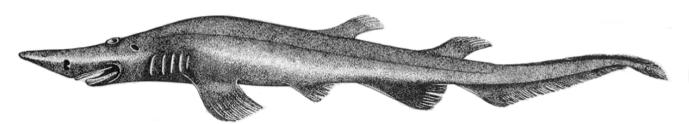
Revised 12 Oct. 2023 COMMENTS

Order CARCHARHINIFORMES

Deepwater Catsharks

Family **PENTANCHIDAE**

Smith 1912



Apristurus stenseni, immature male holotype, 185 mm TL. From: Springer, S. 1979. A revision of the catsharks, family Scyliorhinidae. NOAA (National Oceanic and Atmospheric Administration) Technical Report NMFS (National Marine Fisheries Service) Circular No. 422: i–v + 1–152.

Akheilos

White, Fahmi & Weigmann 2019

named for the Greek mythological sea daemon Ἄχειλος, modern transcription Akheilos (Latin Acheilus), who was a handsome boy until turned into a shark by the goddess Aphrodite as punishment for boasting that he was more beautiful than she²

Akheilos suwartanai White, Fahmi & Weigmann 2019 in honor of Atjep Suwartana, first director of the Research and Development Center of Oceanology, Indonesian Institute of Sciences in Ambon (where the second author works)



Akheilos suwartanai. Painting by Lindsay Marshall (www.stickfigurefish.com.au). From: White, W. T, F. Fahmi and S. Weigmann. 2019. A new genus and species of catshark (Carcharhiniformes: Scyliorhinidae) from eastern Indonesia. Zootaxa 4691 (5): 444–460.

Apristurus

Garman 1913

a- (Gr. ἀ), negative prefix, e.g., without; pristis, from $pri\bar{o}$ (Gr. πρίω) or $priz\bar{o}$ (πρίζω), to saw, or from $prist\bar{e}s$ (πρίστης), sawyer; urus, from oura (Gr. ουρά), tail, referring to absence of saw-toothed crest of enlarged dermal denticles along upper edge of caudal fin as found in the closely related Pristiurus (=Galeus)

Apristurus albisoma Nakaya & Séret 1999 albus (L.), white; sốma (Gr. σῶμα), body, referring to its whitish color

Apristurus ampliceps Sasahara, Sato & Nakaya 2008 amplus (L.), large; -ceps (Neo-Latin), headed, 21.8–25.5% TL

Apristurus aphyodes Nakaya & Stehmann 1998 *aphyṓdēs* (Gr. ἀφυώδης), derived from *aphyē* (ἀφύη), small white fry, i.e., fry-like but also used to mean whitish, referring to its pale-gray coloration

Apristurus australis Sato, Nakaya & Yorozu 2008 Latin for southern, referring to its distribution in the southern hemisphere around Australia

Apristurus breviventralis Kawauchi, Weigmann & Nakaya 2014 brevis (L.), short; ventralis (L.), of the belly, referring to its short abdomen

Apristurus brunneus (Gilbert 1892) Medieval Latin for brown, referring

to its "uniform warm brown" color above and below

Apristurus bucephalus White, Last & Pogonoski 2008 from bouképhalos (βουκέφαλος), bull-headed, from bo $\dot{u}s$ (βοῦς), bull (metaphorically used to mean big), and $kephal\acute{e}$ (κεφαλή), head, referring to its large, broad head

Apristurus canutus Springer & Heemstra 1979 Latin for hoary (gray or ash-colored), referring to its dark-gray coloration (with minute white spots underneath denticles)

Apristurus exsanguis Sato, Nakaya & Stewart 1999 *ex* (L.), out of; *sanguis* (L.), blood, i.e., bloodless or lifeless, referring to its characteristic pale coloration and flaccid body

Apristurus fedorovi Dolganov 1983 in honor of ichthyologist Vladimir Vladimirovich Fedorov (1939–2011), Zoological Institute, Russian Academy of Sciences (Saint Petersburg), the first to collect this shark

Apristurus garricki Sato, Stewart & Nakaya 2013 in honor of J.A.F. (Jack) Garrick (1928–2018), "pioneer" New Zealand shark biologist, the first to recognize this genus from New Zealand waters; he also "generously" shared his notes on this species with the authors

Apristurus gibbosus Meng, Chu & Li 1985 Latin for very crooked or humpbacked, referring to its convex dorsal outline

Apristurus herklotsi (Fowler 1934) in honor of British botanist-ornithologist Geoffrey Alton Craig Herklots (1902–1986), University of Hong Kong, "with many fond memories of the China Sea and Java"

Apristurus indicus (Brauer 1906) -icus (L.), belonging to: referring to Indian Ocean off Somalia and Gulf of Aden, type locality

Apristurus internatus Deng, Xiong & Zhan 1988 Latin for growing among or between, allusion not explained nor evident

Apristurus investigatoris (Misra 1962) -is, Latin genitive singular of: HMS Investigator station in Andaman Sea, where holotype was collected

Apristurus japonicus Nakaya 1975 -icus (L.), belonging to: Japan, known only from the northwest Pacific off Chiba Prefecture, Honshu, Japan

Apristurus kampae Taylor 1972 in honor of Elizabeth Kampa Boden (1922–1986), Scripps Institution of Oceanography, chief scientist aboard the research vessel *Argos*, from which holotype was collected

Apristurus laurussonii (Saemundsson 1922) in honor of Saemundsson's friend Gísli Lárusson (1865–1935), goldsmith, watchmaker, farmer and nature enthusiast, for his "long and invaluable support of the study of Icelandic fishes, and for carefully encouraging the skillful fishermen of Vestmannaeyjar Island [near type locality]" (translation)

 $^{^1}$ In 2022, two new subfamilies for Pentanchidae were proposed but the taxa are unavailable since type genera were not designated as required by ICZN 16.2. See: Soares, K. D. A. and K. Mathubara. 2022. Combined phylogeny and new classification of catsharks (Chondrichthyes: Elasmobranchii: Carcharhiniformes). Zoological Journal of the Linnean Society 195 (3): 761–814.

² There is no deep meaning or special relevance behind the reference to Akheilos, simply a "cool name" that "just seemed to click" (William T. White, pers. comm.).

2 · The ETYFish Project

Apristurus longicephalus Nakaya 1975 long-headed, from longus (L.), long, and kephalé (Gr. κεφαλή), head, referring to its long head, ~¼ TL

Apristurus macrorhynchus (Tanaka 1909) big-snouted, from *makrós* (Gr. μακρός), long or large, and *rhýnchos* (Gr. ῥύγχος), snout, referring to its long, acutely pointed snout

Apristurus macrostomus Chu, Meng & Li 1985 big-mouthed, from *makrós* (Gr. μακρός), long or large, and *stóma* (Gr. στόμα), mouth, allusion not explained, perhaps referring to having the widest mouth among its South China Sea congeners

Apristurus manis (Springer 1979) misapplied accusative plural of manes (L.), spirits or ghosts, referring to its grayish-white (i.e., ghost-like) color

Apristurus manocheriani Cordova & Ebert 2021 in honor of Greg Manocherian (b. 1967), American real estate developer, investor and philanthropist, for his "strong commitment to and passion for shark conservation and research"

Apristurus melanoasper Iglésias, Nakaya & Stehmann 2004 *mélanos* (Gr. μέλανος), genitive of *mélas* (μέλας), black; *asper* (L.), rough, referring to black body color and rough skin

Apristurus microps (Gilchrist 1922) micro-, from mikrós (Gr. μικρός), small; $\acute{o}ps$ (Gr. $\~{\omega}$ ψ), eye, described as having the smallest eyes in its original genus, *Scyliorhinus* (Scyliorhinidae)

Apristurus micropterygeus Meng, Chu & Li 1986 micro-, from mikrós (Gr. μικρός), small; pterygeus, presumably a variation of pterygion, diminutive of ptéryx (Gr. πτέρυξ), wing or fin, referring to first dorsal fin being % size of second dorsal fin

Apristurus nakayai Iglésias 2013 in honor of ichthyologist Kazuhiro Nakaya (b. 1945), Hokkaido University (Japan), who has dedicated his research on Apristurus, describing eight new species and revising the genus in 2009

Apristurus nasutus de Buen 1959 Latin for large-nosed, referring to its elongated snout

Apristurus ovicorrugatus White, O'Neill, Devloo-Delva, Nakaya & Iglésias 2023 ovi, genitive singular of ovum (L.), egg; corrugatus (L.), corrugated, referring to its ridged or corrugated egg case, unique in the genus

Apristurus parvipinnis Springer & Heemstra 1979 parvus (L.), small; pinnis, Neo-Latin adjective of pinna (L.), fin, i.e., finned, referring to first dorsal fin 2–4 times smaller than second dorsal fin

Apristurus pinguis Deng, Xiong & Zhan 1983 Latin for fat, described as having a "stout" body

Apristurus platyrhynchus (Tanaka 1909) broad-snouted, from *platýs* (Gr. $\pi\lambda\alpha\tau$ ύς), broad or wide, and *rhýnchos* (Gr. $\dot{p}\dot{v}$ γγς), snout, referring to its shorter, wider snout compared with *A. macrorhynchus*

Apristurus profundorum (Goode & Bean 1896) Latin for "out of the depths" (holotype captured at 1492 m)

Apristurus riveri Bigelow & Schroeder 1944 in honor of biologistanthropologist Luis Hugo Howell-Rivero (1899–1986), for his contributions to Cuban ichthyology (this shark described from Cuba's northern coast)

Apristurus saldanha (Barnard 1925) named for Saldanha Bay, South Africa, type locality

Apristurus sibogae (Weber 1913) of the ship Siboga and Indonesian expedition (1898–1899) of the same name, during which holotype was collected

Apristurus sinensis Chu & Hu 1981 -ensis, Latin suffix denoting place: Sinica (China), referring to its distribution in the South China Sea

Apristurus spongiceps (Gilbert 1905) spongia (L.), sponge; -ceps (Neo-Latin), headed, referring to its soft and spongy snout

Apristurus stenseni (Springer 1979) in honor of Danish geologist and anatomist Niels Stensen (1638–1686, also known as Nicolas Steno), for "important studies of elasmobranch anatomy, which, because of their scientific accuracy, were influential in the beginnings of elasmobranch systematics in the pre-Linnaean period and later, even to the time of the appearance of Müller and Henle's 'Plagiostomia' in 1841"

Apristurus yangi White, Mana & Naylor 2017 in honor of Lei Yang, College of Charleston (Charleston, South Carolina, USA), whose molecular phylogenetic work on sharks and rays has improved our understanding of their alpha taxonomy and phylogenetic relationships

Asymbolus

Whitley 1939

etymology not explained, possibly a- (Gr. α), negative prefix, e.g., without; sym (Gr. συμ), together or joined; bolus, from $b\tilde{o}los$ (Gr. βῶλος), lump or morsel, proposed as a subgenus of Scyliorhinus (Scyliorhinidae) distinguished in part by labial fold of upper lip of A. analis and A. vincenti not hanging over lower-jaw symphysis

Asymbolus analis (Ogilby 1885) Latin for anal, probably referring to its anal fin, which is larger than second dorsal fin

Asymbolus funebris Compagno, Stevens & Last 1999 Latin for funereal, referring to its somber appearance (i.e., duller color pattern) compared with other Asymbolus

Asymbolus galacticus Séret & Last 2008 *galaktikós* (Gr. γαλακτικός) milky, referring to its striking color pattern with numerous milky white patches that resemble the Milky Way



Asymbolus galacticus, holotype, male, 434 mm TL. From: Séret, B. and P. R. Last. 2008. Asymbolus galacticus sp. nov., a new species of spotted catshark (Carcharhiniformes: Scyliorhinidae) from New Caledonia. Cybium 32 (2): 137–143.

Asymbolus occiduus Last, Gomon & Gledhill 1999 Latin for western (of the setting sun), referring to its western distribution in Australian seas

Asymbolus pallidus Last, Gomon & Gledhill 1999 Latin for ashen or wan, referring to its wan body color, distinctively paler than congeners

Asymbolus parvus Compagno, Stevens & Last 1999 Latin for small, referring to its small relative size within the genus

Asymbolus rubiginosus Last, Gomon & Gledhill 1999 Latin for rusty, referring to its body coloration

Asymbolus submaculatus Compagno, Stevens & Last 1999 sub (L.), under; maculatus (L.), spotted, referring to spots on undersurface in slightly more of half of the types

Asymbolus vincenti (Zietz 1908) etymology not explained, probably named for Gulf St Vincent, where Kangaroo Island (southern coast of Australia), type locality, is situated

Bythaelurus

Compagno 1988

býthios (Gr. βύθιος), in the deep, referring to its deepwater habitat; *aílouros* (Gr. αΐλουρος), cat, probably from the vernacular "catshark"

Bythaelurus alcockii (Garman 1913) in honor of physician-naturalist Alfred William Alcock (1859–1933), who noted the distinctiveness of this species in 1896

Bythaelurus bachi Weigmann, Ebert, Clerkin, Stehmann & Naylor 2016 in honor of Johann Sebastian Bach (1685–1750), a "musical genius and one of the greatest composers of all time" (so named because the senior author admires Bach and not for any Bach-like feature the shark might possess, Simon Weigmann, pers. comm.) [see also B. vivaldii]

Bythaelurus canescens (Günther 1878) Latin for hoary gray, referring to its "uniform greyish" coloration (presumably in spirits since this shark is brown in life)



Bythaelurus clevai, paratype, adult male, 360 mm TL. From: Séret, B. 1987. Halaelurus clevai, sp. n., a new species of catshark (Scylliorhinidae) from off Madagascar, with remarks on the taxonomic status of the genera Halaelurus Gill and Galeus Rafinesque. The J.L.B Smith Institute of Ichthyology Special Publication No. 44: 1–27.

Bythaelurus clevai (Séret 1987) in honor of Régis Cléva, biologist, Muséum national d'Histoire naturelle (Paris), who collected holotype

Bythaelurus dawsoni (Springer 1971) in honor of Elliot W. Dawson (b. 1930), National Museum of New Zealand (now Museum of New Zealand Te Papa Tongarewa), who brought the first specimens to Springer's attention

Bythaelurus giddingsi McCosker, Long & Baldwin 2012 in honor of Al Giddings (b. 1937), American underwater filmmaker, naturalist, and friend

Bythaelurus hispidus (Alcock 1891) Latin for bristly, referring to its skin being covered with minute stony tricuspid spines

Bythaelurus immaculatus (Chu & Meng 1982) im-, from in (L.), not; maculatus (L.), spotted, referring to its lack of markings

Bythaelurus incanus Last & Stevens 2008 Latin for quite gray, referring to its body and fin coloration

Bythaelurus lutarius (Springer & D'Aubrey 1972) Latin for "of the mud," referring to its habitat on or just above muddy bottoms at 338–766 m

Bythaelurus naylori Ebert & Clerkin 2015 in honor of Gavin Naylor, College of Charleston (Charleston, South Carolina, USA), for contributions and innovative molecular research into the higher classification of chondrichthyans and for his support of the junior author's work in the Southwest Indian Ridge of the southwestern Indian Ocean

Bythaelurus stewarti Weigmann, Kaschner & Thiel 2018 in honor of the late Rob Stewart (1979–2017), Canadian filmmaker and shark conservationist, who "inspired the second author and stimulated her interest in sharks" (he died from hypoxia while diving off Islamorada, Florida, USA)

Bythaelurus tenuicephalus Kaschner, Weigmann & Thiel 2015 slenderheaded, from tenuis (L.), slender, and $kephal\acute{e}$ (Gr. κεφαλή), head, referring to its "remarkably" narrow head and snout

Bythaelurus vivaldii Weigmann & Kaschner 2017 in honor of Antonio Vivaldi (1678–1741), a "genius composer" of the Baroque era, to express its relationship to *B. bachi*, named after "sublime genius" Johann Sebastian Bach

Cephalurus

Bigelow & Schroeder 1941

cephalus, from kephalḗ (Gr. κεφαλή), head, referring to its expanded, flattened and rounded head; ailouros (Gr. αἴλουρος), cat, probably from the vernacular "catshark"

Cephalurus cephalus (Gilbert 1892) cephalus, from kephalḗ (Gr. κεφαλή), head, probably referring to its expanded, flattened and rounded head, "much wider" and with larger pores compared with the similar *Parmaturus xaniurus*, its presumed congener at the time



Cephalurus cephalus, paratype, 186 mm TL. From: Bigelow, H. B. and W. C. Schroeder. 1941 Cephalurus, a new genus of scyllorhinid shark with redescription of the genotype, Catulus cephalus Gilbert. Copeia 1941 (2): 73–76.



Figaro boardmani, holotype. From: Whitley, G. P. 1928. Studies in ichthyology. No. 2. Records of the Australian Museum 16 (4): 211–239, Pls. 16–18.

Figaro Whitley 1928

presumably named for the eponymous barber in various dramas (e.g., *The Marriage of Figaro*), allusion not explained nor evident

Figaro boardmani (Whitley 1928) in honor of friend and colleague William Boardman (1906–1963), Assistant Ornithologist, Australian Museum (Sydney), who collected holotype from a trawler

Figaro striatus Gledhill, Last & White 2008 Latin for grooved or furrowed (authors say "striped"), referring to its striped color pattern

Galeus

Rafinesque 1810

galeus, from galeós (Gr. γαλεός), weasel, used by Aristotle for the name of a small shark or dogfish, perhaps alluding to the pointed snouts, swift movements and/or rapacious feeding behavior of smaller predatory sharks 3

Galeus antillensis Springer 1979 -ensis, Latin suffix denoting place: the Antilles, or West Indies, where Leeward Islands, type locality, is situated

Galeus arae (Nichols 1927) of *Ara*, motor yacht owned by William K. Vanderbilt II (1878–1944), wealthy collector of natural history and marine specimens, from which holotype was collected



Galeus arae. Painting by William Belanske (1892–1945), artist aboard the Ara, from which holotype was collected. From: Nichols, J. T. 1927. A new shark from the continental slope off Florida. American Museum Novitates 256: 1–2.

Galeus atlanticus (Vaillant 1888) -icus (L.), belonging to: eastern Atlantic Ocean, where it occurs

Galeus cadenati Springer 1966 in honor of French ichthyologist Jean Cadenat (1908–1992), Director, Marine Biological Section of the Institut Français d'Afrique Noire (Gorée, Senegal), who described the similar *G. polli* in 1959

Galeus corriganae White, Mana & Naylor 2016 in honor of Australian molecular geneticist Shannon Corrigan (b. 1982), "whose extensive molecular population and phylogenetic work on sharks has contributed toward an improved understanding of their alpha taxonomy and phylogenetic relationships" (she also captured some of the molecular data used in this description)

Galeus eastmani (Jordan & Snyder 1904) patronym not identified, probably in honor of American geologist and paleontologist Charles Rochester Eastman (1868–1918), a specialist in fossil fishes

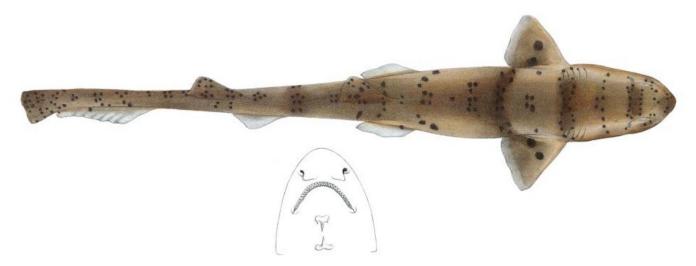
Galeus friedrichi Ebert & Jang 2022 in honor of German philanthropsist Jürgen Friedrich, co-founder of the JAF Foundation (Switzerland), for his commitment to marine conservation, research, and advocacy

Galeus gracilis Compagno & Stevens 1993 Latin for thin or slender, referring to its firm, slender body

Galeus longirostris Tachikawa & Taniuchi 1987 longus (L.), long; rostris, Neo-Latin scientific adjective of rostrum (L.), snout, referring to its "considerably longer" snout compared with congeners known at the time

Galeus melastomus Rafinesque 1810 black-mouthed, from *mélas* (μέλας), black, and stóma (Gr. στόμα), mouth, referring to color inside

 $^{^3}$ Strömberg, R. 1943. Studien zur Etymologie und Bildung der griechischen Fischnamen. Göteborg: Wettergren & Kerber. 1–165.



Halaelurus buergeri. From: Müller, J. and F. G. J. Henle. 1838–41. Systematische Beschreibung der Plagiostomen. Veit und Comp., Berlin. i–xxii + 1-200, 60 pls. [Pp. 1–28 published in 1838, reset pp. 27–28, 29–102 in 1839, i-xxii + 103–200 in 1841.]

of mouth (common in congeners but quickly lost after preservation)

Galeus mincaronei Soto 2001 in honor of ichthyologist Michael Maia Mincarone (b. 1971), for his "extensive work and tireless dedication" as collections manager of the Museu Oceanográfico do Vale do Itajaí (Brazil)

Galeus murinus (Collett 1904) Latin for mouse-gray, possibly referring to its mouse-like "uniformly gray" color

Galeus nipponensis Nakaya 1975 -ensis, Latin suffix denoting place: Nippon, or Japan (known only from Japanese waters)

Galeus piperatus Springer & Wagner 1966 Latin for peppered, referring to black dots all over body and tail

Galeus polli Cadenat 1959 in honor of Belgian ichthyologist Max Poll (1908–1991), who first brought attention to this species

Galeus priapus Séret & Last 2008 named for Priapos (Πρίαπος), Greek god of reproduction, referring to its long claspers

Galeus sauteri (Jordan & Richardson 1909) in honor of German businessman and entomologist Hans Sauter (1871–1943), who collected holotype at a Taiwan fish market

Galeus schultzi Springer 1979 in honor of Leonard P. Schultz (1901–1986), Curator of Fishes, U.S. National Museum (based on an unpublished name proposed by Henry W. Fowler)

Galeus springeri Konstantinou & Cozzi 1998 in honor of American ichthyologist Stewart Springer (1906–1991), an "outstanding leader" in shark taxonomy, for his work with the family Scyliorhinidae (which included Pentanchidae at the time)

Halaelurus Gill 1862

halós (Gr. ἀλός), genitive of háls (ἄλς), sea; ailouros (Gr. αἴλουρος), cat, probably from the vernacular "catshark"

Halaelurus boesemani Springer & D'Aubrey 1972 in honor of Marinus Boeseman (1916–2006), curator of fishes at the Rijksmuseum van Natuurlijke Historie (Leiden, Netherlands), for his "important" contributions to ichthyology

Halaelurus buergeri (Müller & Henle 1838) in honor of German physician-biologist Heinrich Bürger (ca. 1804–1858), who collected and illustrated Japanese flora and fauna and apparently collected holotype of this species

Halaelurus lineatus Bass, D'Aubrey & Kistnasamy 1975 Latin for lined, referring to its 13 pairs of narrow dark-brown stripes

Halaelurus maculosus White, Last & Stevens 2007 Latin for speckled, referring to speckling of small dark spots over dorsal and lateral surfaces of body

Halaelurus natalensis (Regan 1904) -ensis, Latin suffix denoting place: the coast of Natal, South Africa, type locality

Halaelurus quagga (Alcock 1899) etymology not explained, possibly referring to shark's narrow vertical bars, similar to those of the zebra, Equus quagga

Halaelurus sellus White, Last & Stevens 2007 from sella (L.), saddle, referring to dark saddles on head and body

Haploblepharus

Garman 1913

haplós (Gr. ἀπλός), single or simple; blépharon (Gr. βλέφαρον), eyelid, referring to simple structure of lower eyelid, which closes against upper eyelid to protect the eye

Haploblepharus edwardsii (Schinz 1822) in honor of English naturalist George Edwards (1694–1773), known as the "father of British ornithol-



"The Greater Cat-fish," first known published illustration of *Haploblepharus edwardsii*, named for the artist George Edwards. Per Edwards, "These figures were worked on the copper-plate immediately from nature, of the size of life. The [upper figure is] supposed to give the size of the fish, when it is only a few days old: the lower figures are of their bigness at the time of their exclusion from the egg, part of the contents of the egg still adhering to one of them by the navel-string." From: Edwards, G. 1760. Gleanings of natural history, exhibiting figures of quadrupeds, birds, insects, plants &c., most of which have not, till now, been either figured or described: with descriptions of seventy different subjects. Part II. London: Royal College of Physicians. I-xxv + 109–220 + 261–310 pl.

Holohalaelurus grennian, paratype, mature male, 273 mm TL. From: Human, B. A. 2006. A taxonomic revision of the catshark genus Holohalaelurus Fowler 1934 (Chondrichthyes: Carcharhiniformes: Scyliohinidae), with descriptions of two new species. Zootaxa 1315: 1–56.

ogy," who was the first to illustrate this shark, in 1760

Haploblepharus fuscus Smith 1950 Latin for dusky, dark or swarthy, probably referring to its overall drab-brown coloration

Haploblepharus kistnasamyi Human & Compagno 2006 in honor of Nat Kistnasamy (b. 1938), Oceanographic Research Institute (Durban, South Africa), for "outstanding efforts and pioneering work" in the systematics and taxonomy of the chondrichthyan fauna of southern Africa

Haploblepharus pictus (Müller & Henle 1838) Latin for painted or colored, probably referring to its variegated color pattern

Holohalaelurus

Fowler 1934

hólos (Gr. ὄλος), whole or entire, i.e., being a form of Halaeurus without any labial folds or grooves in the mouth

Holohalaelurus favus Human 2006 Latin for honeycomb, referring to the color pattern of fresh specimens

Holohalaelurus grennian Human 2006 from the old English *grennian*, grin, referring to its wide, broadly arched mouth and relatively large dentition, which resembles an "ominous grin"

Holohalaelurus melanostigma (Norman 1939) mélanos (Gr. μέλανος), genitive of mélas (μέλας), black; stígma (Gr. στίγμα), mark or spot, probably referring to dark-colored spots on dorsal surface

Holohalaelurus punctatus (Gilchrist 1914) Latin for spotted, referring to dense covering of small brown spots on dorsal surface

Holohalaelurus regani (Gilchrist 1922) in honor of English ichthyologist Charles Tate Regan (1878–1943), Natural History Museum (London), who described many South African fishes

Parmaturus

Garman 1906

parma (L.), from pármē (Gr. πάρμη), a light shield or buckler; urus, from ourá (Gr. οὑρά), tail, presumably referring to upper edge of caudal fin "armed with modified" scales (per Garman 19134)

Parmaturus albimarginatus Séret & Last 2007 albus (L.), white; marginatus (L.), bordered, referring to broad white margins on posterior fine



Parmaturus bigus, holotype, female, 710 mm TL. From: Séret, B. and P. R. Last. 2007. Four new species of deep-water catsharks of the genus Parmaturus (Carcharhiniformes: Scyliorhinidae) from New Caledonia, Indonesia and Australia. Zootaxa 1657: 23–39.

Parmaturus albipenis Séret & Last 2007 albus (L.), white; penis (L.), copulatory organ, referring to white claspers, which contrast strongly against dark brownish body coloration

Parmaturus angelae Soares, Carvalho, Schwingel & Gadig 2019 in honor of the fourth author's granddaughter, Angela

Parmaturus bigus Séret & Last 2007 Latin for beige, referring to general plain and pale yellow-brown coloration

Parmaturus campechiensis Springer 1979 -ensis, Latin suffix denoting place: Bay of Campeche, Gulf of Mexico, type locality

Parmaturus Ianatus Séret & Last 2007 Latin for "soft like wool," referring to the velvety feel of its skin

Parmaturus macmillani Hardy 1985 in honor of ichthyologist Peter McMillan (b. 1955, note Latinization of "Mc" to "Mac"), who collected holotype and "many examples of undescribed or poorly known marine fish and invertebrate species" from deep waters off New Zealand

Parmaturus melanobranchus (Chan 1966) mélanos (Gr. μέλανος), genitive of mélas (μέλας), black; branchus, from bránchia (Gr. βράγχια), gills, referring to blackish color on gill septa

Parmaturus nigripalatum Fahmi & Ebert 2018 nigri, from niger (L.), black; palatum (L.), palate, referring to distinctive blackish color of roof of mouth

Parmaturus pilosus Garman 1906 Latin for hairy, allusion not explained, perhaps referring to its "minute, velvety" scales

Parmaturus xaniurus (Gilbert 1892) comb-tailed, from *xánion* (Gr. ξάνιον), comb or card for combing wool, and *ourá* (Gr. οὐρά), tail, referring to crest-like row of tooth-like projections along upper edge of caudal fin

Pentanchus

Smith & Radcliffe 1912

penta, from pénte (Gr. πέντε), five; -anchus, perhaps an abridgement of branchus, from bránchia (Gr. βράγχια), gills, referring to five pairs of branchial apertures (gill slits), unique among the group of sharks (hexanchoid) in which the authors erroneously believed this shark belonged

Pentanchus profundicolus Smith & Radcliffe 1912 profundus (L.), deep; -colus (L.), dwelling in, referring to deepwater habitat (holotype taken at 1070 m)



Pentanchus profundicolus, holotype. Smith, H. M. 1912. Description of a new notidanoid shark from the Philippine Islands representing a new family. Proceedings of the United States National Museum 41 (1872): 489–491, Pl. 42.

 $^{^4}$ Garman, S. 1913. The Plagiostomia (sharks, skates, and rays). Memoirs of the Museum of Comparative Zoology 36: i–xiii + 1–515.