# The ETYFish Project

COMMENTS: 🖃 v. 7.0 - 1 May 2024

# Order PERCIFORMES (part 22)

# Suborder COTTOIDEI

Infraorder COTTALES (part 4 of 4)

# Family LIPARIDAE Snailfishes

41 genera/subgenera · 453 species/subspecies

# Acantholiparis Gilbert & Burke 1912

acanthus, thorn or spine, referring to strongly projecting spines on operculum; Liparis, type genus of family

# Acantholiparis caecus Grinols 1969

caecum, blind (as in "cul-de-sac"), named for its well-defined pyloric caeca

# Acantholiparis opercularis Gilbert & Burke 1912

opercular, referring to strongly projecting spines on operculum

## Aetheliparis Stein 2012

*aethes*, Greek for unusual or strange, referring to "remarkable" morphology of head and pectoral girdle; *Liparis*, root of the family name (and type genus of family)

# Aetheliparis rossi (Chernova & Stein 2004)

in honor of Steve W. Ross, University of North Carolina Center for Marine Science, who notified the authors about the capture of this snailfish furnished specimens for examination

# Aetheliparis taurocanis Stein 2012

taurus, bull; canis, dog, referring to pugnacious appearance resulting from vertical mouth and prominent lower jaw

# Allocareproctus Pitruk & Fedorov 1993

allo-, other, i.e., another genus closely related to Careproctus, original genus of type species, A. jordani

# Allocareproctus jordani (Burke 1930)

in honor of ichthyologist David Starr Jordan (1851-1931), who co-described this species as *Careproctus gilberti* in 1914 but used a preoccupied name

# Allocareproctus kallaion Orr & Busby 2006

Greek for comb, referring to multiple projections on orobuccal valve and single row of teeth on posterior part of dentary

## Allocareproctus tanix Orr & Busby 2006

Aleut word (species is endemic to the Aleutian Islands) for forehead, referring to absence of nasal papillae on its pale head

# Allocareproctus unangas Orr & Busby 2006

*unangas*, autonym of the Aleuts of Atka Island, a major island near the center of this species' distribution, in honor of the people of the Aleutian Islands

## Allocareproctus ungak Orr & Busby 2006

Alutiiq (native people of the Alaskan Peninsula, where this snailfish occurs) word for whiskers, referring to strong papillae on many cephalic pores

# Bathyphasma Gilbert 1896

*bathys*, deep, referring to occurrence at 2904 m; *phasma*, an apparition, presumably referring to white head, fins and body ("inconspicuously mottled with brown")

# Bathyphasma ovigerum Gilbert 1896

*ovum*, egg; *-iger*, to bear, referring to holotype, a male, captured with a spherical mass of eggs, "evidently" belonging to this species, in its mouth, suggesting that it is a mouthbrooder

## Careproctus Krøyer 1862

carus, head; proctus, anus, referring to anterior position of anus of C. reinhardti, below posterior part of head

# Subgenus Careproctus

#### Careproctus abbreviatus Burke 1930

shortened, allusion not explained, perhaps referring to short tail compared with attenuate tail of C. bathycoetus

## Careproctus acanthodes Gilbert & Burke 1912

*acanthus*, spine; *-odes*, form, i.e., spiny form, presumably referring to multifid prickles scattered over head and body, absent on lips and chin, few or none near caudal fin

## Careproctus aciculipunctatus Andriashev & Chernova 1997

*acicula*, spinule; *punctatus*, spotted, referring to entire body densely covered with very small, light speckles, each having a needle-like spinule

## Careproctus albescens Barnard 1927

whitish, referring to color in spirits

#### Careproctus ambustus Orr 2020

scorched, referring to black tail that contrasts with pink-to-red anterior part of body

#### Careproctus attenuatus Gilbert & Burke 1912

thin or tapered, presumably referring to its slender body

# Careproctus bathycoetus Gilbert & Burke 1912

bathys, deep; koitos, bed, holotype captured at 3294 m, presumably at or near the seabed

## Careproctus batialis Popov 1933

etymology not explained, perhaps a variant spelling of *bathyalis*, of the deep, referring to its occurrence at 1225-1980 m

# Careproctus bowersianus Gilbert & Burke 1912

-anus, belonging to: Bowers Bank, Bering Sea, Alaska, type locality

# Careproctus brevipectoralis Chernova, Thiel & Eidus 2020

brevis, short; pectoralis, pectoral, referring to short upper pectoral-fin lobe (11.3% SL), not reaching anal-fin origin

# Careproctus canus Kido 1985

Latin for gray, referring to body color

## Careproctus canusocius Orr 2020

combination of *canus*, an amalgamation of the abbreviated names of Canada and the United States, with *socius*, Latin for ally, alluding to the collections of types during a collaborative cruise conducted by the United States and Canada in the Beaufort Sea Transboundary Region, which is "claimed by both countries, who have remained historic allies in the face of global challenges"

# Careproctus catherinae Andriashev & Stein 1998

in honor of Catherine Ozouf-Costaz (b. 1951), Muséum national d'Histoire naturelle (Paris), for her "pioneer" caryotaxonomic studies of Antarctic notothenioid fishes

# Careproctus crozetensis Duhamel & King 2007

*-ensis*, suffix denoting place: abyssal depths (4250 m) of the Crozet Basin, Southern Ocean, only known area of occurrence

#### Careproctus cryptacanthoides Krasyukova 1984

-oides, having the form of: cryptos, hidden; acanthus, spine, allusion not explained, perhaps referring to bony spine immersed in small epithelial tubercles swollen with mucus on head and anterior body of formalin-fixed specimens

## Careproctus curilanus Gilbert & Burke 1912

-*anus*, belonging to: latinization of Kuril, referring to Kuril Islands, western north Pacific, where type locality (Simushir Island) is situated

#### Careproctus cyanogladius Kai, Endo & Nakayama 2021

*cyaneus*, blue, referring to pale-blue coloration; *gladius*, sword, referring to compressed and elongated sword-like body shape

# Careproctus cyclocephalus Kido 1983

cyclo-, round; cephalus, head, presumably referring to "massive, and globular" head

# Careproctus cypseluroides Schmidt 1950

-oides, having the form of: similar to C. cypselurus

# Careproctus ectenes Gilbert 1896

drawn out, described as having an "extremely elongate form"

# Careproctus entargyreus Gilbert & Burke 1912

*entos*, within or inside; *argyreus*, silvery, referring to silvery (with scattered black dots) peritoneum, instead of black as in *C. entomelas* (described in same publication)

# Careproctus entomelas Gilbert & Burke 1912

entos, within or inside; melas, black, referring to "jet black" peritoneum

# Careproctus filamentosus Stein 1978

with filaments, referring to fine, elongated, lower pectoral-fin rays

# Careproctus furcatus Mori 1956

forked, referring to "deeply forked" caudal fin

# Careproctus globulus Chernova, Thiel & Eidus 2020

diminutive of globus, ball or sphere, referring to nearly spherical anterior part of body

# Careproctus guillemi Matallanas 1998

in honor of Matallanas' son Guillem, for his "inexhaustible scientific curiosity"

# Careproctus homopterus Gilbert & Burke 1912

*homos*, same; *ptera*, fin, perhaps referring to how pectoral fin is "indistinctly" (vs. distinctly) notched, with none of the lower rays extending beyond ventral suction disc

# Careproctus hyaleius Geistdoerfer 1994

hyaline, i.e., with the transparency of glass, referring to transparent bodies in life (opaque in formalin)

# Careproctus kamikawai Orr 2012

in honor of Dan J. Kamikawa, Northwest Fisheries Science Center, "keen observer" and collector of most of the type material; the common name, Arbiter Snailfish, refers to Kamikawa's given name, Dan, meaning "judge" in Hebrew

# Careproctus lacrima Orr 2021

Latin for tear or teardrop, referring to its translucent and teardrop-shaped body

# Careproctus laperousei Chernova, Thiel & Eidus 2020

in honor of French Naval officer and seafarer J. F. Laperouse (Chevalier Jean-François de Galaup, comte de La Pérouse, 1741-ca. 1788), who made a geographical expedition to the Pacific Ocean and discovered the Bussol Strait (type locality) in 1787

## Careproctus latiosus Andriashev & Chernova 2011

latus, broad; os, mouth, i.e., broad-mouthed, referring to large mouth, its angle below center of eye

# Careproctus lerikimae Orr, Kai & Nakabo 2015

in honor of Erika Acuña, Kim Rand, and Libby Logerwell, all of the Alaska Fisheries Science Center, for collecting, or coordinating the collection, of the first representatives of this species at sea in 2008; epithet is an amalgamation of the collectors' names to be treated as a noun in apposition

# Careproctus longidigitus Kai & Matsuzaki 2019

longus, long; digitus, finger, referring to filamentous rays in lower lobe of pectoral fin

# Careproctus longifilis Garman 1892

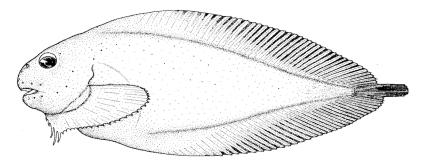
longus, long; filum, thread, referring to "slender prolongations" of upper pectoral-fin rays

## Careproctus lycopersicus Orr 2012

named for the tomato plant, Solanum lycopersicum, referring to the fish's typically bright, red tomato-like coloration

#### Careproctus macrodiscus Schmidt 1950

*macro-*, large; *discus*, disc, referring to large ventral suction disc, larger than the similar disc of *Bathyphasma ovigerum*, its presumed congener at the time



Careproctus marginatus. Kido, K. 1988. Phylogeny of the family Liparididae, with the taxonomy of the species found around Japan. Memoirs of the Faculty of Fisheries Hokkaido University v. 35 (no. 2): 125-256.

#### Careproctus marginatus Kido 1988

edged, referring to black posterior portions of dorsal and anal fins

# Careproctus maslenikovae Orr 2021

in honor of Katherine P. Maslenikov, Collections Manager of the Burke Museum's Fish Collection at the University of Washington (Seattle, USA), "diligent collector of many snailfish types and other specimens," for her "contributions to and cheerful support of ichthyology in the Pacific Northwest"

# Careproctus mederi Schmidt 1916

in honor of Gerhard Richardovich Meder (1865-?), Russian naval physician aboard the hydrographical vessel *Okhotsk* (1914-1916), who collected holotype

# Careproctus melanuroides Schmidt 1950

-oides, having the form of: similar to C. melanurus

# Careproctus merretti Andriashev & Chernova 1988

in honor of English ichthyologist Nigel R. Merrett (b. 1940), the "author of highly interesting studies on the ecology and systematics of deepwater fishes" (translation); he also collected holotype

# Careproctus microstomus Stein 1978

micro-, small; stomus, mouth, referring to small "tadpolelike" mouth

## Careproctus mollis Gilbert & Burke 1912

soft, presumably referring to its soft, gelatinous body (common to all snailfishes)

# Careproctus moskalevi Andriashev & Chernova 2011

in honor of Lev I. Moskalev, Shirshov Institute of Oceanology, Russian Academy of Sciences, hydrobiologist, zoologist and researcher of deep-water fauna

## Careproctus narilobus Stein 2012

naris, nostril; lobus, lobe, referring to each nostril with a distinct dorsoposterior flap or lobe

# Careproctus nelsoni Orr 2016

in honor of Russell ("Russ") E. Nelson, Jr., retired Director of the Resource Assessment and Conservation Engineering (RACE) Division of the Alaska Fisheries Science Center (AFSC), and manager of the Foreign Fishery Observer Program of the Northwest and Alaska Fisheries Science Center, for his "leadership and support of research into biodiversity and ecosystem-based fisheries management"

## Careproctus nigricans Schmidt 1950

blackish, its "coloration grayish, somewhat darker on head and tail; dorsal and anal fins, gray anteriorly, becoming blackish posteriorly, the hind parts as well as the caudal fin black" (translation)

# Careproctus notosaikaiensis Kai, Ikeguchi & Nakabo 2011

-ensis, suffix denoting place: off Saikai, Noto Peninsula, Ishikawa, Japan, type locality

# Careproctus novaezelandiae Andriashev 1990

of New Zealand, described from the southeastern New Zealand Plateau

# Careproctus opisthotremus Gilbert & Burke 1912

opistho-, behind; trema, hole, referring to posterior position of vent, closer to anal fin than to ventral suction disc

# Careproctus oregonensis Stein 1978

-ensis, suffix denoting place: off the coast of Oregon, USA, type locality

## Careproctus orri Kai & Tashiro 2021

in honor of James W. Orr, Alaska Fisheries Science Center (National Oceanic and Atmospheric Administration), who has contributed "greatly" to the systematics of snailfishes

# Careproctus ostentum Gilbert 1896

a spectre, allusion not explained, but, like C. phasma and C. spectrum, a whitish denizen of the deep with loose skin

# Careproctus parvidiscus Imamura & Nobetsu 2002

parvus, small; discus, disc, referring to its "rudimentary" ventral suction disc (2.5% HL)

# Careproctus paxtoni Stein, Chernova & Andriashev 2001

in honor of John R. Paxton (b. 1938), Australian Museum (Sydney), for his many contributions to the knowledge of Australian and deep-sea fishes

# Careproctus pellucidus Gilbert & Burke 1912

clear or transparent, referring to transparent skin, tinged with light rose, in life

# Careproctus phasma Gilbert 1896

an apparition, allusion not explained, but, like *C. ostentum* and *C. spectrum*, a whitish denizen of the deep with loose skin

## Careproctus pulcher Chernova, Thiel & Eidus 2020

handsome, referring to its "elegant proportions and beautiful fresh color" (reddish-orange body with orange dorsal, anal and caudal fins; male has a wide dark band on head across eye area)

# Careproctus pycnosoma Gilbert & Burke 1912

pycnos, thick; soma, body, allusion not explained nor evident, perhaps referring to posterior part of body thicker and deeper than congeners (per Mecklenburg et al., 2002, Fishes of Alaska)

# Careproctus ranula (Goode & Bean 1879)

diminutive of rana, frog, i.e., tadpole, referring to tadpole-like shape (thick head, quickly tapering to the tail)

#### Careproctus rastrinoides Schmidt 1950

-oides, having the form of: similar to C. rastrinus

## Careproctus rastrinus Gilbert & Burke 1912

-inus, adjectival suffix: rastrum, scraper, presumably referring to multifid prickles "scattered thickly" over head and body

## Careproctus rausuensis Machi, Nobetsu & Yabe 2012

*-ensis*, suffix denoting place: Rausu, a town on the Pacific coast of the Shiretoko Peninsula, Hokkaido, Japan, type locality

# Careproctus reinhardti (Krøyer 1862)

in honor of Danish zoologist Johannes Theodor Reinhardt (1816-1882), who described *Liparis tunicatus* in 1836 [Krøyer spelled the name *reinhardi* but *reinhardti* is in prevailing usage]

# Careproctus rhodomelas Gilbert & Burke 1912

*rhodo-*, rosy; *melas*, black, presumably referring to "rose red or brick red" body color in life, "brighter anteriorly, except where underlaid by black"; *melas* could also refer to "jet black" anterior coloration in spirits

# Careproctus rhomboides Mori, Matsuzaki, Kai & Tashiro 2024

-oides, having the form of: a rhombus, referring to its diamond-like body shape

# Careproctus roseofuscus Gilbert & Burke 1912

*roseo-*, rosy; *fuscus*, dark or dusky, referring to rosy anterior color in life, with black abdomen and peritoneum, and "dusky" margins of dorsal, anal and caudal fins

## Careproctus rotundifrons Sakurai & Shinohara 2008

rotundus, round; frons, front or forehead, referring to rounded forehead

# Careproctus sarasa Tanaka 1916

Japanese for calico, allusion not explained, perhaps referring to variegated color pattern [a doubtful species, provisionally included here, possibly a junior synonym of *Liparis punctulatus*]

# Careproctus scottae Chapman & DeLacy 1934

in honor of Dorothy Ruth Rustad née Scott (1909-1998), a teacher in Petersburg, Alaska, who provided type specimens, which were captured by a shrimp trawler (in 1986 she published a book, *I Married a Fisherman*)

# Careproctus segaliensis Gilbert & Burke 1912

-ensis, suffix denoting place: Isle Ségalian, French spelling of Sakhalin Island, Russia, type locality

# Careproctus seraphimae Schmidt 1950

in honor of ichthyologist Seraphima Grigorievna Somova-Generosova (1907-ca. 1960), and wife of Mikhail Mikhailovitch Somov (see *Paraliparis somovi*), who worked on the trawler *Gagara*, and who sampled an "important" (translation) collection of fishes, including holotype of this one

# Careproctus schmidti Chernova, Vedischeva & Datskii 2021

in honor of Soviet ichthyologist Petr Yulievich Schmidt (1872-1949), author of "fundamental" (translation) works on the fishes of the Far Eastern seas [subgeneric placement provisional]

# Careproctus shigemii Matsuzaki, Mori, Kamiunten, Yanagimoto & Kai 2020

in honor of the late Shigemi Fujimoto, a fisherman of Rausu, Hokkaido, Japan, who assisted the authors' team in collecting various marine organisms, including this species, and who contributed "significantly" to their efforts to understand the marine biodiversity of Rausu and Shiretoko Peninsula, a World Heritage Area

## Careproctus sinensis Gilbert & Burke 1912

-ensis, suffix denoting place: Sinica (China), although it was described from off Sado Island, Japan

# Careproctus spectrum Bean 1890

spectre or ghost, allusion not explained, perhaps referring to pale coloration of most specimens and/or occurrence in deep water (collected at 201 m)

#### Careproctus spiraki Orr 2021

derived from the Greek *spyrakia*, small rice-like bumps, referring to small pimple-like bumps covering body

# Careproctus surugaensis Murasaki, Takami & Fukui 2017

-ensis, suffix denoting place: northern part of Suruga Trough, Suruga Bay, Japan, type locality

# Careproctus tomiyamai Murasaki, Kai, Endo & Fukui 2022

in honor of ichthyologist Shinichi Tomiyama, Marine Science Museum, Tokai University, "whose provision of the holotype of the new species initiated this study"

# Careproctus trachysoma Gilbert & Burke 1912

*trachys*, rough; *soma*, body, referring to multifid prickles scattered thickly over head and body (except for lips and chin), with ~10 slender prickles clustered around a single base

# Careproctus zachirus Kido 1985

za-, very; cheiros, hand, referring to long upper pectoral-fin lobe

## Subgenus Allochir Jordan & Evermann 1896

allo-, other (i.e., different); cheiros, hand, referring to unnotched pectoral fin of C. melanurus

# Careproctus colletti Gilbert 1896

in honor of zoologist Robert Collett (1842-1913), "distinguished" author of the fishes section of *The Norwegian North-Atlantic Expedition, 1876-1878*, published in 1880

# Careproctus cypselurus (Jordan & Gilbert 1898)

kypselos, swallow (bird); oura, tail, referring to elongate caudal fin, forked like the tail of a swallow

# Careproctus furcellus Gilbert & Burke 1912

diminutive of furcus, forked, referring to "less forked" caudal fin compared with C. cypselurus

# Careproctus melanurus Gilbert 1892

melas, black; oura, tail, referring to black caudal fin (and posterior portions of confluent dorsal and anal fins)

#### Subgenus Caremitra Jordan & Evermann 1896

*carus*, head, possibly referring to "very heavy" head of *C. simus* and/or to nominate genus *Careproctus*; *mitra*, stomacher (per the authors), a V-shaped piece of decorative cloth worn over chest and stomach, perhaps referring to ventral suction disc of *C. simus* nearly as long as eye

# Careproctus kidoi Knudsen & Møller 2008

in honor of Kaoru Kido, Hokkaido University (Japan), who, together with Marmoru Yabe, first recognized this as a probable new species in 1995

#### Careproctus micropus (Günther 1887)

*micro*-, small; *pous*, foot, referring to "unusually small" ventral suction disc

## Careproctus simus Gilbert 1896

pug-nosed, referring to thick, rounded snout overlapping mouth

# Subgenus Careproctula Andriashev 2003

diminutive of Careproctus

#### Careproctus acaecus Andriashev 1991

a-, without; *caecum*, blind (as in "cul-de-sac"), referring to absence of pyloric caeca, its chief diagnostic character

# Careproctus acifer Andriashev & Stein 1998

acus, needle; fero, to bear, referring to needle-like prickles covering body

# Careproctus aculeolatus Andriashev 1991

small-spined, referring to sparse bundles of needle-like spines on body

#### Careproctus ampliceps Andriashev & Stein 1998

amplus, large; cephalus, head, referring to large, high head, its width nearly <sup>2</sup>/<sub>3</sub> its depth and <sup>1</sup>/<sub>2</sub> its length

## Careproctus armatus Andriashev 1991

armed (with a weapon), referring to well-developed prickles on skin

## Careproctus atakamensis Andriashev 1998

-ensis, suffix denoting place: Atakama (actually spelled Atacama) Trough, off Chile, only known area of occurrence

# Careproctus atrans Andriashev 1991

blackish, referring to almost black pigmentation of anterior body of holotype

# Careproctus aureomarginatus Andriashev 1991

*aureus*, gold; *marginatus*, edged or bordered, referring to gold-orange borders of dorsal, caudal, anal, and pectoral fins in life

## Careproctus cactiformis Andriashev 1990

cacti-, cactus; formis, shape, referring to cactus-like spinules (arranged in clusters with their bases merged) on skin

#### Careproctus continentalis Andriashev & Prirodina 1990

continental, the first species of *Careproctus* found on the Antarctic continental shelf

# Careproctus credispinulosus Andriashev & Prirodina 1990

*credi*-, authors say it means "infrequent," but we cannot find Latin words that match this meaning; *spinulosus*, with small spines, presumably referring to small, "button-shaped spinules" (translation, i.e., thumb-tack prickles) covering body

#### Careproctus discoveryae Duhamel & King 2007

in honor of the RRS Discovery, from which holotype was collected, and her officers and crew, who did the collecting

# Careproctus eltaninae Andriashev & Stein 1998

in honor of the USNS *Eltanin*, research vessel of the United States Antarctic expedition, from which holotype was collected, and which made possible many years of successful biological investigations in the Southern Ocean

## Careproctus falklandicus (Lönnberg 1905)

-*ica*, belonging to: Berkley Sound, Falkland Islands, South Atlantic Ocean, where one of the first specimens was collected

# Careproctus fedorovi Andriashev & Stein 1998

in honor of Russian ichthyologist Vladimir Vladimirovich Fedorov (1939-2011), for his "extensive" studies of North Pacific fishes, including snailfishes

#### Careproctus fueguensis Matallanas & Piacentino 2019

-ensis, suffix denoting place: coastal waters of Tierra del Fuego, Argentina, where it occurs

## Careproctus georgianus Lönnberg 1905

-anus, belonging to: referring to distribution in Southern Ocean off South Georgia Island

# Careproctus gilberti Burke 1912

patronym not identified but almost certainly in honor of ichthyologist Charles Henry Gilbert (1859-1928), who collaborated with Burke on the descriptions of several snailfish taxa

# Careproctus improvisus Andriashev & Stein 1998

Latin for unforeseen, presumably referring to its unexpected discovery since two other species of *Careproctus* with discontinuous depth distributions are known from South Georgia: *C. georgianus* (85-285 m) and *C. credispinulosus* (795-1400 m)

#### Careproctus inflexidens Andriashev & Stein 1998

*inflexus*, recurved; *dens*, teeth, referring to its recurved teeth

## Careproctus lacmi Andriashev & Stein 1998

in honor of the Natural History Museum of Los Angeles County (LACM), original repository for all snailfishes collected during the *Eltanin* expeditions in the Southern Ocean, including holotype of this one

# Careproctus leptorhinus Andriashev & Stein 1998

*leptos*, thin or slender; *rhinos*, nose or nostril, referring to its long, slender tubular nostril

## Careproctus longipectoralis Duhamel 1992

longus, long; pectoralis, pectoral, referring to long pectoral fin, ~160% HL

## Careproctus macranchus Andriashev 1991

macro-, large; anchus, abridgement of branchia, gill, referring to large gill opening compared with congeners

#### Careproctus maculosus Stein 2006

speckled, mottled or full of spots, referring to small, irregular black blotches on body composed of well-defined melanophores visible as dots

## Careproctus magellanicus Matallanas & Pequeño 2000

Magellan, referring to its occurrence in the Straits of Magellan region

## Careproctus mica Chernova 2015

Latin for crumb, bit, morsel, or grain, referring to small size of adult (78 mm TL)

#### Careproctus minimus Andriashev & Stein 1998

least, referring to small size of adult holotype (43 mm TL, 37 mm SL)

#### Careproctus pallidus (Vaillant 1888)

pale, described as a "cool pink or whitish gray" in spirits (orange in life)

# Careproctus parviporatus Andriashev & Stein 1998

parvus, small; poratus, pored, referring to its small sensory pores

## Careproctus patagonicus Matallanas & Pequeño 2000

Patagonian, referring to its occurrence in the Patagonian region

#### Careproctus pellucicauda Stein 2012

*pelluceo*, transparent; *cauda*, tail, referring to unpigmented caudal region

## Careproctus polarsterni Duhamel 1992

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

#### Careproctus profundicola Duhamel 1992

profundus, deep; -cola, dweller or inhabitant, referring to its capture at 1820-2000 m

## Careproctus pseudoprofundicola Andriashev & Stein 1998

pseudo-, although this species may resemble C. profundicola, such an appearance is false

## Careproctus rimiventris Andriashev & Stein 1998

rima, slit; ventris, of the belly, referring to unusual (ventral) position of the gill slit

#### Careproctus sandwichensis Andriashev & Stein 1998

-ensis, suffix denoting place: South Sandwich Trench of the Southern Ocean, only known area of occurrence

# Careproctus scaphopterus Andriashev & Stein 1998

skaphis, shovel; pterus, fin, referring to upper 20-22 rays of pectoral fin forming a wide shovel-shaped lobe

## Careproctus steini Andriashev & Prirodina 1990

in honor of David L. Stein, "well known liparidologist," Oregon State University (USA)

# Careproctus stigmatogenus Stein 2006

stigmatos, marked; genys, cheek, referring to darkly pigmented areas below and anterior to the orbits

# Careproctus tricapitidens Andriashev & Stein 1998

tri-, three; capitus, head; dens, teeth, referring to trilobed tubercular teeth

#### Careproctus vladibeckeri Andriashev & Stein 1998

in honor of Vladimir Edward Becker (1925-1995), author of the "excellent" *Myctophid Fishes of the World Ocean*, for his contributions to ichthyology from many expeditions to the Pacific, Indian, and Atlantic Oceans

# Careproctus zispi Andriashev & Stein 1998

in honor of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZISP), where the senior author worked

#### Subgenus Temnocora Burke 1930

*temno*, cut or divide; *cora*, from the Greek *kore*, pupil of eye, referring to "slitlike" pupil of *C. candidus* [treated as a full genus by some authors]

## Careproctus bromius Gardner, Orr & Tornabene 2023

named after the Greek god Bromius (sometimes referred to as the second Dionysus), referring to its similarity to *C. iacchus*, which was named for the god Iacchus (the third Dionysus)

# Careproctus candidus Gilbert & Burke 1912

shining white, allusion not explained, described as having transparent skin "covered with fine dark points; in life, uniform light reddish above, whitish below"

# Careproctus comus Orr & Maslenikov 2007

named for Comus, the Roman god of mirth, referring to its comical appearance (e.g., snout protruding beyond lower jaw)

# Careproctus faunus Orr & Maslenikov 2007

named for the Roman god Faunus, the mischievous half-brother of Comus, because of its close similarity to *C. comus* 

## Careproctus iacchus Kai, Yohkairin, Fujiwara & Hamatsu 2018

named for the Roman god Iacchus, half-brother of Comus and Faunus, referring to close similarity of this species to *C. comus* and *C. faunus*; in addition, Iacchus is a child-god who is forever young, also referring to the small size of this species

## Careproctus io Kai, Morikawa & Misawa 2024

named for Io, a Greek mythological character who wandered the world without rest, referring to its "unsettled" phylogenetic position [subgeneric placement provisional]

# Careproctus klisi Gardner, Orr & Tornabene 2023

Greek for incline or ramp, referring to its unique dorsal-fin morphology, with 5-7 short anterior rays nearly equal in length preceding distinctly longer succeeding rays

## Careproctus staufferi Orr 2016

in honor of Gary Stauffer, retired Director of the Resource Assessment and Conservation Engineering (RACE) Division of the Alaska Fisheries Science Center, for his "leadership in the eastern North Pacific fisheries community and his recognition of the importance of systematic taxonomy to the ecosystem-based management of fisheries"

# Crystallias Jordan & Snyder 1902

crystallum, crystal, referring to its "diaphanous" or "translucent" body

# Crystallias matsushimae Jordan & Snyder 1902

of the Bay of Matsushima (matsu, pine; shima, island), Japan, type locality

## Crystallichthys Jordan & Gilbert 1898

crystallum, crystal, presumably referring to "translucent gelatinous texture" of C. mirabilis; ichthys, fish

## Crystallichthys cameliae (Nalbant 1965)

in honor of Nalbant's wife, Camelia Iliana Nalbant

## Crystallichthys cyclospilus Gilbert & Burke 1912

cyclo-, round; spilos, spot, referring to large, roundish, reddish-brown or yellowish-brown spots on body and fins

## Crystallichthys mirabilis Jordan & Gilbert 1898

wonderful, allusion not explained, probably referring to its overall appearance, described as a "large species, soft and gelatinous in texture, the color translucent grayish or purplish, marked on back with many large light circles which were probably reddish in life"

# Eknomoliparis Stein, Meléndez C. & Kong U. 1991

*eknomios*, Greek for marvelous, unusual or strange, presumably referring to posterior position of the nasals, "remarkably unlike" the usual snailfish arrangement; *Liparis*, type genus of family

# Eknomoliparis chirichignoae Stein, Meléndez C. & Kong U.

in honor of Peruvian ichthyologist Norma Chirichigno Fonseca (b. 1929), who first recognized this species as a unique taxon and brought it to the authors' attention

# Elassodiscus Gilbert & Burke 1912

elasson, smaller; discus, disc, referring to "greatly reduced and imperfect condition" of ventral suction disc of E. tremebundus

# Elassodiscus caudatus (Gilbert 1915)

tailed, presumably referring to wider, many-rayed caudal fin compared with the similar *Paraliparis ulochir*, its presumed congener at the time

# Elassodiscus nyctereutes Kai, Matsuzaki, Orr, Mori & Kamiunten 2020

*nyktos*, night; *ereutēs*, wanderer, referring to its probable habitat, drifting in the dark deep-sea due to the absence of a robust ventral suction disc

## Elassodiscus obscurus Pitruk & Fedorov 1993

dark, referring to any or all of the following: dark or black posterior portions of dorsal, anal and caudal fins; dark skin around anus; nostrils, pectoral-fin tips, and anterior and inferior portions of head usually dark or black; black mouth and gill cavities; black stomach; black peritoneum seen through semi-transparent skin

# Elassodiscus tremebundus Gilbert & Burke 1912

tremendous, large; -bundus, suffix denoting fullness or abundance, a "fine large species" reaching 22.86 cm

## Eutelichthys Tortonese 1959

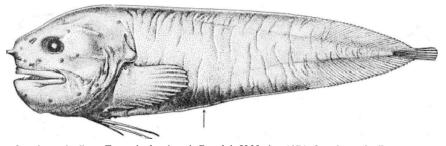
eutel, cheap or worthless ("petit" or small according to Tortonese), described at 91 mm TL; ichthys, fish

#### Eutelichthys leptochirus Tortonese 1959

leptos, fine or thin; cheiros, hand, referring to narrow pectoral fins relative to other snailfishes

# Genioliparis Andriashev & Neelov 1976

genion, chin, referring to "extremely massive" (translation) lower jaw of G. lindbergi; Liparis, type genus of family



Genioliparis lindbergi. From: Andriashev, A. P. and A. V. Neelov. 1976. Genioliparis lindbergi, gen. et sp. n. — a new fish of the family of sea snail fishes (Liparidae) from the bathyal depths of western Antarctica. Pp. 68-77. In: O. A. Skarlato & V. M. Korovina (eds). Zoogeography and Systematics of Fishes. Leningrad: Akademija Nauk S.S.S.R., Zoologicheskij Institut.

# Genioliparis ferox (Stein 1978)

fierce, an "obviously predatory" species with a "well-armed" mouth (teeth are large, slender and extremely sharp)

## Genioliparis kafanovi Balushkin & Voskoboinikova 2008

in honor of friend and colleague Aleksandr Ivanovich Kafanov (1947–2007), a "biogeographer of a global scale, and an outstanding connoisseur of modern and fossil bivalves. He was a scientist engrossed in his research of life and the ocean, a person endowed with emotional generosity and bright talent from nature" (translation)

## Genioliparis lindbergi Andriashev & Neelov 1976

in honor of the authors' teacher, Georgii Ustinovich Lindberg (1894-1976), Zoological Institute, Russian Academy of Sciences, "outstanding" ichthyologist and zoogeographer

# Gyrinichthys Gilbert 1896

gyrinus, tadpole, presumably referring to tadpole-like appearance; ichthys, fish

# Gyrinichthys minytremus Gilbert 1896

mini-, reduced; trema, aperture, referring to gill openings reduced to a minute round pore

#### Liparis Scopoli 1777

presumably tautonymous (no species mentioned) with Cyclopterus liparis Linnaeus 1766, from the Greek liparos, sleekskinned, referring to its smooth, scaleless skin

# Subgenus Liparis

## Liparis atlanticus (Jordan & Evermann 1898)

*-icus*, belonging to: northwest Atlantic Ocean, "generally common along rocky shores from Newfoundland to Cape Cod"

## Liparis barbatus Ekström 1833

bearded, referring to seven "very fine" anterior rays of pectoral fin, which, when the fish moves, resembles a "tuft of hair or a beard" (translation)

# Liparis brashnikovi Soldatov 1930

in honor of the late Russian ichthyologist and fisheries chief Vladimir Konstantinovich Bražnikov (or Brashnikov, 1870-1921), who wrote largely on the fauna and fishery of the Amur River and Okhotsk Sea

## Liparis bristolensis (Burke 1912)

-ensis, suffix denoting place: vicinity (northwest) of Bristol Bay, Alaska, Bering Sea, type locality

# Liparis coheni Able 1976

in honor of American ichthyologist Daniel M. Cohen (1930-2017), for his "interest in and contributions to our knowledge of liparine fishes and the gift of much of the type material"

# Liparis frenatus (Gilbert & Burke 1912)

bridled, referring to dark streak running forward and downward from eye

# Liparis herschelinus Scofield 1898

-inus, belonging to: Herschel Island, Beaufort Sea, off coast of Yukon, Canada, type locality

#### Liparis inquilinus Able 1973

Latin for tenant, referring to how this snailfish lives within the mantle cavity of the sea scallop

# Liparis liparis (Linnaeus 1766)

sleek-skinned, referring to its smooth, scaleless skin

#### Liparis marmoratus Schmidt 1950

marbled, referring to large brown spots encircled by white streaks and spots on rose-orangish body

# Liparis montagui (Donovan 1804)

in honor of British naturalist George Montagu (1753-1815), who provided specimens, a descriptive account, and an illustration taken from life of this "beautiful little" fish

#### Liparis tunicatus Reinhardt 1836

bearing a tunic, cloak or other loose garment, referring to its skin "loosely attached" (translation) to its appendages

## Subgenus Careliparis Garman 1892

*carus*, head, etymology not explained, but proposed as a subgenus of *Liparis* with "broader frontal regions" (name could also be a combination of *Careproctus* and *Liparis*)

# Liparis agassizii Putnam 1874

in honor of "Prof. Agassiz," probably zoologist-geologist Louis Agassiz (1807-1873), Museum of Comparative Zoology, Harvard University, with whom Putnam was associated as a student and assistant for eight years, and who supplied Putnam with a "large amount of material"; Alexander (1835-1910), Agassiz' son and successor is also mentioned, but as "Mr. Agassiz"

## Liparis alboventer (Krasyukova 1984)

*albus*, white; *venter*, belly, referring to milky-white color with silvery reflections on lower part of body [name proposed by Schmidt in 1959, made available by Krasyukova]

# Liparis bathyarcticus Parr 1931

*bathy*, deep, *arcticus*, of the Arctic, proposed as an Arctic subspecies of *L. liparis* occurring in deeper water (125-300 m vs. 50 m)

## Liparis catharus Vogt 1973

clear or pure, referring to cream-colored peritoneum

# Liparis chefuensis Wu & Wang 1933

-ensis, suffix denoting place: Chefoo (also known as Yantai and Zhifu), Shandong Province, China, type locality

# Liparis dennyi Jordan & Starks 1895

in honor of real estate agent Charles L. Denny (1861-1919), Seattle, Washington (USA), for his "active and intelligent interest in the natural history of Washington" (biographical footnote: Denny's father was one of the founders of Seattle)

## Liparis dubius Soldatov 1930

uncertain, provisionally described as a species possessing characters of both L. pulchellus and L. ochotensis

# Liparis eos Krasyukova 1984

dawn, referring to its "rose color and smoky spotting" (translation) [name proposed by Schmidt in 1959, made available by Krasyukova]

# Liparis gibbus Bean 1881

hump, presumably referring to "somewhat elevated" vertex (top of head) and nape

# Liparis ingens (Gilbert & Burke 1912)

of remarkable size, at 49 cm, by far the largest snailfish described in Gilbert & Burke's paper

# Liparis latifrons Schmidt 1950

latus, wide; frons, forehead, referring to wider interorbital space compared with L. ochotensis

# Liparis lindbergi Krasyukova 1984

patronym not identified but almost certainly in honor of ichthyologist Georgii Ustinovich Lindberg (1894-1976), Russian Academy of Sciences [name proposed by Schmidt in 1959, made available by Krasyukova]

# Liparis maculatus Krasyukova 1984

spotted, referring to round spots densely covering head and body and extending to the fins [name proposed by Schmidt in 1959, made available by Krasyukova; preoccupied by *L. maculatus* Malm 1865, but the older name is considered a *nomen oblitum* since it had not been used as a valid name after 1899]

## Liparis megacephalus (Burke 1912)

mega-, large; cephalus, head, referring to short but "heavy" head, about as wide as deep, with swollen cheeks

# Liparis meridionalis Schmidt 1950

southern, described as a southernly subspecies of L. latifrons

## Liparis newmani Cohen 1960

in honor of then-zoologist Merrill Edward Newman (b. 1928), who, while serving in the Korean War, collected a number of fish species from the Yellow Sea off the Korean west coast in 1953, including holotype of this one [biographical footnote: in 2013, Newman, then a retired Silicon Valley executive, traveled to North Korea, where he was detained and forced to confess to war crimes; he was released six weeks later]

# Liparis niger Soldatov & Lindberg 1930

black, referring to uniformly bluish-black top of head, sides, back, and vertical fins

# Liparis owstoni (Jordan & Snyder 1904)

in honor of Alan Owston (1853-1915), businessman, yachtsman and collector of Asian wildlife, who collected holotype

#### Liparis pravdini Schmidt 1951

in honor of Soviet ichthyologist Ivan Fedorovich Pravdin (1880-1963), for his "great" (translation) contribution to the study of salmonid fishes of the Sea of Okhotsk (where this snailfish occurs)

## Liparis punctatus Schmidt 1950

spotted, referring to entire body densely covered by small black dots

# Liparis quasimodo Krasyukova 1984

name of hump-backed character in Victor Hugo's novel *The Hunchback of Notre Dame* (1831), referring to dorsally humped body [name proposed by Schmidt in 1959, made available by Krasyukova]

#### Liparis rhodosoma Burke 1930

rhodo-, rosy; soma, body, referring to pinkish body color

## Liparis rotundirostris Krasyukova 1984

*rotundus*, round or circular, *rostris*, snout, referring to its blunt and rounded snout [name proposed by Schmidt in 1959, made available by Krasyukova]

# Liparis takashimensis Nojima 1936

*-ensis*, suffix denoting place: off Takashima, near Otaru, western coast of Hokkaido, Japan, original type locality (holotype unknown, neotype designated)

# Liparis tanakae (Gilbert & Burke 1912)

in honor of ichthyologist Shigeho Tanaka (1878-1974), Imperial University (Tokyo, Japan), who presented type to Stanford 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]

#### Liparis tunicatiformis Krasyukova 1984

*formis*, shape, similar in some characters to *L. tunicatus* [name proposed by Schmidt in 1959, made available by Krasyukova]

# Liparis zonatus Chernova, Stein & Andriashev 2004

banded, referring to 10 dark-brown transverse bars on dorsal portion of head and body [replacement name for *L. maculatus* Ding 1987, preoccupied by *L. maculatus* (=*montagui*) Malm 1865 and *L. maculatus* Krasyukova 1984]

# Subgenus Lycocara Gill 1884

*lykos*, Greek for wolf, but in this case reflecting to Gill's belief that type species (now identified as *L. fabricii*) was a zoarcid related to *Lycodes*, *Lycenchelys* and *Lycodonus*; *cara*, head, presumably referring to very obtuse head, wider than body, flattened and grooved between the eyes

# Liparis fabricii Krøyer 1847

in honor of Otto Fabricius (1744-1822), Danish missionary, naturalist, explorer, ethnographer, and the first to study the fishes of Greenland; he mentioned this species, without formally naming it, in his *Fauna Groenlandica* (1780)

# Liparis laptevi Popov 1933

of the Laptev Sea, Arctic Ocean, only known area of occurrence

# Subgenus Lyoliparis Jordan & Evermann 1896

lyo, to loosen, presumably referring to thin, loose skin of L. pulchellus (as in other snailfishes); Liparis, nominate genus

# Liparis pulchellus Ayres 1855

pretty or beautiful, presumably referring to its color, described as "light olive brown, with numerous narrow, waving lines of darker brown running longitudinally, and forming in some instances rings and irregular figures; abdomen and throat white; some small brown and white spots on the sides, on a series faintly indicating a lateral line with a slight downward curve"

# Liparis tessellatus (Gilbert & Burke 1912)

tessellated, i.e., inlaid with small squares, allusion not explained, perhaps referring to dark bars on posterior dorsal-fin margin which "zigzag obliquely downward" across the fin, and/or anal fin "crossed by about seven pairs of narrow dusky bars, inclosing each a wider light bar"

## Subgenus Neoliparis Steindachner 1875

neo-, new, i.e., a new kind of Liparis

## Liparis adiastolus Stein, Bond & Misitano 2003

Greek for not separated, referring to its "long-standing confusion" with L. rutteri

# Liparis antarcticus Putnam 1874

-*ica*, belonging to: Antarctica, described from Eden Harbor, Ultima, southern Chile, and never collected again (stated type locality may be an error, and the specimen could be from California; if type locality is correct, this is the only species of *Liparis* known from the southern Hemisphere)

# Liparis bikunin Matsubara & Iwai 1954

local Japanese name for this and related fishes, said to be from the Sanskrit Bhiksuni, meaning "nun"

## Liparis burkei (Jordan & Thompson 1914)

in honor of Charles Victor Burke (1882-1958), one of Jordan's students at Stanford University, who studied the Cyclogasteridae (earlier but invalid family name for snailfishes) and described and co-described several taxa in 1912

#### Liparis fucensis Gilbert 1896

*-ensis*, suffix denoting place: Strait of Juan da Fuca, type locality (occurs in northeastern Pacific from southeastern Bering Sea and Unimak Pass south to central California, USA)

## Liparis grebnitzkii (Schmidt 1904)

in honor of Nikolay Aleksandrovich Grebnitsky (1848-1908), naturalist and Governor of the Commander Islands, Bering Sea, where he collected holotype

# Liparis kusnetzovi Taranetz 1936

in honor of fisheries biologist Ivan Ivanovich Kuznetsov (1885-1962), who collected many "interesting" specimens from Sakhalin Island, Russia, presumably including the holotype of this one

# Liparis kussakini Pinchuk 1976

in honor of Russian marine biologist Oleg Grigoryevich Kussakin (1930-2001), known for his research of littoral faunal communities and the biogeography of the Komandorski Islands (where type locality is situated) of Russia

#### Liparis mednius (Soldatov 1930)

latinization of medni, Bulgarian for copper, referring to Medny Island, Commander Islands, Bering Sea, type locality

# Liparis micraspidophorus (Gilbert & Burke 1912)

*micro-*, small; *aspido-*, shield; *phorus*, bearer, presumably referring to body and fins with scattered "thumb-tack" prickles (absent on lower surfaces and snout)

#### Liparis miostomus Matsubara & Iwai 1954

mio-, less or small; stomus; body, a dwarf species, described at 64-84 mm SL

# Liparis mucosus Ayres 1855

slimy, referring to its slippery, slimy skin

# Liparis petschiliensis (Rendahl 1926)

*-ensis*, suffix denoting place: off the Yellow Sea coast of Petschili (also spelled Běizhíli, i.e., North Zhili), a northern province in China until 1928, now part of Hebei Province, type locality

## Liparis punctulatus (Tanaka 1916)

diminutive of *punctum*, spot, referring to small brown dots over entire body

# Liparis rutteri (Gilbert & Snyder 1898)

in honor of salmon biologist Cloudsley Louis Rutter (1867-1903), U. S. Fish Commission, who collected holotype [biographical footnote: he died at age 36 apparently of erysipelas, a skin infection, which he contracted while taking a train from California to Indiana)

# Liparis schantarensis (Lindberg & Dulkeit 1929)

-ensis, suffix denoting place: Shantar Sea, western Okhotsk Sea, where type locality (Konstantin Bay) is situated

# Liparis schmidti Lindberg & Krasyukova 1987

in honor of Soviet ichthyologist Petr Yulievich Schmidt (1872-1949)

# Liparis tartaricus Soldatov 1930

-*icus*, belonging to: Tartary, allusion not explained, presumably referring to Strait of Tartary, near or just to the north of Peter the Great Bay, type locality

#### Subgenus Polypera Burke 1912

poly, many; pera, pouch, referring to ~300 pyloric caeca on L. greeni [treated as a full genus by some workers]

# Liparis callyodon (Pallas 1814)

callos, beauty; odon, tooth, referring to its tricuspid teeth, which Pallas had never seen before on a fish

# Liparis curilensis (Gilbert & Burke 1912)

*-ensis*, suffix denoting place: latinization of Kuril, referring to Kuril Islands, western North Pacific, where type locality (Milne Bay, Simushir Island) is situated

# Liparis florae (Jordan & Starks 1895)

in honor of Flora Hartley Greene (1865-1948), Assistant Curator of the Museum of Stanford University, where Jordan served as President

# Liparis greeni (Jordan & Starks 1895)

in honor of Ashdown Henry Green (1840-1927), President of the Natural History Society of Victoria (British Columbia, Canada), who collected holotype

## Liparis simushirae (Gilbert & Burke 1912)

of Simushir Island, Japan, western North Pacific, where type locality (Milne Bay) is situated

Subgenus Incertae sedis

#### Liparis cyclopus Günther 1861

cyclos, circle; pous, foot, referring to ventral fins forming an "ovate" suction disc

# Liparis dulkeiti Soldatov 1930

in honor of Russian zoologist Georgy Dzheymsovich Dulkeit (1896-1988), who collected holotype

## Liparis fishelsoni Smith 1967

in honor of ecologist and marine biologist Lev Fishelson (1923-2013), Tel-Aviv University, who led Red Sea expedition during which holotype (and only known specimen) was collected, which he sent to Smith for identification (the only warmwater snailfish; attempts to discredit type locality have failed)

# Liparis ochotensis Schmidt 1904

-ensis, suffix denoting place: Okhotsk Sea, near Popov Point, Sakhalin Island, Russia, type locality

# Lipariscus Gilbert 1915

diminutive of Liparis, type genus of family, possibly alluding to diminutive size of L. nanus (described at 47 mm long)

# Lipariscus nanus Gilbert 1915

dwarf, referring to small size, described at 47 mm long

## Lopholiparis Orr 2004

lophos, mane or crest, referring to hard bony ridges on head; Liparis, type genus of family

# Lopholiparis flerxi Orr 2004

in honor of fisheries biologist William C. Flerx, National Marine Fisheries Service, who collected holotype, recognized its distinctiveness, and has taken "extraordinary care to preserve many other significant specimens captured along the west coast from Alaska to California"

# Menziesichthys Nalbant & Mayer 1971

in honor of Robert James Menzies (1923-1976), carcinologist, oceanographer, and head scientist of the 11th cruise of the research vessel *Anton Bruun*, during which type was collected; *ichthys*, fish

# Menziesichthys alaid Prokofiev & Iftime 2020

named after the Alaid Volcano, located near type locality (Okhotsk Sea north of Paramushir Island), the highest volcano in the Kuril Islands and a "subject of much aesthetic praise described in the Japanese arts"

# Menziesichthys bacescui Nalbant & Mayer 1971

in honor of zoologist Mihai C. Băcescu (1908-1999), Museum of Natural History in Bucharest, who collected and preserved this "very interesting" snailfish

# Nectoliparis Gilbert & Burke 1912

nectes, swimmer, a pelagic snailfish (most others are benthic); Liparis, type genus of family

# Nectoliparis pelagicus Gilbert & Burke 1912

pelagic, referring to its midwater swimming habits (most other snailfishes are benthic)

# Notoliparis Andriashev 1975

notos, south, referring to distribution in Southern Hemisphere; Liparis, type genus of family

#### Notoliparis antonbruuni Stein 2005

in honor of the research vessel *Anton Bruun* (named for the Danish marine biologist, 1901-1961), from which holotype was collected (and those of three other new snailfishes described in the same paper), and whose cruises have added "significantly" to knowledge of the South American deep-sea fish fauna

# Notoliparis kermadecensis (Nielsen 1964)

-ensis, suffix denoting place: Kermadec Trench, western South Pacific, only known area of occurrence

# Notoliparis kurchatovi Andriashev 1975

in honor of the research vessel *Akademic Kurchatov*, from which holotype was collected; ship was named after Igor Kurchatov (1903-1960), nuclear physicist often called the "father of the Soviet atomic bomb" and "father of the Soviet nuclear missile"

## Notoliparis macquariensis Andriashev 1978

-ensis, suffix denoting place: Macquarie-Hjort Trench, Southern Ocean, only known area of occurrence

## Notoliparis stewarti Stein 2016

in honor of Andrew Stewart (b. 1958), Collection Manager Sciences at Te Papa Tongarewa, the National Museum of New Zealand, who was "instrumental" in making specimens available for study

# Osteodiscus Stein 1978

osteus, bony; discus, disc, referring to skeletal ventral suction disc covered only by a thin skin

## Osteodiscus abyssicola Murasaki, Kai, Endo & Fukui 2021

abyss, deep sea; -cola, dweller or inhabitant, referring to deeper habitat compared (4,671-4,744 m) with congeners

# Osteodiscus andriashevi Pitruk & Fedorov 1990

in honor of Russian ichthyologist Anatoly Petrovich Andriashev (1910-2009) on the occasion of his 80th birthday, for "outstanding" (translation) contributions to the study of systematics and zoogeography of fishes (including snailfishes) of temperate and cold waters of both Northern and Southern Hemispheres

# Osteodiscus cascadiae Stein 1978

of the Cascadia Abyssal Plain, off Oregon, USA, a "location of known abundance"

# Osteodiscus rhepostomias Stein 2012

rhepo, incline or slope; stomias, mouth, referring to upwardly angled mouth

#### Palmoliparis Balushkin 1996

*palma*-, palm, wrist or hand, referring to lower lobe of pectoral fin forming an elongate peduncle that widens into a palmate shape distally; *Liparis*, type genus of family

## Palmoliparis beckeri Balushkin 1996

in honor of Vladimir Eduardovich Becker (1925-1995), Institute of Oceanology (Moscow), a "remarkable man and an outstanding Russian ichthyologist" (translation)

## Paraliparis Collett 1879

para-, near, proposed as a subgenus of Liparis lacking a ventral suction disc

#### Subgenus Paraliparis

# Paraliparis abyssorum Andriashev & Chernova 1997

-orum, belonging to: the abyss, holotype captured at 3852 m

# Paraliparis acutidens Chernova 2006

acutus, sharp; dens, teeth, referring to its inner canine-like teeth, large and sharp

# Paraliparis adustus Busby & Cartwright 2009

swarthy or "brown of skin," referring to uniform brown coloration of body and median fins of holotype

# Paraliparis albeolus Schmidt 1950

whitish, described as similar to P. albescens, which is translucent or whitish

#### Paraliparis albescens Gilbert 1915

whitish, with head, body and fins described as "uniformly translucent or whitish"

#### Paraliparis alius Stein 2012

Latin for another, referring to how it "differs from all others in its different combination of characters but has no outstanding particular trait"

# Paraliparis amerismos Stein 2012

*a*-, without; *merismos*, division, referring to "general absence" of fin-ray segmentation

# Paraliparis andriashevi Stein & Tompkins 1989

in honor of Russian ichthyologist Anatoly Petrovich Andriashev (1910-2009), for his "great" contributions to polar ichthyology and our knowledge of snailfishes

# Paraliparis angustifrons (Garman 1899)

angustus, narrow; frons, forehead, referring to narrow head, nearly as twice as high as wide

#### Paraliparis antarcticus Regan 1914

Antarctic, referring to its occurrence in the Southern Ocean of Antarctica

# Paraliparis anthracinus Stein, Chernova & Andriashev 2001

coal-colored, referring to uniformly black coloration of head, body, lips, subrostral fold, and chin

## Paraliparis aspersus Andriashev 1992

speckled, referring to head and body covered with small melanophore speckles

# Paraliparis ater Stein, Chernova & Andriashev 2001

black as soot, referring to uniformly black coloration of body and head (lips and inner surface of subrostral fold almost as black as head)

# Paraliparis atramentatus Gilbert & Burke 1912

atra, black; mentatus, chinned, presumably referring to "dusky" snout

# Paraliparis atrolabiatus Stein, Chernova & Andriashev 2001

atro-, dark; labiatus, lipped, referring to dark blackish-brown color of lips

# Paraliparis attenuatus Garman 1899

tapered, presumably referring to "very long and slender" caudal section of body

# **Paraliparis auriculatus Stein, Chernova & Andriashev 2001** shaped like an ear, referring to ear-shaped opercular lobe

# Paraliparis australiensis Stein, Chernova & Andriashev 2001

-ensis, suffix denoting place: off South Australia, Australia, only known area of occurrence

#### Paraliparis australis Gilchrist 1902

southern, referring to its collection off the Cape of Good Hope, South Africa, which "considerably widens the distribution of this interesting group of fishes"

## Paraliparis avellaneus Stein, Chernova & Andriashev 2001

nut-brown, referring to pale nut-brown color of head and body, slightly darker posteriorly

#### Paraliparis badius Stein, Chernova & Andriashev 2001

Latin for brown, referring to overall brown body color (but blackish around gill opening and on chin)

# Paraliparis balgueriasi Matallanas 1999

in honor of marine biologist Eduardo Balguerías, "pioneer" of the Spanish fishing investigations in the Southern Ocean (where this snailfish occurs)

## Paraliparis bathybius (Collett 1879)

*bathys*, deep; *bios*, life, referring to deep-sea habitat (collected at 1800 m) [originally spelled *bathybii*, emended to *bathybius* by Günther 1887, a spelling that has been in prevailing usage since 1892]

#### Paraliparis bipolaris Andriashev 1997

bipolar, referring to its range (North Atlantic, southwest of Ireland) relative to a similar species, *P. kreffti* (Weddell Sea, Antarctica, and Scotia Sea)

# Paraliparis brunneocaudatus Stein, Chernova & Andriashev 2001

brunneus, brown; caudatus, tailed, referring to end of tail a dark, blackish-brown

# Paraliparis brunneus Stein, Chernova & Andriashev 2001

brown, referring to uniformly dark, blackish-brown head and body (lips slightly paler than head)

# Paraliparis bullacephalus Busby & Cartwright 2009

bulla, bubble; cephalus, head, referring to large, round head covered with gelatinous tissue

# Paraliparis calidus Cohen 1968

Latin for hot or warm, referring to higher temperature of the region (western North Atlantic, Gulf of St. Lawrence to Gulf of Mexico) where it has been caught, compared with the home of its closest known relative, *P. bathybius* (of polar seas)

# Paraliparis camilarus Stein 2012

-arus, adjectival suffix: named in honor of the Commission for the Conservation of Antarctic Living Resources, CCAMLR, under whose auspices this species was collected

# Paraliparis caninus Chernova & Prut'ko 2011

canine, referring to dog-like snout thanks to its massive lower jaw

Paraliparis carlbondi Stein 2005

in honor of Carl E. Bond (1920-2007), Oregon State University (USA), "lifelong student of cottoid fishes"

#### Paraliparis cerasinus Andriashev 1986

cherry red, referring to its color in life

#### Paraliparis challengeri Andriashev 1993

in honor of the British research ship *Challenger*, famous for its deep-sea investigations of the World Ocean (1872-1876); holotype was collected by one of its successors, R.R.S. *Challenger*, in 1992

#### Paraliparis charcoti Duhamel 1992

in honor of French scientist and explorer Jean-Baptiste Charcot (1867-1936), leader of l'Expédition Antarctique Française (1903-1905) (biographical footnotes: Charcot won two silver medals in sailing at the 1900 Summer Olympics and died five years later when his vessel wrecked in a storm off the coast of Iceland)

# Paraliparis copei copei Goode & Bean 1896

in honor of zoologist-paleontologist Edward Drinker Cope (1840-1897), University of Pennsylvania, a "leader in American vertebrate zoology"

## Paraliparis copei gibbericeps Andriashev 1982

gibber, humpbacked; ceps, head, referring to upper profile of head steeply sloping from occiput to blunt snout

# Paraliparis copei wilsoni Richards 1966

in honor of Robert C. Wilson, U.S. Bureau of Commercial Fisheries, who conceived and directed the trawling survey during which holotype was collected

# Paraliparis coracinus Stein, Chernova & Andriashev 2001

black as a crow, referring to "ink-black" body color

#### Paraliparis costatus Stein, Chernova & Andriashev 2001

ribbed, referring to well-developed epipleural and epineural ribs forming a keel-like lateral ridge above pectoral fins

## Paraliparis csiroi Stein, Chernova & Andriashev 2001

named after the Commonwealth Scientific and Industrial Research Organization (CSIRO), supporting agency for Australian fisheries research

## Paraliparis dactyloides Schmidt 1950

-oides, having the form of: similar to P. dactylosus

#### Paraliparis dactylosus Gilbert 1896

fingered, presumably referring to 30 pectoral-fin rays, with upper rays extending beyond front of anal fin

# Paraliparis darwini Stein & Chernova 2002

in honor of Charles Darwin (1809-1882), who described the biological diversity of the Galapágos Islands (type locality) and its significance

#### Paraliparis deani Burke 1912

patronym not identified but almost certainly in honor of ichthyologist Bashford Dean (1867-1928), American Museum of Natural History

## Paraliparis debueni Andriashev 1986

in honor of Spanish ichthyologist and oceanographer Fernando de Buen y Lozano (1895-1962), for his "valuable" work on Spanish and Chilean fishes

### Paraliparis delphis Stein, Chernova & Andriashev 2001

Greek for dolphin, referring to "distinctly humpbacked" body shape, like that of the mammal

# Paraliparis devriesi Andriashev 1980

in honor of biochemist Arthur L. DeVries (b. 1938), University of Illinois (USA), authority on antifreeze characteristics of coldwater fishes, who helped collect holotype

# Paraliparis dewitti Stein, Chernova & Andriashev 2001

in honor of ichthyologist-oceanographer Hugh H. DeWitt (1933-1995), University of Maine (USA), "prominent student" of Antarctic fishes

## Paraliparis diploprora Andriashev 1986

diplo-, twofold; prora, brow, referring to unusual snout bearing a pair of rostral protuberances

## Paraliparis dipterus Kido 1988

di-, two; pterus, fin, referring to deeply notched pectoral fin

# Paraliparis duhameli Andriashev 1994

in honor of the "famous" (translation) French ichthyologist Guy Duhamel (b. 1953), Muséum national d'Histoire naturelle (Paris), who first called attention to this new species; he also collected holotype

## Paraliparis eastmani Stein, Chernova & Andriashev 2001

in honor of Joseph T. Eastman (b. 1944), Ohio University (USA), for his "valuable" studies on the natural history, physiology, and origins of Antarctic fishes

# Paraliparis echongpachot Stein & Mundy 2021

word meaning "crooked mouth" in the Chamorro language of the Mariana Islands (where type locality, Esmeralda Bank west of Tinian Island, is situated), referring to its oblique mouth, its angle about 20° to horizontal; this name, and that of *P. kadadakaleguak*, were suggested by children on Guam, the largest and southernmost of the Mariana Islands

# Paraliparis edwardsi (Vaillant 1888)

in honor of Alphonse Milne Edwards (1835-1900), zoologist and paleontologist, Muséum national d'Histoire naturelle (Paris), who supervised samples aboard the research vessel *Talisman*, from which holotype was collected

# Paraliparis ekaporus Stein 2012

eka, Sanskrit for one; poros, Greek for hole, referring to single chin pore

# Paraliparis eltanini Stein & Tompkins 1989

in honor of the U.S. Navy research vessel *Eltanin*, from which holotype and many other Antarctic fishes were collected

## Paraliparis entochloris Gilbert & Burke 1912

entos, within; chloris, green, referring to green peritoneum, visible through the body walls

#### Paraliparis epacrognathus Stein 2012

epakros, pointed at the end; gnathos, jaw, referring to sharply angled symphysis of lower jaw

# Paraliparis exilis Stein 2012

thin, referring to its slender, elongated body

## Paraliparis fimbriatus Garman 1892

fringed, referring to "prominent fringes" formed by lower parts of pectoral fins

#### Paraliparis flammeus Kai, Murasaki & Fukui 2020

flame, referring to its crimson dorsal and anal fins

## Paraliparis freeborni Stein 2012

in honor of scientific illustrator Michelle Freeborn, who drew the figures for Stein's paper and for the fourvolume *Fishes of New Zealand* (biographical footnote: Freeborn also worked for 15 years in the film industry, providing special make-up, costume and model making for a number of films, including *Saving Private Ryan*) [preferably spelled *freebornae* since name honors a woman, but ICZN 32.5.1 forbids such a correction]

# Paraliparis fuscolingua Stein & Tompkins 1989

*fuscus*, dark; *lingua*, tongue, referring to its "dusky," a "noticeable difference" from the white or light tongue of the otherwise similar *P. leucoglossus* 

#### Paraliparis galapagosensis Stein & Chernova 2002

-ensis, suffix denoting place: Galapágos Islands off Ecuador, only known area of occurrence

## Paraliparis garmani Burke 1912

patronym not identified but almost certainly in honor of Harvard ichthyologist-herpetologist Samuel Garman (1843-1927), who described *P. attenuatus* in 1899

## Paraliparis gomoni Stein, Chernova & Andriashev 2001

in honor of Martin F. Gomon (b. 1945), Senior Curator, Ichthyology, Museum Victoria, Melbourne, Australia, for his contributions to Australian ichthyology

## Paraliparis gracilis Norman 1930

slender, allusion not explained, presumably referring to body shape

## Paraliparis grandis Schmidt 1950

large, referring to large size of holotype (25.1 cm), second only to *P. grandiceps* (= *rosaceus*, 25.4 cm) among congeners known at the time

## Paraliparis haploporus Stein 2012

haplos, single; poros, hole, referring to single chin pore

# Paraliparis hawaiiensis Stein & Drazen 2014

-ensis, suffix denoting place: northwestern Hawaiian Islands, type locality

#### Paraliparis hobarti Stein, Chernova & Andriashev 2001

of Hobart, described from the continental slope of Tasmania, of which Hobart is the capital

# Paraliparis hokuto Murasaki, Takami & Fukui 2019

named for the training vessel Hokuto (Tokai University, Japan), from which type specimens were collected

#### Paraliparis holomelas Gilbert 1896

holo-, entire; melas, black, referring to uniform black color, including fins and lining of mouth and gill cavity

#### Paraliparis hubbsi Andriashev 1986

in honor of the late Carl L. Hubbs (1894-1979), "the great ichthyologist of our time, a man of big heart and good will"

# Paraliparis hureaui Matallanas 1999

in honor of Jean-Claude Hureau (b. 1935), Muséum national d'Histoire naturelle (Paris), for his "notable" scientific contributions to Antarctic ichthyology

## Paraliparis hystrix Merrett 1983

porcupine, referring to the survey vessel H.M.S. *Porcupine*, which discovered the "considerable" submarine feature where this snailfish occurs

## Paraliparis impariporus Stein, Chernova & Andriashev 2001

impar, unequal; porus, pore, referring to single (rather than paired) terminal mandibular pore

# Paraliparis incognita Stein & Tompkins 1989

unidentified, having initially been mistaken for P. terranovae

## Paraliparis infeliciter Stein, Chernova & Andriashev 2001

unfortunately or unhappily (authors say "bad luck"), referring to holotype having been eaten by an Orange Roughy *Hoplostethus atlanticus* 

# Paraliparis kadadakaleguak Stein & Mundy 2021

word meaning "short rib bone" in the Chamorro language of the Mariana Islands (where type locality, Anatahan Island, is situated), referring to its short ribs; this name, and that of *P echongpachot*, were suggested by children on Guam, the largest and southernmost of the Mariana Islands

## Paraliparis kerguelensis Andriashev 1982

*-ensis*, suffix denoting place: Kerguelen Sumbarine Ridge, near Kerguelen Islands, southern Indian Ocean, type locality

## Paraliparis kocki Chernova 2006

in honor of marine biologist Karl-Hermann Kock, for his contribution to the study of Antarctic fishes

# Paraliparis kreffti Andriashev 1986

in honor of the "distinguished" German ichthyologist Gerhard Krefft (1912-1993), Institute für Seefischerei (Hamburg), who "collected and preserved in excellent condition this and two other species of the genus *Paraliparis* from the depths of the Scotia Sea"

# Paraliparis labiatus Stein, Chernova & Andriashev 2001

large-lipped, referring to upper lip, entirely covering lower lip fold

# Paraliparis lasti Stein, Chernova & Andriashev 2001

in honor of Peter R. Last, CSIRO Marine & Atmospheric Research, "whose studies of Australian fishes have added fundamentally to knowledge of the deep-sea fauna of that region"

# Paraliparis latifrons Garman 1899

latus, broad; frons, forehead, referring to large head "broad and convex on the forehead"

# Paraliparis leobergi Andriashev 1982

in honor of Lev (also Leo) Semyonovich Berg (1876-1950), the "great Soviet ichthyologist, geographer and evolutionist"

# Paraliparis leucogaster Andriashev 1986

leucos, light or white; gaster, belly, referring to its "light, unpigmented" stomach

# Paraliparis leucoglossus Andriashev 1986

leucos, light or white; glossus, tongue, referring to its pale tongue

# Paraliparis liparinus (Goode 1881)

-inus, adjectival suffix: presumed to be a Liparinus-like sculpin (Cottidae) at time of description

## Paraliparis longicaecus Stein 2012

longus, long; caecum, blind (as in "cul-de-sac"), referring to its "unusually long" pyloric caeca

# Paraliparis macrocephalus Chernova & Eastman 2001

*macro-*, large; *cephalus*, head, referring to larger head compared with the similar *P. hubbsi*, *P. valentinae* and *P. somovi* 

## Paraliparis macropterus Stein 2012

macro-, long; pterus, fin, referring to "unusually long" upper lobe of pectoral fin

# Paraliparis magnoculus Stein 2012

magnus, large; oculus, eye, referring to its "exceptionally large" orbits, 36–39% HL

## Paraliparis mandibularis Kido 1985

of the lower jaw, allusion not explained, perhaps referring to origin of uppermost pectoral-fin ray located below tip of lower jaw, one of its distinguishing features

# Paraliparis marianae Stein & Mundy 2021

of the Mariana Islands (or Archipelago), where type locality, off Tinian Island, is situated

# Paraliparis mawsoni Andriashev 1986

in honor of geologist-naturalist Douglas Mawson (1882-1958), "great explorer of the Antarctic Continent," who "demonstrated a deep concern and hospitality towards our expedition aboard R/V 'Orb' when we anchored in Adelaide (South Australia) in 1956 and 1958"

# Paraliparis megalopus Stein 1978

megalo-, large; opus, eyed, referring to its round and "very large" eyes

# Paraliparis meganchus Andriashev 1982

mega-, large; anchus, abridgement of branchos, gill, referring to large gill opening, not less than half HL

#### Paraliparis melanobranchus Gilbert & Burke 1912

melanos, black; branchus, gill, presumably referring to black gill cavity

## Paraliparis membranaceus Günther 1887

of skin or parchment, presumably referring to "extremely delicate membrane" of the pectoral fin, "in which rays are visible like fine striae, and which on its hinder margin is provided with long fringes"

#### Paraliparis mentikoilon Stein 2012

mentos, chin; koilon, cavity or hollow, referring to chin pores in a clear depression or shallow pit

## Paraliparis meridionalis Kido 1985

southern, allusion not explained, perhaps referring to its more southerly occurrence in southern Japan (Okinawa Trough, East China Sea) compared with *P. mandibularis* (Tosa Bay), described in the same paper

# Paraliparis merodontus Stein, Meléndez C. & Kong U. 1991

meros, part; odontos, toothed, referring to presence of teeth only in the lower jaw

# Paraliparis mexicanus Chernova 2006

Mexican, referring to Pacific coast of Mexico, type locality

# Paraliparis molinai Stein, Meléndez C. & Kong U. 1991

in honor of the first Chilean ichthyologist, Abate Juan Ignacio Molina (1740-1829), who published one of the earliest works on Chilean natural history in 1782, including the descriptions of a shark and a mullet (this snailfish is known only from off the coast of Valparaiso, Chile)

## Paraliparis monoporus Andriashev & Neelov 1979

mono-, one; porus, pore, referring to one unpaired mandibular symphyseal pore

## Paraliparis murielae Matallanas 1984

in honor of Matallanas' youngest daughter, Muriel

# Paraliparis nassarum Stein & Fitch 1984

genitive plural of the Latin nassa, fish trap, referring to all known specimens at the time collected by fish traps

## Paraliparis neelovi Andriashev 1982

in honor of Alexei Vladimirovich Neyelov (Neelov in Latin), "author of an excellent monograph on the morphology of the seismosensorial system and the classification of sculpins (Cottidae)" (per Andriashev 1986)

# Paraliparis nigellus Chernova & Møller 2008

blackish or dark, referring to its dark black-brown color

# Paraliparis nigrolineatus Stein 2012

niger, black; lineatus, lined, referring to black strip on posterior ventral midline

# Paraliparis nullansa Stein 2012

*null*, none; *ansa*, helve, referring to absence of a scapular helve (i.e., shaped like a double-headed axe, the larger head being the scapular blade, and the other head being the helve)

## Paraliparis obliquosus Chernova & Duhamel 2003

*obliquus*, oblique; *osus*, mouthed, referring to strongly oblique mouth, symphysis of upper jaw level with center of orbit

# Paraliparis obtusirostris Stein, Chernova & Andriashev 2001

obtusus, blunt; rostris, snout, referring to its deep, blunt snout

# Paraliparis operculosus Andriashev 1979

operculum, cover or lid; -osus, full of, referring to its very large opercular lobe, extending beyond pectoral-fin origin

## Paraliparis orbitalis Stein 2012

orbital, referring to "large prominent orbits and eyes that dominate the front of the head"

# Paraliparis orcadensis Matallanas & Pequeño 2000

*-ensis*, suffix denoting place: Orcadas, Spanish name of South Orkney Islands, Scotia Sea, Southern Ocean, only known area of occurrence

#### Paraliparis parviradialis Stein 2012

parvus, small; radialis, radial, referring to small size of pectoral radials

## Paraliparis paucidens Stein 1978

*paucus*, few; *dens*, teeth, referring to lack of mandibular teeth and low number of premaxillary teeth compared with congeners

## Paraliparis pearcyi Stein 2012

in honor of oceanographer William G. Pearcy, Oregon State University (USA), "nekton ecologist and naturalist *par excellence*, for his exemplary research on, long standing interest in, and support for, deep sea biology"

#### Paraliparis pectoralis Stein 1978

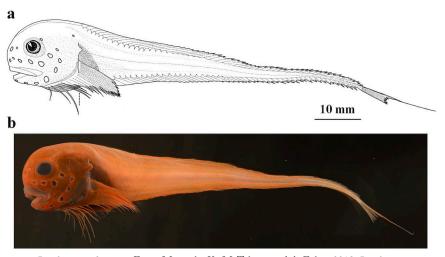
referring to pectoral fins, with 29-32 rays, the upper ray on a horizontal through posterior of maxillary

## Paraliparis penicillus Baldwin & Orr 2010

Latin for little brush, referring to its long, thin body and six principal caudal-fin rays

## Paraliparis piceus Stein, Chernova & Andriashev 2001

pitch-black, referring to uniformly dark blackish-brown body, head, lips, inner surface of subrostral fold, and chin



Paraliparis ruficometes. From: Murasaki, K., M. Takami and A. Fukui. 2018. Paraliparis ruficometes sp. nov. (Liparidae), a new snailfish from Suruga Trough, Japan. Ichthyological Research v. 66 (no. 1): 88-96.

#### Paraliparis plagiostomus Stein, Chernova & Andriashev 2001

*plagios*, oblique, transverse or slanting (authors say it means "placed on lower surface of head"); *stoma*, mouth, referring to inferior mouth

## Paraliparis plicatus Stein 2012

folded, referring to chin pores closely paired with an anterior crescent-shaped tissue fold

## Paraliparis porcus Chernova 2006

pig, referring to its projecting snout

## Paraliparis posteroporus Stein 2012

postero-, rear; porus, hole, referring to mandibular pores set well back from symphysis and edges of lower jaw

## Paraliparis pseudokreffti Stein 2012

pseudo-, false, referring to its similarity to P. kreffti

# Paraliparis retrodorsalis Stein, Chernova & Andriashev 2001

retro-, rear; dorsalis, dorsal, referring to relatively posterior position of first dorsal-fin ray between vertebrae 7 and 8

## Paraliparis rosaceus Gilbert 1890

rosy, referring to light rose-red body color (the fins and head, however, are largely jet black)

# Paraliparis rossi Chernova & Eastman 2001

in honor of polar explorer James Clark Ross (1800-1862), on the bicentennial of his birth; "His expedition in 1839-1843 collected the first fishes from the Antarctic Region, and his biological observations and scientific insights are still of great value" (species occurs in the southwestern Ross Sea, also named after Ross)

## Paraliparis ruficometes Murasaki, Takami & Fukui 2018

*rufus*, reddish; *cometes*, comet, referring to orange-red color and elongate dorsal-most caudal-fin ray, like the tail of a comet

# Paraliparis selti Linley, Gerringer & Canto-Hernández 2022

word for blue in the near-extinct Kunza language of the indigenous peoples of the Atacama Desert, referring to its blue-black anterior color in life; the waters over the Atacama Trench (where this snailfish occurs) are "especially productive, due in part to the mineral enrichment by dust deposits from this neighbouring Atacama Desert and aided by intense upwelling along the continental slope"

# Paraliparis skeliphrus Stein 2005

Greek for "dry-looking," referring to holotype having dried out at some previous time; because it is hard and brittle, a thorough examination or counts of some characters (e.g., pyloric caeca) is not possible

## Paraliparis somovi Andriashev & Neelov 1979

in honor of the oceanographer Mikhail Mikhailovitch Somov (1908-1973), "outstanding" (translation) polar explorer and leader of the first Soviet Antarctic Expedition (1955-1957)

# Paraliparis stehmanni Andriashev 1986

in honor of the "distinguished" skate taxonomist Matthias Stehmann (b. 1943), Institut für Seefischerei (Hamburg), for his "fundamental works on the morphology and systematics of rajid fishes"

## Paraliparis tangaroa Stein 2012

named after the Maori god of the sea, Tangaroa, responsible for all sea creatures

## Paraliparis tasmaniensis Stein, Chernova & Andriashev 2001

-ensis, suffix denoting place: Great Australian Bight northwest of Tasmania, Australia, only known area of occurrence

#### Paraliparis terraenovae Regan 1916

of the Terra Nova Antarctic Expedition (1910-1913), during which holotype was collected

## Paraliparis tetrapteryx Andriashev & Neelov 1979

tetra, four; pteryx, fin, referring to two lobes on each pectoral fin, for a total of four

# Paraliparis thalassobathyalis thalassobathyalis Andriashev 1982

*thalassa*, sea; *bathyalis*, of the deep, referring to remote oceanic bathyal zones, separated from continents by vast expanses of ocean floor, that Andriashev calls "thalasso-bythal"; this snailfish was captured in one such zone, Banzare Banks, southwestern Indian Ocean, at 1300 m

## Paraliparis thalassobathyalis meteorensis Andriashev 2003

*ensis*, suffix denoting place: Meteor Seamount, South Atlantic Ocean, type locality

# Paraliparis tompkinsae Andriashev 1992

in honor of molecular biologist Linda S. Tompkins, for her "pioneer" taxonomic studies of Antarctic snailfishes

# Paraliparis trilobodon Andriashev & Neelov 1979

tri-, three; lobus, lobe; odon, tooth, referring to the shape of its teeth

# Paraliparis trunovi Andriashev 1986

in honor of ichthyologist Ivan Andreevich Trunov (1936-2005) Atlantic Research Institute of Fisheries, Kaliningrad (Russia), for his "valuable years of exploring the ichthyofauna of the southeastern Atlantic"

## Paraliparis ulochir Gilbert 1896

oulos, complete; cheiros, hand, referring to pectoral fins not divided into two separate lobes as in *P. holomelas*, described in the same paper

# Paraliparis vaillanti Chernova 2004

in honor of zoologist Léon Vaillant (1834-1914), Muséum national d'Histoire naturelle (Paris), the "French investigator of the oceans" (translation), who described the similar *P. edwardsi* in 1888

## Paraliparis valentinae Andriashev & Neelov 1984

in honor of ichthyologist Valentina P. Prirodina (1937-2021), Zoological Institute, Russian Academy of Sciences, for her "unfailing help" in studying the morphology of snailfishes and other Antarctic fishes (per Andriashev 1986)

## Paraliparis variabilidens Murasaki, Takami & Fukui 2019

variabilis, variable; dens, teeth, referring to its mix of simple and trilobate teeth

## Paraliparis vipera Chernova & Prut'ko 2011

snake, referring to flattened head, like that of a snake

#### Paraliparis voroninorum Stein 2012

*-orum*, commemorative suffix, plural: in honor of Elena Voronina and Vladimir Voronin, "who by their kindness, generosity, and hospitality over many years helped support my snailfish research at the Zoological Institute of the Russian Academy of Sciences, St. Petersburg"

# Paraliparis wolffi Duhamel & King 2007

in honor of geochemist George Wolff, University of Liverpool, for his contributions to marine biogeochemistry and for "always being happy on Mondays throughout an arduous cruise" to the Crozet Basin of the Southern Ocean

# Subgenus Amitrichthys Jordan & Evermann 1896

*a*-, without; *mitra*, stomacher (per the authors), a V-shaped piece of decorative cloth worn over chest and stomach, presumably referring to absence of ventral suction disc (common to all *Paraliparis*); *ichthys*, fish

## Paraliparis cephalus Gilbert 1892

head, presumably referring to its very large, high, and compressed head, its upper profile descending in a strong convex curve behind occiput

## Paraliparis mento Gilbert 1892

mentum, chin, referring to "very heavy" lower jaw, projecting beyond upper jaw

# Praematoliparis Andriashev 2003

*praemato*-, premature, referring to its neotenic characters (looseness of dorsal- and anal-fin rays) and extreme early maturity at 10 mm; *Liparis*, type genus of family

## Praematoliparis anarthractae (Stein & Tompkins 1989)

*an-*, not; *arthron*, jointed; *actae*, genitive of *aktis*, ray, referring to general absence of articulations in dorsal- and anal-fin rays

## Prognatholiparis Orr & Busby 2001

pro-, in front of, and gnathos, jaw, referring to protruding lower jaw; Liparis, type genus of family

# Prognatholiparis ptychomandibularis Orr & Busby 2001

ptychos, a fold; mandibularis, of the jaw, referring to skin folds on snout and along ventral margin of mandible

# Psednos Barnard 1927

thin, scanty, bald or naked, allusion not explained, perhaps referring to scaleless body (David L. Stein, pers. comm.), although all snailfishes are scaleless

# Subgenus Psednos

#### Psednos andriashevi Chernova 2001

in honor of Russian ichthyologist Anatoly Petrovich Andriashev (1910-2009), who wrote the "definitive" morphological study of the genus *Psednos* 

#### Psednos anoderkes Chernova & Stein 2002

ano-, up or upward; derkes, referring to upward-looking eyes

# Psednos barnardi Chernova 2001

in honor of Keppel Harcourt Barnard (1887-1964), South African Museum, who proposed the genus *Psednos* in 1927

## Psednos cathetostomus Chernova & Stein 2002

kathetos, upright; stoma, mouth, referring to almost vertical angle of lower jaw and mouth

# Psednos christinae Andriashev 1992

in honor of German ichthyologist Christine Karrer, for her "useful work" on Atlantic Ocean fishes (she also collected holotype)

## Psednos delawarei Chernova & Stein 2002

named for the NOAA (National Oceanic and Atmospheric Administration) ship *Delaware II*, from which holotype was collected

## Psednos dentatus Chernova & Stein 2002

toothed, referring to its "unusual" dentition, "unusually large and arrow-shaped, recurved inward (tips almost horizontal), forming a brushlike paved surface on jaws"

#### Psednos gelatinosus Chernova 2001

gelatinous or jelly-like, referring to "very" gelatinous body

## Psednos griseus Chernova & Stein 2002

gray, referring to body color

# Psednos groenlandicus Chernova 2001

-icus, belonging to: Davis Strait off southwestern Greenland, type locality

## Psednos harteli Chernova 2001

in honor of Karsten E. Hartel, Curatorial Associate in Ichthyology, Museum of Comparative Zoology, Harvard University, who loaned specimens, "carefully" read the manuscript, and was "very helpful in other ways"

# Psednos islandicus Chernova & Stein 2002

-icus, belonging to: western North Atlantic, south of Iceland, type locality

## Psednos melanocephalus Chernova & Stein 2002

melanos, black; cephalus, head, referring to dark subterminal pigmentation of head, "anteroventrally dark blackish-brown"

# Psednos mexicanus Chernova & Stein 2002

Mexican, described from North Point, Guadalupe Island, off central Baja California, Mexico

#### Psednos microps Chernova 2001

micro-, small; ops, eye, referring to its "very small" eyes

# Psednos micruroides Chernova 2001

-oides, having the form of: similar to P. micrurus

#### Psednos micrurus Barnard 1927

*micro-*, small; *oura*, tail, presumably referring to small caudal portion of body "abruptly narrower" than round, anterior portion, with a small caudal fin

## Psednos mirabilis Chernova 2001

amazing or marvelous, allusion not explained, perhaps referring to its capture over bottom at a depth of 1300-1700 m

# Psednos pallidus Chernova & Stein 2002

pale, referring to body color

## Psednos sargassicus Chernova 2001

-icus, belonging to: Northern Sargasso Sea, North Atlantic, type locality

# Psednos spirohira Chernova & Stein 2002

spira, coil; hira, intestine, referring to posterior part of intestine, tightly coiled and forming two parallel rings

# Psednos steini Chernova 2001

in honor of ichthyologist David L. Stein, Oregon State University (USA), who identified holotype as *P. macrurus* in 1979, and is "well known" for his research on snailfishes

## Subgenus Protopsednos Andriashev 2003

protos, first, comprising primitive south Australian species with a number of plesiomorphic features

# Psednos balushkini Stein, Chernova & Andriashev 2001

in honor of Arkady V. Balushkin (1948-2021), Zoological Institute, Russian Academy of Sciences, for his many contributions to the knowledge of Antarctic fishes, especially to the taxonomy of the suborder Notothenioidei

# Psednos nataliae Stein & Andriashev 2001

in honor of Natalia V. Chernova, Zoological Institute, Russian Academy of Sciences, for her contributions to the knowledge of Arctic snailfishes and other fishes (also co-author of paper in which description, and that of 29 other new snailfish species, are described)

# Psednos whitleyi Stein, Chernova & Andriashev 2001

in honor of Gilbert P. Whitley (1903–1975), "well known" Australian ichthyologist, formerly Curator of the fish collection in the Australian Museum, Sydney

Subgenus Incertae sedis

# Psednos argyrogaster Stein 2012

argyros, silvery; gaster, belly, referring to silvery outer lining of abdomen

# Psednos carolinae Stein 2005

in honor of Caroline Ajootian (no other information available), for her "unfailing support and encouragement of snailfish research"

## Psednos chathami Stein 2012

of northwest Chatham Rise, near New Zealand, type locality

# Psednos cryptocaeca Stein 2012

*cryptos*, hidden; *caecum*, blind (as in "cul-de-sac"), referring to difficulty of finding its pyloric caeca (extremely dorsal in position)

#### Psednos longiventris Stein 2012

longus, long; ventris, venter or abdomen, referring to long abdominal cavity, its "particularly distinctive" feature

## Psednos microstomus Stein 2012

micro-, small; stomus, mouth, referring to small, upper jaw ~26% HL

# Psednos nemnezi Stein 2012

of NMNZ, the National Museum of New Zealand Te Papa Tongarewa

## Psednos platyoperculosus Stein 2012

platy, broad; operculum, cover, referring to its unusually wide opercle

# Psednos struthersi Stein 2012

in honor of Carl D. Struthers, Research & Technical Officer, Fishes (National Museum of New Zealand, Te Papa Tongarewa), "without whose help this and an earlier monograph on Ross Sea liparids would have been much more difficult to accomplish"

## Pseudoliparis Andriashev 1955

pseudo-, false, allusion not explained but described as similar to shallow-water species of Liparis

## Pseudoliparis amblystomopsis (Andriashev 1955)

*ambly*, blunt or obtuse; *stomus*, mouth; *opsis*, appearance, etymology not explained nor evident, possibly referring to its blunt, broadly rounded snout, protruding slightly in front of upper jaw

### Pseudoliparis belyaevi Andriashev & Pitruk 1993

in honor of marine biologist Georgi Mihailovich Belyaev (1913-1994), for his "great" (translation) contributions

to the study of the ultra-abyssal trenches of the World Ocean

## Pseudoliparis swirei Gerringer & Linley 2017

in honor of Herbert Swire (1851-1934), First Navigating Sublieutenant, HMS *Challenger*, "in acknowledgment and gratitude of the crew members that have supported oceanographic research throughout history"; the Mariana Trench, where this snailfish occurs, houses the ocean's deepest point, Challenger Deep (8184 m), discovered during the *Challenger* expedition and originally christened the Swire Deep [occurring at depths of 8178 m, possibly the deepest-living vertebrate]

# Pseudonotoliparis Pitruk 1991

pseudo-, false, referring to how it resembles Notoliparis in many characters

# Pseudonotoliparis rassi Pitruk 1991

in honor of Soviet ichthyologist Teodor Saulovich Rass (1904-2001), who, while participating in the second voyage of the research vessel *Vityaz* in 1949, collected "interesting material of deep-sea fishes, some of which turned out to be new genera and species" (translation), including this one, which he provided to Pitruk

## Rhinoliparis Gilbert 1896

rhinos, snout, referring to greatly produced snout of R. barbulifer, Liparis, type genus of family

# Rhinoliparis attenuatus Burke 1912

tapered, referring to "low, extremely attenuate" body

# Rhinoliparis barbulifer Gilbert 1896

barbula, small barbel; fero, to bear, referring to two barbels at tip of snout

# Rhodichthys Collett 1879

rhodo-, red, referring to uniform bright-red color of R. regina in life; ichthys, fish

# Rhodichthys melanocephalus Andriashev & Chernova 2011

*melano*-, black; *cephalus*, head, referring to brownish-black head and anterior part of body, with black gill cavity and mouth

## Rhodichthys regina Collett 1879

queen, allusion not explained, perhaps referring to its bright-red color and thin, transparent skin, which can be said give it a "regal" appearance

# Squaloliparis Pitruk & Fedorov 1993

*squalo*-, having teeth similar to those of the dogfish genus *Squalus* (Squaliformes: Squalidae); *Liparis*, type genus of family

## Squaloliparis dentatus (Kido 1988)

toothed, referring to "unusual" arrangement of its "unique" (in the family) teeth, arranged in a single row (vs. bands), and strongly recurved backward in the middle lobe

# Volodichthys Balushkin 2012

Volodya, diminutive of Vladimir, named for Vladimir Vladimirovich Fedorov (1939-2011), a "great" (translation) Russian ichthyologist, colleague and friend, an expert on the fishes of the northern Pacific Ocean, especially fond of snailfishes, eelpouts, sculpins, and flatfishes, who, at the time of his death, was working on a geographical review of snailfishes, which he did not complete; *ichthys*, fish

# Volodichthys herwigi (Andriashev 1991)

named after research vessel *Walther Herwig*, from which type was collected, and not Walther Herwig (1838-1912), founder of German fisheries science, for whom vessel was named

# Volodichthys parini (Andriashev & Prirodina 1990)

in honor of ichthyologist Nikolai Vasil'evich Parin (1932-2012), Institute of Oceanology, Russian Academy of Sciences

## Volodichthys smirnovi (Andriashev 1991)

in honor of marine zoologist Igor Sergeevich Smirnov (b. 1945), Zoological Institute, Russian Academy of Sciences, who sampled a good collection of liparids aboard the fisheries research vessel *Zund* in 1974

## Volodichthys solovjevae Balushkin 2012

in honor of Natalia Stepanovna Solovjeva (1911-2005), Perm State University (Perm, Russia), Balushkin's first ichthyology teacher, a "talented teacher who cultivated an active interest in fishes among her students," a "charming" and "very modest and polite" person (translation)