Tatlı su çipurası. — Listed in previous checklists from Türkiye by Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2021, 2022a). — Distribution in River Basin: 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan. — Turkish material: None.

***Oreochromis mossambicus* (Peters 1852)**

Common name: Mozambique tilapia

Taxonomy: Original description: *Chromis (Tilapia) mossambicus* Peters 1852: 681 [Zambezi River, Mozambique (East Africa); syntypes: BMNH [ex Peters] 1861.5.2.58-59 (2), FMNH 54267 [ex CM 2898] (2) Mosambique; ZMB 2805-06 (2, 1), 16035 (3), 31564 (15)].

Middle Eastern synonyms: *Tilapia mossambica* (Peters 1852); *Sarotherodon mossambicus* (Peters 1852); *Oreochromis mossambica* (Peters 1852); *Oreochromis mosambica* (Peters 1852).

Revisions: None.

Illustrations: Lee et al. (1980: 774) as *Tilapia mossambica*.

Distribution. General distribution: Southeastern Africa; introduced widely elsewhere.

Distribution in the Middle East: Israel, Saudi Arabia, UAE, Yemen.

Distribution in Ecoregions: 439-Southwestern Arabian Coast, 443-Oman Mountains.

Habitat: This species occurs in all but fast flowing waters and thrives in standing waters. Further south in its range it is most common in blind estuaries and coastal lakes where it tolerates brackish and marine environments. It feeds on algae, especially diatoms, and detritus, large individuals also take insects and other invertebrates. — Freshwater.

Economic importance: No commercial in Israel, elsewhere commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Israel: [Exotic]. — Amnun mozambiq. — First record from Israel by Golani and Lerner (2007); confirmed by Golani and Lerner (2007); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUI.

Status in Saudi Arabia: [Exotic]. — Buti, mozambiki. — First record from Saudi Arabia by Al-Kahem-Al-Balawi et al. (2008); listed in previous checklists from Saudi Arabia by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Status in UAE: [Exotic]. — Bulti, mozambiki. — First record from UAE by Freyhof et al. (2020); confirmed by Esmaili and Hamidan (2023). — UAE material: None.

Status in Yemen: [Exotic]. — Bulti, mozambiki. — First record from Yemen by Freyhof et al. (2020); confirmed by Esmaili and Hamidan (2023). — Yemen material: None.

***Oreochromis niloticus* (Linnaeus 1758)**

Common name: Nile tilapia

Taxonomy: Original description: *Perca niloticus* Linnaeus 1758: 290 [Nile River; holotype: ?NRM LP 10].

Middle Eastern synonyms: *Perca nilotica* Linnaeus 1758; *Tilapia nilotica* (Linnaeus 1758); *Chromis niloticus* (Linnaeus 1758); *Tilapia vulcani* Trewavas 1933.

Revisions: None.

Illustrations: Ye in Pan et al. (1991: 416, fig. 248) as *Tilapia nilotica*; Teugels and Thys van den Audenaerde in Lévêque et al. (1992: 761, fig. 49.36); Esmaili et al. (2022b: 490, fig. 46).

Distribution. General distribution: North Africa and East Africa. Widely introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, Israel, Jordan Lebanon, Oman, Saudi Arabia, Syria, Türkiye, UAE, and Yemen.

Distribution in Ecoregions: 432-Southern Anatolia, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a very wide range of flowing water habitats, from fast-flowing headwaters and reservoirs to polluted canals and large lowland rivers. It is the most environmentally tolerant of all tilapia species, tolerating lack of oxygen, pollution, salinity, etc. Low water temperatures (below 10-13°C) limit its occurrence. — Freshwater.

Economic importance: Locally commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Tilapia-e Nil. — Listed in previous checklists from Iran by Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 1-Persis. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — Bulti. — First record from Iraq by Al-Faisal and Mutlak (2014a, b); confirmed by Mohamed and Al-Wan (2020). — Distribution in River Basin: 1- Tigris, 2- Euphrates, 3-Shatt al-Arab. — Iraq materials: Fish Collection of the Department of Fisheries and Marine Resources, College of Agriculture, University of Basrah, Basrah, Iraq; Fish collection at the Marine Science Centre, University of Basrah, Basrah, Iraq.

Status in Israel: [Exotic]. — Amnun ha'yeor. — First record from Israel by Lortet (1883: 137); Tristram (1884: 164) as *Chromis niloticus*; by Steinitz (1953: 217) as *Tilapia nilotica exul*; Fishelson (1962) as *Tilapia nilotica*; confirmed by Goren (1974: 102) as *Tilapia nilotica*; Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin. — Israel material: None.

Status in Oman: [Exotic]. — Bulti nili. — It is probable that this species introduced to the country. — Oman material: None.

Status in Saudi Arabia: [Exotic]. — Bulti nili. — Listed in previous checklists from Saudi Arabia by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Saudi Arabia material: None.

Status in Syria: [Exotic]. — Mesht Nili. — First record from Syria by El Bolock and Koura (1961); confirmed by Beckman (1962: 58) as *Tilapia nilotica*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian materials: MSL.

Status in Türkiye: [Exotic]. — Tilapya-İsrail çipurası-Tatlı su çipurası. — Listed in previous checklists from Türkiye by Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023). — Distribution in River Basin: 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan. — Turkish materials: None.

Status in UAE: [Exotic]. — Bulti nili. — Listed in previous checklists from UAE by Freyhof et al. (2020) and Esmaeili and Hamidan (2023). — UAE material: None.

Status in Yemen: [Exotic]. — Bulti nili. — Listed in previous checklists from UAE by Freyhof et al. (2020) and Esmaeili and Hamidan (2023). — Yemen material: None.

Pseudotropheus sp.

Common name: Mpanga cichlids

Taxonomy. This species has yet to be identified to species level.

Distribution. General distribution: *Pseudotropheus* is a genus of fishes in the family Cichlidae. These mbuna cichlids are endemic to Lake Malawi in Eastern Africa. Introduced elsewhere.

Distribution in the Middle East: Israel.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species lives in shallow water among rocks in sediment free habitats and occasionally in the intermediate habitat close to rocks. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Israel: [Exotic]. — None. — First record from Israel Golani et al. (2022); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUI.

***Sarotherodon galilaeus* (Linnaeus 1758)**

Common name: Mango tilapia

Taxonomy: Original description: *Sparus galilaeus* Linnaeus 1758: 282 [Lake Tiberias [Galilée], Israel; no types known].

Middle Eastern synonyms: *Sparus galilaeus* Linnaeus 1758; *Tilapia galilaea* and attributed to Artedi; *Chromis microstomus* Lortet 1883; *Chromis tiberiadis* Lortet 1883.

Revisions: None.

Illustrations: Krupp and Schneider (1989: 399, fig. 51).

Distribution. General distribution: Middle East; introduced elsewhere.

Distribution in the Middle East: Israel, Jordan Lebanon, and Syria.

Distribution in Ecoregions: 436-Coastal Levant, 437-Orontes, 438-Jordan River.

Habitat: This demersal species occurs in shallow inshore waters of lakes and prefers open water, but juveniles and breeding adults can be found offshore. In the Sudd lakes, it is often associated with beds of submerged vegetation. It occasionally forms schools and can be territorial. It also occurs in rivers. — Freshwater, brackish.

Economic importance: Commercially important.

Reasons of introduction: Aquaculture/research.

Conservation: IUCN: LC (IUCN, 2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Israel: [Native]. — Amnun ha'galil. — Recorded from Israel in original description by Linnaeus (1758); subsequently reported by Günther (1865: 490) as *Chromis nilotica* (non Linnaeus 1758); Lortet (1883: 139); Tristram (1884: 167) as *Chromis microstomus* and *Chromis tiberiadis*; Steinitz (1953: 216) as *Tilapia galilaea*; Goren (1974: 102) as *Tilapia galilaea*; Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUI.

Status in Jordan: [Native]. — Bulyt abiad. — It is probable that this species is naturally distributed in the country. — Jordan material: None.

Status in Syria: [Native]. — Mesht abiad. — First record from Syria by El Bolock and Koura (1961); confirmed by Beckman (1962: 56) as *Tilapia galilaea*, Saad et al. (2006, 2009); listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian materials: MSL. **Remarks.** In Syria, *S. galilaeus* is both found naturally and translocated to various regions for aquaculture purposes.

***Tristramella magdalenae* (Lortet 1883)**

Common name: Damascus tristramella

Taxonomy: Original description: *Chromis magdalenae* Lortet 1883: 146, pl. 9 (fig. 2) [Lakes Hula and Tiberias (Galilée), Israel; lakes east of Damascus (Syria); syntypes: BMNH 1898.12.5.1-2 (2) (Damascus, Syria), 1898.12.5.3-4 (2) (Damascus, Syria); MCZ 25533 (1) (Damascus, Syria); MHNG 611.21 (2); MNHN 1883-1139 (1) (Israel); SMF 187 (1); SMNS 3187 (1, lost) (Bahret-el-Hidjane near Damascus, Syria); USNM 48023 (1) (Syria)].

Middle Eastern synonyms: None.

Revisions: Trewavas (1942: 535).

Illustrations: Lortet (1883: pl. 9, fig. 2) as *Chromis magdalenae*.

Distribution. General distribution: Middle East: swamps and pools in Damascus area.

Distribution in the Middle East: Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species lives in the shallow zones of lakes, springs, and streams, where it may be found among stones or vegetation. — Freshwater.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Syria: [Endemic]. — None. — Recorded from Syria in original description by Lortet (1883: 141; subsequently reported by Beckman (1962: 65) as *Tristramella simonis magdalenae*; Hurani (2005); listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 7-Al-Yarmouk. — Syrian material: MGHN, MSL.

Tristramella sacra (Günther 1865)

Common name: Long jaw tristramella

Taxonomy: Original description: *Hemichromis sacra* Günther 1865: 493 [Lake Tiberias (Galilee), Israel; lectotype: BMNH 1864.8.20.1; lectotype selected by Krupp & Schneider (1989: 402)].

Middle Eastern synonyms: *Chromis paterfamilias* Lortet 1876.

Revisions: None.

Illustrations: Tristram (1884: pl 18, fig. 2); Krupp and Schneider (1989: 402, fig. 53).

Distribution. General distribution: Lake Tiberias basin.

Distribution in the Middle East: Israel, Jordan, and Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species was a lacustrine species. Reproduction occurred in spring (April-July); it was a paternal mouth brooder. The species fed on zooplankton and small fish. — Freshwater.

Economic importance: Commercially important.

Conservation: IUCN: EX (IUCN, 2023). **Remarks.** The IUCN category of *T. sacra* is extinct based on Goren's (2014) assessment. Nonetheless, it was reported that this species is still found in Syria. This situation needs to be clarified by field studies and detailed molecular analyses.

Threats: Unknown. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Extincted. — High priority for conservation action.

Status in Israel: [Native]. — Tvarnun listani. — Recorded from Israel in original description by Günther (1865: 490) as *Hemichromis sacra*; subsequently reported by Lortet (1883: 148); Tristram (1884: 168) as *Hemichromis sacra*; Steinitz (1953: 218); Goren (1974: 105); Goren and Ortal (1999: 4); listed by Çiçek et al. (2023c). — Distribution in River Basin: 3-Kinneret Basin. — Israel material: HJJ.

Status in Syria: [Native]. — Mesht addadi. — First record from Syria by Beckman (1962: 66); confirmed by Borkenhagen and Freyhof (2009: 335); listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 7-Al-Yarmouk. — Syria material: None.

Tristramella simonis (Günther 1864)

Common name: Short jaw tristramella

Taxonomy: Original description: *Chromis simonis* Günther 1864: 492 [Lake Tiberias (Kinneret), Israel; lectotype: BMNH 1864.8.20.10].

Middle Eastern synonyms: *Tristramella simonis intermedia* Steinitz & Ben-Tuvia 1959.

Revisions: None.

Illustrations: Krupp and Schneider (1989: 404, fig. 54); Borkenhagen and Freyhof (2009: 335, fig. 1).

Distribution. General distribution: Jordan River system.

Distribution in the Middle East: Israel, Jordan Lebanon, and Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: It lives in lakes, springs, and rivers. Spawns from March to August. It is a female mouth-brooder. — Freshwater, brackish.

Economic importance: No commercial importance.

Conservation: IUCN: VU (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Israel: [Native]. — Tvarnun kinnarti. — Recorded from Israel in original description by Günther (1865: 490); Lortet (1883: 143, 146); Tristram (1884: 165, 167) as *Chromis simonis*; subsequently reported by Steinitz (1953: 218); Goren (1974: 105); Goren and Ortal (1999: 4) as *Tristramella simonis simonis* and *T. simonis intermedia*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 3-Kinneret Basin. — Israel material: HUUJ.

Status in Syria: [Native]. — Mesht addadi. — First record from Syria by Beckman (1962: 66) as *Tristramella simonis simonis*; confirmed by Hurani (2005); Borkenhagen and Freyhof (2009); Barakat et al. (2020); Dib et al. (2021); listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian materials: None.

Atheriniformes

Atherinidae Risso 1827 (old world silversides)

Atherininae Risso 1827 (silversides)

Atherina boyeri Risso 1810

Common name: Big-scale sand smelt

Taxonomy: Original description: *Atherina boyeri* Risso 1810: 338, pl. 10, fig. 38 [Dept. du Var, France, northwestern Mediterranean Sea; lectotype: MNHN A-4342 (70.6 mm SL); lectotype selected by Kottelat and Freyhof (2009: 83)].

Middle Eastern synonyms: *Atherina presbyter* var. *pontica* Eichwald 1831.

Revisions: None.

Illustrations: Risso (1810: 338, pl. 10, fig. 38).

Distribution. General distribution: Southern North Sea; Mediterranean Sea; Sea of Marmara; Black Sea; Sea of Azov; eastern Atlantic: English Channel south to Mauritania, including Madeira and Canary Islands.

Distribution in the Middle East: Israel, Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 436-Coastal Levant, 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species lives in the lower parts of rivers, estuaries, coastal lakes, and the sea. Freshwater populations prefer still or slow-flowing waters. — Freshwater, brackish.

Economic importance: No commercial importance. However, commercially important inland water population of Türkiye.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Lebanon: [Native]. — None. — First record from Lebanon by George et al. (1964); confirmed by Mouneimné (2002); Bariche et al. (2009). — Lebanon material: AMNH, AUBM, USNM.

Status in Syria: [Native]. — None. — First record from Syria by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: MSL.

Status in Türkiye: [Native]. — Gümüş balığı. — Listed in previous checklists from Türkiye by Bilecenoglu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 16-Konya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 24-Aras. Continue to spread other basins. — Turkish material: None.

Atherina caspia* Eichwald 1831*Common name:** Caspian silverside**Taxonomy:** Original description: *Atherina presbyter* var. *caspia* Eichwald 1831: 72 [Caspian Sea; no types known].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Jouladeh-Roudbar et al. (2020: 271, fig. 495).**Distribution. General distribution:** Eurasia: Caspian Sea basin.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.**Habitat:** This species inhabits the lower parts of rivers, estuaries, coastal lakes, and the sea. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Shishe mahi. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.**Status in Türkiye:** [Native]. — Gümüş balığı. — First record from Türkiye by Yoğurtçuoğlu et al. (2020a); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 13-Batı Karadeniz. — Turkish material: None.**Cyprinodontiformes****Cyprinodontoidei****Poeciliidae Bonaparte 1831 (poeciliids)****Poeciliinae Bonaparte 1831 (livebearers)*****Gambusia holbrooki* Girard 1859****Common name:** Eastern mosquitofish**Taxonomy:** Original description: *Gambusia holbrooki* Girard 1859: 390 [Palatka, eastern Florida, (Palatka, eastern Florida and Charleston, South Carolina), USA; lectotype: ANSP 6976; lectotype selected by Huber (2019: 64)].**Middle Eastern synonyms:** None.**Revisions:** Rauchenberger (1989: 3).**Illustrations:** McEachran and Fechhelm (1998: 924, fig.); Esmaeili (2021: 313, fig. 17.18).**Distribution. General distribution:** North America: Atlantic and Gulf Coast drainages, eastern USA; widely introduced elsewhere for mosquito control.**Distribution in the Middle East:** Iran, Iraq, Lebanon, Jordan Saudi Arabia, Syria, and Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 439-Southwestern Arabian Coast, 440-Arabian Interior, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 443-Oman Mountains, 444-Lake Van, 445-Orumiyeh, 446-Caspian Highlands, 447-Namak, 448-Kavir and Lut Deserts, 449-Esfahan, 450-Turan Plain, 451-Northern Hormuz Drainages, 452-Caspian Marine, 631-Amu Darya, 701-Baluchistan, 702-Helmand-Sistan.**Habitat:** This species often occurs in shallow, often stagnant ponds and the shallow edges of lakes and streams where predatory fish are largely absent, and temperatures are high. — Freshwater, brackish.**Reasons of introduction:** Bio-control: to prevent eutrophication, aquatic plants, and pest control.

Conservation: Not relevant (introduced species).

Remarks: This species was misidentified as *Gambusia affinis* erranously in many previous studies.

Distribution. General distribution: North America: Atlantic and Gulf Coast drainages, eastern USA; widely introduced elsewhere for mosquito control.

Status in Iran: [Exotic]. — Mahi-e pashe khar. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: All basins. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — *Gambusia*. — First record from Iraq by the government of Iraq during 1950s to combat malaria); confirmed by Jawad (2003; listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: Fish Collection of the Department of Fisheries and Marine Resources, College of Agriculture, University of Basrah, Basrah, Iraq; Fish collection at the Marine Science Centre, University of Basrah, Basrah, Iraq.

Status in Israel: [Exotic]. — *Gambusia*. — Introduced to Israel in the 1920's (Ben-Tuvia, 1981); confirmed by Goren and Ortal (1999); Tadmor-Levi et al. (2022); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUJ, MNHN.

Status in Jordan: [Exotic]. — *Gambusia*. — It is probable that this species introduced to the country. — Jordan material: None.

Status in Lebanon: [Exotic]. — *Gambusia*. — Listed in previous checklists from Lebanon by Froese and Pauly (2008). — Lebanon material: None.

Status in Saudi Arabia: [Exotic]. — *Gambusia*. — First record from Saudi Arabia by Al-Kahem-Al-Balawi et al. (2008); confirmed by Freyhof et al. (2020); Esmail and Hamidan (2023). — Saudi Arabia material: None.

Status in Syria: [Exotic]. — *Gambusia*. — First record from Syria by Khalil (1930) as *Gambusia affinis*; confirmed by Beckman (1962: 170); Krupp (1992b: 47); Ali (2003); Hurani (2005); Saad et al. (2006); listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo, 3-Desert, 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: MNHN, MSL

Status in Türkiye: [Exotic]. — Sivrisinek balığı. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 16-Konya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh, 24-Aras, 25-Van Lake. — Turkish material: None.

Remarks: This species was misidentified as *Gambusia affinis* erranously in many previous studies.

***Poecilia latipinna* (Lesueur 1821)**

Common name: Sailfin molly

Taxonomy: Original description: *Mollienesia latipinna* Lesueur 1821a: 3, pl. 3 [Freshwater ponds in the vicinity of New Orleans, Louisiana, USA; lectotype: MNHN B-0929].

Middle Eastern synonyms: None.

Revisions: Miller (2006: 234).

Illustrations: Miller (2006: 235, fig. 6.275); Esmaeili (2021: 313, fig. 17.19).

Distribution. General distribution: North America: southeastern U.S.A. south to Tuxpan (Veracruz, Mexico); introduced widely elsewhere.

Distribution in the Middle East: Bahrain, Iran, Iraq, Oman, and Saudi Arabia.

Distribution in Ecoregions: 434-Kura-South Caspian Drainages, 439-Southwestern Arabian Coast, 441-Lower Tigris and Euphrates, 443-Oman Mountains, 447-Namak, 449-Esfahan.

Habitat: This species lives in springs, lakes, and ponds; backwaters and pools of streams; drainage ditches; and salt marshes. — Freshwater, brackish.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — None. — Listed in previous checklists from Iran by Esmaili et al. (2018); Eagderi et al. (2022); Mousavi-Sabet et al. (2023). — Distribution in River Basin: 4-Tigris, 6-Caspian Sea, 9-Esfahan, 15-Namak Lake. — Iran material: ZM-CBSU.

Status in Iraq: [Exotic]. — None. — First record from Iraq by Kennedy (1937) confirmed by Hussain et al. (2009; listed by Çiçek et al. (2023b)). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

Status in Bahrain: [Exotic]. — None. — Listed in previous checklists from Bahrain by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Bahrain material: None.

Status in Oman: [Exotic]. — None. — Listed in previous checklists from Oman by Freyhof et al. (2020); Al Jufaili and Jawad, (2020); Esmaili et al. (2022a); Esmaili and Hamidan (2023). — Oman material: None.

Status in Saudi Arabia: [Exotic]. — None. — Listed in previous checklists from Saudi Arabia by Al-Kahem-Al-Balawi et al. (2008); Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Poecilia reticulata Peters 1859

Common name: Guppy

Taxonomy: Original description: *Poecilia reticulata* Peters 1859: 412 [Guayre River, Caracas, Venezuela; syntypes: BMNH 1866.6.6.3 [ex ZMB] (1); ZMB 3468 (9), 3469 (8, lost)].

Middle Eastern synonyms: None.

Revisions: Rosen and Bailey (1963: 56).

Illustrations: Rosen and Bailey (1963: figs. 19A, 22A, 25D).

Distribution. General distribution: Northern South America: coastal drainages between the Orinoco delta (Venezuela) and the Essequibo River delta, Guyana, Venezuelan Islands, the Netherlands Antilles, and Trinidad and Tabago; widely introduced elsewhere.

Distribution in the Middle East: Iran, Israel, Jordan Lebanon, Saudi Arabia, Syria, Türkiye.

Distribution in Ecoregions: 429-Western Anatolia, 434-Kura-South Caspian Drainages, 439-Southwestern Arabian Coast, 442-Upper Tigris and Euphrates, 447-Namak.

Habitat: This species occurs in a broad range of freshwater habitats, from small, fragmented headwater streams to deep lowland pools, and exhibits a marked degree of population differentiation in morphology, life history characteristics, and behaviour subject to environmental variables. — Freshwater, brackish.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Mahi-e guppy. — First recorded from Iran by Mousavi-Sabet et al. (2014); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Eagderi et al. (2022); Mousavi-Sabet et al. (2023); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 15-Namak Lake. — Iran material: GUIC.

Status in Saudi Arabia: [Exotic]. — None. — First record from Saudi Arabia by Al-Kahem-Al-Balawi et al. (2008); confirmed by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Status in Syria: [Exotic]. — Guppy. — It is probable that this species introduced to the country. — Syria material: None.

Status in Türkiye: [Exotic]. — Lepistes. — Recorded from Türkiye by Türkmen (2019); subsequently reported by Kirankaya and Ekmekçi (2021); listed in previous checklists from Türkiye by Çiçek et al. (2022a, 2023a). — Distribution in River Basin: 5-Gediz, 21-Fırat-Dicle. — Turkish material: None.

Poecilia sphenops* Valenciennes 1846*Common name:** Molly**Taxonomy:** Original description: *Poecilia sphenops* in Cuvier & Valenciennes 1846: 130, pl. 525-526, bottom [Veracruz, Mexico; lectotype: MNHN B-0930].**Middle Eastern synonyms:** None.**Revisions:** Miller (2006: 238).**Illustrations:** Miller (2006: 238, fig. 6.280).**Distribution. General distribution:** Both slopes of southern North America and central America: Mexico, El Salvador, Honduras, and Nicaragua. Introduced in Tobago, Society Islands and elsewhere.**Distribution in the Middle East:** Iraq, Saudi Arabia, UAE.**Distribution in Ecoregions:** 439-Southwestern Arabian Coast.**Habitat:** This species occurs in a broad range of freshwater habitats, from small, fragmented headwater streams to deep lowland pools, and exhibits a marked degree of population differentiation in morphology, life-history characteristics, and behavior subject to environmental variables. — Freshwater, brackish.**Economic importance:** Valuable for the aquarium trade.**Reasons of introduction:** Ornamental fish industry.**Conservation:** Not relevant (introduced species).**Status in Saudi Arabia:** [Exotic]. — None. — First record from Saudi Arabia by Al-Kahem-Al-Balawi et al. (2008); confirmed Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Saudi Arabia material: None.**Status in UAE:** [Exotic]. — None. — First record from UAE by Freyhof et al. (2020) and confirmed by Esmaeili and Hamidan (2023). — UAE material: None.***Poecilia velifera* (Regan 1914)****Common name:** Sail-fin molly**Taxonomy:** Original description: *Mollienesia velifera* Regan 1914: 3, pl. 3 [Freshwater ponds in the vicinity of New Orleans, Louisiana, USA; lectotype: MNHN B-0929].**Middle Eastern synonyms:** None.**Revisions:** Miller (2006: 234).**Illustrations:** Miller (2006: 235, fig. 6.275).**Distribution. General distribution:** Southern North America: Atlantic slope of southeastern Mexico; also, Colombia (introduced) and elsewhere.**Distribution in the Middle East:** Israel.**Distribution in Ecoregions:** 438-Jordan River.**Habitat:** This species is restricted to coastal habitats, mostly brackish but also freshwater, such as cenotes (karstic sinkholes), mangrove channels, coastal lagoons, and salt marshes, never higher than 20 m above sea level. — Freshwater, brackish.**Economic importance:** Valuable for the aquarium trade.**Reasons of introduction:** Ornamental fish industry.**Conservation:** Not relevant (introduced species).**Status in Israel:** [Exotic]. — Moly mifrasan. — First record from Israel by Goren and Ortal (1999); confirmed by Golani and Mires (2000); Golani et al. (2022); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin. — Israel material: HUJ.***Xiphophorus hellerii* Heckel 1848****Common name:** Green swardtail**Taxonomy:** Original description: *Xiphophorus hellerii* Heckel 1848: 291, pl. 8 (figs. 1-3) [Orizaba, Mexico [Atlantic]; syntypes: NMW 60543 (8)].**Middle Eastern synonyms:** None.**Revisions:** Rosen and Bailey (1963: 65).

Illustrations: Heckel (1848: 291, pl. 8 (figs. 1-3).

Distribution. General distribution: Atlantic slope of Central America: Belize, Guatemala, Honduras, Mexico; introduced widely elsewhere.

Distribution in the Middle East: Iran, Israel, and Türkiye.

Distribution in Ecoregions: 438-Jordan River, 442-Upper Tigris and Euphrates, 447-Namak.

Habitat: This species inhabits diverse habitats, including ponds, springs, shaded and sometimes very rocky arroyos, ditches, open lagoons, and rivers with a variety of substrates; the water is clear to murky, muddy, or opaque, sometimes badly polluted. — Freshwater, brackish.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Iran: [Exotic]. — Mahi-e Dom shamshiri. — First record from Iran by Esmaili et al. (2010b); listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 15-Namak Lake, 1-Persis. — Iran material: ZM-CBSU.

Status in Israel: [Exotic]. — Sayfan. — This species was introduced in the 1940's (Dor 1987). First record from Israel by Steinitz (1953); confirmed by Goren and Ortal (1999). — Distribution in River Basin: 2-Dead Sea Basin. — Israel materials: HUI.

Status in Türkiye: [Exotic]. — Kılıç kuyruk. — First record from Türkiye by Kirankaya and Ekmekçi (2021); listed in previous checklists from Türkiye by Çiçek et al. (2022a, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: None.

Xiphophorus maculatus (Günther 1866)

Common name: Southern platyfish

Taxonomy: Original description: *Platypoecilus maculatus* Günther 1866: 350 [Mexico [Central America]; syntypes: BMNH 1857.7.31.11-12 (2)].

Middle Eastern synonyms: None.

Revisions: Rosen and Bailey (1963: 63).

Illustrations: Rosen and Bailey (1963: pl. 1, figs. 3-5).

Distribution. General distribution: Southern North America and central America: Atlantic slope of Mexico, Belize, and Guatemala; introduced widely elsewhere.

Distribution in the Middle East: Saudi Arabia.

Distribution in Ecoregions: 439-Southwestern Arabian Coast.

Habitat: This species is a freshwater species, prefers peripheral waters such as ditches, ponds, backwaters, flooded pastures, and swamps. It is common amongst the roots of plants. — Freshwater.

Economic importance: Valuable for the aquarium trade.

Reasons of introduction: Ornamental fish industry.

Conservation: Not relevant (introduced species).

Status in Saudi Arabia: [Exotic]. — None. — First record from Saudi Arabia by Al-Kahem-Al-Balawi et al. (2008); confirmed by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Aphaniidae Hoedeman 1949 (Oriental killifishes)

Anatolichthys anatoliae (Leidenfrost 1912)

Common name: Anatolian giant killifish

Taxonomy: Original description: *Cyprinodon anatoliae* Leidenfrost 1912: 159, fig. 1, p. 130 [Near the village Jazla Jayla, near the Kradzsa Da mountain, Asia Minor; no types known].

Middle Eastern synonyms: *Aphanius anatoliae* (Leidenfrost 1912); *Lebias anatoliae* (Leidenfrost 1912); *Cyprinodon lykaoniensis* Leidenfrost 1912; *Aphanius chantrei venustus* Kosswig & Sözer 1945; *Aphanius chantrei aksaranus* Akşiray 1948; *Aphanius chantrei flavianalis* Akşiray 1948; *Aphanius chantrei obrukensis* Akşiray 1948; *Aphanius obrukensis* Akşiray 1948.

Revisions: None.

Illustrations: Leidenfrost (1912: 159, fig. 1, p. 130).

Distribution. General distribution: Asia Minor: central Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia, 431-Central Anatolia.

Habitat: This species lives in clear, well-oxygenated, springs, running freshwaters, and pools.
— Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NT (IUCN, 2023).

Threats: ABS, CLI, CON, COM, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Leidenfrost (1912); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Aphanius anatolias*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 11-Akarçay, 12-Sakarya, 16-Konya. — Turkish material: None.

Anatolichthys chantrei (Gaillard 1895)

Common name: Sultan killifish

Taxonomy: Original description: *Cyprinodon chantrei* Gaillard 1895: 10, figs. 8-9 [Spring in Sandarémek village, Evérek, Asia Minor; syntypes: BMNH 1896.1.29.1-5 (5)].

Middle Eastern synonyms: *Aphanius chantrei* (Gaillard 1895); *Lebias chantrei* (Gaillard 1895).

Revisions: None.

Illustrations: Gaillard (1895: figs. 8-9 as *Cyprinodon chantrei*).

Distribution. General distribution: Asia Minor: Sultan Marsh endorheic basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation, but it is also found in turbid field canals. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: CR (IUCN, 2023 as *Anatolichthys danfordii*).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Gaillard (1895); listed in previous checklists from Türkiye by Geldiay and Balık (2007) as *Aphanius chantrei*; Kuru et al. (2014) as *Aphanius chantrei*; listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: BMNH.

Anatolichthys danfordii (Boulenger 1890)

Common name: Danford's killifish

Taxonomy: Original description: *Cyprinodon danfordii* Boulenger 1890: 169 [Albistan [= Elbistan-Kahramanmaraş], Asia Minor; lectotype: BMNH 1879.6.7.5; lectotype selected by Wildekamp et al. (1999) from Sultan Marsh].

Middle Eastern synonyms: *Aphanius danfordii* (Boulenger 1890); *Lebias danfordi* (Boulenger 1890).

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Elbistan, upper Ceyhan River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation, but it is also found in turbid field canals. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, CON, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Boulenger (1890); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: BMNH.

Anatolichthys fontinalis (Akşiray 1948)

Common name: Burdur killifish

Taxonomy: Original description: *Aphanius chantrei fontinalis* Akşiray 1948: 128, pl. 3 (figs. 28-32) [Spring near Lake Yarisli (37°34'N, 29°53'E), southwest of Lake Burdur, Türkiye; no types known].

Middle Eastern synonyms: *Aphanius chantrei altus* Akşiray 1948; *Aphanius chantrei litoralis* Akşiray 1948.

Revisions: None.

Illustrations: Akşiray (1948: 128, pl. 3, figs. 28-32).

Distribution. General distribution: Asia Minor: Burdur Gölü tributary, Lake Yarisli basin, Burdur province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 10-Burdur. — Turkish material: None.

Anatolichthys iconii (Akşiray 1948)

Common name: Konya killifish

Taxonomy: Original description: *Aphanius burduricus iconii* Akşiray 1948: 134, pl. 4 (figs. 43-46) [Spring Karaot at shore of Lake Eğirdir, about 4 km north of Yenice, Isparta province, Türkiye, 38°08.094'N, 30°54.443'E; neotype: IUSHM 2017-1272].

Middle Eastern synonyms: *Aphanius iconii* Akşiray 1948.

Revisions: None.

Illustrations: Akşiray (1948: 134, pl. 4, figs. 43-46).

Distribution. General distribution: Asia Minor: Eğirdir Gölü and Kovada Gölü tributaries.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation, but it is also found in turbid field canals. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Pflaiderer et

al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya. — Turkish material: IUSHM.

***Anatolichthys irregularis* (Yogurtcuoglu & Freyhof 2018)**

Common name: Killifish

Taxonomy: Original description: *Aphanius irregularis* Yogurtcuoglu & Freyhof 2018: 321, figs. 1-4 [Spring Kaklık, Denizli province, Türkiye, 37°51.36'N, 29°23.11'E; holotype: FFR 08653].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Yogurtcuoglu and Freyhof (2018: 321, figs. 1-4).

Distribution. General distribution: Asia Minor: Büyük Menderes River drainage, Aegean Sea tributary.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation, but it is also found in turbid field canals. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Yogurtcuoglu and Freyhof (2018); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes. — Turkish material: FFR.

***Anatolichthys maeandricus* (Akşiray 1948)**

Common name: Maeander killifish

Taxonomy: Original description: *Aphanius chantrei maeandricus* Akşiray 1948: 125, pl. 3 (figs. 35-37); figs. 20-21 [Springs of the Büyük Menderes River, near Isikli (38°19'N, 29°50'E) and Karakuyu (38°11'N, 29°55'E), Dinar, Türkiye; no types known].

Middle Eastern synonyms: *Aphanius maeandricus* Akşiray 1948.

Revisions: None.

Illustrations: Akşiray (1948: 125, pl. 3, figs. 35-37; figs. 20-21).

Distribution. General distribution: Asia Minor: Büyük Menderes River basin, Aegean Sea tributary.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 429-Western Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation, but it is also found in turbid field canals. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Pfeleiderer et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 7-Büyük Menderes. — Turkish material: None.

***Anatolichthys marassantensis* (Pfleiderer, Geiger & Herder 2014)**

Common name: Kizilirmak killifish

Taxonomy: Original description: *Aphanius marassantensis* Pfeleiderer, Geiger & Herder 2014: 571, figs. 2-4, 5F, 6G [Ankara Province, Hirfanı Reservoir, 39°11'19"N, 33°34'45"E, Türkiye; holotype: ZFMK 66342 (ex FSJF 3455)].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Pflaederer et al. (2014: 571, figs. 2-4, 5F, 6G).

Distribution. General distribution: Asia Minor: Kızılırmak and Yeşilırmak River basins (Black Sea tributary).

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 430-Northern Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation, but it is also found in turbid field canals. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Pflaederer et al. (2014); listed in previous checklists from Türkiye by Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 15-Kızılırmak. — Turkish material: ZFMK.

***Anatolichthys meridionalis* (Akşiray 1948)**

Common name: Killifish

Taxonomy: Original description: *Aphanius chantrei meridionalis* Akşiray 1948: 131, pl. 4, figs. 47-48 [Lake Söğüt (37°04'N, 29°53'E) at border between Burdur District and Antalya District, Türkiye; no types known].

Middle Eastern synonyms: *Aphanius meridionalis* Akşiray 1948; *Aphanius chantrei parvus* Akşiray 1948.

Revisions: None.

Illustrations: Akşiray (1948: 131, pl. 4, figs. 47-48).

Distribution. General distribution: Asia Minor: Lake Söğüt, Burdur and Antalya provinces.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation, but it is also found in turbid field canals. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Çiçek et al. (2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: None.

***Anatolichthys saldae* (Akşiray 1955)**

Common name: Salda killifish

Taxonomy: Original description: *Anatolichthys splendens saldae* Akşiray 1955: 58, pl. 1 (figs. 1-2); figs 1-2 [Lake Salda near Yesilova (37°31'N, 29°39'E), Burdur District, Türkiye; holotype: male (Männchen, not researched)].

Middle Eastern synonyms: *Aphanius saldae* (Akşiray 1955).

Revisions: None.

Illustrations: Akşiray (1955: 58, pl. 1, figs. 1-2; figs 1-2).

Distribution. General distribution: Asia Minor: Lake Salda, Burdur province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species lives in spring-fed streams with clear waters and dense vegetation, but it is also found in lakes. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 10-Burdur. — Turkish material: None.

Anatolichthys splendens Kosswig & Sözer 1945

Common name: Splendid killifish

Taxonomy: Original description: *Anatolichthys splendens* Kosswig & Sözer 1945: 77, fig. 2 [Lake Gölçük, west of Isparta (37°44'N, 30°30'E), central Anatolia, Türkiye; lectotype: ZMH 3505].

Middle Eastern synonyms: *Aphanius splendens* (Kosswig & Sözer 1945); *Kosswigichthys splendens* (Kosswig & Sözer 1945); *Lebias splendens* (Kosswig & Sözer 1945).

Revisions: None.

Illustrations: Kosswig and Sözer (1945: 77, fig. 2).

Distribution. General distribution: Asia Minor: Lake Gölçük, Isparta province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species is a lacustrine species that inhabits one mountain lake. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: EX (IUCN, 2023).

Threats: COM. — High sensitivity to human activities. — Keystone species. — Decline status: Unspecified. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Kosswig and Sözer (1945); listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: ZMH.

Anatolichthys sureyanus (Neu 1937)

Common name: Sureyan killifish

Taxonomy: Original description: *Cyprinodon sureyanus* Neu 1937: 109 [1] [Lake Burdur (37°45'N, 30°15'E), southwestern Türkiye; no types known. On p. 1 of separate].

Middle Eastern synonyms: *Aphanius sureyanus* (Neu 1937); *Lebias sureyanus* (Neu 1937); *Anatolichthys burdurensis* Ermin 1946; *Kosswigichthys burdurensis* (Ermin 1946); *Aphanius burduricus* Akşiray 1948.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Burdur Gölü, Burdur province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 431-Central Anatolia.

Habitat: This species lives in the littoral zone of a saline lake. Lake Burdur also has spring-fed streams with clear waters and dense vegetation. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Neu (1937); listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 10-Burdur. — Turkish material: None.

Anatolichthys transgrediens* (Ermin 1946)*Common name:** Acipinar killifish**Taxonomy:** Original description: *Turkichthys transgrediens* Ermin 1946: 244, figs. 38-45 [Stream, fed by the Acipinar spring at the west end of Lake Aci, Denizli District (37°49'N, 29°43'E), Türkiye; no types known].**Middle Eastern synonyms:** *Aphanius transgrediens* (Ermin 1946); *Kosswigichthys transgrediens* (Ermin 1946); *Lebias transgrediens* (Ermin 1946).**Revisions:** None.**Illustrations:** Ermin (1946: figs. 38-45) as *Turkichthys transgrediens*.**Distribution. General distribution:** Asia Minor: Acıgöl tributary, Denizli province.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia.**Habitat:** This species inhabits a very small spring field and short spring feed streams. This species also inhabited Lake Aci before it dried out. — Freshwater.**Economic importance:** No commercial importance. Has potential to be used as aquarium fish.**Conservation:** IUCN: CR (IUCN, 2023).**Threats:** ABS, CLI, CON, EUT, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Ermin (1946); listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 10-Burdur. — Turkish material: None.***Anatolichthys villwocki* (Hrbek & Wildekamp 2003)****Common name:** Villwock's killifish**Taxonomy:** Original description: *Aphanius villwocki* Hrbek & Wildekamp 2003: 138, figs. 1-2 [Pinarbasi, about 10.5 kilometers east of Emirdag, drainage canal of small spring pond, 39°02'53"N, 31°19'38"E, Türkiye; holotype: MRAC A1-30-P-1].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Hrbek and Wildekamp (2003: 138, figs. 1-2).**Distribution. General distribution:** Asia Minor: Akgöl tributary, Afyonkarahisar and Konya provinces.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 430-Northern Anatolia, 431-Central Anatolia.**Habitat:** This species inhabits lakes, springs, and slowly flowing streams with dense vegetation. — Freshwater.**Economic importance:** No commercial importance. Has potential to be used as aquarium fish.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Hrbek and Wildekamp (2003); listed in previous checklists from Türkiye by Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 11-Akarçay, 12-Sakarya. — Turkish material: MRAC.***Aphaniops dispar* (Rüppell 1829)****Common name:** Arabian toothcarp**Taxonomy:** Original description: *Lebias dispar* Rüppell 1829: 66, pl. 18, figs. 1-2 [Red Sea; lectotype: SMF 821].**Middle Eastern synonyms:** *Aphanius dispar* (Rüppell 1829); *Cyprinodon lunatus* Valenciennes 1846; *Cyprinodon zaccarinii* Gianferrari 1933; *Cyprinodon darrorensis* Gianferrari 1933; *Cyprinodon cilensis* Gianferrari 1930; *Cyprinodon zaccarinii* var. *airebejenis* Gianferrari 1933.

Revisions: Teimori et al. (2018); Esmaeili et al. (2020a: 5).

Illustrations: Rüppell (1829: pl. 18, figs. 1-2) as *Lebias dispar*; Banister and Clarke (1977: 144, fig. 30) as *Aphanius dispar*.

Distribution. General distribution: Middle East: Shores of Red Sea and Gulf of Aden, and easternmost Mediterranean Sea basin; Socotra (north-western Indian Ocean).

Distribution in the Middle East: Israel, Saudi Arabia, Syria, and Yemen.

Distribution in Ecoregions: 438-Jordan River, 439-Southwestern Arabian Coast.

Habitat: This species is euryhaline, inshore habitats with dense structures of vegetation or stones. Also common in coral reefs in the Red Sea and widely distributed in lower parts of rivers, streams, and all kind of inland water bodies, especially if these have brackish waters. Very rarely reported in freshwater habitats. Spawns on plants, algae, and rock fissures. — Freshwater, brackish.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: LC (IUCN, 2023).

Threats: HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Israel: [Native]. — Na'avit ha'mlyhot. — First record from Israel by Richardson (1856); confirmed by Lortet (1883: 175); Tristram (1884: 170) as *Cyprinodon dispar*; Krupp and Schneider (1989); listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: HUI.

Status in Syria: [Native]. — Batrikh. — First record from Syria by Ali (2003); confirmed by Saad et al. (2006); listed by Saad et al. (2023). — Distribution in River Basin: 5-Barada and Awaj, 7-Al-Yarmouk. — Syria material: MSL.

Status in Saudi Arabia: [Exotic]. — Afty. — Listed in previous checklists from Saudi Arabia by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Saudi Arabia material: None.

Status in Yemen: [Native]. — None. — Listed in previous checklists from Yemen by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Yemen material: ZMH.

***Aphaniops furcatus* (Teimori, Esmaeili, Erpenbeck & Reichenbacher 2014)**

Common name: Scaleless tooth-carp

Taxonomy: Original description: *Aphaniops furcatus* Teimori, Esmaeili, Erpenbeck & Reichenbacher 2014: 329, figs. 2a-b, 3, 4a-d, 5a-e, 6a [Shur River, along road Bandar Abbas - Minab, 20 km east of Bandar Abbas, Hormuzgan Province, Iran, 27°19'37.6"N, 56°28'10.2"E, altitude 2 meters; holotype: ZM-CBSU 225].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Teimori et al. (2014: 329, fig. 2).

Distribution. General distribution: Middle East: Salty rivers and hot sulphuric springs, Hormuz and Makran basins.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages, 701-Baluchistan.

Habitat: This species found in salty rivers and hot sulphuric springs. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e bedone fals. — Recorded from Iran in the original description by Teimori et al. (2014); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz, 3-Makran. — Iran material: ZM-CBSU.

***Aphaniops ginaonis* (Holly 1929)**

Common name: Geno (Genow) tooth-carp

Taxonomy: Original description: *Cyprinodon ginaonis* Holly 1929: 63 [2] [Hot spring at Ginao, north of Bandar Abbas, southeastern Iran; syntypes: (3) NMW 13800-02 (1, 1, 1)].

Middle Eastern synonyms: *Lebias ginaonis* (Holly 1929); *Aphanius ginaonis* (Holly 1929).

Revisions: None.

Illustrations: Teimori et al. (2018: 8, fig. 2).

Distribution. General distribution: Middle East: Ginao hot spring near the Persian Gulf, Hormuz basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: The species is common within the bounds of the hot spring stream. The water is clear and colourless but there is a strong sulphur odour. The stream bed is composed of stones and pebbles covered by lime-green to dark blue-green algae. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e Geno. — Recorded from Iran in the original description by Holly (1929); listed in previous checklists from Iran by Esmaeili et al. (2010a as *Aphanius ginaonis*, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz. — Iran material: ZM-CBSU.

***Aphaniops hormuzensis* (Teimori, Esmaeili, Hamidan & Reichenbacher 2018)**

Common name: Hormuz tooth-carp

Taxonomy: Original description: *Aphanius hormuzensis* Teimori, Esmaeili, Hamidan & Reichenbacher 2018: (7), figs. 3, 4, 5a-f [Mahran River, Gotab village, 15 km south of Bastak, Hormuzgan Province, Iran, 27°08'39.8"N, 54°15'46.1"E, elevation 330 m; holotype: ZM-FISBUK 157].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Teimori et al. (2018: 7, fig. 3).

Distribution. General distribution: Middle East: coastal drainages, Hormuzgan basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: It occurs mainly in two types of habitats, that is, brackish rivers of exorheic drainages and hot sulfur springs. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e Hormuz. — Recorded from Iran in the original description by Teimori et al. (2018); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz. — Iran material: ZM-FISBUK, ZM-CBSU.

***Aphaniops kruppi* Freyhof, Weissenbacher & Geiger 2017**

Common name: Killifish

Taxonomy: Original description: *Aphaniops kruppi* Freyhof, Weissenbacher & Geiger 2017: 561, figs. 2-5 [Spring in Al Mudayrib, Oman, 22°36'46"N, 58°40'31"E; holotype: ZFMK-ICH 103668].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Freyhof et al. (2017b: figs. 2-5).

Distribution. General distribution: Wadi Bani Khalid drainage.

Distribution in the Middle East: Oman and Yemen.

Distribution in Ecoregions: 443-Oman Mountains.

Habitat: This species inhabits springs and small ponds. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: CLI, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Oman: [Native]. — None. — Recorded from Oman in original description by Freyhof et al. (2017b); confirmed by Freyhof et al. (2020); Esmaili et al. (2022a), Zarei et al. (2023); Esmaili and Hamidan (2023). — Oman material: ZM-CBSU.

Status in Yemen: [Native]. — None. — Listed in previous checklists from Yemen by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Yemen material: None.

Aphaniops richardsoni Boulenger 1907

Common name: Dead Sea killifish

Taxonomy: Original description: *Cyprinodon richardsoni* Boulenger 1907: 412 [Brine spring near Usdum, Dead Sea, 31°51'N, 35°25'E; lectotype: BMNH 1856.5.2.4].

Middle Eastern synonyms: *Lebias dispar richardsoni* Boulenger 1907; *Aphanius dispar richardsoni* Boulenger 1907; *Aphanius richardsoni* Boulenger 1907.

Revisions: Teimori et al. (2018); Esmaili et al. (2020a).

Illustrations: None.

Distribution. General distribution: Middle East: springs in the Dead Sea basin.

Distribution in the Middle East: Israel and Jordan.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species lives streams and pools on a variety of foundations. — Freshwater, brackish.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: EN (IUCN, 2023).

Threats: ABS, CLI, CON, COM, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — High priority for conservation action.

Status in Israel: [Native]. — Na'avit. — Recorded from Israel by Günther (1865: 490); Lortet (1883: 178); Tristram (1884: 172) as *Cyprinodon sophiae* (non Heckel 1843), and in original description by Boulenger (1907); subsequently reported by Goren (1974: 100) as *Aphanius dispar richardsoni*; confirmed by Goren and Ortal (1999: 4) as *Aphanius dispar richardsoni*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 2-Dead Sea Basin. — Israel material: BMNH.

Status in Jordan: [Native]. — None. — It is probable that this species is naturally distributed in the country. — Jordan material: None.

Remarks. This species was described as subspecies, *Aphanius dispar richardsoni*. There is, probably no justification to elevate it to specific level. However, it is suggested not to use subspecies anymore; either raise to species level or synonymize. Need to further study to eliminate this hypothesis.

Aphaniops sirhani (Villwock, Scholl & Krupp 1983)

Common name: Azraq killifish

Taxonomy: Original description: *Aphanius sirhani* Villwock, Scholl & Krupp 1983: 260, figs. 3-4 [Azraq oasis, Jordan 31°49'59.0"N, 36°49'19.1"E (corrected); holotype: ZMH 6444.

Middle Eastern synonyms: *Lebias sirhani* (Villwock, Scholl & Krupp 1983).

Revisions: None.

Illustrations: Villwock et al. (1983: figs. 3-4).

Distribution. General distribution: Middle East: Azraq Oasis.

Distribution in the Middle East: Israel and Jordan.

Distribution in Ecoregions: 438-Jordan River.

Habitat: The species inhabits shallow wetlands. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: CR (IUCN, 2023).

Threats: ABS, CLI, COM, CON, EUT, HAB. — High sensitivity to human activities. — Keystone species. — Decline status: Stable. — High priority for conservation action.

Status in Jordan: [Endemic]. — None. — Recorded from Jordan in original description by Villwock (1983). — Jordan material: None.

***Aphaniops stoliczkanus* (Day 1872)**

Common name: Killifish

Taxonomy: Original description: *Cyprinodon stoliczkanus* Day 1872: 258 [Stream at the village Joorun and along edge of the Rann River, Lodai, India, 22°30'N, 69°20'E; Stream at the village Joorun and along edge of the Rann River, Lodai, India, 22°30'N, 69°20'E].

Middle Eastern synonyms: *Aphanius stoliczkanus* (Day 1872).

Revisions: Charmpila et al. (2020: 2); Esmaeili et al. (2020a).

Illustrations: Kärst et al. (2020: 115, figs.); Esmaeili et al. (2022b: 450, fig. 50).

Distribution. General distribution: Middle East, South Asia: Oman and Persian Gulf east to Pakistan and Gujarat (India).

Distribution in the Middle East: Bahrain, Iraq, Iran, Kuwait, Oman, Qatar, Saudi Arabia, UAE.

Distribution in Ecoregions: 439-Southwestern Arabian Coast, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 443-Oman Mountains, 451-Northern Hormuz Drainages, 701-Baluchistan.

Habitat: This species lives in euhyaline, inshore habitats with dense structures of vegetation or stones. Also common in coral reefs in the Red Sea and widely distributed in the lower parts of rivers, streams, and all kinds of inland water bodies, especially if these have brackish waters. They can also be found in freshwater environments. — Freshwater, brackish, marine.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Bahrain: [Native]. — None. — Listed in previous checklists from Bahrain by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Bahrain material: None.

Status in Iran: [Native]. — Kapur-e dandandar-e sharghi. — Listed in previous checklists from Iran by Esmaeili et al. (2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 3-Makran, 10-Hamun-e Mashkid. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Unknown introduction; confirmed by Freyhof et al. (2021a; listed by Çiçek et al. (2023b). — Distribution in River Basin: 1- Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: Fish Collection of the Department of Fisheries and Marine Resources, College of Agriculture, University of Basrah, Basrah, Iraq; Fish collection at the Marine Science Centre, University of Basrah, Basrah, Iraq.

Status in Kuwait: [Native]. — None. — Listed in previous checklists from Kuwait by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Kuwait material: None.

Status in Oman: [Native]. — None. — Listed in previous checklists from Oman by Freyhof et al. (2020); Esmaeili et al. (2022a); Esmaeili and Hamidan (2023). — Oman material: ZM-CBSU.

Status in Qatar. [Native]. — None. — Listed in previous checklists from Qatar by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Qatar material: None.

Status in Saudi Arabia: [Exotic]. — None. — Listed in previous checklists from Saudi Arabia by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — Saudi Arabia material: None.

Status in UAE: [Native]. — None. — Listed in previous checklists from UAE by Freyhof et al. (2020); Esmaeili and Hamidan (2023). — UAE material: None.

***Aphanius almiriensis* Kottelat, Barbieri & Stoumboudi 2007**

Common name: Killifish

Taxonomy: Original description: *Aphanius almiriensis* Kottelat, Barbieri & Stoumboudi 2007: 15, figs. 1-2 [Brackish water spring Kokosi at southern end of Almiri beach, at Kato Almiri, about 4 kilometers south of Loutra Elenis, 37°50'32"N, 23°00'58"E, Korinthia District, Peloponnese, Greece; holotype: MHNG 2654.087].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Barbieri and Stoumboudi (2007: 15, figs. 1-2).

Distribution. General distribution: Southern Europe: Calabria (Italy), Greece, western Türkiye.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia.

Habitat: This species inhabits fresh and brackish water springs (up to 23 ‰ salinity). — Freshwater, brackish.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: CR (IUCN, 2023).

Threats: TOU. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Native]. — Dişli sazancık. — Listed in previous checklists from Türkiye by Valdesalici et al. (2019); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes. — Turkish material: None.

***Aphanius fasciatus* (Valenciennes 1821)**

Common name: Mediterranean banded killifish

Taxonomy: Original description: *Lebias fasciata* Valenciennes 1821: 160, pl. 51, fig. 4 [Salt works of Cagliari, Sardinia; neotype: MNHN 2005-1975; neotype designated by Kottelat et al. (2007: 24)].

Middle Eastern synonyms: *Lebias fasciatus* Valenciennes 1821; *Aphanius sophiae* (non Heckel 1847).

Revisions: Langeneck et al. (2021: 10).

Illustrations: Humboldt & Valenciennes (1821: 160, pl. 51, fig. 4).

Distribution. General distribution: Mediterranean Sea basin endemic. Introduced elsewhere.

Distribution in the Middle East: Lebanon and Syria.

Distribution in Ecoregions: 432-Southern Anatolia, 436-Coastal Levant, 437-Orontes.

Habitat: This species lives mainly in brackish and salty waters and enters lagoons. — Freshwater, brackish, marine.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CLI, EUT. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Lebanon: [Native]. — Batrikh. — First record from Lebanon by George et al. (1964); confirmed by Mouneimné (2002); Bariche et al. (2009). — Lebanon material: AMNH, AUBM, USNM.

Status in Syria: [Native]. — Batrikh. — New record from Syria, based on ANSP and BMNH material (Saad et al., 2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: ANSP, BMNH, MSL.

Status in Türkiye: [Native]. — Dişli sazancık. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 8-Batı Akdeniz, 9-Antalya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan. — Turkish material: None.

***Esmaeilius arakensis* (Teimori, Esmaeili, Gholami, Zarei & Reichenbacher 2012)**

Common name: Arak tooth-carp

Taxonomy: Original description: *Aphanius arakensis* Teimori, Esmaeili, Gholami, Zarei & Reichenbacher 2012:62, Figs. 2A, B, 5 [Small pond, Namak Lake basin, 34°00'N, 49°50'E, 5 km southeast of the city of Arak, Iran, elevation 1786 m; holotype: ZM-CBSU 10999].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Teimori et al. (2012: 62, Figs. 2A, B, 5).

Distribution. General distribution: Middle East: 447-Namak.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 447-Namak.

Habitat: Inhabiting in small natural shallow ponds and springs. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e Arak. — Recorded from Iran in the original description by Teimori et al. (2012); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 15-Namak Lake. — Iran material: ZM-CBSU.

***Esmaeilius darabensis* (Esmaeili, Teimori, Gholami & Reichenbacher 2014)**

Common name: Darab tooth-carp

Taxonomy: Original description: *Aphanius darabensis* Esmaeili, Teimori, Gholami & Reichenbacher 2014: 254, figs. 2-3, 4A-E [Fars, Darab, Korsiah Banaki spring-stream system, Kol River, 28°46'24.96"N, 54°23'35.48"E, Iran, altitude 1027 m; holotype: ZM-CBSU 9713].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Esmaeili et al. (2014c: 254, fig. 2).

Distribution. General distribution: Middle East: Hormuz, Kol River drainage.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 451-Northern Hormuz Drainages.

Habitat: It occurs in low numbers in restricted habitats including Dasht e Konar wetland and Golabi spring. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Drought and introductions of alien fishes, particularly *Gambusia holbrooki* and Neotropical convict cichlid, *Amatitlania nigrofasciata* (see Esmaeili et al. 2013b), are major threats to this endemic fish species.

Status in Iran: [Endemic]. — Goormahi-e Darab. — Recorded from Iran in the original description by Esmaeili et al. (2014c); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 2-Hormuz. — Iran material: ZM-CBSU.

Esmaeilius isfahanensis* (Hrbek, Keivany & Coad 2006)*Common name:** Esfahan tooth-carp**Taxonomy:** Original description: *Aphanius isfahanensis* Hrbek, Keivany & Coad 2006: 245, figs. 2A, B [Zayandeh Rud (Zayandeh River) at Varzaneh bridge, 32°25'32"N, 52°39'14E, Isfahan Province, Iran; holotype: CMNFI 2004-0001].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Hrbek et al. (2006: 245, fig. 2).**Distribution. General distribution:** Middle East: Zayandeh Rud basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 449-Esfahan.**Habitat:** The type locality had a water temperature of 27°C, pH was 6.7, the water was brackish, conductivity was 10.9 mS, dissolved solids were 5450 ppm, dissolved oxygen was 12.3 mg/L, river width was 50 m, and capture depth was 0.5 m. Current was slow, and there was no cover. — Freshwater.**Economic importance:** No commercial importance. Has potential to be used as aquarium fish.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Iran:** [Endemic]. — Goormahi-e Esfahan. — Recorded from Iran in the original description by Hrbek et al. (2006); listed in previous checklists from Iran by Esmaeili et al. (2010a as *Aphanius isfahanensis*, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 9-Esfahan. — Iran material: CMNFI, ZM-CBSU.***Esmaeilius kavirensis* (Esmaeili, Teimori, Gholami & Reichenbacher 2014)****Common name:** Kavir tooth-carp**Taxonomy:** Original description: *Aphanius kavirensis* Esmaeili, Teimori, Gholami & Reichenbacher 2014: 259, Figs. 4F-J, 6-7 [Semnan, Damghan, Cheshmeh Ali Spring, Kavir Basin, 36°16'45.6"N, 54°05'01.6"E, Iran, altitude 1569 m; holotype: ZM-CBSU 9587a].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Esmaeili et al. (2014c: 259, Figs. 4F-J, 6-7).**Distribution. General distribution:** Middle East: Kavir basin.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 448-Kavir and Lut Deserts.**Habitat:** Inhabiting in a restricted spring of its type locality. — Freshwater.**Economic importance:** No commercial importance. Has potential to be used as aquarium fish.**Conservation:** IUCN: NE (2023).**Threats:** Introduction of exotic carnivorous fish such as *Oncorhynchus mykiss* may threaten this endemic species.**Status in Iran:** [Endemic]. — Goormahi-e Kavir. — Recorded from Iran in the original description by Esmaeili et al. (2014c); listed in previous checklists from Iran by Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 7-Dasht-e Kavir. — Iran material: ZM-CBSU.***Esmaeilius mesopotamicus* (Coad 2009)****Common name:** Mesopotamian tooth-carp**Taxonomy:** Original description: *Aphanius mesopotamicus* Coad 2009: 150, Fig. 1 [Khuzestan, canal branch of Karkheh River, 31°40'N, 48°35'E, Iran; holotype: CMNFI 1979-0360A].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Coad (2009: 150, Fig. 1).

Distribution. General distribution: Middle East: Tigris (Karkheh and Jarrahi Rivers).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates.

Habitat: The 25 m wide river had a water temperature of 22°C, a mud bottom and the principal plant materials were rushes, reeds, and filamentous green algae. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e Beinolnahrin. — Recorded from Iran in the original description by Coad (2009); listed in previous checklists from Iran by Esmaili et al. (2010a as *Aphanius mesopotamicus*, 2017, 2018); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: CMNFI.

Esmailius persicus Jenkins 1910

Common name: Persian tooth-carp

Taxonomy: Original description: *Cyprinodon persicus* Jenkins 1910: 125, pl. 6 (fig. 4) [Spring on the edge of Shiraz Lake, southern Iran; syntypes: ZSI F9403-04 (2)].

Middle Eastern synonyms: *Aphanius persicus* (Jenkins 1910); *Cyprinodon blanfordii* Jenkins 1910; *Aphanius farsicus* Teimori, Esmaili & Reichenbacher, 2011; *Aphanius arakensis* Teimori, Esmaili, Gholami, Zarei & Reichenbacher 2012.

Revisions: Freyhof and Yoğurtçuoğlu (2020: 434).

Illustrations: Freyhof and Yoğurtçuoğlu (2020: 434, fig. 8).

Distribution. General distribution: Middle East: Maharlu Lake basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrate.

Habitat: This species is found in fresh streams and springs and in springs of varying saline content or saline influence from hypersaline chloride Lake Maharlu (Coad 2021). — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e Parsi. — Recorded from Iran in the original description by Hrbek et al. (2006); listed in previous checklists from Iran by Esmaili et al. (2010a as *Aphanius persicus*, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 13-Lake Maharlu. — Iran material: ZSI, ZM-CBSU.

Esmailius pluristriatus (Jenkins 1910)

Common name: Mond tooth-carp

Taxonomy: Original description: *Cyprinodon pluristriatus* Jenkins 1910:125, pl. 6 (fig. 5) [East of Shiraz, stream running to Fussa [Fasa], southern Iran, elevation 5000 feet; syntypes: ZSI F9408-9411 (4), F9412 (?)].

Middle Eastern synonyms: *Aphanius pluristriatus* (Jenkins 1910).

Revisions: Esmaili et al. (2012).

Illustrations: Jenkins (1910: 125, Fig. 5).

Distribution. General distribution: Middle East: Mond River tributaries (Persis).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: Inhabiting in several streams and rivers. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e Beinolnahrin. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 1-Persis. — Iran material: ZSI, ZM-CBSU.

***Esmailius shirini* (Gholami, Esmaili, Erpenbeck & Reichenbacher 2014)**

Common name: Shirin tooth-carp

Taxonomy: Original description: *Aphanius shirini* Gholami, Esmaili, Erpenbeck & Reichenbacher 2014: 132, figs. 3a-b [Paselari spring of the Khosroshirin spring-stream system, Khosroshirin Village, Abadeh City, Fars, uppermost reaches of Kor River Basin, 30°53'29.5"N, 52°00'36.8"E, Iran, altitude 2327 m; holotype: ZM-CBSU, ZG151].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Gholami et al. (2014: 132, fig. 3).

Distribution. General distribution: Middle East: Kor River Basin, Iran; translocated to Helleh River basin.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: It is found in few springs which the substrates are generally muddy with small gravels, and the water surface is covered by dense filamentous green algae. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: The main threat is carnivorous exotic *O. mykiss* (rainbow trout), which escape from the fish farms and enter to the stream.

Status in Iran: [Endemic]. — Goormahi-e Khosro shirin. — Recorded from Iran in the original description by Gholami et al. (2014); listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 12-Kor River, 1-Persis. — Iran material: ZM-CBSU.

***Esmailius sophiae* (Heckel 1847)**

Common name: Killifish

Taxonomy: Original description: *Lebias sophiae* Heckel 1847: 267, pl. 22 [Accepted locality: endorheic Kor River basin north of Shiraz, Fars Province, Iran; syntypes: NMW 14496 (6), 33616-23 (8), 60327 (8), 68283 (8), 75067 (7); ZMB 31377 (9)].

Middle Eastern synonyms: *Aphanius sophiae* (Heckel 1847); *Aphanius mesopotamicus* Coad 2009; *Aphanius kavirensis* Esmaili, Teimori, Gholami & Reichenbacher 2014; *Aphanius pluristriatus* (Jenkins 1910).

Revisions: Freyhof and Yoğurtçuoğlu (2020: 445).

Illustrations: Heckel (1847: 267, pl. 22) as *Lebias sophiae*.

Distribution. General distribution: Lower Shat-al-Arab River drainage; translocated to Persis and Tigris basins.

Distribution in the Middle East: Iran and Iraq.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: Inhabits a wide range of springs, streams, lakes, and rivers. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area, but none seems to be strong enough to threaten this species. — High sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e Kor. — Recorded from Iran in the original description by Heckel (1847); listed in previous checklists from Iran by Esmaili et al.

(2010a as *Aphanius sophiae*, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 12-Kor River, 4-Tigris, 1-Persis. — Iran material: ZMB, ZM-CBSU.

***Esmaeilius vladykovi* (Coad 1988)**

Common name: Zagros tooth-carp

Taxonomy: Original description: *Aphanius vladykovi* Coad 1988: 115, fig. 1 [Large pool in Shahrestan-e Bakhtiari va Chahar Mahall, 3 kilometers west of Boldaji, Iran, 31°57'N, 51°01'E, elevation about 2380 meters; holotype: NMC 79-0247].

Middle Eastern synonyms: *Lebias vladykovi* (Coad 1988).

Revisions: None.

Illustrations: Coad (1988: 115, fig. 1).

Distribution. General distribution: Middle East: Upper Karun River drainage, Tigris basin, Zagros Mountains.

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: It is found in small pools, streams, and marshes in freshwaters. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Endemic]. — Goormahi-e Zagros. — Recorded from Iran in the original description by Coad (1988); listed in previous checklists from Iran by Esmaeili et al. (2010a *Aphanius vladykovi*, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris. — Iran material: NMC, ZM-CBSU.

***Kosswigichthys asquamatus* Sözer 1942**

Common name: Hazar Lake killifish

Taxonomy: Original description: *Kosswigichthys asquamatus* Sözer 1942: 308, fig. 2 [Lake Hazer, Elazığ District (38°30'N, 39°25'E), Anatolia, Türkiye; syntypes: (20) MSNG 36472 (3)].

Middle Eastern synonyms: *Aphanius asquamatus* (Sözer 1942); *Lebias asquamatus* (Sözer 1942).

Revisions: None.

Illustrations: Sözer (1942: 308, fig. 2).

Distribution. General distribution: Asia Minor: Lake Hazer endemic, eastern Anatolia.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 442-Upper Tigris and Euphrates.

Habitat: This species is a pelagic species that comes to shores in the spring and early summer to spawn. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CLI, HAB. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Hazar dişli sazancığı. — Recorded from Türkiye in the original description by Sözer (1942); listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 21-Fırat-Dicle. — Turkish material: MSNG.

***Paraphanius alexandri* (Akşiray 1948)**

Common name: Killifish

Taxonomy: Original description: *Aphanius cypris alexandri* Akşiray 1948: 119 [Coastal creek near Iskenderun, Türkiye (36°35'N, 36°10'E); no types known].

Middle Eastern synonyms: *Aphanius alexandri* Akşiray 1948.

Revisions: None.

Illustrations: None.

Distribution. General distribution: Asia Minor: Mediterranean coastal region of Ceyhan River basin.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits a wide range of springs, wetlands, lakes, and slow flowing streams. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Geiger et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: None.

***Paraphanius boulengeri* (Akşiray 1948)**

Common name: Killifish

Taxonomy: Original description: *Aphanius cypris boulengeri* Akşiray 1948: 118, figs. 13-14 [Lake Gösbasi, in an area of three small lakes west of Besni, Malatya District, Türkiye (37°45'N, 37°35'E); no types known].

Middle Eastern synonyms: *Aphanius boulengeri* Akşiray 1948.

Revisions: None.

Illustrations: Akşiray (1948: figs. 13-14) as *Aphanius cypris boulengeri*.

Distribution. General distribution: Asia Minor: Mediterranean drainages of Türkiye.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits a wide range of springs, wetlands, lakes, and slow flowing streams. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Geiger et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: None.

***Paraphanius mento* (Heckel 1843)**

Common name: Pearl-spotted killifish

Taxonomy: Original description: *Lebias mento* Heckel 1843: 1089 [99] [Mosul, northern Iraq (36°18'N, 43°18'E); possible syntypes: NMW 21699-704 (6), 59832 (21)].

Middle Eastern synonyms: *Aphanius mento* (Heckel 1843).

Revisions: Esmaeili et al. (2020a).

Illustrations: Heckel (1843b: pl. 6, fig. 4).

Distribution. General distribution: Asia Minor and Middle East: Tigris River basin.

Distribution in the Middle East: Iran, Iraq, Israel, Jordan Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia, 436-Coastal Levant, 438-Jordan River, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.

Habitat: This species inhabits a wide range of springs, wetlands, lakes, and slow flowing streams. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are many threats in the area, but none seems to be strong enough to threaten this species. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Decreasing. — Moderate priority for conservation action.

Status in Iran: [Native]. — Goormahi-e rangin kamani. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Aphanius mento*; Esmaili et al. (2017a, 2018); Eagderi et al. (2022) but needs confirmation by specimens (Sayyadzadeh & Esmaili, 2023). — Distribution in River Basin: 4-Tigris. — Iran material: None.

Status in Iraq: [Native]. — None. — Recorded from Iraq in original description by Heckel (1843); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris. — Iraq materials: NMW.

Status in Israel: [Native]. — Na'avit khula. — First record from Israel by Günther (1865: 490) as *Cyprinodon mento* and *C. cypris*; Lortet (1883: 174); Tristram (1884: 171) as *Cyprinodon cypris*; Steinitz (1953) as *Aphanius mento*; confirmed by Goren (1974: 98) as *Aphanius mento*; Goren and Ortal (1999: 4) as *Aphanius mento*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin. — Israel material: HUI.

Status in Lebanon: [Native]. — Batrikh. — It is probable that this species is naturally distributed in the country. — Lebanon material: None.

Status in Syria: [Native]. — Batrikh. — First record from Syria by Beckman (1962: 151) as *Aphanius mento*; confirmed by Krupp and Schneider (1991b: 73) as *Aphanius mento*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: None.

Status in Türkiye: [Native]. — Dişli sazancık. — Listed in previous checklists from Türkiye by Kuru (2004); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 18-Seyhan, 20-Ceyhan, 21-Fırat-Dicle. — Turkish material: None.

***Paraphanius mentoides* (Akşiray 1948)**

Common name: Killifish

Taxonomy: Original description: *Aphanius sophiae mentoides* Akşiray 1948: 110, pl. 1 (figs. 1-2); figs. 7-8 [Kirkgöz, northwestern of Antalya, Türkiye (37°06'N, 30°35'E); no types known].

Middle Eastern synonyms: *Aphanius mentoides* Akşiray 1948.

Revisions: None.

Illustrations: Akşiray (1948: 110, pl. 1 (figs. 1-2); figs. 7-8).

Distribution. General distribution: Asia Minor: Mediterranean Sea tributaries, Antalya province.

Distribution in the Middle East: Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia.

Habitat: This species inhabits a wide range of springs, wetlands, lakes, and slow flowing streams. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Geiger et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 9-Antalya. — Turkish material: None.

Paraphanius orontis* (Akşiray 1948)*Common name:** Killifish**Taxonomy:** Original description: *Aphanius cypris orontis* Akşiray 1948: 116, pl. 2 (figs. 5-6); figs. 11-12 [Small ditches near Lake Amik near Antakya, Türkiye (36°17'N, 36°20'E); no types known].**Middle Eastern synonyms:** *Aphanius orontis* Akşiray 1948.**Revisions:** None.**Illustrations:** Akşiray (1948: 116, pl. 2 (figs. 5-6); figs. 11-12).**Distribution. General distribution:** Asia Minor: Orontes River basin.**Distribution in the Middle East:** Syria and Türkiye.**Distribution in Ecoregions:** 437-Orontes.**Habitat:** This species inhabits a wide range of springs, wetlands, lakes, and slow flowing streams. — Freshwater.**Economic importance:** No commercial importance. Has potential to be used as aquarium fish.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Syria:** [Native]. — Batrikh. — Recorded from Syria by Gaillard (1895: 6) as *Cyprinodon cypris* (non Heckel 1843); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes. — Syrian material: BMNH, MNHN.**Status in Türkiye:** [Native]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Geiger et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 19-Asi. — Turkish material: None.***Paraphanius similis* (Akşiray 1948)****Common name:** Killifish**Taxonomy:** Original description: *Aphanius sophiae similis* Akşiray 1948: 111, pl. 4 (figs. 38-42); figs. 9-10 [Akgöl between Konya and Ereğlisi, Türkiye (37°31'N, 33°45'E); no types known].**Middle Eastern synonyms:** *Aphanius similis* Akşiray 1948.**Revisions:** None.**Illustrations:** Akşiray (1948: 111, pl. 4 (figs. 38-42); figs. 9-10).**Distribution. General distribution:** Asia Minor: Mediterranean tributaries and Tuz Lake basin, south-central Türkiye.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 431-Central Anatolia, 432-Southern Anatolia.**Habitat:** This species inhabits a wide range of springs, wetlands, lakes, and slow flowing streams. — Freshwater.**Economic importance:** No commercial importance. Has potential to be used as aquarium fish.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Moderate sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.**Status in Türkiye:** [Endemic]. — Dişli sazancık. — Recorded from Türkiye in the original description by Akşiray (1948); listed in previous checklists from Türkiye by Geiger et al. (2014); Çiçek et al. (2015, 2018a, 2020, 2023a). — Distribution in River Basin: 16-Konya, 18-Seyhan. — Turkish material: None.***Paraphanius striptus* (Goren 1974)****Common name:** Killifish**Taxonomy:** Original description: *Aphanius mento striptus* Goren 1974: 99 [Rosh Hanikra, springs near Amiçam, Israel; holotype: SMNHTAU 3280].**Middle Eastern synonyms:** *Aphanius striptus* Goren 1974.**Revisions:** Freyhof and Yoğurtçuoğlu (2020: 437).

Illustrations: Goren (1974: fig. 27) as *Aphanus mento striptus*.

Distribution. General distribution: Middle East: Israel and south-western Syria.

Distribution in the Middle East: Israel and Syria.

Distribution in Ecoregions: 438-Jordan River.

Habitat: This species inhabits a wide range of springs, streams, and wetlands. — Freshwater.

Economic importance: No commercial importance. Has potential to be used as aquarium fish.

Conservation: IUCN: NE (2023).

Threats: Unknown. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — High priority for conservation action.

Status in Israel: [Native]. — Na'avit psusa. — Recorded from Israel in original description by Goren (1974: 99) as *Aphanus mento striptus*; subsequently reported by Freyhof and Yoğurtçuoğlu (2020); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin. — Israel material: HUI, SMF.

Status in Syria: [Native]. — Batrikh. — First record from Syria by Freyhof and Yoğurtçuoğlu (2020: 437); listed by Saad et al. (2023). — Distribution in River Basin: 3-Desert, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian material: None.

Mugiliformes

Mugilidae Jarocki 1822 (mulletts)

Chelon auratus (Risso 1810)

Common name: Golden grey mullet

Taxonomy: Original description: *Mugil auratus* Risso 1810: 344 [Nice, France, northwestern Mediterranean Sea; no types known].

Middle Eastern synonyms: *Planiliza aurata* (Risso 1810); *Liza aurata* (Risso 1810).

Revisions: Durand and Borsa (2015: 268).

Illustrations: Ben-Tuvia in Whitehead et al. (1986: 1199, fig.).

Distribution. General distribution: Western Baltic Sea; North Sea; Mediterranean Sea; Sea of Marmara; Black Sea; Sea of Azov; eastern Atlantic: Scotland south to Senegal, including Azores, Madeira, Canary Islands and Cape Verde Islands, introduced elsewhere.

Distribution in the Middle East: Iran, Israel, Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 450-Turan Plain, 452-Caspian Marine.

Habitat: This species is pelagic, near shore, sometimes in lagoons and estuaries, and rarely in freshwater. Among the Mugilidae recorded from freshwaters, this is the least tolerant of the freshwaters. It pawns at sea. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Exotic]. — Kafal mahi-e talayi. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Liza aurata*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Mousavi-Sabet et al. (2023); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — It is probable that this species is naturally distributed in the country. — Distribution in River Basin: 3-Shatt al-Arab. — Iraq material: None.

Status in Israel: [Native]. — Kiphon zahov. — First record from Israeli freshwater by Yashouf and Brener (1961); confirmed by Goren and Ortal (1999); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin. — Israel material: HUI.

Status in Lebanon: [Native]. — Bouri dehban. — First record from Lebanon by Gruvel (1931) as *Mugil auratus*; confirmed by George et al. (1964) as *Mugil auratus*; Mouneimné (1977, 2002) as *Liza aurata*. — Lebanon material: AUBM, USNM.

Status in Syria: [Native]. — Bouri dehban. — First record from Syria by Beckman (1962: 160) as *Liza auratus*; confirmed by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: MSL.

Status in Türkiye: [Native]. — Altınbaş kefal. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Liza aurata*; Geldiay and Balık (2007) as *Liza aurata*; Fricke et al. (2007) as *Liza aurata*; Kuru et al. (2014) as *Liza aurata*; Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

***Chelon labrosus* (Risso 1827)**

Common name: Thicklip grey mullet

Taxonomy: Original description: *Mugil labrosus* Risso 1827: 389 [Nice, France, northwestern Mediterranean Sea; no types known].

Middle Eastern synonyms: *Mugil chelo* Cuvier 1829.

Revisions: Durand and Borsa (2015: 268).

Illustrations: Ben-Tuvia in Whitehead et al. (1986: 1198, fig.).

Distribution. General distribution: Baltic Sea; North Sea; Mediterranean Sea; Sea of Marmara; Black Sea; eastern Atlantic: Norway and Iceland south to Senegal, including Azores, Madeira, Canary Islands and Cape Verde Islands.

Distribution in the Middle East: Israel, Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River.

Habitat: This species is pelagic, near shores, sometimes in lagoons and estuaries. It spawns at sea in coastal surface water. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Israel: [Native]. — Kiphon kilon. — First record from Israeli freshwater by Yashouv and Brener (1961); confirmed by Goren and Ortal (1999); Golani and Mires (2000); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin. — Israel material: HUI.

Status in Lebanon: [Native]. — Bourishelan. — First record from Lebanon by Gruvel (1931) *Mugil chelo*; confirmed by George et al. (1964), Mouneimné (1977, 2002), Bariche et al. (2009). — Lebanon material: AUBM.

Status in Syria: [Native]. — Bouri shelan. — First record from Syria by Beckman (1962: 164) as *Liza labrosus*; confirmed by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: MSL.

Status in Türkiye: [Native]. — Kefal, mavraki. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007) as *Mugil (Chelon) labrosus*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Chelon ramada* (Risso 1827)*Common name:** Thinlip mullet**Taxonomy:** Original description: *Mugil ramada* Risso 1827: 390 [Nice, France, northwestern Mediterranean Sea; no types known].**Middle Eastern synonyms:** *Liza ramado* (Risso 1810); *Chelon ramado* (Risso 1827); *Liza ramada* (Risso 1827).**Revisions:** Durand and Borsa (2015: 268).**Illustrations:** Ben-Tuvia in Whitehead et al. (1986: 1200, fig.) as *Liza ramada*.**Distribution. General distribution:** Western Baltic Sea; Mediterranean Sea; Sea of Marmara; Black Sea; eastern Atlantic: southern Norway south to Senegal, including Azores, Madeira, Canary Islands and Cape Verde Islands. Introduced in Red Sea.**Distribution in the Middle East:** Israel, Lebanon, Syria, and Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River.**Habitat:** This species is pelagic, near shore, entering lagoons and the lower reaches of rivers, and is often found in polluted waters. It spawns offshore at sea. — Freshwater, brackish, marine.**Economic importance:** No commercial importance.**Conservation:** IUCN:LC (IUCN, 2023).**Threats:** No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Israel:** [Native]. — Kiphon tubar. — First record from Israeli freshwater by Yashouh and Brener (1961); confirmed by Goren and Ortal (1999: 4) as *Liza ramada*; Golani and Mires (2000); Tadmor-Levi et al. (2022); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUIJ.**Status in Lebanon:** [Native]. — Bouri katan. — First record from Lebanon by Gruvel (1931) as *Mugil capito*; confirmed by George et al. (1964) as *Mugil capito*; Mouneimné (1977, 2002) as *Liza ramada*. — Lebanon material: AUBM, USNM.**Status in Syria:** [Native]. — Bouri katan. — First record from Syria by Beckman (1962: 163) as *Liza capito*; confirmed by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: None.**Status in Türkiye:** [Native]. — Pulatarina balığı, ceran. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Liza ramada*; Geldiay and Balık (2007) *Mugil (Liza) ramada*; Fricke et al. (2007) as *Liza ramado*; Kuru et al. (2014) as *Liza ramada*; Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.***Chelon saliens* (Risso 1810)****Common name:** Leaping mullet**Taxonomy:** Original description: *Mugil saliens* Risso 1810: 345 [Nice, France, northwestern Mediterranean Sea; no types known].**Middle Eastern synonyms:** *Liza saliens* (Risso 1810).**Revisions:** Durand and Borsa (2015: 268).**Illustrations:** Ben-Tuvia in Whitehead et al. (1986: 1201, fig.) as *Liza saliens*.**Distribution. General distribution:** Mediterranean Sea; Sea of Marmara; Black Sea; Sea of Azov; eastern Atlantic: Bay of Biscay (Spain) south to Western Sahara, including Madeira; introduced in Caspian Sea area.**Distribution in the Middle East:** Iran, Israel, Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine.

Habitat: This species is pelagic, near shore, and sometimes in lagoons and estuaries. It spawns at sea. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Exotic]. — Kafal mahi-e poozeh barik. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Liza saliens*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Mousavi-Sabet et al. (2023); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Israel: [Native]. — Kiphon harutz. — First record from Israeli freshwater by Reich (1978); confirmed by Goren and Ortal (1999); Golani and Mires (2000); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin. — Israel material: HUI.

Status in Lebanon: [Native]. — Bouri sheli. — First record from Lebanon by Gruvel (1931) as *Mugil saliens*; confirmed by George et al. (1964) as *Mugil saliens*; Mouneimné (1977, 2002) as *Liza saliens*; Bariche et al. (2009). — Lebanon material: AUBM, USNM.

Status in Syria: [Native]. — Bouri sheli. — First record from Syria by Beckman (1962: 165) as *Liza saliens*; confirmed by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: None.

Status in Türkiye: [Native]. — Kefal, kokar balığı-Kastros. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Liza saliens*; Geldiay and Balık (2007) as *Mugil (Protomegil) saliens*; Fricke et al. (2007) as *Liza saliens*; Kuru et al. (2014) as *Liza saliens*; Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Ellochelon vaigiensis (Quoy & Gaimard 1825)

Common name: Squaretail mullet

Taxonomy: Original description: *Mugil vaigiensis* Quoy & Gaimard 1825: 337, pl. 59 (fig. 2) [Waigiou [Pulau Waigeo, Papua Barat Province, Indonesia, western Pacific]; holotype (unique): MNHN A-3641].

Middle Eastern synonyms: *Liza vaigiensis* (Quoy & Gaimard 1825).

Revisions: None.

Illustrations: Randall (1995: 236, fig.).

Distribution. General distribution: Red Sea; Indo-West Pacific: northern Eastern Cape and KwaZulu-Natal (South Africa), East Africa, Persian Gulf, Socotra (Yemen), Madagascar and western Mascarenes (La Réunion) east to Marshall Islands, Gambier Islands and Marquesas Islands (French Polynesia), north to southern Japan, south to Western Australia, New South Wales (Australia), New Caledonia and Rapa (French Polynesia).

Distribution in the Middle East: Iran.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages.

Habitat: This species is found in coastal waters in lagoons, marshes, estuaries, and lower courses of rivers. It spawns at sea. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are no threats to this species on a global scale. — High sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Biah. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Liza vaigiensis*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 1-Persis, 2-Hormuz, 4-Tigris. — Iran material: ZM-CBSU.

***Mugil cephalus* Linnaeus 1758**

Common name: Flathead mullet

Taxonomy: Original description: *Mugil cephalus* Linnaeus 1758: 316 [European sea, Europe; syntypes: NRM 43 (1), 44 (2), 143 (1)].

Middle Eastern synonyms: None.

Revisions: Thomson (1997: 483).

Illustrations: Ben-Tuvia in Whitehead et al. (1986: 1202, fig.).

Distribution. General distribution: Nearly circumglobal in temperate and tropical seas and estuaries (including Gulf of Mexico, Mediterranean Sea, Sea of Marmara, Black Sea, Red Sea, Persian Gulf, Sea of Japan); introduced elsewhere.

Distribution in the Middle East: Iran, Iraq, Israel, Lebanon, Jordan Syria, Türkiye, Yemen.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River, 442-Upper Tigris and Euphrates, 434-Kura-South Caspian Drainages, 450-Turan Plain, 452-Caspian Marine, 701-Baluchistan.

Habitat: This species is a euryhaline, pelagic nearshore species that sometimes forages in lagoons, estuaries, and lower courses of rivers and can tolerate freshwater. It inhabits inshore marine waters, estuaries, lagoons, and rivers, where it can tolerate wide ranges of temperature and salinity. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Kefal mahi-e sarpahn. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Mousavi-Sabet et al. (2023); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 3-Makran, 6-Caspian Sea. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Biah. — First record from Iraq by Mahdi (1971); confirmed by Jawad (2021); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

Status in Israel: [Native]. — Kiphon buri. — First record from Israeli freshwater by Yashouv and Brener (1961); confirmed by Goren and Ortal (1999: 4); Golani and Mires (2000); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 3-Kinneret Basin. — Israel material: HUI.

Status in Lebanon: [Native]. — Bouri aftas. — First record from Lebanon by Gruvel (1931); confirmed by George et al. (1964); Mouneimné (1977, 2002). — Lebanon material: AUBM, USNM.

Status in Syria: [Native]. — Bouri aphtas. — First record from Syria by Beckman (1962: 165); confirmed by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: None.

Status in Türkiye: [Native]. — Haskefal-Topan kefal. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-

Yeşilırmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Status in Yemen: [Native]. — Beyah. — First record from Yemen by Attaala and Salem Rubaia (2005); confirmed by Freyhof et al. (2020); Esmaili and Hamidan (2023). — Yemen material: None.

Remarks. This species probably founds in Saudi Arabia, Oman, UAE, Kuwait.

***Oedalechilus labeo* (Cuvier 1829)**

Common name: Boxlip mullet

Taxonomy: Original description: *Mugil labeo* Cuvier 1829: 233 [Mediterranean Sea; lectotype: MNHN A-3606; lectotype selected by Blanc and Hureau (1971: 692)].

Middle Eastern synonyms: None.

Revisions: Durand et al. (2012: 693).

Illustrations: Ben-Tuvia in Whitehead et al. (1986: 1203, fig.).

Distribution. General distribution: Mediterranean Sea; Sea of Marmara; eastern Atlantic: Portugal, northern Morocco, and Madeira; introduced elsewhere.

Distribution in the Middle East: Israel, Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 435-Sinai, 436-Coastal Levant, 437-Orontes.

Habitat: This species is a benthopelagic, neritic species found inshore, at the mouths of rivers and sewage effluents, but not entering brackish or freshwater. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are no known major threats for this species. It may appear in bycatch. This is a commercial species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Israel: [Native]. — Kiphon siftani. — First record from Israel by Goren and Ortal (1999); listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin. — Israel material: HUI.

Status in Lebanon: [Native]. — Bouri chelan. — First record from Lebanon by Gruvel (1931) as *Mugil labeo*; confirmed by George et al. (1964), Mouneimné (1977, 2002); Harmelin-Vivien et al. (2005); Fanelli et al. (2015). — Lebanon material: AUBM, USNM.

Status in Syria: [Native]. — Bouri chelan. — First record from Syria by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 6-Coastal. — Syrian material: MSL.

Status in Türkiye: [Native]. — Dudaklı kefal. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007) as *Mugil (Oedalechilus) labeo*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilırmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

***Planiliza abu* (Heckel 1843)**

Common name: Abu mullet

Taxonomy: Original description: *Mugil abu* Heckel 1843: 1097 (107) [Tigris River, near Mosul, Iraq; syntypes: NMW 9224-30 (7), 67868 (2)].

Middle Eastern synonyms: *Chelon abu* (Heckel 1843); *Liza abu* (Heckel 1843).

Revisions: Thomson (1997: 513) as *Liza abu*.

Illustrations: Randall (1995: 234, fig.) as *Chelon abu*.

Distribution. General distribution: Northwestern Indian Ocean: Persian Gulf and adjacent Euphrates and Tigris River drainages.

Distribution in the Middle East: Iran, Iraq, Saudi Arabia, Syria, and Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia, 437-Orontes, 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages.

Habitat: This species is a freshwater mullet, found in streams, rivers, drains, channels, canals, lakes, reservoirs, and ponds, including fish farms. It is found in schools. It is found in surface waters and the submerged vegetation of lakes and marshes, preferring a gentle flow of water, and it enters deeper waters in December and January, especially in cold winters. — Freshwater, brackish, marine.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: CLI, EUT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iran: [Native]. — Mahi biah. — Listed in previous checklists from Iran by Esmaili et al. (2010a) as *Liza abu*; Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 2-Hormuz, 13-Lake Maharlu. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — Khashni. — First record from Iraq by Heckel (1843); confirmed by Al-Hassan et al. (1989); listed by Çiçek et al. (2023b). — Distribution in River Basin: 1-Tigris, 2-Euphrates, 3-Shatt al-Arab. — Iraq materials: None.

Status in Saudi Arabia: [Exotic]. — Baiah. — Recorded from Saudi Arabia by Freyhof et al. (2020) and confirmed by Esmaili and Hamidan (2023). — Saudi Arabia material: None.

Status in Syria: [Native]. — Bouri nahri. — First record from Syria by Beckman (1962: 160) as *Liza abu*; confirmed by Krupp and Schneider (1991b: 73) as *Liza abu*; listed by Saad et al. (2023). — Distribution in River Basin: 1-Dajleh and Khabour, 2-Euphrates and Aleppo. — Syrian material: MNHN, MSL.

Status in Türkiye: [Native]. — Kefal. — Listed in previous checklists from Türkiye by Kuru (2004) as *Liza abu*; Geldiay and Balık (2007) as *Mugil (Liza) abu*; Fricke et al. (2007); Kuru et al. (2014) as *Liza abu*; Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 19-Asi, 20-Ceyhan, 21-Fırat-Dicle. — Turkish material: None.

***Planiliza carinata* (Valenciennes 1836)**

Common name: Keeled mullet

Taxonomy: Original description: *Mugil carinatus* Valenciennes (ex Ehrenberg) in Cuvier & Valenciennes 1836: 148 [Red Sea; lectotype: MNHN A-3643].

Middle Eastern synonyms: *Liza carinata* (Valenciennes 1836); *Liza carinatus* (Valenciennes 1836); *Chelon carinata* (Valenciennes 1836); *Chelon carinatus* (Valenciennes 1836).

Revisions: Thomson (1997: 518) as *Liza carinata*.

Illustrations: Randall (1995: 234, fig.) as *Chelon abu*.

Distribution. General distribution: Red Sea; western Indian Ocean: East Africa, Seychelles, Madagascar, and Persian Gulf east to India; immigrated into eastern Mediterranean Sea through Suez Canal (Red Sea immigrant).

Distribution in the Middle East: Iraq.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates.

Habitat: This species occurs in shallow coastal waters and in brackish and freshwater regions of rivers. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iraq: [Native]. — None. — First record from Iraq by Mohamed and Hameed (2019); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

***Planiliza klunzingeri* (Day 1888)**

Common name: Mullet

Taxonomy: *Planiliza klunzingeri* Day 1888: 264 [Mumbai, India; lectotype: ZSI 1407].

Middle Eastern synonyms: *Liza klunzingeri* (Day 1888); *Chelon klunzingeri* (Day 1888).

Revisions: None.

Illustrations: Randall (1995: 235, fig.) as *Chelon klunzingeri*.

Distribution. General distribution: Western Indian Ocean: Persian Gulf east to Mumbai (India).

Distribution in the Middle East: Iraq.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates.

Habitat: This species inhabits coral reefs and occurs in coastal waters in marine, freshwater, and brackish habitats. It forms schools in shallow coastal waters and enters lagoons, marshes, estuaries, and the lower courses of rivers to feed. — Brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iraq: [Native]. — None. — First record from Iraq by Hussain et al. (2009); confirmed by Abood (2010); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

***Planiliza macrolepis* (Smith 1846)**

Common name: Largescale mullet

Taxonomy: Original description: *Mugil macrolepis* Smith 1846: no pagination, pl. 28 (fig. 2) [Rivers and freshwater lakes, South Africa; holotype (unique): BMNH 1859.5.7.56 (dry)].

Middle Eastern synonyms: *Liza macrolepis* (Smith 1846); *Chelon macrolepis* (Smith 1846).

Revisions: Thomson (1997: 524) as *Liza macrolepis*.

Illustrations: Harrison and Senou (1999: 2088, fig.) as *Liza macrolepis*; Esmaeili et al. (2022b: 486, fig. 42).

Distribution. General distribution: Indo-West Pacific: Eastern Cape and KwaZulu-Natal (South Africa), East Africa, Persian Gulf, Socotra (Yemen), Seychelles, Madagascar, and eastern Mascarenes (Rodrigues) east to Tuamotu Archipelago and Marquesas Islands (French Polynesia), north to southern Korea and Osumi Islands (southern Japan), south to New Caledonia, Aitutaki (Cook Islands) and Austral Islands (French Polynesia).

Distribution in the Middle East: Iraq and Oman.

Distribution in Ecoregions: 441-Lower Tigris and Euphrates, 443-Oman Mountains.

Habitat: This species occurs in shallow coastal waters and in brackish and freshwater regions of rivers. — Freshwater, brackish, marine.

Economic importance: Locally consumed, but of no commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are no known major threats to this species. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Iraq: [Native]. — None. — First record from Iraq by Al-Hassan and Hussain (1985); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

Status in Oman: [Native]. — Baiah. — First record from Oman by Esmaeili et al. (2022a) and confirmed by Esmaeili and Hamidan (2023). — Oman material: ZM-CBSU.

Planiliza subviridis* (Valenciennes 1836)*Common name:** Greenback mullet**Taxonomy:** Original description: *Mugil subviridis* Valenciennes in Cuvier & Valenciennes 1836: 115 [Ganges River, Malabar, India; syntypes: MNHN A-3649 (now 1) Mumbai, A-3650 (1) Ganges, A-3651 (1) Puducherry, 1990-0132 (ex MNHN A-3649) (1); ?ZMB (ex MNHN) 1834 (1) Mumbai].**Middle Eastern synonyms:** *Chelon subviridis* (Valenciennes 1836); *Liza subviridis* (Valenciennes 1836).**Revisions:** Thomson (1997: 533) as *Chelon subviridis*.**Illustrations:** Harrison and Senou (1999: 2093, fig.) as *Chelon subviridis*.**Distribution. General distribution:** Red Sea; Indo-West Pacific: Eastern Cape and KwaZulu-Natal (South Africa), East Africa, Persian Gulf and Socotra (Yemen) east to Philippines, Tonga, and Samoa, north to southern Japan, south to Shark Bay (Western Australia), New South Wales (Australia) and New Caledonia.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates.**Habitat:** This species inhabits coral reefs and occurs in coastal waters in marine, freshwater, and brackish habitats. It forms schools in shallow coastal waters and enters lagoons, marshes, estuaries, and the lower courses of rivers to feed. — Freshwater, brackish, marine.**Economic importance:** Locally consumed, but of no commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, COM, EUT, FIT, TOU. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Kafal mahi-e posht sabz. — Listed in previous checklists from Iran by Esmaeili et al. (2010a) as *Liza subviridis*; Esmaeili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis. — Iran material: ZM-CBSU.**Status in Iraq:** [Native]. — None. — First record from Iraq by Al-Nasiri et al. (1976); confirmed by Al-Hassan and Madhi (1987); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: Fish Collection of the Department of Fisheries and Marine Resources, College of Agriculture, University of Basrah, Basrah, Iraq; Fish collection at the Marine Science Centre, University of Basrah, Basrah, Iraq.**Blenniiformes****Blenniidae Rafinesque 1810 (cometooth blennies)****Salariinae Gill 1859 (salariai blennies)*****Salaria pavo* (Risso 1810)****Common name:** Peacock blenny**Taxonomy:** Original description: *Blennius pavo* Risso 1810: 13 [Nice, France, northwestern Mediterranean Sea; no types known].**Middle Eastern synonyms:** *Lipophrys pavo* (Risso 1810).**Revisions:** Bath (1996: 92).**Illustrations:** Zander in Whitehead et al. (1986: 1104) as *Lipophrys pavo*.**Distribution. General distribution:** Mediterranean Sea; Sea of Marmara; Black Sea; eastern Atlantic: Bay of Biscay south to Morocco, including Madeira and Canary Islands.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 437-Orontes.**Habitat:** This species occurs in the intertidal zone and shallow bottoms, on rocks or sand between pebbles and vegetation. This species is tolerant to different salinities (euryhaline) and is more commonly found in brackish waters down to 5ppt. — Freshwater.**Economic importance:** No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: There are no known major threats for this species. — Moderate sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Moderate priority for conservation action.

Status in Türkiye: [Endemic]. — Horozbina. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007) as *Blennius pavo*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Salariopsis burcucae Yoğurtçuoğlu, Kaya, Atalay, Ekmekçi & Freyhof 2023

Common name: Freshwater blenny

Taxonomy: Original description: *Salariopsis burcucae* Yoğurtçuoğlu, Kaya, Atalay, Ekmekçi & Freyhof 2023: 90, fig. 3-5 [Türkiye: Adana prov.: Körkün River at Hacılı, 37.2947 35.1539; holotype: FFR 4260].

Middle Eastern synonyms: None.

Revisions: None.

Illustrations: Yoğurtçuoğlu et al. (2023: fig. 3-5).

Distribution. General distribution: Middle Asia: Mediterranean coastal watersheds from Antalya (Türkiye) to Israel.

Distribution in the Middle East: Israel, Jordan Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 432-Southern Anatolia, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River.

Habitat: This species is mainly a riverine species that can also be found in lakes. It likes rubble and gravel substrates with moderate to high current velocities and stays in the deepest part. The male makes a nest under large stones. Larvae are pelagic. — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: NE (2023).

Threats: Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.

Status in Israel: [Native]. — Karnun ha'naharot. — Recorded from Israel in original description by Yoğurtçuoğlu et al. (2023); previous record from Israel by Lortet (1883: 129, 130) as *Blennius varus* and *B. lupulus*; Tristram (1884: 162) as *Blennius varus* and *B. lupulus*; Steinitz (1953: 223) as *Blennius vulgaris*; Goren (1974: 101) as *Salaria fluviatilis*, Goren and Ortal (1999: 4) as *Salaria fluviatilis*; listed by Çiçek et al. (2023c). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin, 3-Kinneret Basin. — Israel material: HUI.

Status in Lebanon: [Native]. — None. — First record from Lebanon by George et al. (1964) as *Blennius inaequalis* and *Blennius fluviatilis*; confirmed by Mouneimné (1977, 2002) as *Blennius fluviatilis*; Bariche et al. (2009). — Lebanon material: AUBM.

Status in Syria: [Native]. — None. — Recorded from Syria in original description by Yoğurtçuoğlu et al. (2023); previous record from Syria by Beckman (1962: 52) as *Blennius vulgaris*; Krupp (1987) as *Blennius fluviatilis*; listed by Saad et al. (2023). — Distribution in River Basin: 4-Orontes, 5-Barada and Awaj, 6-Coastal, 7-Al-Yarmouk. — Syrian materials: FFR.

Status in Türkiye: [Native]. — Tatlı su horozbinası. — Recorded from Türkiye in original description by Yoğurtçuoğlu et al. (2023); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 9-Antalya, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi. — Turkish material: None.

Salariopsis fluviatilis* (Asso y del Rio 1801)*Common name:** Freshwater blenny**Taxonomy:** Original description: *Blennius fluviatilis* Asso y del Rio 1801: 31 [Ebro River, Zaragoza, Spain; no types known].**Middle Eastern synonyms:** *Salaria fluviatilis* (Asso y del Rio 1801); *Ichthyocoris fluviatilis* (Asso y del Rio 1801); *Blennius vulgaris* Pollini 1816.**Revisions:** Duquenne-Delobel et al. (2022: 37) as *Ichthyocoris fluviatilis*; Azzena et al. (2022: 4).**Illustrations:** Goren (1974: fig. 29).**Distribution. General distribution:** Europe, Middle East, North Africa: Marmara and Egean Seas watersheds in Türkiye.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia.**Habitat:** This species is mainly a riverine species that can also be found in lakes. It likes rubble and gravel substrates with moderate to high current velocities and stays in the deepest part. The male makes a nest under large stones. Larvae are pelagic. — Freshwater, brackish, marine.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** ABS, CLI, CON, COM, HAB, EUT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.**Status in Türkiye:** [Native]. — Tatlı su horozbinası. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Salaria fluviatilis*; Geldiay and Balık (2007) as *Blennius fluviatilis*; Fricke et al. (2007) as *Salaria fluviatilis*; Kuru et al. (2014) as *Salaria fluviatilis*; Çiçek et al. (2015, 2020) as *Salaria fluviatilis*; Çiçek et al. (2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz. — Turkish material: None.***Salariopsis renatorum* Yoğurtçuoğlu, Kaya, Atalay, Ekmekçi & Freyhof 2023****Common name:** Freshwater blenny**Taxonomy:** Original description: *Salariopsis renatorum* Yoğurtçuoğlu, Kaya, Atalay, Ekmekçi & Freyhof 2023: 96, fig. 8-11 [Kahramanmaraş prov.: Aksu at Pazarcık, Türkiye, 37.5390 37.3480; holotype: FFR FFR 4262].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Yoğurtçuoğlu et al. (2023: fig. 8-11).**Distribution. General distribution:** Middle Asia: Ceyhan River basin (Türkiye).**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 432-Southern Anatolia.**Habitat:** This species is mainly a riverine species that can also be found in lakes. It likes rubble and gravel substrates with moderate to high current velocities and stays in the deepest part. — Freshwater, brackish, marine.**Economic importance:** No commercial importance.**Conservation:** IUCN: NE (2023).**Threats:** Unknown. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Stable. — Low priority for conservation action.**Status in Türkiye:** [Endemic]. — Tatlı su horozbinası. — Recorded from Türkiye in original description by Yoğurtçuoğlu et al. (2023); listed in previous checklists from Türkiye by Çiçek et al. (2023a). — Distribution in River Basin: 20-Ceyhan. — Turkish material: None.

Perciformes**Percoidei****Percidae Rafinesque 1815 (perches and darters)****Percinae Rafinesque 1815 (freshwater perches)*****Gymnocephalus cernua* (Linnaeus 1758)****Common name:** Ruffe**Taxonomy:** Original description: *Perca cernua* Linnaeus 1758: 294 [European lakes; syntypes: BMNH 1853.11.12.5 [Gronovius coll.] (1, skin), LS 2 (left half-skin)].**Middle Eastern synonyms:** *Acerina cernua* (Linnaeus 1758).**Revisions:** Berg (1949: 1046) as *Acerina cernua*.**Illustrations:** Kottelat and Freyhof (2007: 529, fig.).**Distribution. General distribution:** Europe. Introduced elsewhere.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace.**Habitat:** This species is found in eutrophic lakes, lowlands, and piedmont rivers. Prefers still or slow-flowing water with a soft bottom, without vegetation. Most abundant are estuaries of large rivers, brackish lakes with salinities up to 10-12‰ and reservoirs. Generally, abundance increases with increased eutrophication. — Freshwater.**Economic importance:** Locally commercially important.**Reasons of introduction:** Unknown: Inadvertently introduced by transboundary waterways for no known reason or method.**Conservation:** Not relevant (introduced species).**Status in Türkiye:** [Endemic]. — Trakya levreği. — Listed in previous checklists from Türkiye by Deveciyan (1926); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara. — Turkish material: None.***Perca fluviatilis* Linnaeus 1758****Common name:** European perch**Taxonomy:** Original description: *Perca fluviatilis* Linnaeus 1758: 289 [Europe; syntypes: BMNH 1853.11.12.3 (1, left half-skin), 1853.11.12.2 (1, right half-skin)].**Middle Eastern synonyms:** None.**Revisions:** Berg (1949: 1032).**Illustrations:** Berg (1949: 1033, fig. 756).**Distribution. General distribution:** Europe. Introduced elsewhere.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 434-Kura-South Caspian Drainages.**Habitat:** This species is found in a very wide range of habitats, from estuarine lagoons and lakes of all types to medium-sized streams. — Freshwater, brackish.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Soof mahi-e haji Tarkhan. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.**Status in Türkiye:** [Native]. — Tatlı su levreği. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 12-Sakarya, 13-Batı Karadeniz, 15-Kızılırmak, 20-Ceyhan. — Turkish materials: None.

Luciopercinae Jordan & Evermann 1896 (pikeperches and Danube perches)***Sander lucioperca* (Linnaeus 1758)****Common name:** Zander**Taxonomy:** Original description: *Perca lucioperca* Linnaeus 1758: 289 [European lakes; no types known].**Middle Eastern synonyms:** *Lucioperca lucioperca* (Linnaeus 1758); *Stizostedion lucioperca* (Linnaeus 1758).**Revisions:** None.**Illustrations:** Jouladeh-Roudbar et al. (2020: 283, fig. 516).**Distribution. General distribution:** Eastern and central Europe east to Aral Sea drainages; introduced elsewhere.**Distribution in the Middle East:** Iran and Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 431-Central Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 442-Upper Tigris and Euphrates, 445-Orumiyeh, 447-Namak, 450-Turan Plain.**Habitat:** This species occurs in large, turbid rivers and eutrophic lakes, brackish coastal lakes, and estuaries. — Freshwater, brackish.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Soof mahi-e ordaki. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 4-Tigris, 14-Lake Orumiyeh, 15-Namak Lake, 12-Kor River. — Iran material: ZM-CBSU.**Status in Türkiye:** [Native]. — Sudak/Tatlı su levreği. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007) as *Stizostedion lucioperca*; Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 10-Burdur, 11-Akarçay, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 16-Konya, 17-Doğu Akdeniz, 18-Seyhan, 20-Ceyhan, 22-Doğu Karadeniz, 23-Çoruh. — Turkish materials: None.***Sander marinus* (Cuvier 1828)****Common name:** Estuarine perch**Taxonomy:** Original description: *Lucioperca marina* Cuvier in Cuvier & Valenciennes 1828: 120 [Black Sea; Sea of Azov; no types known].**Middle Eastern synonyms:** *Lucioperca lucioperca* (Linnaeus 1758); *Stizostedion lucioperca* (Linnaeus 1758).**Revisions:** Berg (1949: 1020) as *Lucioperca lucioperca*.**Illustrations:** Berg (1949: 1021, fig. 748) as *Lucioperca lucioperca*.**Distribution. General distribution:** Northern Black Sea and Caspian Sea. Introduced in Persian Gulf.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages, 450-Turan Plain.**Habitat:** This species lives in the brackish waters of the Black and Caspian Seas. It spawns only in seas but does enter the lower portions of rivers. It lives near the bottom on hard substrates in the coastal zone. — Freshwater, brackish.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).

Threats: AQU, CON, EUT, FIT, HAB. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Native]. — Soof mahi-e daryayi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.

Gasterosteidae Bonaparte 1831

***Gasterosteus aculeatus* Linnaeus 1758**

Common name: Three-spined stickleback

Taxonomy: Original description: *Gasterosteus aculeatus* Linnaeus 1758: 295 [Europe; syntypes: ZSL 29 (left half-skin), 30-31 (2, right half-skins)].

Middle Eastern synonyms: *Gasterosteus gymnurus* Cuvier 1829.

Revisions: None.

Illustrations: Kottelat and Freyhof (2007: 492, fig.).

Distribution. General distribution: North Pacific; Atlantic; Baltic Sea; North Sea; Mediterranean Sea; Sea of Marmara; Black Sea and adjacent watersheds; Sea of Japan; widespread in northern Europe, northern Asia, and North America.

Distribution in the Middle East: Iran, Israel, Lebanon, Syria, and Türkiye.

Distribution in Ecoregions: 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 434-Kura-South Caspian Drainages, 435-Sinai, 436-Coastal Levant, 437-Orontes, 448-Kavir and Lut Deserts, 450-Turan Plain, 631-Upper Amu Darya.

Habitat: This species is typically found in quiet, weedy pools and backwaters. It is also found in the marginal vegetation of streams and over sand and mud bottom substrates. Marine populations are pelagic and usually found inshore along the coast, in estuaries, and in coastal lagoons. In some lakes, two morphologically and ecologically distinct forms may occur, differing in habitat and morphology (one littoral, the other mainly limnetic). — Freshwater, brackish, marine.

Economic importance: No commercial importance.

Conservation: IUCN: LC (IUCN, 2023).

Threats: COM, EUT. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.

Status in Iran: [Exotic]. — Mahi-e sekhare. — Listed in previous checklists from Iran by Esmaili et al. (2017a, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Mousavi-Sabet et al. (2023); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 6-Caspian Sea, 7-Dasht-e Kavir, 19-Hari River. — Iran material: ZM-CBSU.

Status in Syria: [Native]. — None. — First record from Syria by Gruvel (1931); confirmed by Beckman (1962: 154) as *Gasterosteus argyropomus*, Krupp and Coad (1985: 36); Krupp and Schneider (1991b); Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 6-Coastal. — Syrian material: CMN.

Status in Türkiye: [Native]. — Dikence balığı. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.

Pungitius platygaster* (Kessler 1859)*Common name:** Ukrainian stickleback**Taxonomy:** Original description: *Gasterosteus platygaster* Kessler 1859: 202 [Odessa and side arm of Dnieper River in Aleschki, Ukraine; syntypes: BMNH 1897.7.5.2 (ex ZIN) (2), ZIN 2350-51 (6, 6+)].**Middle Eastern synonyms:** *Gasterosteus platygaster* var. *caucasicus* Kessler 1877; *Gasterosteus platygaster* var. *aralensis* Kessler 1877.**Revisions:** Esmaeili et al. (2023).**Illustrations:** Kottelat and Freyhof (2007: 492, fig.).**Distribution. General distribution:** Eurasia: Black, Caspian and Aral Sea basins.**Distribution in the Middle East:** Iran.**Distribution in Ecoregions:** 434-Kura-South Caspian Drainages.**Habitat:** This species inhabits swamps and slow-flowing streams with dense vegetation; occasionally enters brackish water. — Freshwater, brackish.**Economic importance:** No commercial importance.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Iran:** [Native]. — Mahi-e nohkhare. — Listed in previous checklists from Iran by Esmaeili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaeili (2024). — Distribution in River Basin: 6-Caspian Sea. — Iran material: ZM-CBSU.**Centrarchiformes****Centrarchidae Bleeker 1859****Lepominae Gill 1864*****Lepomis gibbosus* (Linnaeus 1758)****Common name:** Pumpkinseed**Taxonomy:** Original description: *Perca gibbosa* Linnaeus 1758: 292 [Carolinas, America; no types known].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Lee et al. (1980: 593, fig.).**Distribution. General distribution:** North America: Atlantic drainages, Canada, and U.S.A.; introduced elsewhere.**Distribution in the Middle East:** Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia.**Habitat:** This species inhabits lakes, reservoirs, ponds, sloughs, and sluggish streams; prefers quiet, clear water with aquatic vegetation and some organic debris. Eggs are laid in a nest constructed by the male in shallow water (less than 1 m deep) on bottoms of sand, gravel, or woody debris. — Freshwater.**Economic importance:** Valuable for the aquarium trade.**Reasons of introduction:** Ornamental fish industry.**Conservation:** Not relevant (introduced species).**Status in Türkiye:** [Exotic]. — Güneş levreği. — Listed in previous checklists from Türkiye by Kuru (2004); Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2022a, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 12-Sakarya. — Turkish material: None.

Acanthuriformes**Moronidae Jordan & Evermann 1896 (white basses or temperate basses)*****Dicentrarchus labrax* (Linnaeus 1758)****Common name:** European seabass**Taxonomy:** Original description: *Perca labrax* Linnaeus 1758: 290 [Southern Europe, Mediterranean Sea; syntypes: BMNH 1853.11.12.1 (1, skin)].**Middle Eastern synonyms:** *Morone labrax* (Linnaeus 1758).**Revisions:** None.**Illustrations:** Tortonese in Whitehead et al. (1986: 794, fig.).**Distribution. General distribution:** Western Baltic Sea; North Sea; Mediterranean Sea; Sea of Marmara; Black Sea; eastern Atlantic: Norway and Iceland south to Senegal, including Madeira; Red Sea: Gulf of Suez (Mediterranean Sea immigrant).**Distribution in the Middle East:** Israel, Lebanon, Syria, and Türkiye.**Distribution in Ecoregions:** 423-Thrace, 429-Western Anatolia, 430-Northern Anatolia, 432-Southern Anatolia, 433-Western Transcaucasia, 435-Sinai, 436-Coastal Levant, 437-Orontes, 438-Jordan River.**Habitat:** This species is pelagic, near shore, and sometimes in lagoons and estuaries. It spawns at sea. — Freshwater, brackish, marine.**Economic importance:** Commercially important.**Conservation:** IUCN: LC (IUCN, 2023).**Threats:** No major threats known. — Low sensitivity to human activities. — Not considered a keystone species. — Decline status: Unknown. — Low priority for conservation action.**Status in Israel:** [Native]. — Lbrak halak. — First record in freshwater from Israel by Yashouva (1969); confirmed by Goren and Ortal (1999); Golani and Mires (2000); listed by Çiçek et al. (2023a). — Distribution in River Basin: 1-Western Basin, 2-Dead Sea Basin. — Israel material: HUJ.**Status in Lebanon:** [Native]. — Brak. — First record from Lebanon by Gruvel (1931); confirmed by George et al. (1964); Mouneimné (1977, 2002). — Lebanon material: AUBM, BMNH.**Status in Syria:** [Native]. — Brak/Ghenbar. — First record from Syria by Saad (2005); listed by Saad et al. (2023). — Distribution in River Basin: 6-Coastal. — Syrian material: MSL.**Status in Türkiye:** [Native]. — Levrek, deniz levreği. — Listed in previous checklists from Türkiye by Bilecenoğlu et al. (2002, 2014); Kuru (2004) as *Morone labrax*; Geldiay and Balık (2007); Fricke et al. (2007); Kuru et al. (2014); Çiçek et al. (2015, 2020, 2023a). — Distribution in River Basin: 1-Meriç-Ergene, 2-Marmara, 3-Susurluk, 4-Kuzey Ege, 5-Gediz, 6-Küçük Menderes, 7-Büyük Menderes, 8-Batı Akdeniz, 9-Antalya, 12-Sakarya, 13-Batı Karadeniz, 14-Yeşilirmak, 15-Kızılırmak, 17-Doğu Akdeniz, 18-Seyhan, 19-Asi, 20-Ceyhan, 21-Fırat-Dicle, 22-Doğu Karadeniz, 23-Çoruh. — Turkish material: None.**Sparidae Rafinesque 1818 (porgys and seabreams)*****Acanthopagrus arabicus* Iwatsuki 2013****Common name:** Arabian yellowfin seabream**Taxonomy:** Original description: *Acanthopagrus arabicus* Iwatsuki 2013: 83, fig. 4 (b) [Western Coast of Qatar (market specimen); holotype: MUFS 33840].**Middle Eastern synonyms:** None.**Revisions:** None.**Illustrations:** Iwatsuki (2013: 83, fig. 4); Esmaili et al. (2014d: 24, figs. 2-5).**Distribution. General distribution:** Northwestern Indian Ocean: Persian Gulf and Oman.**Distribution in the Middle East:** Iran and Iraq.**Distribution in Ecoregions:** 441-Lower Tigris and Euphrates, 442-Upper Tigris and Euphrates, 451-Northern Hormuz Drainages.**Habitat:** This species occurs throughout the Gulf in shallow waters. — Freshwater, brackish, marine.

Economic importance: Commercially important.

Conservation: IUCN: LC (IUCN, 2023).

Threats: FIT. — High sensitivity to human activities. — Keystone species. — Decline status: Unknown. — Moderate priority for conservation action.

Status in Iran: [Native]. — Shanak mahi-e Arabi. — Listed in previous checklists from Iran by Esmaili et al. (2010a, 2017, 2018); Jouladeh-Roudbar et al. (2020); Eagderi et al. (2022); Sayyadzadeh and Esmaili (2024). — Distribution in River Basin: 4-Tigris, 1-Persis, 2-Hormuz. — Iran material: ZM-CBSU.

Status in Iraq: [Native]. — None. — First record from Iraq by Mohamed and Abood (2017a); listed by Çiçek et al. (2023b). — Distribution in River Basin: 3-Shatt al-Arab. — Iraq materials: None.

The confirmed freshwater fishes comprise 727 species and among these, 470 species (64.7%) are endemic to the Middle East, of these 352 species are endemic for only one country, and 56 species (7.7%) are alien. The orders with the largest numbers of species in the ichthyofauna of the Middle East are Cypriniformes (472 species, 64.9%), followed by the Gobiiformes (55 species, 7.6%), Cyprinodontiformes (49 species, 6.7%), Salmoniformes (30 species, 4.1%), Cichliformes (21 species, 2.9%), Clupeiformes (20 species, 2.8%), and Siluriformes (22 species, 3.0%). At the family level, the Leuciscidae has the greatest number of species (159 species; 21.9% of the total species), followed by Cyprinidae (140 species, 19.3%), and Nemacheilidae (112 species, 15.4%), Gobiidae (53 species, 7.3%), Aphaniidae (42 species, 5.8%), and Cobitidae (34 species, 4.7%).

According to IUCN Red List criteria, among 670 naturally distributed species (alien species not included), six fish species are extinct (EX), one species is extinct in the wild (EW) and 133 species (19.9%) are categorised as threatened extinctions, including 38 (5.7%) are CR, 58 (8.6%) are EN, and 37 (5.5%) are VU. IUCN categories have not been evaluated (NE) for over one third of the species (266 species).

Based on the present checklist, we document the presence of a total of 727 species from the Middle Eastern inland waters. Out of these species distributed in the Middle East, 134 species have economic importance, 46 species have regional economic value, while 307 species have no economic importance: Although a total of 174 species are not of economic importance, they are caught and consumed as food by local people. Among the species that are generally found as exotic, 22 species are aquarium fish species while 44 species are potentially aquarium species. Local names of the species are also included in the checklist. However, it has not been overlooked that the local names of the species are a major deficiency. It was observed that while large-sized economic species were given names, small fish species without economic value were generally not given local names. For this reason, it was revealed that there is a need for studies to determine the local names.

The ichthyofauna diversity and exotic and endemic species distribution of the Middle Eastern countries are given in Table 1. Turkey is the country with the highest number of both species' diversity and endemic species, followed by Iran, Syria, and Iraq.

The distribution of endemic and exotic species by ecoregion is given in Figure 1. According to this, the highest species diversity and number of endemic species (for Middle East not ecoregion) was determined in 442-Upper Tigris and Euphrates. Due to its extensive catchment basin, this ecoregion encompasses regions with diverse climatic, geographical, topographical, and geological attributes. These variations contribute to the process of speciation and the presence of a diverse range of species. The 442-Upper Tigris and Euphrates is succeeded by the ecoregions in Anatolia. Due to the significant biodiversity in Anatolia, the ecoregions in this area exhibit a high level of endemism and richness.

Table 1. Endemic, exotic, and total number of fish species in the Middle Eastern countries

Countries	Endemic		Exotic		Total
	#	%	#	%	#
Bahrain	1	33,3	1	33,3	3
Iran	108	35,1	38	12,3	308
Iraq	4	4,1	25	25,8	97
Israel	3	5,3	21	36,8	57
Jordan	1	4,8	7	33,3	21
Kuwait	0	0,0	0	0,0	1
Lebanon	2	5,7	10	28,6	35
Oman	5	21,7	3	13,0	23
Qatar	0	0,0	0	0,0	1
Saudi Arabia	3	11,1	11	40,7	27
Syria	6	5,6	11	10,2	108
UAE	0	0,0	4	44,4	9
Türkiye	215	50,5	21	4,9	426
Yemen	4	21,1	2	10,5	19

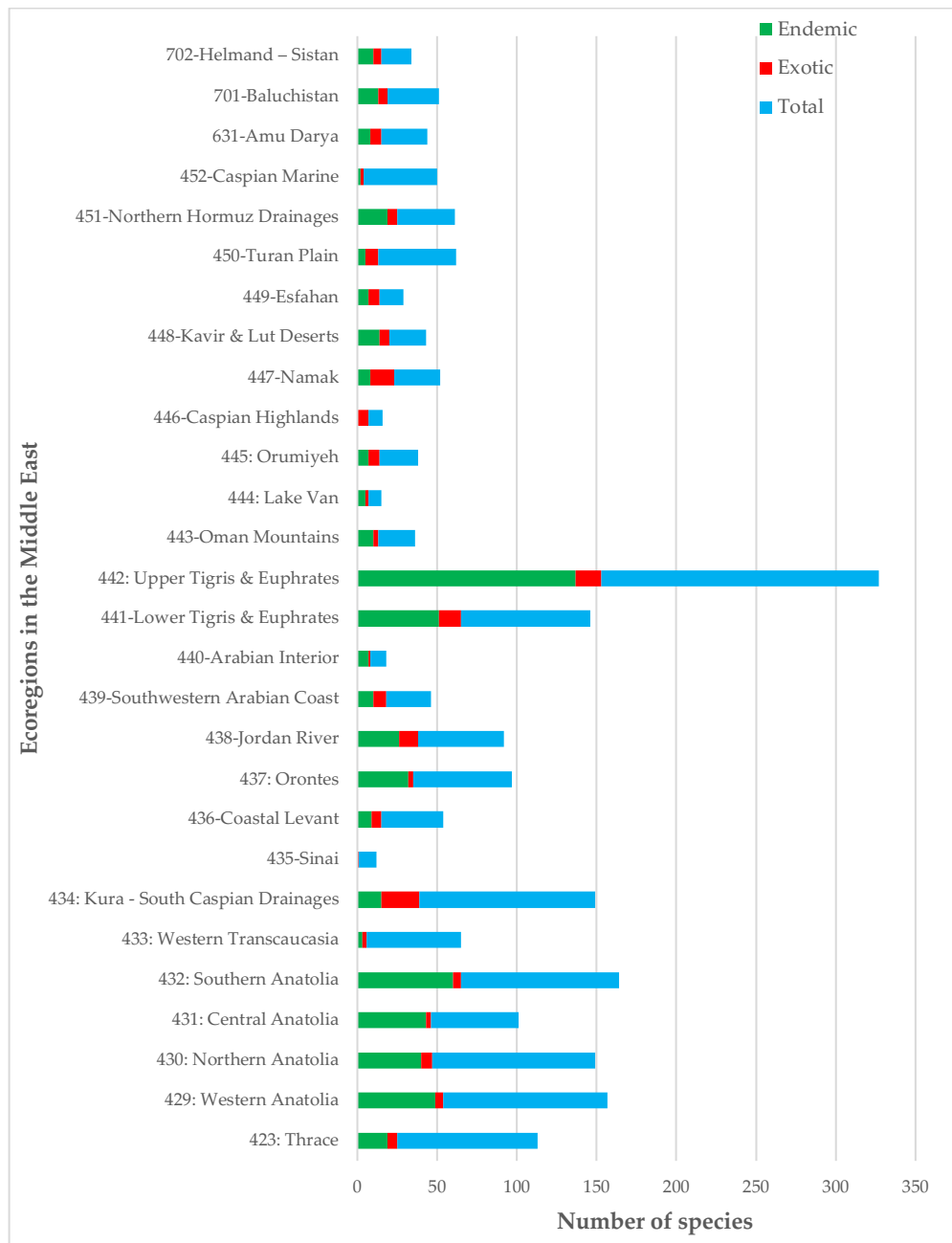


Figure 1. Endemic, exotic, and total number of species in ecoregions.

Discussion

Biodiversity

Because there were few faunistic studies conducted in some parts of the Middle East, little was known about ichthyofauna. Foreign researchers, particularly European scientists, have historically been responsible for revealing the ichthyofauna of the Middle Eastern countries. Local scientists in each country have carried out a large number of studies to reveal the ichthyofauna in recent years. There is no doubt that the exploration of the fish fauna is still far from complete. Therefore, despite the extensive studies conducted on the freshwater fishes of the Middle East, we can anticipate numerous new records, including those of endemic species. In fact, researchers recognized 236 valid new species, mostly endemic, after 2000.

Researchers identified some newly discovered species in the Middle East, all belonging to the same genus, within a single basin or ecoregion. These species have a very narrow geographic range and are closely located to each other. These are probably members of the same species, distributed in a small range of subpopulations of the species. Indeed, many newly identified species have been short-lived and synonymized (*Alburnus battalgilae* Özuluğ & Freyhof 2007; *Alburnoides recepi* Turan, Kaya, Ekmekçi & Doğan 2014; *Alburnus selcuklui* Elp, Şen & Özuluğ, 2015; *Alburnoides coadi* Mousavi-Sabet, Vatandoust & Doadrio 2015; *Garra menderesensis* (Küçük, Bayçelebi, Güçlü & Gülle, 2015); *Glyptothorax alidaeei* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021; *Glyptothorax galaxias* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021; *Glyptothorax hosseinpanahii* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021; *Glyptothorax shapuri* Mosavi-Sabet, Eagderi, Vatandoust & Freyhof 2021).

In this context, we believe that some of the newly reported species are ambiguous and need additional discussion and deliberation by the ichthyological authorities. Therefore, recent new fish records from the Middle East should be carefully evaluated, argued for, and revised with deep knowledge and a wide perspective. As a result of the emergence of some fish species that are likely to be synonymous with each other, there will be a reduction in the total number of species.

As new information is received from the point of view of historical data, researchers are revising both new and old records. A very serious problem with ichthyological literature (especially papers in the recent past) is that authors uncritically rely on earlier data, with the result that many reviews are merely compilations of old and often incompatible information. Kottelat and Freyhof (2007) argued that errors propagate over long periods of time. The same case applies for the freshwater ichthyofauna of Middle Eastern countries. Indeed, it is known that the presence and distribution of some fish species in the Middle East are controversial.

Endemism

Considering the entire Middle East geography, excluding the countries, 470 species (64.6%) are endemic, for only a few species were found to be distributed only in the Middle East. Table 1 provides the status of endemic, exotic, and total species for each country. A total of 352 species that are country-endemic are found in only one country. The highest number of species was found in Türkiye (426 species), followed by Iran (308 species), Syria (108 species), Iraq (97 species), and Israel (57 species). In terms of the number of endemic species, Türkiye has the highest endemism with 215 species (50.5%). The number of endemic fish is 108 (35.1%) in Iran, six in Syria (5.6%), five (21.7%) in Oman, four (21.1%) in Iraq and Yemen (4.1%) in each, three in Saudi Arabia (11.1%) and Israel (5.3%) in each, two in Lebanon (5.7%), and one (4.8%) in Jordan. Other countries do not have any endemic species.

Complex geography yields rivers with diverse habitats, leading to relatively high levels of endemism (Sekercioglu et al. 2011). We recognize pronounced species richness and a high degree of endemism in the ichthyofauna of the Middle East. The Middle East's unique position at the crossroads between Europe, Asia, and Africa and coasting the Mediterranean, Aegean Sea, Black Sea, Red Sea, Persian Gulf, and Oman Sea have provided an interesting mixture of fish species due to its diverse geology, climate, and habitats.

Conservation

Presented are the IUCN Red List criteria and threats for the naturally distributed species. Out of the 672 naturally distributed species (excluding alien species), six endemics (0.9%) have already gone extinct, while one species is extinct in the wild (EW). Additionally, 133 species (19.8%) are classified as threatened extinctions, including 38 (5.7%) CR, 58 (8.7%) EN, and 37 (5.5%) VU. Of the total number of taxa assessed, 2.7% (18 species) are NT and 33.5% (225 species) are LC (Figure 1). DD classification is given to 23 species (3.4%) due to insufficient knowledge, while 266 species (39.6%) remain unassigned (NE). It is probable that these species might qualify for the threatened category when more data becomes available.

Endemic species comprise the majority of species that have not undergone IUCN assessment. The assessment of these endemic species with sufficient data is of great importance for the conservation of biodiversity (Çiçek et al., 2020). So, it is of great importance to prepare the Red List of Fishes for the Middle East as a matter of urgency. For this purpose, international cooperation is necessary since some species have populations in different countries in transboundary waters. In this context, organizing international workshops is of great importance.

It is well established that, globally, freshwater biodiversity is declining faster than terrestrial and marine biodiversity. Most of this decline is caused by anthropogenic alterations in habitat quality and extent. These pressures are relevant for all freshwater taxonomic groups. Currently, available information is inadequate for tracking these changes, despite the considerable effort and resources devoted to freshwater monitoring in some regions and for some taxonomic groups (Tickner et al., 2020). There are still major geographic and taxonomic gaps in the data available to support the freshwater components.

More resources are needed for freshwater biodiversity monitoring, but there is also an urgent need to facilitate the contribution of local national and sub-global programs and initiatives towards global goals. Many practitioners and researchers engaged in freshwater biodiversity observations and assessments do not currently have the capacity and support needed to ensure such contributions. There is no global institution that has the responsibility or intention to coordinate these contributions. National or multinational government agencies and intergovernmental platforms or conventions do not have the capacity or jurisdiction to play this role. This leaves a huge gap, which can at least partially be filled by a voluntary community of practice with a global agenda that is not bound by national or regional agendas and political priorities.

Alien Species

As of now, researchers have documented the deliberate or accidental introduction of over 100 exotic fish species into Middle Eastern inland waters (Golani and Mires, 2000; Çiçek et al., 2022, 2023a, 2023b, 2023c; Saad et al., 2023). At least 56 alien species have become naturalized in the wild. A total of 18 species were deliberately introduced for aquaculture and research, 12 species for fisheries development in natural stock enhancement, three species for biological control, and 23 species for aquarium fisheries. The introduction of some exotic fishes, particularly into inland waters, has had catastrophic effects; therefore, the reason for the introduction of 12 species is unknown.

The establishment successes of some species are controversial. For example, some species (*Acipenser baerii*, *Coregonus lavaretus*, *C. macrophthalmus*, *Hypophthalmichthys molitrix*, *H. nobilis*, *Ictalurus punctatus*, *Oreochromis mossambicus*, *Salmo salar*, *Salvelinus alpinus*, *S. fontinalis*, *Sarotherodon galilaeus*, etc.) were not introduced in the wild or were not naturalized in Türkiye (Çiçek et al., 2022). Similarly, some introduced species to Israel (*Channa micropeltes*, *Ctenopharyngodon idella*, *Hypophthalmichthys molitrix*, *Ictiobus cyprinellus*, *Piaractus brachypomus*, *Sciaenops ocellatus*, etc.) were never established in the wild (Golani and Mires, 2000). Additionally, for some species reported from the wild (such as *Hemichromis letourneuxi*, *Heteropneustes fossilis*, *Morone* sp. (hybrid), and *Pygocentrus nattereri*), their current presence needs confirmation by specimens. Unfortunately, it is not possible to say that exotic species

have been identified for all countries.

Among exotic species, it has been reported that some species (viz., *Carassius gibelio*, *Pseudorasbora parva*) have become invasive and disrupted the natural balance of the ecosystem in some studies. No country has carried out a detailed analysis of the effects and economic costs of invasive species on the ecosystem. In addition, some species are native to one country and exotic to other country/countries viz., *Acipenser gueldenstaedtii*, *Anguilla anguilla*, *Cyprinus carpio*, *Silurus glanis*, *Sarotherodon galilaeus*, *Oreochromis aureus*, *Chelon auratus*, and *Chelon saliens*.

The situation of translocated species is much more complex. In all countries, some fish species that are natural fauna elements are translocated to other basins and water bodies for various purposes. This may negatively affect the natural balance in some ecosystems and cause pressure on native species (Copp et al., 2005; Çiçek et al., 2022; Gkenas et al., 2023). However, detailed studies and analyzes are not available for any country in this regard.

Conclusion

After a thorough examination, we included only the verified suspicious reports in the list. Previously erroneous reports transferred from one source to another and persisting until the present day pose a significant challenge to the historical record in fauna studies (Çiçek et al., 2020). The fact that the species reported in the historical records are not listed in the new list brings up some controversies. Field studies should confirm some notifications for this reason. Therefore, researchers should conduct future studies to clarify controversial situations in this context.

This study revealed the freshwater fish fauna distributed in the Middle East. Civil unrest and political instability have dominated Middle Eastern countries, which are among the most problematic geographies in the world, in the last century. Some of these problems have caused wars between Middle Eastern countries. Some countries still bear the traces of this situation. These problems have had devastating effects on the biodiversity of the region. However, the solution to some problems requires international cooperation due to transboundary waters. Ensuring freshwater ecosystems are well managed, have sufficient free-flowing water, and have good water quality is essential to halt species declines and maintain food security, livelihoods, and economies in a climate-resilient world. For this reason, it is of great importance for the countries of the region to come together under the roof of an international organization for the protection of biodiversity, leaving aside all the problems between them.

In this study, inland fish species distributed in all Middle Eastern countries were considered. Some studies in the past have misidentified or misreported certain species. Or some countries did not list a species, even though it is distributed there. This first study will eliminate such erroneous situations in future studies. In addition, we are confident that local scientists will contribute to the elimination of deficiencies related to local nomenclature. For this reason, we encourage the authors of the article to contact us regarding any errors, omissions, or additional information.

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