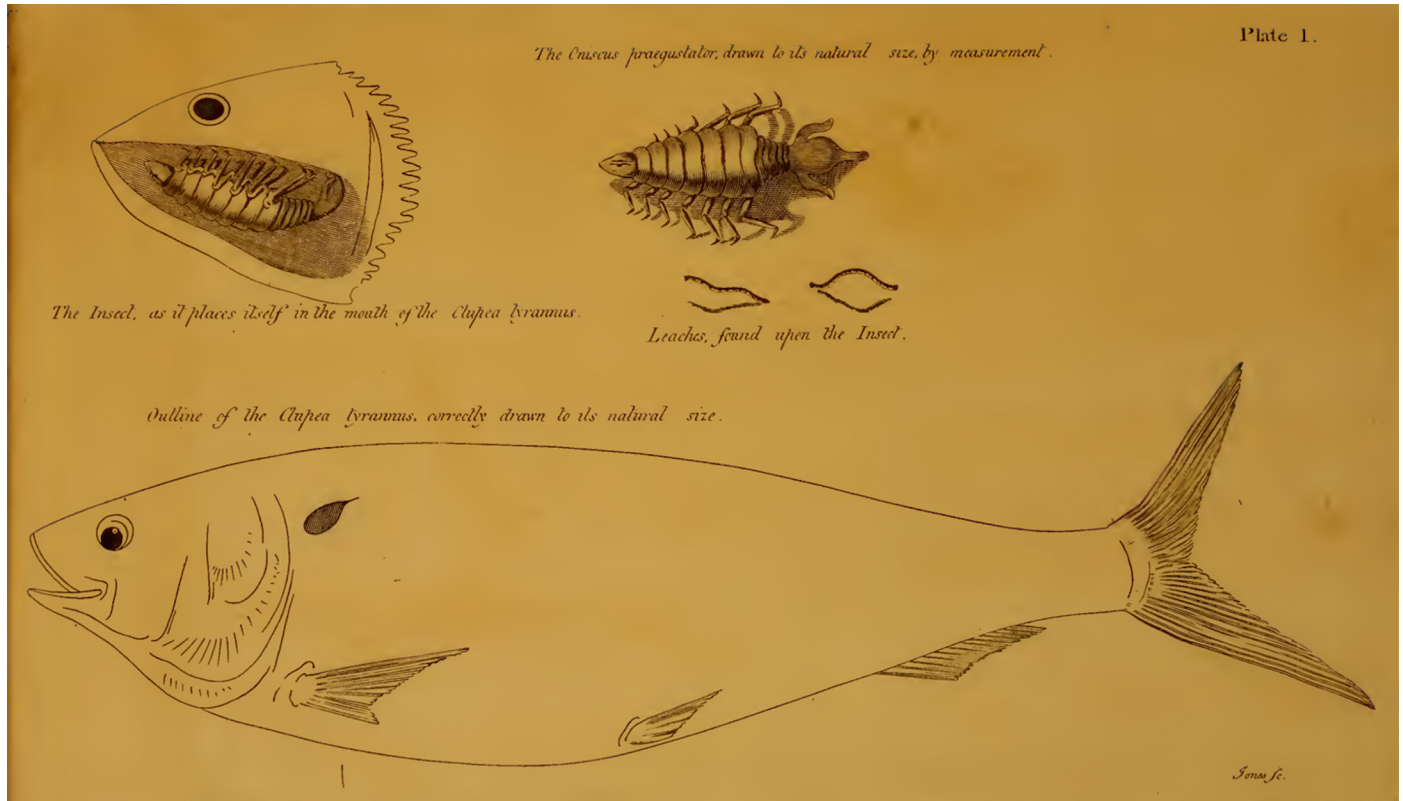


Order CLUPEIFORMES

Shads and Sardines

Family ALOSIDAE

Svetovidov 1953



Brevoortia tyrannus and its parasitic copepod, *Cymathoa praegustator*. From: Latrobe, B. H. 1802. A drawing and description of the *Clupea Tyrannus* and *Oniscus Praegustator*. Transactions of the American Philosophical Society 5 (art. 10): 77–81, Pl. 1.

Alosa

Linck 1790

from *alausea*, Latin name for *A. alosa* from the river Moselle in Germany, but in this case presumably tautonymous with *Clupea alosa* Linnaeus 1758 (no species mentioned)

Subgenus **Alosa**

Alosa agone (Scopoli 1786) presumably from *agoni*, Italian for shad (described from Lago Maggiore, Italy)

Alosa alabamae Jordan & Evermann 1896 of Alabama (USA), where type locality (Black Warrior River at Tuscaloosa) is situated

Alosa algeriensis Regan 1916 *-ensis*, Latin suffix denoting place: Algeria, type locality

Alosa alosa (Linnaeus 1758) from *alausea*, Latin name for a fish from the river Moselle in Germany, now identified as this species

Alosa baltica Kukuev & Orlov 2018 *-ica* (L.), belonging to: Baltic Sea, where it is endemic [originally spelled *balticus*; since *Alosa* is feminine, emendment is necessary]

Alosa braschnikowi (Borodin 1904) in honor of Russian zoologist Vladimir Konstantinovich Bražnikov (or Braschnikov, 1870–1921), who noted this species as a distinct variety of *A. saposchnikowii* in 1898

Alosa braschnikowi agrachanica (Mikhailovsky 1941) *-ica* (L.), belonging to:

meaning not specified but likely referring to Agrakhan Bay, western coast of Caspian Sea, where it spawns during May-June

Alosa braschnikowi autumnalis (Berg 1915) Latin for autumnal, the only herring that occurs in the southern Caspian Sea in the fall (Sept.–Oct.)

Alosa braschnikowi grimmi (Borodin 1904) in honor of Russian ichthyologist Oscar von Grimm (1845–1921), Chief Inspector of Russian fisheries, whose 1887 work on Astrakhan herrings is frequently cited by Borodin

Alosa braschnikowi kisselevitschi (Bulgakov 1926) in honor of Russian ichthyologist Konstantin Andreevich Kisselevich (also spelled Kisselevitz and Kisselevitsch, 1882–1938), Director of the Astrakhan Ichthyological Laboratory and authority on Caspian-Volgan clupeids, who worked with Bulgakov to study the only known specimen of this shad and to locate more [he died in prison, a victim of Soviet repression]

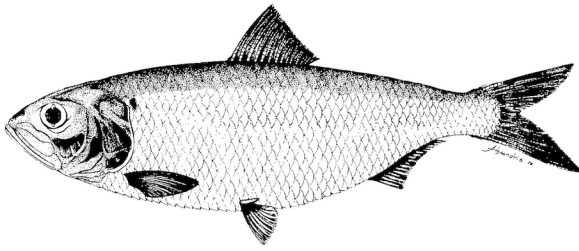
Alosa braschnikowi nirchi (Morozov 1928) in honor of Morozov's employer, Scientific Institute of Fisheries (Moscow), whose initials, when translated into English, spell the acronym NIRCH (N=Scientific, I=Institute, R=Fish, Ch=Industry)

Alosa braschnikowi orientalis (Mikhailovsky 1941) Latin for eastern, referring to its distribution in the eastern part of the southern Caspian Sea

Alosa braschnikowi sarensis (Mikhailovsky 1941) *-ensis*, Latin suffix denoting place: Sara Island, Caspian Sea, Azerbaijan, type locality

Alosa caspia (Eichwald 1838) named for its occurrence in the Caspian Sea basin

Alosa caspia bulgarica Drensky 1934 *-ica* (L.), belonging to: Bulgaria, where



Alosa vistonica, paratype, 252 mm TL. From: Economidis, P. S. and A. I. Sinis. 1986. Situation taxinomique et comparaisons des aloses (Pisces, Clupeidae) provenant des lacs Volvi et Vistonis (Grèce). Description d'une nouvelle sous-espèce: *Alosa caspia vistonica*. Journal of Natural History 20 (3): 723–734.

it is endemic

***Alosa caspia knipowitschi* (Iljin 1927)** in honor of Nikolai Mikhailovich Knipowitsch (1862–1939, often spelled Knipovich in English), Russian oceanographer and zoologist who led several Caspian Sea expeditions (1904–1915), in a Festschrift commemorating his 40 years of scientific research

***Alosa caspia persica* (Iljin 1927)** *-ica* (L.), belonging to: Persia (ancient name of Iran), referring to type locality in Iranian portion of Caspian Sea

***Alosa caspia salina* (Svetovidov 1936)** scientific Neo-Latin for saline, referring to its spawning in “very saline water” in the Caspian Sea [salsa would be the correct adjective in classical Latin]

***Alosa curensis* (Suvorov 1907)** *-ensis*, Latin suffix denoting place: near mouth of Kura (Latinized as Cura) River, southern Caspian Sea, Azerbaijan, type locality

***Alosa fallax* (Lacepède 1803)** Latin for false or deceitful, probably referring to French vernacular *la feinte* (a fake), presumably an allusion to its frequent confusion with the sympatric *A. alosa* (i.e., a fake or false shad)

***Alosa immaculata* Bennett 1835** *im-*, from *in* (L.), not; *maculata* (L.), spotted, presumably referring to its unspotted flanks (compared with spotted flanks of other European *Alosa* known at the time, e.g., *A. alosa* and *A. fallax*)

***Alosa kessleri* (Grimm 1887)** in honor of Russian-German zoologist Karl Federovich Kessler (1815–1881), an authority on fishes of the Volga Delta (type locality)

***Alosa killarnensis* Regan 1916** *-ensis*, Latin suffix denoting place: Killarney Lake, Ireland, where it is endemic

***Alosa macedonica* (Vinciguerra 1921)** *-ica* (L.), belonging to: Macedonia, Greece, where it is endemic

***Alosa maeotica* (Grimm 1901)** *-ica* (L.), belonging to: Maeotis, ancient name of the Sea of Azov, where it occurs (including Strait of Kerch and adjacent Black Sea basin)

***Alosa sapidissima* (Wilson 1811)** Latin for “most delicious,” the two words Wilson used to describe the palatability of this shad

***Alosa saposchnikowii* (Grimm 1887)** in honor of Alexandre Alexandrovich Sapozhnikov (1827–1887), who ran Sapozhnikov Brothers, the oldest fishery company in Astrakhan, Russia, who helped Grimm with his research on the Caspian Sea

***Alosa sphaerocephala* (Berg 1913)** ball-headed, from *sphaîra* (Gr. σφαίρα), ball, and *kephalê* (Gr. κεφαλή), head, referring to the rounded (convex) upper profile of its head

***Alosa suworowi* (Berg 1913)** in honor of Soviet ichthyologist Evgenii Konstantinovich Suvorov (1880–1953), who was the first scientist to work with this shad (presumably meaning he was the first to recognize it as a distinct taxon) [possibly a hybrid, provisionally included here]

***Alosa tanaica* (Grimm 1901)** *-ica* (L.), belonging to: Tana or Tanais, ancient Greek city in the Don River delta near Rostov-na-Donu, Russia, type locality

***Alosa vistonica* Economidis & Sinis 1986** *-ica* (L.), belonging to: Lake Vistonis, Greece, where it is endemic (and now possibly extinct)

***Alosa volgensis* (Berg 1913)** *-ensis*, Latin suffix denoting place: Volga River, Russia, type locality

Subgenus *Pomolobus*

Rafinesque 1820

pomo, from *pōma* (Gr. πῶμα), lid or cover, i.e., opercle; *lobus*, from *lobós* (Gr. λοβός), lobe, referring to lobed opercles Rafinesque used to distinguish “goldshads” (e.g., *A. chrysochloris*) from “herrings” (i.e., other alosids)

***Alosa aestivalis* (Mitchill 1814)** Latin for of the summer, presumably referring to its later spawning run compared with *A. pseudoharengus* (Mitchill called it the “Summer Herring”)

***Alosa chrysochloris* (Rafinesque 1820)** *chrysós* (Gr. χρυσός), gold; *chlōrós* (Gr. χλωρός), green, referring to its greenish-gold dorsal coloration

***Alosa mediocris* (Mitchill 1814)** Latin for middling or ordinary, referring to its taste or food value compared with *A. sapidissima*

***Alosa pseudoharengus* (Wilson 1811)** *pseudo-*, from *pseudēs* (Gr. ψεύδης), false; *harengus*, Medieval Latin for herring, described as an American herring “well tasted, either fresh or salted, [but] not so fat as European Herring” (*A. alosa* or *A. fallax*)

Brevoortia

Gill 1861

-ia (L. suffix), pertaining to: James Carson Brevoort (1818–1887), “the well known ichthyologist of New York” (Brevoort was a businessman and philanthropist who supported various literary and scientific societies and institutions and was himself a fine amateur naturalist; his zoological library was then reputed to be the finest in the country)

***Brevoortia aurea* (Spix & Agassiz 1829)** Latin for golden, referring to its golden sides and abdomen and/or golden-silver operculum

***Brevoortia gunteri* Hildebrand 1948** in honor of marine biologist Gordon Gunter (1909–1998), University of Texas, for “his good work on the aquatic animals of the Gulf coast,” and for supplying holotype (which he noted was distinct in a 1945 publication)

***Brevoortia patronus* Goode 1878** Latin for patron, protector or defender, allusion not explained, presumably referring to how the fish provides safe haven for the parasitic isopod *Cymothoa praegustator* that lives on the roof of its mouth (see also *B. tyrannus*)

***Brevoortia pectinata* (Jenyns 1842)** Latin for comb-toothed, referring to its strongly pectinated scales

***Brevoortia smithi* Hildebrand 1941** in honor of American ichthyologist Hugh M. Smith (1865–1941), Hildebrand’s former chief at the U.S. Bureau of Fisheries, for his “outstanding accomplishments in fishery research” and “useful” book, *The Fishes of North Carolina* (1907)

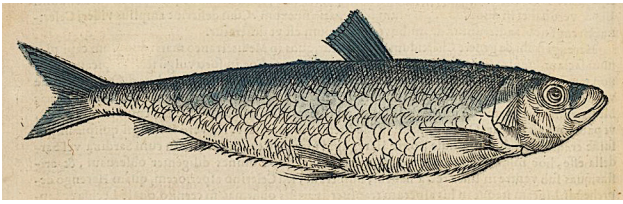
***Brevoortia tyrannus* (Latrobe 1802)** Latin for tyrant, named for the Tyranni rulers of ancient Rome, who forced food-tasters to test their food for poison, referring to this fish’s relationship with the parasitic isopod *Cymothoa praegustator* (a “pretaster,” described by Latrobe in the same publication), which lives in the mouths of many specimens (see also *B. patronus*) and thus represents “the minion of a tyrant ... for he is not without those who suck him” (i.e., like all tyrants, this fish has parasites or hangers-on, perhaps reflecting Latrobe’s enthusiasm for American independence from England)¹

Sardina

Antipa 1904

a sardine, derived from *sardina*, a kind of fish caught near Sardinia and pickled

¹ Although the name *Brevoortia tyrannus* is now applied to the commercially important Atlantic Menhaden, some scholars believe that Latrobe had actually described the Alewife *Alosa pseudoharengus* instead. See Porter, C. M. 1987. Benjamin Henry Latrobe and the nomenclature of two American fishes. Archives of Natural History (14) 1: 85–88. Whatever the case, Latrobe (1764–1820) was better known as the “Father of American Architecture.” He designed the United States Capitol, the first cathedral in the U.S., painted topographical and landscape watercolors, and was engineering a waterworks project in New Orleans, Louisiana, where he contracted yellow fever and died. His description of *Brevoortia tyrannus* appears to be the earliest valid description of any fish species published in the United States.



Possibly first-published image of *Sardina pilchardus*. From: Belon, P. 1553. De aquatilibus libri duo. Paris. 1–448.

***Sardina pilchardus* (Walbaum 1792)** Latinization of *pilchard*, Old English word for this fish, of unknown origin

Sardinops

Hubbs 1929

ops, from *opsis* (Gr. ὄψις), appearance, referring to similarity to and previous confusion with *Sardina*

***Sardinops melanosticta* (Temminck & Schlegel 1846)** *mélanos* (Gr. μέλανος), genitive of *mélas* (μέλας), black; *sticta*, from *stiktós* (Gr. στικτός), spotted, referring to dark spots along flank

***Sardinops ocellatus* (Pappe 1853)** Latin for having little eyes (ocelli), referring to 8–15 black ocelli, or eyespots, extending from upper edge of operculum across entire length of body

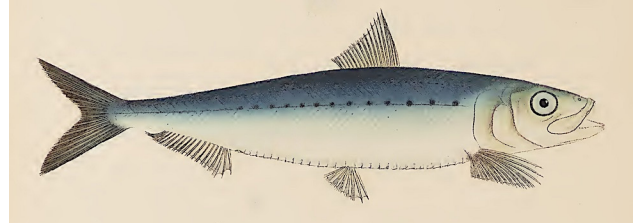
***Sardinops sagax* (Jenyns 1842)** Latin for wise or of quick perception, allusion not explained nor evident, perhaps referring to its larger, longer head compared with *Sardina pilchardus*, its presumed congener at the time

***Sardinops sagax caeruleus* (Girard 1854)** Latin for dark blue, referring to its darkish-blue coloration above

***Sardinops sagax musica* (Girard 1855)** Latin for music, allusion not explained nor evident; perhaps Girard, who sometimes coined names based on euphony,² liked the “musical” sound of this name, originally described as *Alosa musica*

***Sardinops sagax neopilchardus* (Steindachner 1879)** *néos* (Gr. νέος), new, i.e., a new pilchard, referring to similarity of its strongly striated operculum with that of *Sardina pilchardus*, its presumed congener at the time

² In 1856, Girard named several minnow genera after Native American words (e.g., *Agosia*, *Dionda*, *Nocomis*) simply because he liked the sound of them.



Sardinops melanosticta. From: From: Temminck, C. J. and H. Schlegel. 1846. Pisces. In: Siebold, P. F. de (ed.). Fauna Japonica. Lugduni Batavorum [Leiden] (A. Arnz et soc.). Parts 10–14: 173–269.