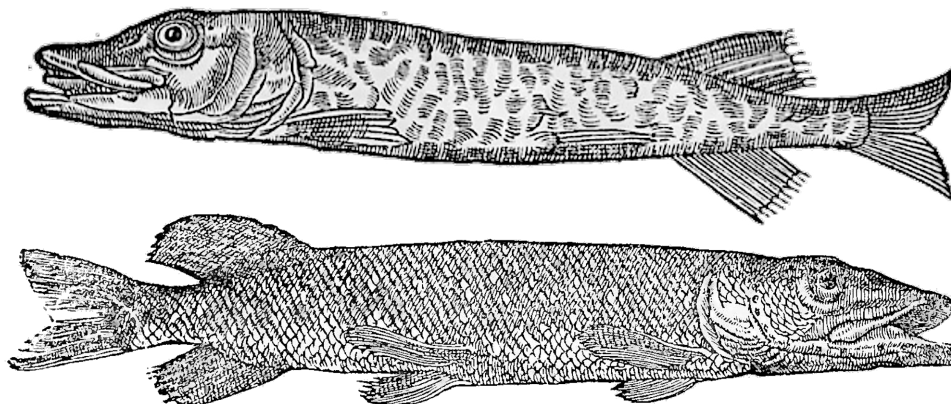
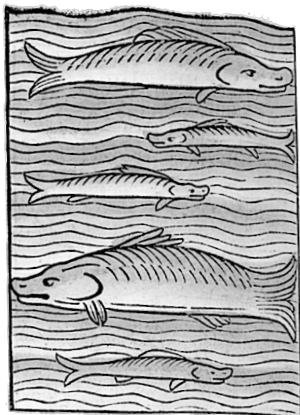


Order SALMONIFORMES

Pikes and Mudminnows

Family **ESOCIDAE**

Rafinesque 1815



Three early published images of *Esox lucius* with varying degrees of verisimilitude. Left: from *Hortus Sanitatis* (1491), a German natural history encyclopaedia. Top right, from: Belon, P. 1553. *De aquatilibus libri duo*. Bottom right, from Rondelet, G. 1555. *Universae aquatiliu historiae pars altera*. Lyon.

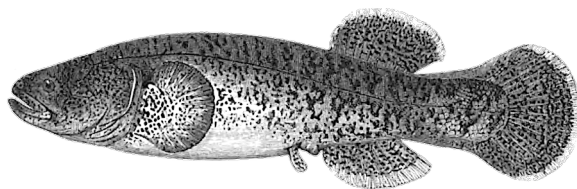
Dallia

Bean 1880

-ia (L. suffix), belonging to: malacologist and explorer William Healey Dall (1845–1927), United States Coast Survey, for contributions to the zoology of Alaska, USA (where *D. pectoralis* occurs)

***Dallia admirabilis* Chereshnev 1980** Latin for admirable or wonderful (or “astonishing or miraculous” per the published English translation of the original Russian text), allusion not explained, perhaps referring to its discovery in the Amguema River basin (Chukotka, Russia), a “considerable distance” from the typical *D. pectoralis* and representing the westernmost occurrence of the genus on the Asian continent [treated as a synonym of *D. pectoralis* by some workers]

***Dallia delicatissima* Smitt 1881** Latin for most delectable; according to Finnish explorer Adolf Erik Nordenskiöld (1832–1901), who led voyage during which holotype was collected, and made Smitt’s name available in a popular account of the expedition, an “exceedingly delicious” fish, a “veritable delicacy, in taste somewhat resembling eel, but finer and more fleshy” (translations) [treated as a synonym of *D. pectoralis* by some workers]



Dallia delicatissima. From: Nordenskiöld, A. E. 1881. *Vegas färd kring Asien och Europa*. Vol. 2. Stockholm: F. & G. Beijers Forlag. i-x + 1–468.

***Dallia pectoralis* Bean 1880** Latin for pectoral, allusion not explained, presumably referring to its “rounded and many-rayed” pectoral fins

Esox

Linnaeus 1758

from the *Esox* of Pliny, a large fish from the Rhine River of Europe (possibly a salmon), applied by Aldrovandi, Artedi and Linnaeus to pikes (the common name is probably from the Anglo-Norman *pike*, a staff having a point or spike, presumably referring to the fish’s long body and pointed snout)

***Esox americanus* Gmelin 1789 -icus** (L.), belonging to: America (described from Long Island, New York), distinguishing it from the circumpolar *E. lucius*

***Esox americanus vermiculatus* Lesueur 1846** Latin for vermiculate (with wavy lines and marks), referring to “narrow, winding” vermiculations on sides, “closer and tighter” on females (translations)

***Esox aquitanicus* Denys, Dettai, Persat, Hauteceur & Keith 2014 -icus** (L.), belonging to: Aquitaine, region of southwestern France, where type locality (Adour drainage, Estampon, Saint-Gor), is situated

***Esox cisalpinus* Bianco & Delmastro 2011 cis-** (L.), on this side; *alpinus* (L.), alpine or of the Alps, referring to its distribution on one side (the Italian) of the Alps

***Esox lucius* Linnaeus 1758** Latin name for this species, dating to at least the *Mosella* of Ausonius (ca. 310–ca. 395)

***Esox masquinongy* Mitchill 1824** Native American name for this species, from the Ojibway (Chippewa) *mask*, ugly, and *kinongé*, fish [name is technically unavailable; see essay on next page]

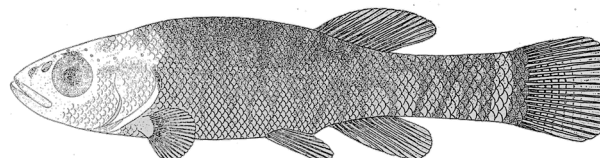
***Esox niger* Lesueur 1818** Latin for dark or black, referring to its juvenile coloration

***Esox reichertii* Dybowski 1869** patronym not identified, probably in honor of Dybowski’s anatomy professor Karl Bogislaus Reichert (1811–1883), a Baltic German embryologist and histologist

Novumbra

Schultz 1929

novus (L.), new, i.e., a new *Umbra* or mudminnow



Novumbra hubbsi, holotype, 34 mm SL. Illustration by Dorothea Bowers Schultz. From: Schultz, L. P. 1929. Description of a new type of mud-minnow from western Washington, with notes on related species. *Publications in Fisheries, Seattle, Washington* 2 (6): 73–81, Pls. 1–2.

***Novumbra hubbsi* Schultz 1929** in honor of American ichthyologist Carl L. Hubbs (1894–1979), who read Schultz’ manuscript, offered “valuable” suggestions and literature references, and loaned specimens for comparisons

***Umbra*¹**

Kramer 1777

Latin for in the shade, allusion not explained; according to Valenciennes (1846²), name refers to a belief among early naturalists that *U. krameri* is rarely seen because it “preferably lives in underground caves where light does not penetrate” (translation)

***Umbra krameri* Walbaum 1792** in honor of German physician–naturalist Wilhelm Heinrich Kramer (d. 1765), who proposed the genus and this species (as “*Umbra umra*”) in a pre-Linnaean publication (1756)



Umbra limi. From: Kirtland, J. P. 1840. Descriptions of four new species of fishes. Boston Journal of Natural History 3 (1–2): 273–277, Pl. 2.

***Umbra limi* (Kirtland 1840)** genitive of *limus* (L.), mud, described from a creek in Ohio (USA), where it “uniformly dwells in soft mud” (it is known to bury itself in mud or sand to avoid capture, hence the vernacular name “mudminnow”)

***Umbra pygmaea* (DeKay 1842)** from *pygmaïos* (Gr. πυγμαῖος), small or dwarf, referring to small size (~25.4 mm) of type specimens (now lost), described as a “pigmy dace”

¹ Many references (including Eschmeyer’s Catalog of Fishes) recognize *Umbra* in its own family, Umbridae. The classification used here follows Page, L. M., K. E. Bemis, T. E. Dowling, H. S. Espinosa-Pérez, L. T. Findley, C. R. Gilbert, K. E. Hartel, R. N. Lea, N. E. Mandrak, M. A. Neighbors, J. J. Schmitter-Soto and H. J. Walker Jr. 2023. Common and scientific names of fishes from the United States, Canada, and Mexico. 8 ed. American Fisheries Society, Spec. Pub. 37: i–vii + 1–439.

² Cuvier, G. and A. Valenciennes. 1846. Histoire naturelle des poissons. Tome dix-neuvième. Livre vingtième. De quelques familles de Malacoptérygiens, intermédiaires entre les Brochets et les Clupes. Vol. 19: i–xix + 1–544 + 3 pp., Pls. 531 and 536. [Valenciennes authored volume.]

The authorial muddle of *Esox masquinongy*

The name of *Esox masquinongy*, the largest member of the pike family, traditionally dates to American naturalist-physician Samuel L. Mitchell (1764–1831) in 1824. But compelling evidence exists that Mitchell did not name the species in a nomenclaturally available way.

Mitchell is said to have proposed the name in 1824, back when new-species descriptions in America sometimes appeared in daily newspapers. Trouble is, very few people saw the description that he published. Instead, taxonomists from David Starr Jordan to the Mitchell’s article that appeared monograph *Zoology of New-Masquinongy*. Mitchell, Mirror DeKay misspelled Mitchell’s citation, Jordan and others as-

appeared in the *New York Mirror*, a weekly newspaper published in New York City from 1823 to 1842. Jordan searched for the article but could not find it. Yet he nevertheless treated the name as valid with Mitchell as author, a decision accepted without question by every fish taxonomist ever since.

In 2015, German ichthyologist Ronald Fricke, while tracking down fugitive references for Eschmeyer’s Catalog of Fishes, finally found Mitchell’s article. It was not in the *New York Mirror* per se, but in a supplement to it called *Minerva*, an important bibliographic distinction DeKay failed to mention.

With Mitchell’s description in hand (the opening lines shown above), Fricke made a surprising discovery: Mitchell did not propose the name *Esox masquinongy*, at least not in proper binomial (genus/species) form. Instead, he simply called the fish “Masquinongy of the Great Lakes.” Nor did Mitchell indicate a genus, saying only that the fish was an “esox” (with a lowercase “e”) or a “pike.” It appears that DeKay created the impression that Mitchell formed a binomial when he cited the species as “E. Masquinongy. Mitchell” in 1840.

So, then, who is the author of *Esox masquinongy*? Or, in other words, what is the first available taxonomic usage of the name? The earliest I’ve found is Jordan’s *Catalogue of the Fishes Known to Inhabit the Waters of North America*, published in 1885. If this is correct, then authorship of *Esox masquinongy* should be Jordan 1885. Or Jordan (ex Mitchell) 1885. Or maybe even Mitchell in Jordan 1885. Or maybe things should just stay as they are. Since “*Esox masquinongy* Mitchell 1824” is such a well-entrenched name/author combination in both scientific and popular literature, perhaps the notion of “prevailing usage” should apply.

If anything, the *masquinongy* muddle teaches us the value of accurate bibliographic data, and the importance of relying on primary rather than secondary sources.

Masquinongy of the Great Lakes.

It is a species of esox or pike, procured from the place of its origin by Mr. Sykes.

present relied on a citation in James E. DeKay’s 1840 *York*. That citation read: “E. 1824, p, 297.” (Note that name.) Based on DeKay’s summed Mitchell’s description