



FISH II. SALT WATER FISHES

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This article deals mainly with the most economically important or otherwise remarkable fishes (except the caviar-yielding Acipenseridae, for which see [CAVIAR](#)). The ichthyofauna may be described for two different geographical and ecological zones, (1) the Persian Gulf and Sea of Oman and (2) the Caspian.

The Persian Gulf and the Sea of Oman. Although connected to open seas (the Indian Ocean and beyond), these two bodies of water are characterized by relatively high salinity, varying between 37 and 50 parts per thousand, and by relatively high water temperature, which varies between 23° C and 19.8° C on the surface according to seasons in the Sea of Oman, and which may reach about 40° C in shallow waters during the summer in the Persian Gulf (Fisheries Share-holding Co. of Iran [FSCI], p. 16). On the other hand, connection with subtropical and tropical seas allows seasonal migration of some non-indigenous fishes and marine mammals from those seas to the Sea of Oman and as far as the Kārūn river.

Except for occasional short reports by foreign researchers on some individual fish species from the Sea of Oman and the Persian Gulf, there was no comprehensive scientific study of the ichthyofauna of the region until the Danish H. Blegvad and B. Løppenthin's systematic survey, carried out in 1316-17 Š./1937-38 on the Persian government's request, and published in 1944



(see *Bibliography*; concerning Blegvad's mission, see the southern fisheries below).

The ichthyofauna of Persia's southern territorial waters comprises about 336 species (and/or subspecies) belonging to about 107 families (Moḳayyer, pref. to the translation of Blegvad and Løppenthin's work, p. xvii). Of the "150 [species potentially] marketable within the country, at present only about 35-40 commercial species are distributed in...fish markets" (FSCI, p. 16), for several reasons, e.g.: religious restrictions concerning scaleless (selachian) fishes (see below), and inadequate processing, storing, and marketing facilities. Due to space limitation, even a synopsis of the families, genera and species of fishes in this area cannot be presented here (for systematic synopses thereof, see Blegvad and Løppenthin, tr. pp. 17-33, with Moḳayyer's supplements, pp. 229-404; Kūčekiān, pp. 236-40; and Asadī and Dehqānī Pošterūdī).

The area's fishes are grouped in two large classes: (1) *Chondrichthyes* (i.e., mostly cartilaginous fishes) and (2) *Actinopterygii* (i.e., ray-finned fishes, comprising most of the "true" bony fishes).

1. *Chondrichthyes*. The seven families of regional selachians include eight to eleven species of sharks (Pers. *kūsa*[-*māhī*], *sag-māhī*), at least six of which are requiem sharks (fam. Carcharinidae); one species of torpedo (Pers. *aždar*[-*larz-māhī*]); locally *nāma* or *ānanū*); two species of sawfish (*arra-māhī*); three or four species of guitar fish (the species *Rhynchobatus djiddensis* [Forssk.] is locally called *sūs* at Jāsk); and seven species of rays (*sofra*[-*separ-māhī*): four species of sting rays (all locally called *loqma*) and three species of eagle rays (the species *Myliobatis niehofii* [Bl. Schn.] is called *rāmak* or *loqma*).

Among selachians, sharks (general local names: *kūlī* at Hormoz, *bombak* at Būšeher, *jarjūr* at Qešm; Sadīd-al-Salṭana, p. 91) distinguish themselves by their greater variety (as reflected in a plethora of local names; see Nūrbakš, 1371 Š./1992, pp. 85-86), their uses, and their danger. The largest (but also the most harmless) is the whale shark, *Rhinocodon typus* (Smith) (locally called *kar-māhī* "deaf fish[?]," *kūlī-kar* "deaf shark[?]," etc.), reported as measuring up to 18 or 21.3 m. (Asadī, pp. 22-23) and weighing about 2.5-3 tons (idem; Nūrbakš, 1992, p. 12). Its huge liver (variously reported as weighing about 150 to 200 kg and sometimes 400 to 1000 kg) is the principal source of the oil used by regional fishermen and boatmen to varnish and reinforce the wooden parts of their vessels. This locally valuable oil is also obtained from the liver of some other large sharks, particularly the oviparous sawfish, locally called *kūlī-*



sayyāf/-šamšīrī/-arra, etc., whose meat (about 400 kg) is also consumed by some natives (Nūrbakš, 1992, p. 86) and whose eggs (varying between 10 and 40, each weighing about 1 kg) are eaten by fishermen and divers as effective against rheumatism (Nūrbakš, 1995, pp. 9-10).

Nūrbakš (1995, p. 9) reports that “the consumption of shark meat—fresh, dried, or salted—is on the increase on both sides of the Persian Gulf.” This statement probably holds true mainly for the overwhelmingly Sunni population of the area, who are not subject to the Shi‘ite prohibition against the consumption of scaleless fish meat (cf., however, the lifting by Shi‘ite authorities of the prohibition against scaleless sturgeons under [CAVIAR](#)). The escalating high price of *ḥalāl* (religiously licit) meat (fish, mutton, etc.) all over the country is certainly another factor in the increasing consumption of *ḥarām* (religiously illicit) shark meat and eggs by the poorer classes of citizens in the south, all the more so because, according to Nūrbakš (ibid.), shark meat is believed to be a tonic, a potent aphrodisiac, and a preventive against rheumatoid arthritis, etc. It is also used locally to make fish meal as food for cattle and poultry.

Requiem sharks constitute an imminent danger to pearlers, fishermen, etc. Every summer, when large migratory man-eating sharks (probably *Carcharias leucas*; 3-4 m long; see [FISHES AND FISHERIES i](#), above) enter the Gulf, go upstream in the Tigris as far as Baghdad and in the Kārūn up to Ahvāz for spawning, many bathers, especially children, fall victims to them (Blegvad and Løppenthin, tr., p. 31).

2. *Actinopterygii*. This very large class is represented in the area by 63 families with 125 genera and over 197 species. Therefore, only the most economically important fishes will be mentioned here. An expert in local food fishes and fish dishes (Nūrbakš, 1994, pp. 22-26) presents as follows “the best scaly fishes” in three groups in descending order of importance (ichthyological explanations here mainly from Blegvad and Løppenthin):

First group: (1) [*māhī-e*] *ḥalwā/zobayda*, pomfret, *Stromateus cinereus* Bl. (fam. Stromateidae); however, Asadī and Dehqānī Pošterūdī distinguish two kinds of *ḥalwā*: *ḥalwā sīāh*, black pomfret, *Parastromateus niger* (Bloch) (fam. Carangidae; p. 27) and *ḥalwā safīd*, silver pomfret, *Pampus argenteus* (Euphrasen) (fam. Stromateidae; p. 182). (2) *rāšgū*, threadfin, *Eleutheronematetractylum* (Shaw). Asadī and Dehqānī Pošterūdī describe two other species of *rāšgū*, too. (3) *šūrīda/e*, tigertooth croaker, *Otolithes ruber*



(Schn.). 4. *qobād* or *šīr(-māhī)*, mackerel, *Cybium guttatum* (Bl. & Schn.). However, Asadī and Dehqānī Pošterūdī (p. 148) apply *qobād* to the “Indo-Pacific king mackerel,” *Scomberomorus guttatus* (Bl. & Schn.), and (p. 147) *sīr-māhī* to the “narrow-barred Spanish mackerel,” *S. commerson* (Lacépède).

Second group: (1) *mīš-māhī*, southern meagre, *Argyrosomus hololepidotus* (Lacépède) (fam. Sciaenidae). (2) *sangsar*, javelin grunter, *Pomadysys argentea* (Forssk.) (fam. Pomadasidae) or, according to Asadī and Dehqānī Pošterūdī (p. 73), *Pomadasya kaakan* (Cuvier) (fam. Haemulidae). (3) *hāmūr*, rock-cod, *Epinephelus tauvina* (Forssk.) (fam. Serranidae; “grouper” in Asadī and Dehqānī Pošterūdī, applied to 7 species of *Epinephelus*, pp. 157-65). (4) *ṭūṭī(-māhī)*, parrotfish, *Scarus* spp. (3 species mentioned by Asadī and Dehqānī Pošterūdī, pp. 132-33, s. fam. Scaridae). (5) *ko/ūbūr*, sweetlips, rubberlip, *Plectorhinchus cinctus* (Temm. & Schl.), fam. Pomadasidae (= *ḵannū* in Asadī and Dehqānī Pošterūdī, who describe 5 species thereof, pp. 66-71). (6) *kafšak*, Indian spiny turbot, *Psettodes erumei* (Schn.). However, *kafšak* is a common local name for all flatfishes, e.g., deep flounder, *Pseudorhombus elevatus* (Ogilby), and the “oriental sole,” *Euryglossa orientalis* (Schn.) (see Asadī and Dehqānī Pošterūdī, pp. 7, 169). (7) *šehrī*, “spangled emperor” (Asadī and Dehqānī Pošterūdī, p. 91), *Lethrinus nebulosus* (Forssk.). Asadī and Dehqānī Pošterūdī (pp. 88-90) describe also 3 other species of *šehrī*. (8) *‘arūs-māhī*, sicklefish, *Drepane punctata* (L.) (fam. Drepanidae). Asadī and Dehqānī Pošterūdī describe also another species of *‘arūs-māhī* (p. 56). However, in Blegvad and Løppenthin, tr., pp. 170-71, *D. punctata* is called by the local names *šīng*, *šengū*, etc.

Third group: (1) *ḵārū*, wolf herring, *Chirocentrus dorab* (Forssk.) (identified by Asadī and Dehqānī Pošterūdī, p. 42, as *Ch. nudus* (Swainson) (fam. Chirocentridae). (2) *š/zobūr*, *zabūr*, (hilsa) shad, *Hilsa ilisha* (Ham. & Buch.) (fam. Clupeidae; in Asadī and Dehqānī Pošterūdī, p. 51, *Tenualosa ilisha* (Ham. & Buch.) (3) *sorkū*, snapper, *Lutjanus coccineus* (Cuv. & Val.) (fam. Lutjanidae). Asadī and Dehqānī Pošterūdī (pp. 93-106) describe 14 species of *sorkū*. (4) *ḵašīna* (local name), commercially and commonly called *sārdīn*, sardine, which loosely applies to several kinds of small or immature fishes of the genera *Dussumieria* and *Sardinella* (see Asadī and Dehqānī Pošterūdī, pp. 44, 48-50) as well as to various small or immature herrings resembling the true sardines. Sardines are usually preserved for food by canning (see below).

To Nūrbakš’s inventory must be added the *ton* (< Fr. *thon*), tuna, tunny, some species of which are now the most esteemed and common canned fish in the



whole country. Asadī and Dehqānī Pošterūdī describe the following species of ton: *zarda*, “kawakawa,” *Euthynnus affinis* (Cantor); *bačča-zarda*, frigate tuna, *Auxis thazard* (Lacépède); *havūr*, skipjack tuna, *Katsuwonus pelamis* (Lacépède), or longtail tuna, *Thunnus tonggol* (Blkr.); and *gīdar*, yellowfin tuna, *Thunnus albacares* (Bonnaterre) (pp. 142-44, 149-50; all belonging to Scomboridae).

The Southern Caspian. The ichthyofauna of the Caspian Sea (including the fishes in the rivers emptying into it) is much less varied than that of the preceding area. Caspian fishes also fall into two classes: cartilaginous and bony ones. The former consist of the valuable sturgeons (fam. Acipenseridae; Figure 21). The commercially important bony fishes in the Iranian territorial waters in the Caspian belong to the following families presented here (after Kūčekiān, pp. 47-48) in descending order of commercial and food significance (taxonomy basically from Beliaeva *et al.*; Persian and/or local [Gīlakī] fish names mainly from Kūčekiān, pp. 47-48; Mar’ašī, s. vv.; and Pāyanda Langarūdī, pp. 681-84; see also Mo’in, s.v. *māhī*; English names, wherever available, from *Great Soviet Encyclopedia*, s. vv.): (1) Fam. Cyprinidae. It includes: *māhī(-e) safīd* (Gīlakī: *sīfīd-mah/yī*), *Rutilus frisii kutum* (Kamensky); *kūlmā/kolme* (Gīlakī; Māzandarānī: *talājī*), roach, *Rutilus rutilus caspicus* (Jakowlew); *sīā-kūlī* (Gīl.), the Caspian vimba, *Vimba vimba persa* (Pallas), “closely related to European breams”; *šā-kūlī* (Gīl.), *Chalcaburnus chalcoides* (Güld.); *kapūr* (Gīl.), carp, *Cyprinus carpio* (L.); and (*māhī(-e) sīm*, European bream, *Abramis brama orientalis* Berg. (2) Fam. Mugilidae. It is represented by two species of *ka/efāl* (Gīl., < Russ. *kefāl*, “large *kafāl*”): golden mullet, *Liza* (or *Mugil*) *aurata* (Risso), and “tiny *kafāl*,” *Liza/Mugilsaliens* (Risso), sharpnose mullet. The *kafāls* from the Black Sea were introduced and acclimatized in the Caspian by Soviet ichthyological services in 1930-34 (Beliaeva *et al.*, p. 178). (3) Fam. Clupeidae, to which belong: two species of *šag-mā(h)ī* (Gīl.) or *zālūn* (Gīl.), i.e., black-backed Caspian herring, *Alosa pontica* (Eichwald), and *A. caspia caspia* (Eichwald), also called *pūzānok* (< Russ. *pūzānok*, “designation for several species of shad of the genus *Alosa* or *Caspialosa*”), and three species of *Clupeonella*, “commonly called [Caspian] sprats” [*sic*], Gīl. *kīlkā* (< Russ. *kil’ka*), including *C. cultriventris* (Nordmann) (= *rīze-kūlī* according to Mar’ašī, s.v. *kūlī*) and especially the commercially valuable anchovy-like *C. engrauliformis* (Borodin) (Figure 22; concerning the *kīlkās* see also ‘A. Aḥmadī, *Māhī-nāma-ye Ābzīān* 2/11 [1370 Š./1991], pp. 36-41). (4) Fam. Percidae. It includes *sūf* (Gīl.: *sībey[ak]*), the common pike perch, *Sander lucioperca* (formerly in *Stizostedion*). (5) Fam. Esocidae, to which



belongs *ordak-māhī* (Gil: *šok*), the “northern pike,” *Esox lucius* L. (6) Fam. Siluridae, which includes *gorba-māhī* or *māhī-e sebīlī* (Gil.: *esbele*), sheatfish, *Silurus glanis* L. (Figure 23), which is reputed to reach sizes of 5 m and 336 kg. (7) Fam. Salmonidae, represented by *māh-e āzād* (Gil.: *āzād-mā/h/ī*), salmon trout, *Salmo trutta caspius* (Kessler).

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Figure 21. A kind of sturgeon (*Acipenser stellatus*), ūzūn borūn, tīrīj (Gīlakī). 2.2 m.

Figure 22. Kīlkā (herring; *Clupeonela engrauliformis*). 16 cm.

Figure 23. Gorba-māhī or māhī-e sebīlī (sheatfish; *Silurus glanis*). 2.3 m. and larger.