The ETYFish Project

COMMENTS: = v. 8.0 - 15 June 2024

Order PERCIFORMES (part 20)

Suborder COTTOIDEI

Infraorder COTTALES (part 2 of 4)

Family COTTIDAE Sculpins

77 genera/subgenera · 306 species/subspecies

Subfamily Cotttinae Sculpins

Abyssocottus Berg 1906

abyssos, deep water, referring to its occurrence in the deep water of Lake Baikal; Cottus, type genus of family

Subgenus Abyssocottus

Abyssocottus fuscus Bogdanov 2013

dusky, dark or swarthy, referring to brown coloration [possibly an unavailable name since holotype was not deposited at a museum as required by ICZN Article 16.4.2]

Abyssocottus korotneffi Berg 1906

in honor of biologist Alexei Alexeievich Korotneff (1852-1914), Kiev University, who dredged all the sculpins from Lake Baikal that Berg examined, including type of this one

Abyssocottus pumilus Bogdanov 2013

dwarfish, diminutive or little, referring to small size, up to 58.3 mm TL [possibly an unavailable name since holotype was not deposited at a museum as required by ICZN Article 16.4.2]

Subgenus Korotnevia Bogdanov 2023

-ia (L. suffix), belonging to: Russian zoologist Aleksei Alekseevich Korotnev (1854-1915), founder of the study of the deepwater fishes of Lake Baikal

Abyssocottus elochini Taliev 1955

of Cape Elokhin, 2 km south of type locality at Lake Baikal, Russia

Abyssocottus gibbosus Berg 1906

humpbacked, presumably referring to high nape and arched dorsal profile

Abyssocottus subulatus (Dybowski 1908)

subulate (slender and tapering to a point), proposed as a longer or more streamlined variety (or subspecies) of A. gibbosus

Alcichthys Jordan & Starks 1904

alce, referring to A. alcicornis (alce, elk; cornis, horn, now a junior synonym of A. elongatus), presumably named for its preopercular spine, which is flat, broad and divided into many points, like the antlers of an elk; ichthys, fish

Alcichthys elongatus (Steindachner 1881)

elongate, referring to "strongly stretched" (translation) body, compared with the "moderately elongate" (translation) body of *Bero elegans*, its presumed congener at the time (and described in the same publication)

Alpinocottus Bogdanov 2023

alpinus, alpine or mountain, referring to occurrence of A. poecilopus in mountain brooks; Cottus, all three species originally placed in that genus

Alpinocottus poecilopus (Heckel 1837)

poecilio-, varicolored; pous, foot, presumably referring to narrow transverse stripes on all fins (except first dorsal fin), but best seen in the ventral fins (which are all-white on *Cottus gobio*, its presumed congener at the time)

Alpinocottus szanaga (Dybowski 1869)

from Szanaga-sagasu (spoon fish), Buryat (Mongolian dialect) for this sculpin in the Upper Amur River basin

Alpinocottus volki (Taranetz 1933)

patronym not identified but almost certainly in honor of Alexander Maksimovich Volk (d. 1943), Pacific Scientific-Research Institute of Fisheries; he was Taranetz' friend and they collected fishes, amphibians and reptiles together in the Russian Far East (both died in action during WW2)

Andriashevicottus Fedorov 1990

patronym not identified but almost certainly in honor of Soviet ichthyologist Anatoly Petrovich Andriashev (1910-2009); *Cottus*, type genus of family

Andriashevicottus megacephalus Fedorov 1990

mega-, large; cephalus, head, referring to its large head, 43.8% of SL

Antipodocottus Bolin 1952

Antipodes, i.e., the other side of the globe, referring to its antipodal distribution of *A. galatheae* (Australia and New Zealand) in relation to all other sculpins known at the time; *Cottus*, type genus of family

Antipodocottus elegans Fricke & Brunken 1984

fine, select, well proportioned, or elegant, referring to "elegant body shape"

Antipodocottus galatheae Bolin 1952

in honor of the Danish research vessel Galathea, from which holotype was collected

Antipodocottus megalops DeWitt 1969

mega-, large; ops, eye, referring to large eyes, "bulging prominently into dorsal profile of head"

Antipodocottus mesembrinus (Fricke & Brunken 1983)

southern, then considered a southern (Kai Islands, Indonesia) representative of the Japanese genus Stlengis

Archistes Jordan & Gilbert 1898

archos, rectum or anus; -istes, adjectival suffix, i.e., referring to vent far forward on A. plumarius, immediately behind base of ventral fins, the male with a long anal papilla

Archistes biseriatus (Gilbert & Burke 1912)

bi-, two; seriatus, rowed, referring to a double series of plates along bases of both dorsal fins

Archistes plumarius Jordan & Gilbert 1898

feathery, presumably referring to a large fringed supraorbital flap, with small flaps and cirri on occiput, sides of head, and along lateral line

Artediellichthys Fedorov 1973

proposed as a subgenus of *Artediellus* by Taranetz (1941), distinguished (in part) by a plate-like (broad and spatulate) rather than a stick-like (narrow and round) suborbital stay; *ichthys*, fish [since Taranetz did not designate a type per ICZN Art. 13.3, first available usage of name dates to Fedorov]

Artediellichthys nigripinnis (Schmidt 1937)

niger, black; pinnis, fin, referring to black dorsal and anal fins, and blackish ventral and pectoral fins

Artediellina Taranetz 1941

-ina, having the nature of: Artediellus, original genus of A. antilope [sometimes dated to Taranetz 1937, with two included species but without fixation of type; Taranetz indicated type in 1941]

Artediellina antilope (Schmidt 1937)

antelope, referring to long upper preopercular spine, like the horn of an antelope

Artedielloides Soldatov 1922

-oides, having the form of: "Named for its appearance, resembling that of Artediellus"

Artedielloides auriculatus Soldatov 1922

shaped like an ear, presumably referring to a pair of "stout, flat very large earlike flaps" above the eyes

Artediellus Jordan 1885

diminutive of Artedius, a similar genus from which it differs chiefly in the naked skin of head and body

Subgenus Artediellus

Artediellus aporosus Soldatov 1922

a-, not; porosus, full of pores, related to A. pacificus but distinguished by absence of pores on top of head

Artediellus atlanticus atlanticus Jordan & Evermann 1898

-icus, belonging to: described as a western Atlantic (Massachusetts, USA) relative of the Arctic A. uncinatus

Artediellus atlanticus europaeus Knipowitsch 1907

European, described from the west coast of Norway, from Svalbard (a Norwegian archipelago between mainland Norway and the North Pole), and from the European Arctic Ocean, presumed to be a European form of the Arctic A. uncinatus

Artediellus camchaticus Gilbert & Burke 1912

-icus, belonging to: off eastern coast of Kamchatka, Russia, type locality (occurs in northwestern Pacific from Sea of Okhotsk and Kamchatka to Kuril Islands, east to western Aleutian Islands, Alaska, USA)

Artediellus gomojunovi Taranetz 1933

in honor of A. A. Gomojunov (no other information available), who prepared the illustrations for Taranetz' paper

Artediellus ingens Nelson 1986

Latin for huge, referring to large, very robust body (up to 123.8 mm SL)

Artediellus miacanthus Gilbert & Burke 1912

meion, less, smaller or fewer; *acanthus*, thorn or spine, allusion not explained, perhaps referring to absence of nasal spines (compared with their presence on the similar *A. pacificus*)

Artediellus neyelovi Muto, Yabe & Amaoka 1994

in honor of Alexei Vadimovich Neyelov (also spelled Neelov), Zoological Institute, Russian Academy of Sciences, who has "contributed greatly" to systematic studies of cottid fishes

Artediellus ochotensis Gilbert & Burke 1912

-ensis, suffix denoting place: Okhotsk Sea, where co-type locality (Robben Island) is situated

Artediellus pacificus Gilbert 1896

-icus, belonging to: Pacific Ocean, i.e., a North Pacific counterpart of the North Atlantic A. uncinatus

Artediellus scaber Knipowitsch 1907

rough, referring to "numerous small granular or conical elevations" (translation) on head and upper body

Artediellus uncinatus (Reinhardt 1834)

hooked, referring to long and sharp upper preopercular spines, which curve upward

Subgenus Artediellops Neelov 1979

ops, appearance, a subgenus of Artediellus with four, instead of two, preopercular spines [author's name also spelled Neyelov]

Artediellus dydymovi dydymovi Soldatov 1915

in honor of fisheries steamer *Lieutenant Dydymov*, from which type was collected; the vessel was named for Akim Grigorevitch Dydymov, a Russian naval officer who served in the Far East

Artediellus dydymovi schmidti Soldatov 1915

in honor of ichthyologist Petr Yulievich Schmidt (1872-1949), who first collected this sculpin at Aniva Bay, Sakhalin Island, Russia

Artediellus fuscimentus Nelson 1986

fuscus, dusky; mentum, chin, referring to brownish-black underside of head and branchiostegal membranes of the male

Artediellus minor (Watanabe 1958)

small or lesser, allusion not explained, perhaps referring to smaller size (6.9 cm TL) compared with *Cottiusculus gonez* (12.3 cm), its presumed closest congener at the time

Artedius Girard 1856

-ius, belonging to: patronym not identified but almost certainly in honor of Swedish naturalist Peter Artedi (1705-1735), known as the "father of ichthyology"

Artedius corallinus (Hubbs 1926)

pertaining to coral, referring to its "probable relationship in habitat and color" with coralline algae

Artedius fenestralis Jordan & Gilbert 1883

of a window, presumably referring to small pore-like opening behind fourth gill arch (not present on A. notospilotus)

Artedius harringtoni (Starks 1896)

in honor of Mark Walrod Harrington (1848-1926), botanist, astronomer, meteorologist, and president of the University of Washington (1895-1897) [biographical footnote: he reportedly suffered a mental breakdown after being struck by lightning, disappeared in 1908 and was later found by his wife in a New Jersey mental hospital, where he subsequently died]

Artedius lateralis (Girard 1854)

of the side, allusion not explained, perhaps referring to "conspicuous" lateral line, "making a slight inflexion downwards upon the middle of the abdomen"; Pietsch & Orr (Fishes of the Salish Sea, 2019), suggest name refers to arrangement of scale rows along sides of body, but this character is not mentioned by Girard

Artedius notospilotus Girard 1856

notos, back; spilotos, marked or spotted, referring to 4-6 dark bars or saddles along upper body

Ascelichthys Jordan & Gilbert 1880

a-, without; skelos, leg, referring to absence of pelvic fins; ichthys, fish

Ascelichthys rhodorus Jordan & Gilbert 1880

rhodon, rosy or red; oros, margin, referring to lips "edged with vermilion" and/or dorsal fin with a "conspicuous edging of bright crimson" (italics in original)

Asemichthys Gilbert 1912

etymology not explained, perhaps *a*-, without and *semion*, standard or flag, referring to shorter spinous dorsal fin compared with that of the "Closely related" *Radulinus*, which has a higher, flag-like spinous dorsal fin; *ichthys*, fish (Pietsch & Orr, *Fishes of the Salish Sea*, 2019, translate *sema*- as sign or mark, but concede that nothing is unmarked about this sculpin except for its nearly transparent anal and pelvic fins)

Asemichthys taylori Gilbert 1912

in honor of Rev. George William Taylor (1854-1912), Director of the Dominion Government Biological Station at Nanaimo, British Columbia, Canada, who collected type

Asprocottus Berg 1906

aspro-, etymology not explained, possibly from asper, rough, referring to body (but not head) densely covered with spines, and/or to Aspro, referring to slender, ventrally-flattened body shape of A. herzensteini, superficially resembling the European percid Aspro apron (=Zingel asper); Cottus, type genus of family

Asprocottus abyssalis Taliev 1955

of the deep sea, referring to its occurrence at up to 1400 m in the southern part of Lake Baikal

Asprocottus herzensteini Berg 1906

patronym not identified but almost certainly in honor of Russian ichthyologist Solomon Markovich Herzenstein (1854-1894)

Asprocottus intermedius Taliev 1955

intermediate, presumably intermediate in characters between A. herzensteini and A. abyssalis

Asprocottus korjakovi korjakovi Sideleva 2001

in honor of Evgeniy Alekseevich Koryakov, an ichthyologist at the Lake Baikal Limnological Station in the 1940s (this sculpin is endemic to Lake Baikal)

Asprocottus korjakovi minor Sideleva 2001

small, presumably referring to smaller size (up to 80 mm TL) compared with the nominate form (up to 110 mm TL)

Asprocottus parmiferus Taliev 1955

parma, shield, fero, to bear, referring to whole body (except for belly, area under pectoral fins, and lower part of head) covered with wide bony scutes

Asprocottus platycephalus Taliev 1955

platy, flat; cephalus, head, referring to dorso-ventrally flattened head, its shape similar to the bill of a duck

Asprocottus pulcher Taliev 1955

beautiful, allusion not explained, perhaps referring to it coloration, described as having a brown back, yellow-brown sides, and dark-gray fins

Astrocottus Bolin 1936

astron, constellation, allusion not explained, however, illustration accompanying Bolin's description shows what appears to be a dense covering of ctenoid scales on body of *A. leprops*, which, on darker portions, can be said to look like stars in a night sky; *Cottus*, type genus of family

Astrocottus leprops Bolin 1936

lepros, scaly; *ops*, face, allusion not explained, perhaps referring to head (and body) "almost completely scaled" and/ or many small scales on eyeball (but lips and chin are described as scaleless)

Astrocottus matsubarae Katayama 1942

in honor of Kiyomatsu Matsubara (1907-1968), Imperial Fisheries Institute (Tokyo), for "kindness extended to [Katayama] in various ways" [although named after a man, some classically trained zoologists latinized the names of individuals whose names ended with the letter "a" by adding an "e" to the spelling]

Astrocottus regulus Tsuruoka, Maruyama & Yabe 2008

regular, referring to its being a common species frequently collected in northern Japan; also, Regulus is the name of the alpha star of the constellation Leo, alluding to the generic name *Astrocottus* ("constellation sculpin"), and to the fact that holotype was collected on 19 Aug. 2004, which is in the sign of Leo

Atopocottus Bolin 1936

atopos, extraordinary, described as a "strange" sculpin, perhaps referring to small size (3 cm SL), three gills (vs. 3½-4), and/or uncertain affinities; Cottus, type genus of family

Atopocottus tribranchius Bolin 1936

tri-, three; branchius, gill, referring to three gills (vs. 3½-4 in most other sculpins)

Batrachocottus Berg 1903

batrachus, frog, allusion not explained, probably referring to large head and or wide mouth of B. baicalensis; Cottus, type genus of family

Batrachocottus baicalensis (Dybowski 1874)

-ensis, suffix denoting place: Lake Baikal, where it is endemic

Batrachocottus multiradiatus Berg 1907

multi-, many; radiatus, rayed, proposed as a variety (or subspecies) of B. nikolskii with a greater number of dorsal-, anal- and pectoral-fin rays

Batrachocottus nikolskii (Berg 1900)

in honor of ichthyologist-herpetologist Alexander Mikhailovich Nikolsky (also spelled Nikolskii, 1858-1942)

Batrachocottus talievi Sideleva 1999

in honor of Dmitrii Nikolaevich Taliev (1908-1952), Soviet ichthyologist-limnologist, known for his work studying the sculpins of Lake Baikal, where this one is endemic

Bero Jordan & Starks 1904

local name for B. elegans at Aomori, Japan (in southern Japan, bero means tongue)

Bero elegans (Steindachner 1881)

elegant, fine, tasteful, neat or select, allusion not explained, possibly referring to color pattern, described as having 5-6 groups of black-brown spots above lateral line, with alternating light and dark-brown transverse bands or F-shaped spots below, with brown and light-gray spots and marblings (color in life is a light brownish cherry red, but Steindachner probably did not see a living specimen)

Bolinia Yabe 1991

-ia, belonging to: ichthyologist Rolf Bolin (1901-1973), Hopkins Marine Station, Stanford University, for his "great" contributions to our understanding of sculpin systematics

Bolinia euryptera Yabe 1991

eurys, broad; ptera, fin, referring to its broad-based pectoral fins, with the highest number of pectoral-fin rays known among sculpins

Chitonotus Lockington 1879

chiton, an outer covering or coat of mail; notos, back, referring to rough ctenoid scales on upper body, "leaving the lower undefended"

Chitonotus pugetensis (Steindachner 1876)

-ensis, suffix denoting place: Puget Sound, Washington, USA, where type locality (Fix Island) is situated (occurs in northeast Pacific from Alaska south to southern Baja California)

Clinocottus Gill 1861

Clinus, a genus of blenny; *Cottus*, type genus of family, i.e., a blenny-like sculpin, perhaps alluding to Girard's 1858 description of *C. globiceps* in 1858: "The general physiognomy of this species reminds us forcibly of certain species of blennies and gobies, owing to its peculiarly rounded head, a feature not common in the cottoid group."

Clinocottus acuticeps (Gilbert 1896)

acutus, pointed; ceps, head, referring to small head, which "tapers rapidly forward to the sharp slender snout"

Clinocottus analis (Girard 1858)

anal, allusion not explained, described as having anal-fin origin situated behind anterior margin of second dorsal fin; Jordan & Evermann (1898) say name refers to "large anal papilla," but this feature is not mentioned by Girard

Clinocottus embryum (Jordan & Starks 1895)

em-, in; bryum, moss, allusion not explained, presumably referring to its occurrence among algae in tide pools

Clinocottus globiceps (Girard 1858)

globus, globe or sphere; cephalus, head, referring to its rounded or bulbous head

Clinocottus recalvus (Greeley 1899)

bald in front, referring to few cirri on top of head, none on interorbital space

Cottinella Berg 1907

-ella, a diminutive; Cottus, type genus of family, i.e., a small sculpin, allusion not explained, proposed as a subgenus of Abyssocottus, possibly referring to smaller size (12.2 cm TL) relative to A. gibbosus (14.0 cm) and A. korotneffi (13.2 cm)

Cottinella boulengeri (Berg 1906)

patronym not identified but almost certainly in honor of ichthyologist-herpetologist George A. Boulenger (1858-1937), British Museum (Natural History)

Cottiusculus Jordan & Starks 1904

a "quasi diminutive" of Cottus (a manuscript name proposed by Petr Yulievich Schmidt; see C. schmidti)

Cottiusculus gonez Jordan & Starks 1904

named for the vessel *Gonez*, from which the fauna of Peter the Great Bay (co-type locality) was studied (a manuscript name proposed by Petr Yulievich Schmidt; see *C. schmidti*)

Cottiusculus nihonkaiensis Kai & Nakabo 2009

-ensis, suffix denoting place: Nihonkai, Japanese name of the Sea of Japan, which includes most of its distributional range

Cottiusculus primoricus Prokofiev 2020

-icus, belonging to: Primorsky Krai, a federal subject of Russia, where type locality (Peter the Great Bay) is situated

Cottiusculus schmidti Jordan & Starks 1904

in honor of Russian ichthyologist Petr Yulievich Schmidt (1872-1949), who collected in Japan and Siberia in 1900, and whose manuscript provided the names and descriptive material for *Cottiusculus* and *C. gonez*

Cottocomephorus Pellegrin 1900

combination of Cottus and Comephorus (Comephorinae), a similar genus also from Lake Baikal

Cottocomephorus alexandrae Taliev 1935

matronym not identified, probably in honor of Taliev's wife, amphipod biologist Aleksandra Yakovlevna Bazikalova; they worked together at the Limnological Research Station at Lake Baikal, where this sculpin is endemic

Cottocomephorus comephoroides (Berg 1900)

-oides, having the form of: resembling Comephorus baikalensis, also from Lake Baikal

Cottocomephorus grewingkii (Dybowski 1874)

patronym not identified but probably in honor of Konstantin Ivanovich Grewingk (1819-1887), Baltic-German geologist and mineralogist

Cottocomephorus inermis (Yakovlev 1890)

unarmed, allusion not explained, perhaps referring to small spines on head, usually hidden in skin, and/or sparse scales on body, lacking spines

Cottus Linnaeus 1758

Latinization of the Greek $k\acute{o}ttos$ ($\kappa\acute{o}\tau tos$), $k\acute{o}thos$ ($\kappa\acute{o}\theta os$) and a few similar words, denoting a bulging head, used as a name for small freshwater fishes with a large head [Gobio, gudgeon, and Gobius, goby, have the same etymological source]

Subgenus Cottus

Cottus aturi Freyhof, Kottelat & Nolte 2005

of Aturus (also spelled Athurus), Latin name of River Adour (occurs in Adour and Nivelle drainages in France and Spain)

Cottus cyclophthalmus Sideleva, Kesminas & Zhidkov 2022

cyclos, round; ophthalmus, eye, referring to round and convex shape of eyes

Cottus cyclophthalmus Sideleva, Kesminas & Zhidkov 2022

cyclos, round; ophthalmus, eye, referring to round and convex shape of eyes

Cottus dorofeevi Sideleva & Shidkov 2024

in honor of zoologist Sergei A. Dorofeev, Vitebsk State University (Belarus), for his "remarkable contribution to advances in the field"; he also organized and took part in the collection of type specimens

Cottus duranii Freyhof, Kottelat & Nolte 2005

of Duranius (also spelled Durranus), Latin name of River Dordogne, France, in whose drainage type locality (Stream Epie) is situated

Cottus dzungaricus Kottelat 2006

-icus, belonging to: Dzungarian Gobi (Mongolia and China), where it occurs [replacement name for *Cottus sibiricus altaicus* Li & Ho 1966, preoccupied by *C. altaicus* Kaschenko 1899; may be a junior synonym of *C. sibiricus*]

Cottus ferrugineus Heckel & Kner 1857

rust-colored, its base color described as brownish to rust-colored in spirits

Cottus gobio Linnaeus 1758

from the Greek kobios, most likely meaning head, usually applied to small fishes with large heads

Cottus gratzianowi Sideleva, Naseka & Zhidkov 2015

in honor of Valerian Ivanovich Gratzianow (also spelled Gratsianov, 1876-1932), author of the first taxonomic review of Russian fishes (1907), and who described *C. koshewnikowi*

Cottus haemusi Marinov & Dikov 1986

of Haemus, old name of the Balkan Ridge, from which the Beli Vit River (Danube River basin, Bulgaria, type

locality) originates

Cottus hispaniolensis Băcescu & Băcescu-Meșter 1964

-ensis, suffix denoting place: Hispania (i.e., Iberian Peninsula), referring to its occurrence in the southern Garonne drainage of Spain (also in France)

Cottus jaxartensis Berg 1916

-ensis, suffix denoting place: Jaxartes, ancient name of Syr Darya, Uzbekistan, in whose type locality (Ugam River, tributary of Chirchik River) is situated

Cottus koshewnikowi Gratzianov 1907

in honor of entomologist Grigorii Aleksandrovich Kozhevnikov (1866-1933), Moscow University, president of the Commission for the Study of the Fauna of the Moscow Governorate from the Goredva River (Oka River Basin), under whose auspices holotype was collected

Cottus metae Freyhof, Kottelat & Nolte 2005

in honor of biologist Meta Povž (Ljubljana, Slovenia), for her "continuous help with several projects"

Cottus microstomus Heckel 1837

micro-, small; stomus, mouth, referring to smaller mouth than that of C. gobio

Cottus perifretum Freyhof, Kottelat & Nolte 2005

peri-, around; fretum, strait, referring to its occurrence in streams on both sides of the English Channel (Fretum Gallicum in Latin)

Cottus petiti Băcescu & Băcescu-Meșter 1964

in honor of zoologist-anatomist Georges Petit (1892-1973), Muséum national d'Histoire naturelle (Paris), "with esteem and affection on the occasion of his 50th anniversary in science" (translation)

Cottus rhenanus Freyhof, Kottelat & Nolte 2005

-anus, belonging to: Rhenus, Latin name of Rhine River (Germany), in whose drainage it occurs

Cottus ricei (Nelson 1876)

in honor of Nelson's friend F. L. Rice, then a student in zoology at Northwestern University (Evanston, Illinois, USA), who collected holotype and gave it to Nelson for identification

Cottus rondeleti Freyhof, Kottelat & Nolte 2005

in honor of Guillaume Rondelet (1507-1566), precursor of European ichthyology and author of one the very first ichthyological treatises (1554-55); he was professor of medicine at the University of Montpellier, very close to type locality (a creek in Dept. Hérault, France)

Cottus sabaudicus Sideleva 2009

-icus, belonging to: Sabaudia, Latin spelling of Savoy, referring to Haute-Savoy district of southeastern France, where this sculpin appears to be endemic

Cottus scaturigo Freyhof, Kottelat & Nolte 2005

Latin for spouting water, i.e., a spring, referring to Timavo spring, Province Friuli-Venezia, Italy, where it is endemic

Cottus sibiricus Warpachowski 1889

-icus, belonging to: Siberia, where type locality (Yenisey River near Minusinsk Town, Krasnoyarsk Krai) is situated

Cottus spinulosus Kessler 1872

diminutive of *spinosus*, spiny, referring to granular spiny plates densely covering upper sides of head and dorsal and lateral regions of body

Cottus transsilvaniae Freyhof, Kottelat & Nolte 2005

of Transsilvania, Latin name of Transylvania, historical region located in central Romania, where this sculpin is endemic

Subgenus Cephalocottus Gratzianov 1907

proposed as a new genus for C. amblystomopsis, distinguished by its flattened cephalus, or head

Cottus amblystomopsis Schmidt 1904

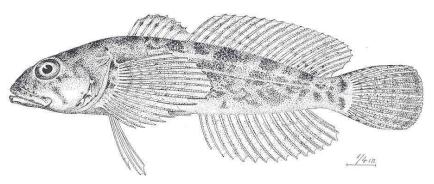
misspelling (with an "l") of *Ambystoma*, referring to the Axolotl, *Ambystoma mexicanus*; *opsis*, appearance, described as having a head that is "strongly dorsoventrally depressed, wide, nearly flat dorsally, abruptly sloping laterally, similar to the head of an axolotl" (translation)

Cottus nozawae Snyder 1911

in honor of zoologist Shunjiro (sometimes spelled Sunziro) Nozawa, Director, Fisheries Bureau (Hokkaido, Japan) [although named after a man, some classically trained zoologists latinized the names of individuals that ended with the letter "a" by adding an "e" to the spelling]

Subgenus Cottopsis Girard 1850

opsis, appearance, proposed as a new genus for C. asper, similar to Cottus but distinguished by its palatine teeth and



Cottus perplexus. From: Gilbert, C. H. and B. W. Evermann. 1894. A report upon investigations in the Columbia River basin, with descriptions of four new species of fishes. Bulletin of the U. S. Fish Commission v. 14 (art. 16): 169-207, Pls. 16-25.

dermal prickles

Cottus aleuticus Gilbert 1896

-ica, belonging to: the Aleutians (specifically, Unalaska Island, Alaska, USA), type locality (occurs in eastern Pacific south to California)

Cottus asper Richardson 1836

rough, its back and sides "thickly studded with very small, subulate, acute spines directed backwards"

Cottus asperrimus Rutter 1908

superlative of asper, very rough, presumably referring to "Fine prickles" covering body

Cottus gulosus gulosus (Girard 1854)

gluttonous, referring to its "proportionally large" mouth

Cottus gulosus wintu Moyle & Campbell 2022

named for the Wintu people, original inhabitants of the Sacramento River watershed of California (USA), where this sculpin occurs; the Winnemem Wintu (Middle Water People) still live in the area and are working to restore salmon runs and to protect sacred rivers and sites in the region

Cottus klamathensis klamathensis Gilbert 1898

-ensis, suffix denoting place: Upper Klamath Lake near Klamath Falls, Klamath County, Oregon (USA), type locality (also occurs in California)

Cottus klamathensis macrops Rutter 1908

macro-, large; ops, eye, referring to larger eye than nominate form

Cottus klamathensis polyporus Daniels & Moyle 1984

poly, many; porus, pore, referring to greater number of lateral-line pores compared with the other two subspecies

Cottus marginatus (Bean 1881)

margined, presumably referring to "distinct" white margin on first dorsal fin

Cottus ohlone ohlone Moyle & Campbell 2022

named for the Ohlone peoples, original inhabitants of the Santa Clara Valley region and much of the southern San Francisco Bay region of California (USA), where this sculpin occurs; the Ohlone name originally referred to more than 50 peoples who spoke similar languages and interacted with one another, but whose descendants are largely encompassed by the present-day Muwekma Ohlone Tribe

Cottus ohlone pomo Moyle & Campbell 2022

named for the Pomo peoples who were once the principal inhabitants (prior to the arrival of the Spanish) of the Russian River region of California (USA), where this sculpin occurs

Cottus perplexus Gilbert & Evermann 1894

interwoven, entangled, involved, intricate or confused, allusion not explained, possibly referring to its complex color pattern (e.g., "back and sides with vermiculations of light and dark, the back with 5 or 6 ill-defined black crossbars, which usually reach the lateral line; ... below the lateral line a number of small, quadrate, dark blotches, arranged in two irregular series"); Jordan & Evermann (1898) say name means "perplexed" without explanation, and Moyle (*Inland Fishes of California*, 2nd. ed., 2002) translates name as "perplexing," reflecting the difficulty in defining this species, but species was unambiguously described without any confusion or hesitation regarding its distinctiveness and status)

Cottus pitensis Bailey & Bond 1963

-ensis, suffix denoting place: Pit River basin, California, USA, type locality (the river itself was was named because

early Euro-American visitors were impressed by the deep pits dug by the native peoples to trap wildlife)

Cottus princeps Gilbert 1898

chief, first or foremost, allusion not explained, perhaps referring to how it differs from congeners known at the time in its "very narrow, slender form, the long fins, and especially in the extreme development of the mucous tubes and pores"

Cottus tenuis (Evermann & Meek 1898)

slender, referring to its "very slender" body

Subgenus *Uranidea* DeKay 1842

uranos, sky; eidon, I looked, i.e., stargazer, referring to "nearly vertical" eyes of *C. quiescens* (=cognatus) [treated as a full genus by some workers]

Cottus baileyi Robins 1961

in honor of ichthyologist Reeve M. Bailey (1911-2011), University of Michigan, for his "many noteworthy" contributions to our knowledge of North American freshwater fishes

Cottus bairdii bairdii Girard 1850

in honor of Spencer Fullerton Baird (1823-1887), Assistant Secretary of the Smithsonian Institution, Director of the U.S. National Museum, and U.S. Commissioner of Fish and Fisheries, who collected type

Cottus bairdii kumlieni (Hoy 1876)

in honor of ornithologist Aaron Ludwig Kumlien (1853-1902), who provided a "very accurate" drawing of the holotype of *Uranidea hoyi* (=*Cottus cognatus*) [authorship uncertain from text; perhaps Nelson (ex Hoy), with description from one of Hoy's types]

Cottus bairdii punctulatus (Gill 1861)

speckled, referring to numerous black spots, "very small and abundant" on head and anterior portion of body, with "quite thickly spotted" dorsal-, caudal- and pectoral-fin rays

Cottus bairdii semiscaber (Cope 1872)

semi-, half; scaber, rough, referring to "prickly" skin above lateral line, smooth below it posteriorly

Cottus bendirei (Bean 1881)

in honor of U.S. Army officer and ornithologist Charles E. Bendire (1836-1897), who collected type

Cottus caeruleomentum Kinziger, Raesly & Neely 2000

caeruleus, blue; mentum, chin, referring to blue chin of spawning males

Cottus carolinae carolinae (Gill 1861)

in honor of Gill's "estimable young friend," Miss Caroline Henry (1839-1920); she was the daughter of Joseph Henry (1797-1878), first Secretary of the Smithsonian Institution, who took Gill under his wing when Gill was beginning his career

Cottus carolinae infernatus Williams & Robins 1970

of the lowlands, referring to its distribution below the Fall Line in Alabama (USA)

Cottus carolinae zopherus (Jordan 1877)

Greek for dusky, referring to its "very dark, almost black" color

Cottus chattahoochee Neely, Williams & Mayden 2007

named for its distribution in the Chattahoochee River drainage above the Fall Line in Georgia (USA)

Cottus cognatus cognatus Richardson 1836

related, referring to its resemblance to the European C. gobio

Cottus cognatus gracilis Heckel 1837

slender, referring to its "slimmer and less spindle-shaped" body (translation) compared with C. gobio

Cottus echinatus Bailey & Bond 1963

Latin for prickly, referring to "heavy investment of prickles on the body, including the ventral surface" [extinct due to pollution and increased salinity from agriculture and drought; last seen in 1928]

Cottus extensus Bailey & Bond 1963

extended or stretched out, referring to its slender form

Cottus girardi Robins 1961

in honor of ichthyologist-herpetologist Charles Girard (1822-1895), "an early student of the genus"

Cottus hubbsi Bailey & Dimick 1949

in honor of Carl L. Hubbs (1894-1979), who recognized the species as new and "from whose broad experience with North American fishes [the authors] have drawn freely"; he also read the manuscript and offered "numerous helpful criticisms"

Cottus hypselurus Robins & Robison 1985

hypselos, high; oura, tail, referring to deep posterior part of body

Cottus immaculatus Kinziger & Wood 2010

spotless (immaculate), referring to absence of melanophores on ventral surface of peritoneum

Cottus kanawhae Robins 2005

of the Kanawha (=New) River system, Virginia and West Virginia, USA, where it is endemic

Cottus paulus Williams 2000

Latin for little, it being the smallest North American sculpin (38 mm SL, 45 mm TL) [replacement name for *C. pygmaeus* Williams 1968, preoccupied by *Cottus quadricornis pygmaeus* Lönnberg 1932, =*Myoxocephalus quadricornis*]

Cottus rhotheus (Smith 1882)

rushing (i.e., torrential), presumably referring to its occurrence in falls or swift current [author later known as Rosa Smith Eigenmann]

Cottus specus Adams & Burr 2013

cave or cavern, referring to primary habitat in caves

Cottus tallapoosae Neely, Williams & Mayden 2007

of the Tallapoosa River drainage, where it occurs above the Fall Line in Alabama and Georgia (USA)

Subgenus Incertae sedis

Cottus altaicus Kaschenko 1899

-icus, belonging to: Altai, Siberia, Russia, where type locality (Katun River, Bol'shoi Uiman) is situated

Cottus beldingii Eigenmann & Eigenmann 1891

in honor of professional bird collector Lyman Belding (1829-1917), who collected part of type series

Cottus confusus Bailey & Bond 1963

Latin for clouded, referring to "irregular and indistinct body pigmentation"

Cottus czerskii Berg 1913

in honor of ornithologist Alexander Ivanovich Czerski (1879-1921, son of Jan Czerski [1845-1892], celebrated Polish geologist, naturalist and explorer), who helped collect type

Cottus greenei (Gilbert & Culver 1898)

in honor of Charles Wilson Greene (1866-1947, then a physiology instructor at Stanford University (later a full professor of physiology and pharmacology at University of Missouri), "to whose energy was due much of the success of the expedition" during which type was collected (he later studied the phosphorescent organs of toadfishes, the circulatory system of hagfishes, and the physiology of Chinook Salmon)

Cottus hangiongensis Mori 1930

-ensis, suffix denoting place: location not explained, perhaps an alternate spelling of Hamgyeong, referring to North Hamgyeong Province of North Korea, where type locality (Kainei) is situated

Cottus kolymensis Sideleva & Goto 2012

-ensis, suffix denoting place: referring to its occurrence in the Kolyma River and other rivers of the Kolyma Krai (federal subject) of Russia

Cottus koreanus Fujii, Choi & Yabe 2005

Korean, known only from the Korean Peninsula, where it occurs in several rivers

Cottus leiopomus Gilbert & Evermann 1894

leios, smooth; poma, operculum, referring to its lack of preopercular spines

Cottus ohmiensis Watanabe 1960

-ensis, suffix denoting place: Ōmi Province, an old province of Japan that today comprises Shiga Prefecture, where co-type localities (Chinai River and Ado River) are situated [status uncertain; provisionally included here]

Cottus pollux Günther 1873

presumably named for Pollux, along with Caster, the Gemini, or twins, in Greek mythology, a seeming twin to *C. gobio*, described as "very similar" in general appearance and color

Cottus reinii Hilgendorf 1879

in honor of "Prof. Rein," who provided type, probably German geographer Johannes Justus Rein (1835-1918), who explored Japan in 1874-1875

Cottus schitsuumsh LeMoine, Young, McKelvey, Eby, Pilgrim & Schwartz 2014

Americanist phonetic notation of the spoken word (pronounced s-CHEET-sue-umsh) used by the first peoples (now recognized as the Coeur d'Alene Tribe) who inhabited portions of northern Idaho and western Montana (where this sculpin occurs), meaning "those who were found here," referring to the people of this tribe

Cyphocottus Sideleva 2003

cypho-, bent or hunchbacked, referring to back of C. megalops, which elevates sharply with age, forming a hump; Cottus, type genus of family

Cyphocottus eurystomus (Taliev 1955)

eury, wide; stoma, mouth, proposed as a subspecies of C. megalops with a bigger mouth, its terminus reaching middle of eye (vs. first ½ of eye)

Cyphocottus megalops (Gratzianov 1902)

mega-, large; ops, eye, referring to very large convex eyes, their diameter horizontally four times in HL

Daruma Jordan & Starks 1904

a "name applied to squat figures of Buddha, and thence to certain thick-headed fishes of Japan"

Daruma sagamia Jordan & Starks 1904

-ia, belonging to: Sagami Bay, Japan, type locality

Furcina Jordan & Starks 1904

-ina, adjectival suffix: furca, fork, referring to forked upper preopercular spine

Furcina ishikawae Jordan & Starks 1904

in honor of biologist Chiyomatsu Ishikawa (1861-1935), Tokyo Imperial University [although named after a man, some classically trained zoologists latinized the names of individuals whose names ended with the letter "a" by adding an "e" to the spelling]

Furcina osimae Jordan & Starks 1904

of Oshima (sometimes spelled Osima), the "great island" of Japan, where type locality (Hakodate, Oshima Subprefecture, Hokkaido) is situated

Gymnocanthus Swainson 1839

gymnos, bare or naked; acanthus, thorn or spine, allusion not explained, perhaps referring to head of *G. ventralis* (=pistilliger), described as scaleless (actually covered or partially covered with large plates) and with "few" spines, or to scaleless preopercular spine and cusps

Gymnocanthus detrisus Gilbert & Burke 1912

etymology not explained; *detrisus* does not appear in any of our dictionaries, perhaps a misspelling of *detritus*, worn away, referring to absence of filaments or papillae on head

Gymnocanthus galeatus Bean 1881

helmeted, referring to space between eyes "deeply concave and *completely covered* by aggregated bony granulations, as are the crown and neck" (italics in original)

Gymnocanthus herzensteini Jordan & Starks 1904

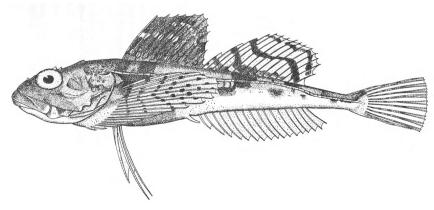
in honor of the late Russian ichthyologist Solomon Markovich Herzenstein (1854-1894), for his "excellent" work on the fishes of Hokkaido, Japan (type locality for this species)

Gymnocanthus intermedius (Temminck & Schlegel 1843)

intermediate, described as seeming to "hold the middle" (translation) between *Cottus* (now *Enophrys*) diceraus and *Cottus* (now *Gymnocanthus*) pistilliger

Gymnocanthus pistilliger (Pallas 1814)

pistilla, pistil; -iger, to bear, referring to axillary papillae of the male, with fringed filaments, white at the tip



Gymnoçanthus vandesandei. From: Poll, M. 1949. Résultats scientifiques des croisières du Navire-École Belge "Mercator" Volume IV. Poissons. Mémoires, Institut Royal des Sciences Naturelles de Belgique. 2 Séries. No. 33: 173-269.

Gymnocanthus tricuspis (Reinhardt 1830)

tri-, three; cuspis, cusp, referring to usually three cusps on upper preopercular spine

Gymnocanthus vandesandei Poll 1949

in honor of Commandant Remi Van de Sande (1893-1969), in charge of the Belgian training ship *Mercator*, from which holotype was collected

Icelinus Jordan 1885

diminutive of Icelus, in which I. quadriseriatus had previously been placed

Icelinus borealis Gilbert 1896

northern, referring to its distribution, described from Alaska (occurs south to Puget Sound, Washington, USA)

Icelinus burchami Evermann & Goldsborough 1907

in honor of James S. Burcham, a "young naturalist of great promise," who lost his life at Lake McDonald (Glacier National Park, Montana, USA) on November 12, 1905, while in the employ of the U. S. Bureau of Fisheries

Icelinus cavifrons Gilbert 1890

cavus, concave; frons, front or forehead, referring to "deep circular pit" (more of a shallow depression) on top of head

Icelinus filamentosus Gilbert 1890

with filaments, referring to long and filamentous first two dorsal-fin spines

Icelinus fimbriatus Gilbert 1890

fringed, referring to conspicuous palmate tentacles on nasal spines and above and behind eyes

Icelinus japonicus Yabe, Tsumura & Katayama 1980

Japanese, the first record of this genus from Japanese waters

Icelinus limbaughi Rosenblatt & Smith 2004

in honor of zoologist, diver and underwater photographer Conrad Limbaugh (1925-1960), who collected type in 1955, and for his pioneering work as diving officer at Scripps Institution of Oceanography, which "paved the way for the modern techniques of collection, manipulation, and observation of underwater marine life for scientific study" [he died after losing his way while diving in the labyrinth of an underground river in France]

Icelinus oculatus Gilbert 1890

eyed, presumably referring to "very large" eyes, as long as snout

Icelinus pietschi Yabe, Soma & Amaoka 2001

in honor of Theodore W. Pietsch (b. 1945), University of Washington (Seattle, USA), a principal investigator for the International Kuril Island Project (1994-1999), during which this sculpin was discovered

Icelinus quadriseriatus (Lockington 1880)

quadri-, four; seriatus, rowed, presumably referring to two bands of large, strongly ctenoid scales on each side (for a total of four)

Icelinus tenuis Gilbert 1890

thin or slender, referring to elongate, slender body, "tapering into a very slender caudal peduncle"

Icelus Krøyer 1845

Icelus, son of Hypnus, Greek god of sleep, referring to the "sluggishness" (translation) of various northern sculpins

Icelus armatus (Schmidt 1916)

armed with a weapon, presumably referring large plates on dorsal half of body, "armed with 10-12 spines each"

Icelus bicornis (Reinhardt 1840)

bi-, two; cornis, horn, referring to pair of spines behind each eye

Icelus canaliculatus Gilbert 1896

with small canals, referring to interorbital space "wholly occupied by the two conspicuous supraorbital mucous canals"

Icelus cataphractus (Pavlenko 1910)

clad in armor, referring to body "definitely armed" with a series of bony plates along lateral line and dorsal-fin base

Icelus ecornis Tsutsui & Yabe 1996

e-, not or non; cornis, horn, referring to absence of head spines on supraocular and occipital regions

Icelus euryops Bean 1890

eury, wide; ops, eye, referring to eye about twice as long as snout and 3/5 as long as head

Icelus gilberti Taranetz 1936

patronym not identified but almost certainly in honor of ichthyologist Charles Henry Gilbert (1859-1928), who described *I. canaliculatus* and *I. spiniger* in 1896, and co-described *I. spatula* in 1912

Icelus hypselopterus Fukuzawa, Mori, Matsuzaki & Kai 2022

hypselos, high; pterus, fin, referring to high first dorsal fin

Icelus mandibularis Yabe 1983

of the lower jaw, referring to lower jaw protruding beyond anterior margin of upper jaw

Icelus mororanis (Jordan & Seale 1906)

-is, genitive singular of: Mororan harbor, Hokkaido Island, Japan

Icelus ochotensis Schmidt 1927

-ensis, suffix denoting place: northern Okhotsk Sea, type locality (occurs in northwestern Pacific from Sea of Japan to Sea of Okhotsk)

Icelus perminovi Taranetz 1936

patronym not identified but probably in honor of G. N. Perminov, who worked with Taranetz at TIRH (Pacific Institute of Fishing Industry); he later became a colonel in the Russian army

Icelus rastrinoides Taranetz 1936

-iodes, having the form of: etymology not explained, presumably referring to its similarity to Rastrinus scutiger (which Taranetz retained in Icelus)

Icelus sekii Tsuruoka, Munehara & Yabe 2006

in honor of Katsunori Seki, Shiretoko Diving Kikaku, Rausu, Japan), who provided the authors with the first information about this species

Icelus spatula Gilbert & Burke 1912

paddle, spoon or broad blade used for stirring, referring to "distinctly spatular" shape of anal papilla of the male

Icelus spiniger Gilbert 1896

spinus, spine; -iger, to bear, i.e., spiny, referring to a single strong spine, directed outward and backward, at center of each dorsal plate

Icelus stenosomus Andriashev 1937

stenos, narrow; soma, body, proposed as a subspecies of I. uncinalis with a thinner, more elongate body

Icelus uncinalis Gilbert & Burke 1912

uncinus, hooked; analis, anal, referring to short, curved, hook-shaped process of anal papilla of the male

Leiocottus Girard 1856

leios, smooth, referring to its "perfectly smooth" skin, "bearing neither prickles nor scales"; *Cottus*, type genus of family [not to be confused with *Leocottus*]

Leiocottus hirundo Girard 1856

swallow (bird), named for having "so much of the aspect of *Trigla*" (i.e., *Trigla hirundo*, = *Chelidonichthys lucerna*, Trigloidei: Triglidae)

Leocottus Palmer 1961

leo, etymology not explained nor evident, but here is a guess: named for ichthyologist Lev (or Leo) Semyonovich Berg (1876-1950), who wrote several papers on Lake Baikal sculpins that Taliev cited, and who described over a dozen sculpin taxa; Cottus, type genus of family [Taliev did not designate a type, so authorship is credited to G. Palmer, British Museum (Natural History), a compiler for the Zoological Record, who designated type [not to be confused with Leiocottus]

Leocottus kesslerii kesslerii (Dybowski 1874)

patronym not identified but probably in honor of German-Russian zoologist Karl Federovich Kessler (1815-1881), who described *Cottus spinulosus* in 1872

Leocottus kesslerii arachlensis Tarkhova 1962

-ensis, suffix denoting place: Lake Arakhlei, Lake Baikal Basin, Russia, type locality

Leocottus kesslerii gussinensis Tarkhova 1962

-ensis, suffix denoting place: Lake Gusinor (also spelled Gusinoye), Lake Baikal Basin, Russia, type locality

Lepidobero Qin & Jin 1992

lepido-, scaled, similar to Bero but differing in having a series of plate-like scales along lateral line

Lepidobero sinensis Qin & Jin 1992

-ensis, suffix denoting place: Sinica (China), where it is endemic

Leptocottus Girard 1854

leptos, slender, referring to "elongated" body and head; Cottus, type genus of family

Leptocottus armatus Girard 1854

armed (with a weapon), referring to large, sharp preopercular spines

Limnocottus Berg 1906

limno-, lake, endemic to Russia's Lake Baikal; Cottus, type genus of family

Limnocottus bergi Dybowski 1908

in honor of ichthyologist Lev (also Leo) Semyonovich Berg (1876-1950), who proposed the genus in 1906

Limnocottus bergianus Taliev 1935

-anus, belonging to: patronym not explained but almost certainly in honor of Russian ichthyologist Lev (or Leo) Semyonovich Berg (1876-1950), who proposed the genus in 1906

Limnocottus godlewskii (Dybowski 1874)

patronym not identified but almost certainly in honor of Polish naturalist Wiktor Ignacy Aleksandrovich Godlewski (1831-1900), who was exiled to Siberia, along with Dybowski, after the failed Polish uprising (1863) in Ukraine; he settled in a village by Lake Baikal (where this sculpin is endemic), where he studied the local fauna

Limnocottus griseus (Taliev 1955)

gray, described as having a violet-brown body with a gray belly

Limnocottus pallidus Taliev 1948

pallid, described as having a yellow-brown back and nape, light-yellow sides, and light-gray belly with a lilac tint

Mesocottus Gratzianov 1907

mesos, middle, allusion not explained, perhaps Gratzianov believed this genus was intermediate between two or more related genera (he placed it between Asprocottus and Abyssocottus in his key); Cottus, type genus of family

Mesocottus haitej (Dybowski 1869)

from Haïtij-sagasu, Buryat (Mongolian dialect) for this sculpin in the Upper Amur River basin

Micrenophrys Andriashev 1954

micro-, small; *Enophrys*, a related genus (or the tribe Enophryini, to which it belongs), allusion not explained, perhaps referring to smaller size (~7.4 cm SL) compared with related species (e.g., *Enophrys diceraus*, ~32.0 cm SL)

Micrenophrys lilljeborgii (Collett 1875)

patronym not identified but almost certainly in honor of zoologist Wilhelm Lilljeborg (1816-1908), Uppsala University, whose 1849 account of a journey through Russia and Finnmark (a former county in northern Norway) is cited several times by Collett

Neocottus Sideleva 1982

neo-, new; Cottus, type genus of family, allusion not explained, perhaps connoting a similarity with Cottus and/or its uniqueness (e.g., a new kind of sculpin), distinguished by the morphology of its lateral-line system papillae, unique in the family

Neocottus thermalis Sideleva 2002

Latin for hot spring, referring to its occurrence in the region of hydrothermal activity

Neocottus werestschagini (Taliev 1935)

patronym not identified, probably in honor of Gleb Yurievich Werestschagin, limnologist and cladocerologist, Leningrad Academy of Sciences, who led an expedition to Lake Baikal (1925-1927), where this sculpin is endemic

Ocynectes Jordan & Starks 1904

ocy, swift (bird); nectes, swimmer, referring to very large pectoral fins (like the wings of a swift) of O. maschalis

Ocynectes maschalis Jordan & Starks 1904

Greek for armpit, referring to "single conspicuous black dot always present on axil"

Ocynectes modestus Snyder 1911

modest or unassuming, referring to how it differs from O. maschalis, in part, by its "plain" color

Oligocottus Girard 1856

oligos, referring to its "diminutive" size (reaching 9 cm TL); Cottus, type genus of family (Girard added: "We have full evidence that the specimens before us are adults, and consequently have not hesitated in the selection of that name. We are aware, however, that further search might bring to notice other species not quite so small and still of the same generic stamp. On the other hand, the etymology of a name is of but little avail towards elucidating the history of the object it designates."

Oligocottus maculosus Girard 1856

mottled or speckled, described as having a yellowish-brown body above, "mottled or variegated with blackish"

Oligocottus rimensis (Greeley 1899)

-ensis, suffix denoting place: etymology not explained but per Jordan & Evermann (1900) named for its habitat, i.e., rima, fissure or crevice, referring to its occurrence in tidepools lined with coralline algae (Pietsch & Orr 2019, Fishes of the Salish Sea, suggest name refers to the deeply incised interradial membranes of its anal fin, but we doubt this explanation)

Oligocottus rubellio (Greeley 1899)

a rosy one, referring to its coloration, described as "light brown to all shades of light red, pink, or lavender"

Oligocottus snyderi Greeley 1898

patronym not identified but almost certainly in honor of ichthyologist John Otterbein Snyder (1867-1943)

Orthonopias Starks & Mann 1911

etymology not explained, perhaps *ortho*-, straight or upright, and *ops*, eye, referring to eyes "set high in head, standing a little above profile" and/or a "line" of four cirri extending backwards from each eye; -ias, suffix used in some Greek names of fishes (e.g., Xiphias)

Orthonopias triacis Starks & Mann 1911

etymology not explained, perhaps tri, three, and akis, point, referring to trifid upper preopercular spine

Paracottus Taliev 1949

para-, near; Cottus, original genus of P. knerii

Paracottus knerii knerii (Dybowski 1874)

patronym not identified but almost certainly in honor of Austrian ichthyologist Rudolf Kner (1810-1869)

Paracottus knerii putorania Koryakov & Sidelev 1976

-ia, belonging to: Putorana Plateau, Krasnoyarsk Krai, Russia, where type locality (Lake Agatha, Enisei River basin) is situated

Phallocottus Schultz 1938

phallos, penis, referring to large conical anal papillae

Phallocottus obtusus Schultz 1938

blunt, referring to "bluntly rounded" preopercular spine

Phasmatocottus Bolin 1936

phasma, ghost or specter, allusion not explained nor evident; Cottus, type genus of family

Phasmatocottus ctenopterygius Bolin 1936

ctenos, comb; pterygius, finned, referring to rays of first dorsal fin not connected by a membrane, therefore the rays are like the teeth of a comb

Procottus Gratzianov 1902

pro-, before, forward, first, or in front of, allusion not explained but probably referring in some way to its similarity to and/or close relationship with *Cottus*, original genus of the type species *P. jeittelesii*

Procottus gotoi Sideleva 2001

in honor of ichthyologist Akira Goto, Hokkaido University (Japan), who studies freshwater sculpins (and who later collaborated with Sideleva on the description of *Cottus kolymensis* in 2012)

Procottus gurwicii (Taliev 1946)

in honor of "talented" zoologist Georgi Semenovich Gurvich (1906-1942), who was killed in action near Leningrad during WW2

Procottus jeittelesii (Dybowski 1874)

patronym not identified but probably in honor of Ludwig Heinrich Christian Jeitteles (1830-1883), Czech zoologist, paleontologist, geologist, and a pioneer of seismological research in the mid-19th century; he also proposed the genus *Alburnoides* (Cypriniformes: Leuciscidae) in 1861

Procottus major Taliev 1949

greater, proposed as a subspecies of P. jeittelesii that reaches a larger size (35 cm vs. 28 cm)

Pseudoblennius Temminck & Schlegel 1850

pseudo-, false; blennius, blenny, described as having the characters of blennies (Blenniiformes) but differing in physiognomy and dentition [proposed without a species, later named P. percoides]

Pseudoblennius argenteus (Döderlein 1887)

silvery, referring to several large, shiny silver spots below lateral line

Pseudoblennius cottoides (Richardson 1848)

-oides, having the form of: described as having "some resemblance" to Cottus

Pseudoblennius marmoratus (Döderlein 1884)

marbled, referring to head, sides and fins marbled with black-brown spots and bands

Pseudoblennius percoides Günther 1861

-oides, having the form of: perca, perch, allusion not explained, perhaps referring to its perch-like appearance

Pseudoblennius totomius Jordan & Starks 1904

-ius, belonging to: Totomi Bay, Japan, type locality

Pseudoblennius zonostigma Jordan & Starks 1904

zonos, band; stigma, mark or spot, presumably referring to any or all of the following: body entirely crossed by six double rows of small brown spots, a pair of rows across caudal peduncle, three pairs under soft dorsal fin, two pairs under spinous dorsal, wavy dark stripes on spinous dorsal, broader bands on anal fin, dark spot on maxillary below each eye, a small dark spot on base of middle pectoral-fin rays, a jet-black spot on first and last spines of spinous dorsal fin

Radulinopsis Soldatov & Lindberg 1930

opsis, appearance, referring to Radulinus, "which it resembles in appearance, but with which it is not closely related"

Radulinopsis derjavini Soldatov & Lindberg 1930

in honor of ichthyologist-hydrobiologist Alexander Nikolaevich Derjavin (1878-1963, also spelled Derzhavin), Director of the Research Institute of Fisheries at Vladivostok, Russia

Radulinopsis taranetzi Yabe & Maruyama 2001

in honor of Anatoly Yakovlevich Taranetz (1910-1941), for his "understanding of boreal fishes and especially cottoid classification"

Radulinus Gilbert 1890

-inus, adjectival suffix: radula, Latin for scraper, presumably referring to rows of large, keeled, spinous plates along lateral line, with similar plates on head

Radulinus asprellus Gilbert 1890

diminutive of asper, rough, presumably referring to rows of large, keeled, spinous plates along lateral line, with similar plates on head

Radulinus boleoides Gilbert 1898

-oides, having the form of: referring to "marked likeness" to the darter (Percidae) subgenus *Boleosoma* (bole, dart or javelin; soma, body, named for its dart-like shape)

Radulinus vinculus Bolin 1950

link or means of binding, referring to its intermediate position connecting Radulinus and Radulinopsis

Rastrinus Jordan & Evermann 1896

-inus, adjectival suffix: rastrum, scraper, referring to its rough scales

Rastrinus scutiger (Bean 1890)

scutum, shield; -iger, to bear, presumably referring to small, spiny scales on head and body above lateral line

Rheopresbe Jordan & Starks 1904

rheo-, to flow swiftly; *presbys*, old man or elder (i.e., first born), referring to Takitaroo ("first born of the cataract"), Japanese name of *R. fujiyamae* (=kazika)

Rheopresbe kazika (Jordan & Starks 1904)

from kajika, Japanese name for river sculpins

Ricuzenius Jordan & Starks 1904

-ius, belonging to: Rikuzen Province, old name for area now encompassing Miyagi Prefecture, where type locality of R. pinetorum (Matsushima Bay, off Kinkwazan Island) is situated

Ricuzenius nudithorax Bolin 1936

nudus, bare or naked; *thorax*, breast, presumably referring to a "few minute scales" anterior to pelvic-fin base, in contrast to scales on head and body above lateral line

Ricuzenius pinetorum Jordan & Starks 1904

of the pines, referring to Matsushima ("pine island") Bay, Japan, type locality

Ruscarius Jordan & Starks 1895

from Ruscum, genus of the Butcher's Broom, a rough plant, referring to prickly scales of R. meanyi

Ruscarius creaseri (Hubbs 1926)

in honor of Charles William Creaser (1897-1965), a "student of fishes," Hubbs' ichthyological colleage at the Museum of Zoology, University of Michigan

Ruscarius meanyi Jordan & Starks 1895

in honor of Edmond Stephen Meany (1862-1935), Secretary of the University of Washington (Seattle, USA), for his work in the Young Naturalists' Society

Sigmistes Rutter 1898

sigma, the letter "S," -istes, adjectival suffix, referring to lateral line of S. caulias, strongly arched anteriorly, creating an S-like shape

Sigmistes caulias Rutter 1898

Greek for stem or stalk, referring to many (20-21) rays of soft dorsal fin

Sigmistes smithi Schultz 1938

in honor of Hugh M. Smith (1865-1941), for his "numerous valuable contributions in ichthyology made over a long period of years"

Stelgistrum Jordan & Gilbert 1898

from stelgistron, Greek for scraper, presumably referring to "strongly spinous" plates along lateral line of S. stejnegeri

Stelgistrum beringianum Gilbert & Burke 1912

-anum, belonging to: Bering Sea, where type locality (Petrel Bank, Aleutian Islands, Alaska, USA) is situated

Stelgistrum concinnum Andriashev 1935

skillfully put together, beautiful or appropriate, allusion not explained, perhaps referring to its "very characteristic" color, which makes it "easily distinguishable" (translation) from its congeners

Stelgistrum stejnegeri Jordan & Gilbert 1898

in honor of Leonhard Stejneger (1851-1943), Curator of Reptiles, U. S. National Museum

Stlengis Jordan & Starks 1904

Greek for comb, presumably referring to villiform teeth (resembling bristles on a brush) on jaws, vomer and palatines of *S. osensis*

Stlengis distoechus Bolin 1936

di-, two; stoechos, rows, referring to two bands of ctenoid scales on sides, intermediate between S. misakia (one band) and S. osensis (three bands)

Stlengis misakia (Jordan & Starks 1904)

-ia, adjectival suffix: near Misaki, Japan, where type locality (Manazuru Point, Sagami Bay) is situated

Stlengis osensis Jordan & Starks 1904

-ensis, suffix denoting place: off Ose Point, Suruga Bay, Japan, type locality

Synchirus Bean 1890

syn-, together; cheiros, hand, referring to fused pectoral fins, unique among eastern Pacific sculpins

Synchirus gilli Bean 1890

in honor of Smithsonian zoologist Theodore Gill (1837-1914), for his "researches upon the mail-cheeked fishes"

Taurocottus Soldatov & Pavlenko 1915

taurus, bull, allusion not explained, perhaps referring to "unusual" preopercular spines, the top one very long and sometimes curved, like the horns of a bull; *Cottus*, type genus of family

Taurocottus bergii Soldatov & Pavlenko 1915

in honor of Lev (also Leo) Semyonovich Berg (1876-1950), Professor of Ichthyology, Agricultural Institute of Moscow, who described over a dozen sculpin taxa

Thyriscus Gilbert & Burke 1912

etymology not explained, perhaps diminutive of thyris, window, or thyra, door, referring to "short slit behind last gill"

Thyriscus anoplus Gilbert & Burke 1912

unarmed, allusion not explained, perhaps referring to absence of dorsal series of plates, distinguishing it from the similar *Icelus*

Trachidermus Heckel 1837

trachys, rough; dermus, skin, referring to scaleless body with thick skin covered with hook-shaped spines with their points turned backwards

Trachidermus fasciatus Heckel 1837

banded, referring to three vertical, dark-brown bands on upper body and/or narrow, brown transverse bands on pectoral, dorsal, anal, and caudal fins

Trichocottus Soldatov & Pavlenko 1915

trichos, hair or ray, presumably referring to many "cirri on lower part of head and some along lateral line; Cottus, type genus of family

Trichocottus brashnikovi Soldatov & Pavlenko 1915

in honor of Russian ichthyologist and fisheries chief Vladimir Konstantinovich Bražnikov (or Brashnikov, 1870-1921), "who collected some years ago in Okhotsk Sea and whose industry and zeal we are indebted for many valuable collections"

Triglops Reinhardt 1830

ops, appearance, the transverse folds of *T. pingelii* resembling the lateral plates of *Trigla pini* and *T. lineata* (Trigloidei: Triglidae), junior synonyms of *Chelidonichthys cuculus* and *C. lastoviza*, respectively

Triglops dorothy Pietsch & Orr 2006

in honor of Dorothy Thomlinson Gilbert (1929-2008), great granddaughter-in-law of the "eminent" ichthyologist and fisheries biologist Charles Henry Gilbert (who recognized this species as distinct in 1912), for her "generous and steadfast support to graduate students in ichthyology at the University of Washington, Seattle, in establishing the William W. and Dorothy T. Gilbert Ichthyology Research Fund" (a noun in apposition, without the matronymic "ae")

Triglops forficatus (Gilbert 1896)

deeply forked, like shears, referring to "very widely forked" caudal fin

Triglops jordani (Schmidt 1904)

in honor of ichthyologist David Starr Jordan (1851-1931) [authorship often given as Jordan & Starks 1904, in whose paper description first appeared]

Triglops macellus (Bean 1884)

diminutive of macer, slender or thin, referring to its slenderer body compared with T. pingelii

Triglops metopias Gilbert & Burke 1912

having a high forehead, presumably referring to "anterior portion of orbital rim forming a convex prominence over front of orbit"

Triglops murrayi Günther 1888

in honor of John Murray (1841-1914, later the founder of modern oceanography), who obtained type while dredging in deep water on the northwest coast of Scotland

Triglops nybelini Jensen 1944

in honor of ichthyologist Orvar Nybelin (1892-1982), Museum of Natural History (Stockholm, Sweden), who "keensightedly pointed out" this species' characteristic features in 1941 but did not separate it from *T. pingelii*; Jensen admitted that he had given Nybelin information that was "not satisfactory" about Reinhardt's original specimens of *T. pingelii*, which contributed to Nybelin's conservative assessment of its taxonomic status

Triglops pingelii Reinhardt 1837

in honor of Peter Christian Pingel (1793-1852), Danish geologist who explored Greenland (type locality) and collected the first specimen in 1829

Triglops scepticus Gilbert 1896

from the Greek skeptikos, observant, presumably referring to its large eyes, larger than those of T. pingelii

Triglops xenostethus Gilbert 1896

xenos, strange (i.e., different); stethos, breast, referring to small, closely imbricated spinous scales on breast, compared with cutaneous folds on congeners known at the time

Vellitor Jordan & Starks 1904

one who plucks or tears, allusion not explained, perhaps referring to long, pike-like head of *V. centropomus*

Vellitor centropomus (Richardson 1848)

presumably referring to its snook-like (Centropomus, Carangiformes: Centropomidae) body shape

Vellitor minutus Iwata 1983

small, a smaller species (up to 93.6 cm SL) than V. centropomus (up to 114.0 cm SL)

Zesticelus Jordan & Evermann 1896

zestos, soft-boiled, referring to very soft body and feeble skeleton of Z. profundorum, an adaptation to deep-sea life; Icelus, son of Hypnus, Greek god of sleep and name of a related genus (but described as most closely related to Porocottus), allusion not explained

Zesticelus bathybius (Günther 1878)

bathys, deep; bios, life, referring to its capture at 1033 m

Zesticelus japonicus Oshima 1957

Japanese, described from off Niigata, Japan [status uncertain, holotype lost; possibly a species of Artediellus]

Zesticelus ochotensis Yabe 1995

-ensis, suffix denoting place: southwestern Okhotsk Sea off Cape Shiretoko, Japan, type locality

Zesticelus profundorum (Gilbert 1896)

of the depths, collected at 730 m

Subfamily Myoxocephalinae

Taxonomic note: Placed in Psychrolutidae by some workers.

Argyrocottus Herzenstein 1892

argyros, silver, referring to silvery spots on belly and sides, and two silvery stripes, one from below eye to base of lower jaw, and another from eye to preopercle; *Cottus*, type genus of family

Argyrocottus zanderi Herzenstein 1892

in honor of "Dr. Zander," a medical doctor in St. Petersburg, Russia, who collected holotype (now lost) at Sakhalin Island in the Sea of Okhotsk; with the help of Hans-J. Paepke (Berlin Museum of Natural History) and Natalia Chernova (Zoological Institute, Russian Academy of Sciences, St. Petersburg), we determined that Dr. Zander was Alexander Karlovich Zander (life dates unknown), who served as "senior ship doctor" on the clipper Rider, which visited Sakhalin Island in 1889 or 1890

Enophrys Swainson 1839

en-, very; ophrys, eyebrow, presumably referring to thick, bony supraorbital ridge of E. claviger (=diceraus), "rendering the fore part of the head club-shaped"

Enophrys bison (Girard 1854)

named for the American buffalo or bison, presumably referring to its long preopercular spines, like the horns of a bison

Enophrys diceraus (Pallas 1787)

di-, two; keraus, horned, referring long upper preopercular spine, one on each side, like the horns of a bull

Enophrys lucasi (Jordan & Gilbert 1898)

in honor of Frederick Augustus Lucas (1852-1929), Curator of Comparative Anatomy, U.S. National Museum, and member of the U.S. Fur Seal Commission in 1896 and 1897

Enophrys taurina Gilbert 1914

bull-like, presumably referring to its long upper preopercular spines, like the horns of a bull

Megalocottus Gill 1861

megalo-, large or great, presumably referring to size of M. platycephalus, which reaches 42 cm TL; Cottus, type genus of family

Megalocottus platycephalus (Pallas 1814)

platy, broad or flat; cephalus, head, referring to broad, flat head, with strongly projecting lower jaw

Megalocottus taeniopterus (Kner 1868)

taenio-, band; *pterus*, fin, referring to three dark, oblique, longitudinal bands on second dorsal fin and four on anal fin, three vertical bands on caudal fin, and 4-5 bands on pectoral fins, much narrower than the light membrane between them

Microcottus Schmidt 1940

micro-, small, allusion not explained, perhaps referring to small size of M. sellaris (up to 14.7 cm TL) compared with other sculpins, especially Myoxocephalus (18-80 cm TL); Cottus, type genus of family

Microcottus matuaensis Yabe & Pietsch 2003

-ensis, suffix denoting place: Matua Island, central Kuril Archipelago, western Pacific between Russia and Japan, only known area of occurrence

Microcottus sellaris (Gilbert 1896)

saddled, referring to two "very conspicuous white saddle-shaped bars extending downward and forward from back"

Myoxocephalus Tilesius 1811

etymology not explained, possibly *myoxo-*, derived from *mys*, Greek for muscle, and *cephalus*, head, referring to beefy or humped ("tuberculum prominet") head of *M. stelleri; myoxos* also translates as Greek for dormouse, but we reject this interpretation since Tilesius said the head resembles that of a frog or toad ("Caput quale in ranis et bufonibus")

Myoxocephalus aenaeus (Mitchill 1814)

brazen, referring to "yellowish, or rather brass coloured" body below lateral line, and belly a "brassy white"

Myoxocephalus brandtii (Steindachner 1867)

patronym not identified, possibly in honor of German naturalist Johann Friedrich von Brandt (1802-1879)

Myoxocephalus jaok (Cuvier 1829)

local name for this sculpin in Kamchatka, Russia

Myoxocephalus niger (Bean 1881)

black, referring to very dark brown, almost black, color in alcohol (with a purplish tinge in some specimens), mottled with lighter brown or white

Myoxocephalus ochotensis Schmidt 1929

-ensis, suffix denoting place: Okhotsk Sea, Kamchatka, Russia, type locality

Myoxocephalus octodecemspinosus (Mitchill 1814)

octodecem, eighteen; spinosus, spined, referring to 18 (actually 20) spines about the head

Myoxocephalus polyacanthocephalus (Pallas 1814)

poly, many; acanthus, thorn or spine; cephalus, head, referring to numerous spines about the head, including three preopercular spines (the uppermost one very long) and well-developed opercular spines

Myoxocephalus quadricornis (Linnaeus 1758)

quadri-, four; cornis, horn, referring to four opercular spines

Myoxocephalus scorpioides (Fabricius 1780)

-oides, having the form of: allusion not explained, probably referring to resemblance to M. scorpius

Myoxocephalus scorpius (Linnaeus 1758)

scorpion, probably referring to "sea scorpion," an early common name for sculpins

Myoxocephalus sinensis (Sauvage 1873)

-ensis, suffix denoting place: Sinica (China), where this sculpin is endemic

Myoxocephalus stelleri Tilesius 1811

in honor of Georg Wilhelm Steller (1709-1746), German physician-naturalist who worked in Russia and explored the Kamchatka Peninsula; his unpublished manuscript provided material for Tilesius' description

Myoxocephalus thompsonii (Girard 1851)

in honor of Rev. Zadock Thompson (1796-1856), Episcopalian priest, geologist, geographer, historian, professor, and "esteemed naturalist" of Burlington, Vermont (USA)

Myoxocephalus tuberculatus Soldatov & Pavlenko 1922

with tubercles, referring to a pair of large, subconical tubercles above eyes and a pair of somewhat smaller ones at occiput, and/or "horny" tubercles on inner surface of pectoral fins on males

Porocottus Gill 1859

poros, pore, referring to numerous pores along head and body of P. quadrifilis, and pores along lateral line

Porocottus allisi (Jordan & Starks 1904)

in honor of Edward Phelps Allis (1851-1947), Milwaukee, Wisconsin (USA), comparative anatomist, evolutionary morphologist, and author of a 1909 monograph on the cranial anatomy of mail-cheeked fishes

Porocottus camtschaticus (Schmidt 1916)

-icus, belonging to: west coast of Kamchatka, Russia, where type locality (mouth of Osernaya River) is situated

Porocottus coronatus Yabe 1992

crowned, referring to group of finger-like cirri on dorsal midline of head

Porocottus japonicus Schmidt 1935

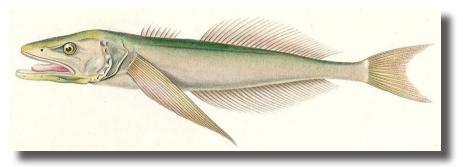
Japanese, probably referring to Sea of Japan, where co-type localities, DeCastri Bay (now called Chikhachyova Bay) and western coast of Sakhalin, are situated

Porocottus leptosomus Muto, Choi & Yabe 2002

leptos, thin; soma, body, referring to strongly compressed body

Porocottus mednius (Bean 1898)

latinization of *Medni*, its Russian name, meaning copper, referring to Medny Island, Commander Islands, Bering Sea, type locality



An early color illustration, perhaps the first, of Comephorus baikalensis. From: Valenciennes, A. 1838. Les poissons. In: Cuvier, G. Le règne animal distribué d'après son organisation, pour servir de base à l'historie naturelle des animaux, et d'introduction à l'anatomie comparée. Troisième édition. Tome 4. Fortin, Masson et Co., Paris. p. 1-392, pls.

Porocottus minutus (Pallas 1814)

small, described at 7.62 cm, the smallest sculpin known to Pallas

Porocottus quadrifilis Gill 1859

quadri-, four; filum, filament, referring to pair of occipital cirri and pair of postocular cirri

Porocottus tentaculatus (Kner 1868)

with tentacles, referring to fringed tentacle on sharp spine before each eye, and a small, thread-like tentacle on blunt, forked, bony knob on end of supraocular ridge

Taurulus Gratzianov 1907

diminutive of *taurus*, bull, referring to anterior of two spines on gill cover, reaching backward to a point below foremost part of dorsal fin, like the horns of a bull or water buffalo

Taurulus bubalis (Euphrasen 1786)

water buffalo (*Bubalus bubalis*), referring to anterior of two spines on gill cover, reaching backward to a point below foremost part of dorsal fin, like the horns of a water buffalo

Subfamily Comephorinae Baikal Oilfishes

Comephorus Lacepède 1800

coma, from the Greek kome, hair of the head; phorus, bearer, referring to many rays of second dorsal fin garnished with long, hair-like filaments, a misnomer: Lacepède, paraphrasing Pallas' exaggerated account of the delicacy of the dorsal-fin rays of C. baikalensis, erroneously believed the rays, as fine as hair, extended far beyond the fin's membrane (which they do not)

Comephorus baikalensis (Pallas 1776)

-ensis, suffix denoting place: Lake Baikal of Russia, where it is endemic

Comephorus dybowski Korotneff 1904

in honor of Polish biologist Benedykt Dybowski (1833-1930), the "learned professor who has studied this strange genus of fishes the most" [often spelled *dybowskii*, but Korotneff (also spelled Korotnev) left off the second "i," either a transcription error or a noun in apposition]