Parascyllium variolatum (Dumeril, 1853)


**Synonymy:** Parascyllium nuchalis McCoy, 1874.

**FAO Names:** En - Necklace carpetshark; Fr - Requin carpette à collier; Sp - Alfombra colarina.

**Field Marks:** The bold, beautiful colour pattern of this shark is unmistakable: a unique, broad, dark, white-spotted collar around the gills, striking black marks on all fins, dark blotches and white spots on body; also, barbels, nasoral and circumnarial grooves, mouth in front of eyes, two equal-sized, spineless dorsal fins and an anal fin, and the first dorsal origin behind the pelvic bases.

**Diagnostic Features:** Body clouded with irregular dark brown blotches and sprinkled with white spots; a blackish-brown, extremely conspicuous collar marking around the gill region, densely spotted with white like a necklace of pearls; bold black spots and blotches present on all fins.

**Geographical Distribution:** Western South Pacific: Australia (Victoria, Tasmania, South and Western Australia).

**Habitat and Biology:** A little-known, temperate-water, common bottom shark of the Australian continental shelf at depths down to about 165 m. Probably oviparous.

**Size:** Maximum total length about 91 cm.

**Interest to Fisheries:** Probably none at present.

**Literature:** Whitley (1940); Fowler (1941); Stead (1963).

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**7.2 FAMILY BRACHAELURIDAE** Applegate, 1974


**Synonymy:** None.

**FAO Names:** En - Blind sharks; Fr - Requins aveugles; Sp - Tiburones ciegos.

**Field Marks:** Small sharks with nasoral grooves, perinasal grooves, long barbels, small transverse mouths in front of eyes, dorsolateral eyes, large spiracles below eyes, no lateral skin flaps on head, two spineless dorsal fins and an anal fin, the second dorsal origin well ahead of the anal origin, and a short precaudal tail much shorter than the head and body.
**Diagnostic Features:** Body cylindrical, or moderately depressed, without ridges on sides. Head broad and somewhat flattened, without lateral flaps of skin, snout broadly rounded; eyes dorsolaterally situated on head, with subocular pockets, spiracles very large, subequal or larger than eyes and somewhat below them; gill slits small, fifth close to fourth but not overlapping it; internal gill slits without filter screens; nostrils with long, pointed barbels and distinct circumnarial folds and grooves around outer edges of incumbent apertures; mouth small, subterminal on head, and nearly transverse, with or without a symphysis groove on chin; teeth not strongly differentiated in jaws, with a medial cusp, lateral cusplets and weak labial root lobes; tooth rows 32/21. Dorsal fins equal-sized, first dorsal with origin over the pelvic bases and insertion well behind the pelvic rear tips; pectoral fins moderate-sized, broad and rounded, as large as pelvic fins or slightly larger, with fin radials not expanded into fin web; pelvic fins about as large as dorsals but slightly greater than anal fin; anal fin as large as or somewhat smaller than second dorsal, with its origin about opposite second dorsal midbase or insertion; anal fin with broad base and angular apex, separated by a space or narrow notch much less than base length from lower caudal origin; caudal fin with its upper lobe at a low angle above the body axis, less than a third as long as the entire shark, with a strong terminal lobe and subterminal notch but no ventral lobe. Caudal peduncle without lateral keels or precaudal pits. Supraorbital crests present on cranium, not laterally expanded. Valvular intestine of spiral-ring type. Colour pattern of dark saddles and light spots present, or colour plain.

**Habitat, Distribution and Biology:** These are common, small, harmless, inshore bottom sharks confined to temperate and tropical continental waters of Australia, ranging in depth from the intertidal down to 110 m. They commonly occur on rocky reefs or on coral close inshore, sometimes in water only sufficient to cover them. These sharks are small less than 1.3 m maximum length. At least one of the species is ovoviviparous. Known food items of these sharks include small fishes, crustaceans, cuttlefish and sea anemones. At least one of the species is very hardy and can live a long time out of water as well as readily in captivity. The name 'blind shark' stems not from lack of vision but from the habits of one of the two species, which closes its eyelids when removed from the water.

**Interest to Fisheries:** Limited, captured in bottom trawls. *Brachaelurus* is captured by sports fishermen.

**Remarks:** I recognize this family following Applegate's (1974) review.

**Key to Genera**

1a. A median symphyseal groove present on chin (Fig. 1a): Anal fin insertion just anterior to lower caudal origin (Fig. 1b) .................................................. Brachaelurus

1b. No symphyseal groove on chin. Anal fin insertion separated from lower caudal origin by a space equal to anal inner margin (Fig. 2a,b) ........................................ Heteroscyllium

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*Brachaelurus*  
**Fig. 1**

*Heteroscyllium*  
**Fig. 2**
Genus: **Brachaelurus** Ogilby, 1907

Type Species: *Chiloscyllium modestum* Günther, 1871, by original designation.

Synonymy: Genus *Cheloscyllium* Maclay, in Ramsay, 1880 (error for *Chiloscyllium* Müller & Henle, 1837); Genus *Cirriscyllium* Ogilby, 1908 replacement for Genus *Brachaelurus* Ogilby, 1907).

Diagnostic Features: A median symphyseal groove present on chin. Nostrils nearly terminal on snout. Spiracles large and close to eyes. First dorsal fin about as large as second dorsal. Anal origin about under insertion of second dorsal fin, anal insertion just anterior to lower caudal origin. Caudal fin short, length of its dorsal margin usually less than distance from snout tip to pectoral fin insertion.

Remarks: See Bigelow & Schroeder (1948: 180, ftn. 5) for a discussion of the nomenclatural history of this genus and *Heteroscyllium*.

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**Brachaelurus waddi** (Bloch & Schneider, 1801)


Synonymy: *Chiloscyllium modestum* Günther, 1871; *Chiloscyllium furvum* Macleay, 1881; *Chiloscyllium fuscum* Parker & Haswell, 1897.

FAO Names: En - Blind shark; Fr - Requin aveugle des roches; Sp - Tiburón ciego de roca.

Field Marks: A small stout shark with long barbels, nasoral grooves and perinasal grooves, very large spiracles, a short mouth ahead of the eyes, a median symphyseal groove on the chin, no dermal lobes on sides of head, two equal-sized spineless dorsal fins and an anal fin, the first dorsal origin over the pelvic bases, a short precaudal tail and short caudal fin, and colour blackish to light brown with or without darker saddles, light yellowish on underside, sometimes with many small white spots.

Diagnostic Features: See genus.
Geographical Distribution: Western South Pacific: Australia (Northern Territory, southern Queensland, New South Wales, possibly Western Australia).

Habitat and Biology: A common, harmless, inshore bottom shark of temperate Australian waters, often close inshore in tidepools that are barely deep enough to cover it and at the surf line but occasionally down to about 73 m and exceptionally to 110 m. It favours rocky shoreline areas and coral reefs.

Development ovoviviparous, with 7 or 8 young in a litter. Said to breed in summer (November in the Sydney area).

Feeds on small reef invertebrates, including crabs, shrimp, cuttlefish and sea anemones, and small fishes; a coralline alga was found in the stomach of one shark.

A hardy shark that thrives in aquaria, and apparently can live a long time out of water. Termed 'blind shark' by fishermen because it retracts its eyeballs, which causes its thick eyelids to close, when removed from the water.

Size: Maximum total length exceptionally 90 to 122 cm; an adult male was 62 cm long and an adult female, 66 cm; size at birth 15 to 18 cm.

Interest to Fisheries: Minimal, taken offshore in bottom trawls but utilization not recorded. Commonly caught by sports fishermen with rod and reel from shore in rocky areas, particularly around Sydney.

Literature: Waite (1901); Whitley (1940); Fowler (1941); Stead (1963).

Remarks: Whitley (1934:182) suggested that Squalus waddi is the earliest name for the Australian 'blind shark', which Bloch & Schneider described from an illustration of an Australian shark by Dr John Latham. I have not seen the illustration but provisionally accept Whitley's usage of waddi rather than modestum for the Blind Shark, which had considerable usage prior to Whitley's note.

Heteroscyllium Regan, 1908


Type Species: Brachaelurus colcloughi Ogilby, 1907, by original designation.

Synonymy: Brachaelurus Ogilby, 1908 (not Genus Brachaelurus Ogilby, 1907).

Diagnostic Features: No symphyseal groove on chin; nostrils subterminal on snout and well behind snout tip; spiracles small and well behind eyes. First dorsal fin noticeably larger than second dorsal; anal origin about under midbase of second dorsal fin, anal fin insertion separated from lower caudal origin by a space about equal to the anal inner margin; caudal fin rather long, length of its dorsal margin greater than distance from snout tip to pectoral fin insertion.

Remarks: See Bigelow & Schroeder (1948:180 fn. 5) for a discussion of the nomenclatural history of this genus and Brachaelurus.

Heteroscyllium colcloughi (Ogilby, 1908)


Synonymy: None.