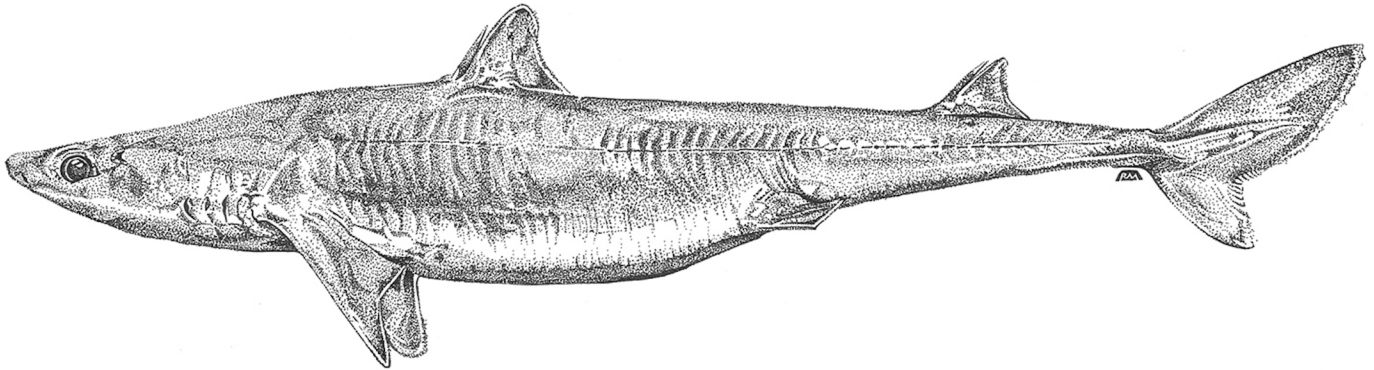


Order SQUALIFORMES

Dogfish Sharks

Family SQUALIDAE

Blainville 1816



*Squalus hawaiiensis*, adult female. Illustration by Romney McPhie. From: Daly-Engel, T. S., A. Koch, J. M. Anderson, C. F. Cotton and R. D. Grubbs. 2018. Description of a new deep-water dogfish shark from Hawaii, with comments on the *Squalus mitsukurii* species complex in the West Pacific. *ZooKeys* 798: 135–157.

***Cirrhigaleus***

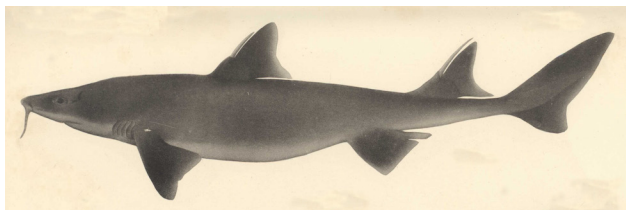
Tanaka 1912

*cirrus* (L.), tuft of hair or fringe, referring to moustache-like nasal barbels on *C. barbifer*; *galeus*, from *galeós* (Gr. γαλέος), 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<sup>1</sup>

***Cirrhigaleus asper* (Merrett 1973)** Latin for rough, referring to its rough skin texture

***Cirrhigaleus australis* White, Last & Stevens 2007** Latin for southern, referring to distribution in the temperate Southern Hemisphere

***Cirrhigaleus barbifer* Tanaka 1912** *barba* (L.), beard or barbel; *-fer*, from *fero* (L.), to have or bear, referring to moustache-like barbels on anterior nasal flaps



*Cirrhigaleus barbifer*, holotype, male, 85.5 cm TL. From: Tanaka, S. 1912. Figures and descriptions of the fishes of Japan, including the Riukiu Islands, Bonin Islands, Formosa, Kurile Islands, Korea, and southern Sakhalin. Imperial University, Tokyo. 9: 145–164, Pls. 41–45.

***Squalus***

Linnaeus 1758

*squalus* (L.), dirty or filthy (i.e., squalid), and an ancient Latin name for marine fishes considered unfit for human consumption, including sharks

***Squalus acanthias* Linnaeus 1758** Latin for a spiny or prickly thing, referring to its dorsal-fin spines

***Squalus acanthias ponticus* Myagkov & Kondyurin 1986** *-icus* (L.), belonging to: Pontos, ancient Greek name for the Black Sea, where it is endemic

***Squalus acutipinnis* Regan 1908** *acutus* (L.), sharp or pointed; *pinnis*, Neo-Latin adjective of *pinna* (L.), fin, presumably referring to its dorsal-

fin spines

***Squalus albicaudus* Viana, Carvalho & Gomes 2016** *albus* (L.), white; *cauda* (L.), tail, referring to white ventral lobe of caudal fin

***Squalus albifrons* Last, White & Stevens 2007** *albus* (L.), white; *frons* (L.), face or brow, referring to white upper ocular margin in most specimens where denticles have been shed

***Squalus altipinnis* Last, White & Stevens 2007** *altus* (L.), high; *pinnis*, Neo-Latin adjective of *pinna* (L.), fin, referring to its upright dorsal fin

***Squalus bahiensis* Viana, Carvalho & Gomes 2016** *-ensis*, Latin suffix denoting place: coast off Bahia, Brazil, where it appears to be endemic

***Squalus bassi* Viana, Carvalho & Ebert 2017** in honor of Alan John Bass, former shark specialist from the Oceanographic Research Institute in Durban, South Africa, for his valuable contributions to the taxonomy of elasmobranch fishes from southern Africa

***Squalus blainville* (Risso 1827)** in honor of zoologist-anatomist Henri Marie Ducrotay de Blainville (1777–1850), who named several shark taxa in 1816 [a noun in apposition, without the patronymic “i”]

***Squalus boretzi* Dolganov 2019** in honor of ichthyologist Leonid Aleksandrovich Boretz (also spelled Borets), Pacific Scientific Research Fisheries Centre (Vladivostok, Russia), for his contributions to the study of fishes from the Northwest Ridge of the Pacific Ocean

***Squalus brevirostris* Tanaka 1917** *brevis* (L.), short; *rostris*, Neo-Latin scientific adjective of *rostrum* (L.), snout, referring to shorter preoral snout length compared with *S. japonicus*

***Squalus bucephalus* Last, Séret & Pogonoski 2007** from *bouképhalos* (βουκέφαλος), bull-headed, from *boús* (βούς), bull (metaphorically used to mean big), and *kephalé* (κεφαλή), head, referring to its “relatively bulky” head

***Squalus chloroculus* Last, White & Motomura 2007** *chlōrós* (Gr. χλωρός), green; *oculus* (L.), eye, referring to the vivid green eyes of fresh specimens

***Squalus clarkae* Pflieger, Grubbs, Cotton & Daly-Engel 2018** in honor of Eugenie Clark (1922–2015), University of Maryland (USA), a “pioneer in the field of marine science broadly, and elasmobranch biology in the Gulf of Mexico [where this shark occurs] specifically,” serving as a “source of inspiration for countless scientists,” including the authors;

<sup>1</sup> Strömberg, R. 1943. Studien zur Etymologie und Bildung der griechischen Fischnamen. Göteborg: Wettergren & Kerber. 1–165.

## Eugenie Clark, the “Shark Lady”

Eugenie Clark (1922–2015), popularly known as the “Shark Lady,” studied the behavior, ecology and taxonomy of fishes, especially sharks, for over 50 years. She was a pioneer in the use of SCUBA for research purposes, and discovered that a milky liquid secreted by the Moses Sole *Pardachirus marmoratus* could serve as a shark repellent. Her 1951 book *Lady with a Spear*, chronicling her adventures in Micronesia and the Red Sea, was a best-seller. She later regretted the title of her book when she became a well-known champion of shark- and ocean-related conservation efforts. Perhaps because she was a woman doing what was perceived to be “man’s science,” she became the rare biologist-celebrity, featured in many popular magazine articles and television documentaries.

Six fishes have been named after Dr. Clark, four from the Red Sea, her favorite place to dive: a goby, *Callogobius clarki* (Goren 1978); *Enneapterygius clarkae*, a threefin blenny (Tripterygiidae); *Atrubucca geniae* Ben-Tuvia & Trewavas 1987, a drum or croaker (Sciaenidae); and *Pteragogus clarkae* Randall 2013, a wrasse (Labridae). *Sticharium clarkae* George & Springer 1980, a clinid from southern New South Wales and Western Australia, was described and named by one of her students. The sixth species, *Squalus clarkae*, the only shark named after the Shark Lady, was named posthumously.

Dr. Clark died at the age of 92 on February 25, 2015, in Sarasota, Florida, from non-smoking lung cancer.



her “history of deep sea research and passion for fauna of the Gulf of Mexico inspired the etymology presented herein”

***Squalus crassispinus* Last, Edmunds & Yearsley 2007** *crassus* (L.), thick, fat or stout; *spinus* (L.), thorn, referring to its stout dorsal-fin spines

***Squalus cubensis* Howell Rivero 1936** *-ensis*, Latin suffix denoting place: Havana, Cuba, type locality

***Squalus edmundsi* White, Last & Stevens 2007** in honor of Australian marine ecologist Matthew (Matt) J. Edmunds for his “high-quality, preliminary research” on Australian *Squalus* during a summer vacation scholarship at CSIRO Marine Laboratories in the early 1990s

***Squalus formosus* White & Iglésias 2011** *-osus* (L.), adjectival suffix, i.e., Formosan, referring to Formosa, or Taiwan, type locality

***Squalus grahami* White, Last & Stevens 2007** in honor of New Zealand-born Australian ichthyologist Kenneth (Ken) J. Graham (b. 1947), who collected holotype and has contributed “greatly” to the knowledge of southeast Australian elasmobranchs

***Squalus griffini* Phillipps 1931** patronym not identified but likely in honor of Louis T. Griffin (1870–1935), Auckland Museum, author of several papers on New Zealand fishes

***Squalus hawaiiensis* Daly-Engel, Koch, Anderson, Cotton & Grubbs 2018** *-ensis*, Latin suffix denoting place: Hawaiian Archipelago, type locality

***Squalus hemipinnis* White, Last & Yearsley 2007** *hemi-*, from *hēmisys* (Gr. ἡμισύς), half; *pinnis*, Neo-Latin adjective of *pinna* (L.), fin, referring to strongly notched, v-shaped posterior margin of second dorsal fin

***Squalus japonicus* Ishikawa 1908** *-icus* (L.), belonging to: Japan, referring to type locality (Senoumi Bank, Suruga Bay, Honshu)

***Squalus lalannei* Baranes 2003** in honor of Maurice Lousteau-Lalanne (b. 1955), Ministry for the Protection of the Environment of the Republic of Seychelles, for his help in organizing the expedition that collected holotype, his kindness, and his friendship

***Squalus lobularis* Viana, Carvalho & Gomes 2016** Neo-Latin scientific adjective of *lobus*, from *lobós* (Gr. λοβός), lobe, referring to its diagnostic broad and lobe-like dorsal and pectoral fins

***Squalus longispinis* Fricke, Durville, Potin & Mulochau 2023** *longus* (L.),

long; *spinis*, from *spina* (L.), thorn, referring to its long first and second dorsal-fin spines

***Squalus mahia* Viana, Lisher & Carvalho 2017** Malagasy (national language of Madagascar, where this shark occurs) word for skinny or very thin, referring to its conspicuously slender body, elongate and thin dorsal-fin spines, and narrow caudal fin compared with congeners

***Squalus margaretsmithae* Viana, Lisher & Carvalho 2017** in honor of Margaret Mary Smith (1916–1987), first director of the J.L.B. Smith Institute of Ichthyology (now the South African Institute for Aquatic Biodiversity), for her “remarkable contributions to ichthyology and her activism for women in science”

***Squalus megalops* (Macleay 1881)** big-eyed, from *mégas* (Gr. μέγας), large, and *ōps* (Gr. ὤψ), eye, referring to the “great length” of its “orbital cavity”

***Squalus melanurus* Fourmanoir 1979** black-tailed, from *mélanos* (Gr. μέλανος), genitive of *mélas* (μέλας), black, and *urus*, from *ourá* (Gr. οὐρά), tail, referring to black patch on lower caudal-fin lobe [authorship often given as Fourmanoir & Rivaton 1979]

***Squalus mitsukurii* Jordan & Snyder 1903** in honor of zoologist Kakichi Mitsukuri (1858–1909), dean of the Imperial University of Tokyo, who was with Jordan and Snyder at Misaki, Japan, when holotype was taken

***Squalus montalbani* Whitley 1931** patronym not identified but since name replaces the preoccupied *S. philippinus* of the Philippines, probably in honor of Filipino fisheries biologist Heraclio R. Montalban

***Squalus nasutus* Last, Marshall & White 2007** Latin for large-nosed, referring to elongated prenasal snout

***Squalus notocaudatus* Last, White & Stevens 2007** *nota* (L.), mark; *caudatus* (L.), tailed, referring to dark bar on caudal fin

***Squalus probatovi* Myagkov & Kondyurin 1986** in honor of Soviet ichthyologist A. N. Probatov, who initiated Soviet studies of dogfishes of the southern Atlantic (where this one occurs)

***Squalus quasimodo* Viana, Carvalho & Gomes 2016** named for the hump-backed character in Victor Hugo’s novel *The Hunchback of Notre Dame* (1831), referring to its conspicuous dorsally humped body

***Squalus raoulensis* Duffy & Last 2007** *-ensis*, Latin suffix denoting place:

Raoul Island, New Zealand, type locality

***Squalus shiraii* Viana & Carvalho 2020** in honor of ichthyologist Shigeru M. Shirai, Tokyo University of Agriculture, for his “valuable” contributions to the systematics of Squaliformes

***Squalus suckleyi* (Girard 1855)** in honor of American physician-naturalist George Suckley (1830–1869), who collected holotype