

Haploblepharus Garman, 1913

SCYL Hap

Genus: Haploblepharus Garman, 1913, Mem.Mus.Comp.Zool.Harv.Coll., 36:501.

Type Species : Haploblepharus edwardsii Garman, 1913, by monotypy, equals Scyllium edwardsii Voigt, in Cuvier, 1832.

Synonymy : None.

Field Marks: Stocky broad-headed scyliorhinids with greatly expanded anterior nasal flaps that reach mouth, nasoral grooves, dorsolateral gill slits, and anal fin about as large as equal sized dorsals.

Diagnostic Features : Body not tadpole-shaped, fairly stout and spindle shaped, tapering slightly to caudal fin; body firm and thick-skinned, with well-calcified dermal denticles; stomach not inflatable; tail moderately long, length from vent to lower caudal origin about 4/5 of snout-vent length. Head depressed, narrowly rounded in lateral view and not wedge-shaped; head short, less than 1/5 of total length in adults; snout short, less than 2/3 of mouth width, thick, slightly flattened, and bluntly pointed in lateral view; snout not expanded laterally, broadly rounded but not bell-shaped in dorsoventral view; ampullar pores not greatly enlarged on snout; nostrils very large, with incurrent apertures only partly open to exterior; anterior nasal flaps very broadly triangular, without barbels, nearly meeting at the midline of the snout and overlapping mouth; internarial space less than 0.5 times in nostril width; broad nasoral grooves present, connecting excurrent apertures with mouth and covered by expanded anterior nasal flaps; eyes dorsolateral on head, broad subocular ridges present below eyes; mouth short and broadly rounded, with lower symphysis covering upper so that upper teeth are not visible in ventral view; labial furrows present along both upper and lower jaws, these moderately long but ending somewhat behind level of upper symphysis of mouth; bronchial region not greatly enlarged distance from spiracles to fifth gill slits about 2/5 of head length; gill slits dorsolateral on head. Two dorsal fins present, about equal-sized, origin of first varying from over last third of pelvic bases to about over their insertions; origin of second dorsal over or slightly behind the anal midbase; pectoral fins moderately large, their width subequal or somewhat greater than mouth width; inner margins of pelvic fins not fused over claspers in adult males; claspers moderately long, fairly thick, and distally pointed, extending about half of their lengths behind the pelvic fin tips; anal fin moderately large but not greatly elongate, about as large as dorsal and pelvic fins, its base length subequal to about 1.3 times second dorsal base; origin of anal well behind pelvic bases, and insertion separated from lower caudal origin by a broad space subequal to the anal base; caudal fin fairly short and broad, about a fifth of total length in adults. No crests of denticles on the caudal margins; supraorbital crests absent from cranium. Colour golden brown without a conspicuous colour pattern, or marked with dark blotches, saddles, and white spots.

Remarks : This genus was reviewed by Bass, D'Aubrey & Kistanasamy (1975a) and Springer (1979).

Key to Species

- 1a. Colour uniform golden brown **H. fuscus**
- 1b. Variegated colour pattern present
- 2a. First dorsal origin over or behind pelvic insertions. Dorsal saddle markings with conspicuous darker margins; saddles dotted with numerous small white spots **H. edwardsii**
- 2b. First dorsal origin somewhat ahead of pelvic insertions. Dorsal saddle markings without conspicuous darker margins; saddles dotted with sparse large white spots..... **H. pictus**

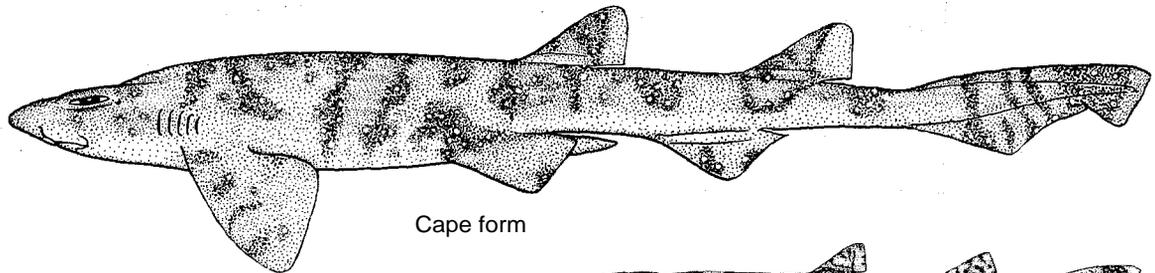
Haploblepharus edwardsii (Voigt, 1832)

SCYL Hap 1

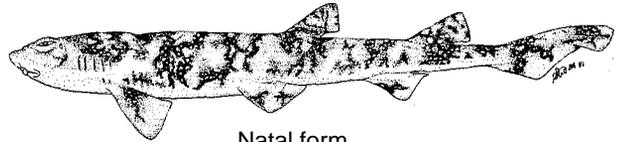
Scyllium edwardsii Voigt, in Cuvier, 1832, Tierreich, 2:504. Holotype: ?. Type Locality: South Africa.

Synonymy : None.

FAO Names : En - Puffadder shyshark; Fr - Roussette vipérine; Sp - Alitán viperino.



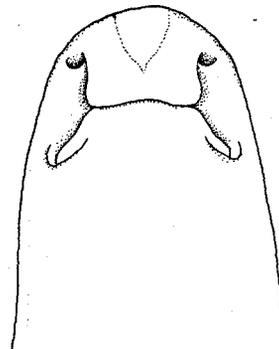
Cape form



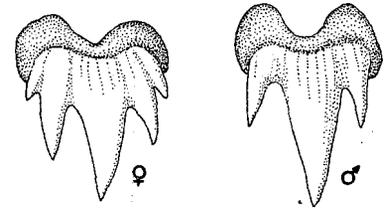
Natal form

Field Marks: Broad-headed, stout-bodied catsharks with greatly expanded anterior nasal flaps that reach mouth and cover, broad nasoral grooves, dorsolateral gill slits, variegated colour pattern with dark-margined dorsal saddles, dotted with small white spots.

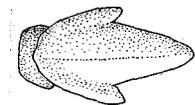
Diagnostic Features: First dorsal origin over or behind pelvic insertions. Colour pattern with striking dorsal saddles, bordered with conspicuous darker margins; saddles dotted with numerous light spots, mostly smaller or equal in size to spiracles.



underside of head



teeth



dermal denticle

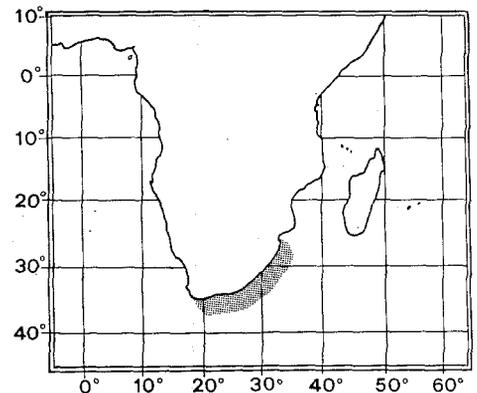
Geographical Distribution : Western Indian Ocean: South Africa (Western Cape Province to Natal).

Habitat and Biology : A common shark of inshore and offshore temperate waters of the continental shelf, on or near the bottom, from the surfline to 130 m depth; commonly on sandy and rocky bottoms. The 'Cape' form of this species shows progressive submergence around the Cape from close inshore down to 15 m in the west to 40 to 130 m in the east. 10

Oviparous, with a single egg-case laid per oviduct. Size of egg-cases about 3.5 to 5 cm long and 1.5 to 3 cm wide.

Eats small bony fishes, crustaceans and cephalopods in about equal quantities.

Size : Maximum 60 cm, males maturing between 42 and 51 cm and reaching 59 cm as adults; females maturing at about 41 cm or more and reaching 60 cm as adults; individuals from southwestern Cape Province may mature at a smaller size than those from northern Natal. Size at hatching about 10 cm.



Interest to Fisheries : Limited, caught by surf anglers with rod and reel and by bottom trawlers, but apparently little-utilized.

Literature : Bass, D'Aubrey & Kistnasamy (1975); Springer (1979).

Remarks : Bass, D'Aubrey & Kistnasamy (1975) cited "*Scyllium* D'Edwards Cuvier, 1817" as the earliest name for this species, but reference to Cuvier (1817, also 1829) suggests that he did not propose a scientific name, but rather a vernacular ("sq. d'Edwards"). Bass, D'Aubrey & Kistnasamy note that there are two different forms of this species, the "Cape" and "Natal" types, that might be geographic variants or two species. These differ in coloration and in habitat, the "Cape" type occurring in deeper cold water in the northeast part of its range, but further northeast the "Natal" type occurs close inshore in warm water at the surfline to 30 m.

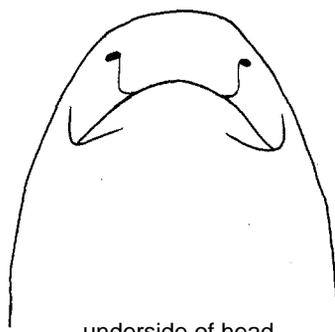
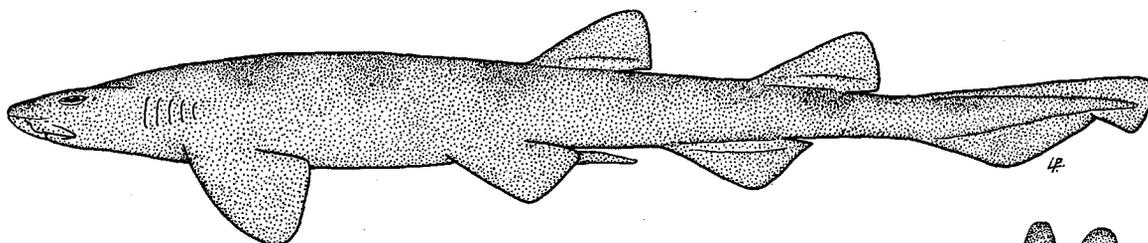
Haploblepharus fuscus Smith, 1950

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Haploblepharus fuscus Smith, 1950, Ann. Mag.Nat.Hist.(Ser.12), 3:883, fig. 2. Holotype: J.L.B. Smith Institute of Ichthyology, Rhodes University, RUSI 21, 570 mm adult male. Type Locality: East London, South Africa.

Synonymy : None.

FAO Names: En - Brown shyshark; Fr - Roussette brune; Sp - Alitán marrón.



underside of head



tooth



dermal denticle.

Field Marks: A broad-banded, stout-bodied catshark with greatly expanded anterior nasal flaps that reach mouth and cover broad nasoral grooves, dorsolateral gill slits, colour uniform brown.

Diagnostic Features: First dorsal origin over pelvic insertions. Colour uniform brown with saddle marks obsolete or absent.

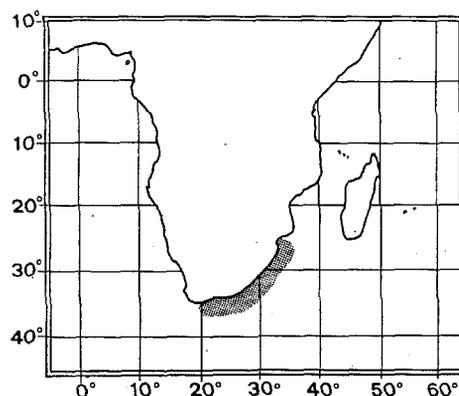
Geographical Distributions : Western Indian Ocean: South Africa (southern Cape Province to southern Natal).

Habitat and Biology : A common temperate-water shark found close inshore on the continental shelf, often in shallow, rocky areas. In the southeastern Cape region of South Africa this species sympatric with H. edwardsii, but there apparently is at least partial microhabitat separation between the two. The brown shyshark is an inshore species in the southeastern Cape, while H. edwardsii, the puffadder shyshark, occurs in deeper water offshore. The term 'shyshark' for this and other members of the genus Haploblepharus refers to their habit of curling up with their tails over their eyes when captured. Oviparous. Eats lobsters and bony fishes. Readily kept in captivity.

Size : Maximum 73 cm; adolescent male 53 cm, adult males 63 to 69 cm, adolescent female 59 cm, adult females 60 to 73 cm.

Interest to Fisheries: None at present, caught by sports anglers with rod and reel but apparently little-utilized.

Literature : Bass, D'Aubrey & Kistnasamy (1975a); Springer (1979).



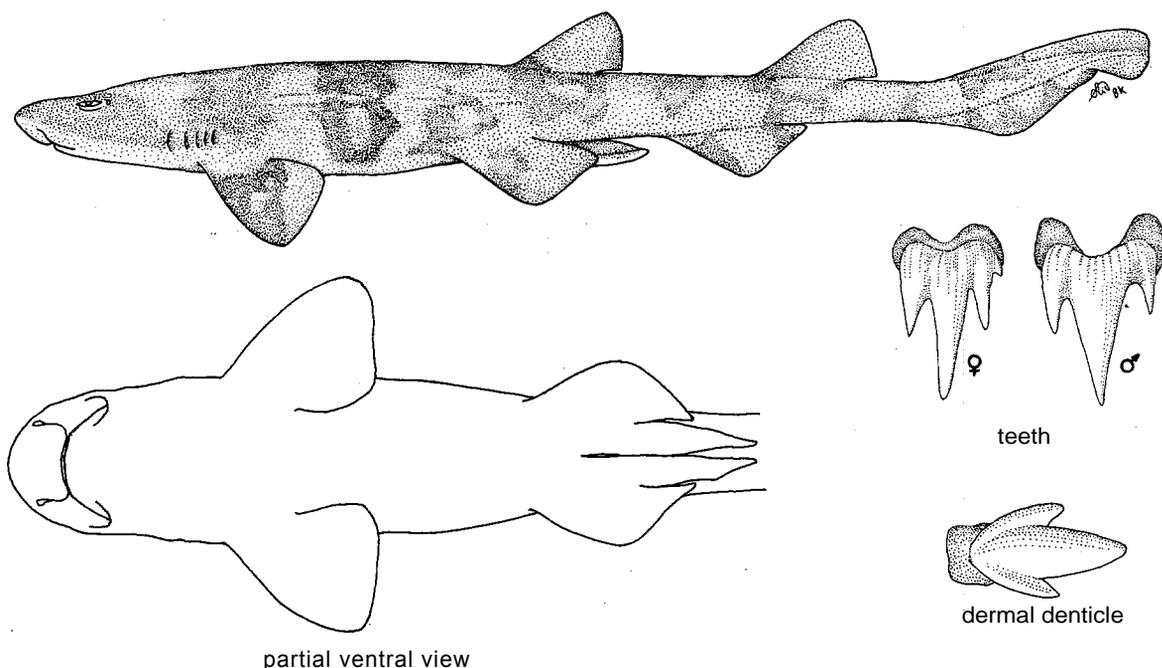
Haploblepharus pictus (Müller & Henle, 1838)

SCYL Hap 3

Scyllium pictum Müller & Henle, 1838, *Syst.Beschr.Plagiost.*, pt. 1:4. Holotype: ?. Type Locality: Cape of Good Hope, South Africa.

Synonymy: None.

FAO Names : En - Dark shyshark; Fr - Roussette sombre; Sp - Alitán oscuro.



Field Marks: A broad-headed, stout-bodied catshark with greatly expanded anterior nasal flaps that reach mouth and cover broad nasoral grooves, dorsolateral gill slits, variegated colour pattern with dorsal saddles, dotted with few large white spots and without dark margins.

Diagnostic Features: First dorsal origin in front of pelvic insertions. Colour pattern with striking dorsal saddles, not bordered with conspicuous darker margins; saddles dotted with sparse light spots, mostly larger than spiracles.

Geographical Distribution : Eastern South Atlantic: Namibia to South Africa (southwestern Cape Province).

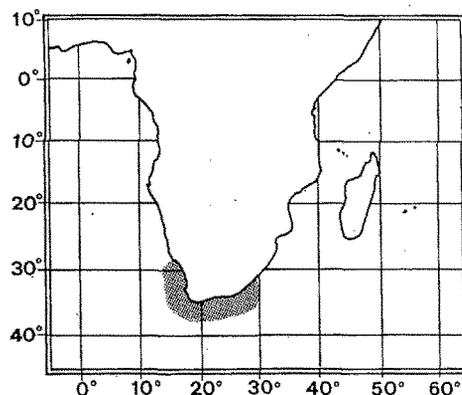
Habitat and Biology : A common inshore bottom-dwelling shark of temperate waters of the continental shelf, commonest in shallow, sandy areas. Oviparous, with one egg laid per oviduct. Size of egg-cases about 6 cm long by 3 cm wide. In an aquarium an egg-case hatched in about 3.5 months.

Size : Maximum about 56 cm, adult male 56 cm, adult female 53 cm, size at hatching about 11 cm.

Interest to Fisheries: None at present, caught by sports anglers with rod and reel but little utilized.

Literature : Bass, D'Aubrey & Kistnasamy (1975a); Springer (1979).

Remarks : According to Bass, D'Aubrey & Kistnasamy (1975a), this species is largely allopatric to *H. edwardsii* with the boundary between it and *H. edwardsii* at False Bay, where both occur; and possibly is entirely allopatric to *H. fuscus* which has not been recorded as far west as False Bay.



Holohalaelurus Fowler, 1934

SCYL Hol

Genus : Subgenus Holohalaelurus Fowler, 1934 (Genus Halaelurus Gill, 1862). Proc.Acad.Nat.Sci.Philad., 75:235.

Type Species : Scylliorhinus regani Gilchrist, 1922, by original designation.

Synonymy : Genus Holohaelurus Fowler, 1967 (misspelling).

Field Marks : Extremely broad-headed short-snouted catsharks without labial furrows, with long mouths and long, low fins, slender tails, very bold, bright, spotted dorsal colour patterns and scattered black dots on underside of head.

Diagnostic Features: Body not tadpole-shaped, fairly stout and spindle-shaped, tapering considerably to caudal fin; body firm and thick skinned, with well-calcified dermal denticles; stomach not inflatable; tail moderately long, length from vent to lower caudal origin over 4/5 of snout-vent length. Head greatly depressed and very broad, narrowly pointed and somewhat wedge-shaped in lateral view; head short, less than 1/5 of total length in adults; snout rather short, less than 3/5 of mouth width, thin, and very flattened, pointed in lateral view; snout somewhat expanded laterally, rounded-parabolic and slightly bell-shaped in dorsoventral view; ampullar pores not greatly enlarged on snout; nostrils fairly large, with incurrent and excurrent apertures only partly open to exterior; anterior nasal flaps broadly triangular, without barbels, well separate from each other but nearly or quite reaching level of mouth; internarial space about 1 to 1.3 times the nostril width; no nasoral grooves; eyes dorsolateral on head, very broad subocular ridges present below eyes. Mouth semiangular, very long, with lower symphysis well behind upper so that upper teeth are exposed in ventral view; labial furrows absent from both jaws; branchial region not enlarged, distance from spiracles to fifth gill slits 2/5 of head length; gill slits dorsolateral on head. Two dorsal fins present, the second slightly larger than first; origin of first dorsal varying from, about over the pelvic midbases to slightly in front of their insertions; origin of second dorsal about over the last third of the anal base; pectoral fins moderately large, their width subequal or somewhat less than mouth width; inner margins of pelvic fins not fused over claspers in adult males; claspers moderately long, slender and distally pointed, extending about half of their lengths behind the pelvic fin tips; anal fin moderately large and definitely elongated, about as large as pelvic fins or larger, and larger than the dorsals; base length 1.5 to 2 times second dorsal base; origin of anal well behind pelvic bases, and insertion separated from lower caudal origin by a broad space subequal to the anal base; caudal fin moderately elongated, between 1/4 to 1/5 of total length in adults. No crest of denticles on the caudal margins; supraorbital crests absent from cranium. Colour light with a conspicuous colour pattern of dark spots and blotches on dorsal surface, unique small black dots on underside of head.

Remarks : The writer follows Bigelow & Schroeder (1948), Bass, D'Aubrey & Kistnasamy (1975a), and Springer (1979) in recognizing this genus, though the differences between it and the closely related Halaelurus are fairly small. An alternate arrangement as originally proposed by Fowler (1934) is ranking this taxon as a subgenus of Halaelurus.

Key to Species

- 1a. Anal base 32 times its height or less. Colour pattern of very small regular, close-spaced dark spots on a light background, the light areas not appearing reticulated **H. punctatus**
- 1b. Anal base over 3 1/2 times its height or less. Colour pattern usually of larger, somewhat irregular, very close-spaced dark spots on a light background, the light areas having a reticulated appearance **H. regani**

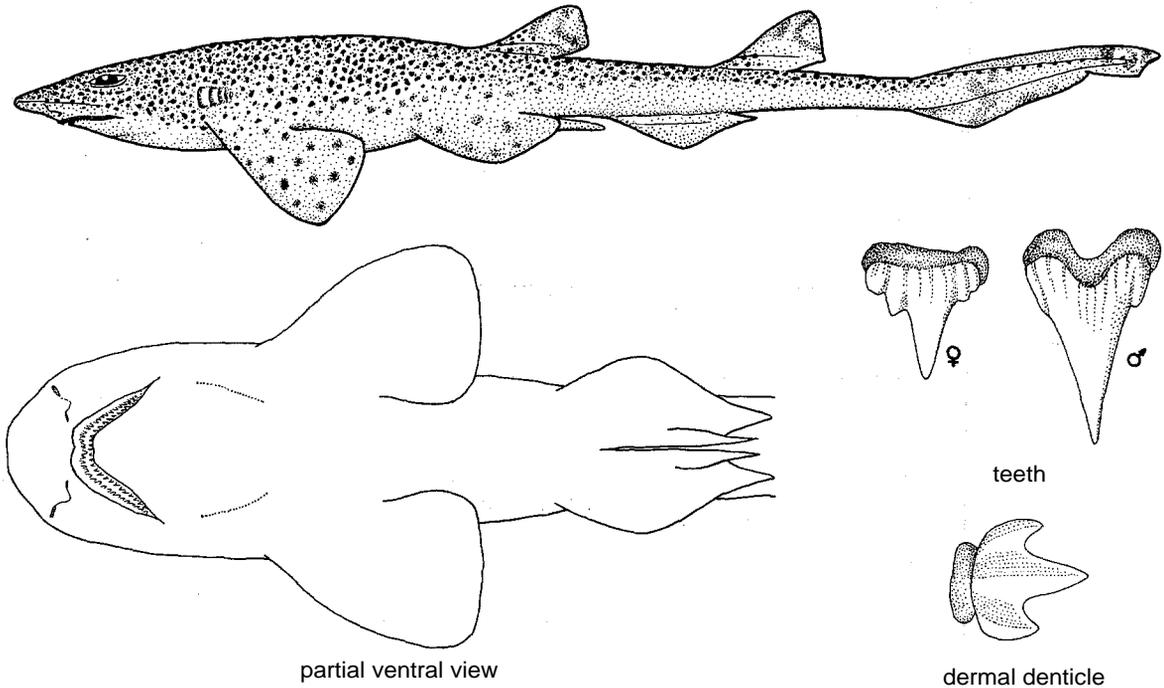
Holohalaelurus punctatus (Gilchrist, 1914)

SCYL Hol 1

Scylliorhinus punctatus Gilchrist, 1914, Mar.Biol.Rep.Cape Town, (2):129. Holotype: ?. Type Locality: Cape Point, South Africa.

Synonymy : Scylliorhinus (Halaelurus) polystigma Regan, 1921.

FAO Names : En - African spotted catshark;. Fr - Holbiche à gorge tachetée; Sp - Pejegato moteado.



Field Marks : A catshark with an extremely broad head, no labial furrows, nostrils separate from each other and mouth, and without barbels or nasoral grooves, dorsolateral gill slits, dorsal fins equal-sized, first dorsal with origin about over rear end of pelvic bases, second dorsal base partly behind anal base, dorsal surface with dense covering of dark brown spots, underside of head with tiny dark dots, conspicuous white spot over pectoral insertion.

Diagnostic Features: Anal base 3 1/2 times its height or less, usually shorter than interdorsal space. Second dorsal fin about as large as first. Denticles on back and top of head of uniform size (but see remarks below). Colour pattern variable but usually with very small, regular, closely spaced dark brown spots on yellow-brown or orange-brown ground colour of back giving more of a leopard-like appearance; also longitudinal or double-V-shaped markings on dorsal fins, lined with white, and white spots on sides of body that are especially prominent above pectoral insertions. A smaller species, adult males 28 + cm, adult females 24 + cm.

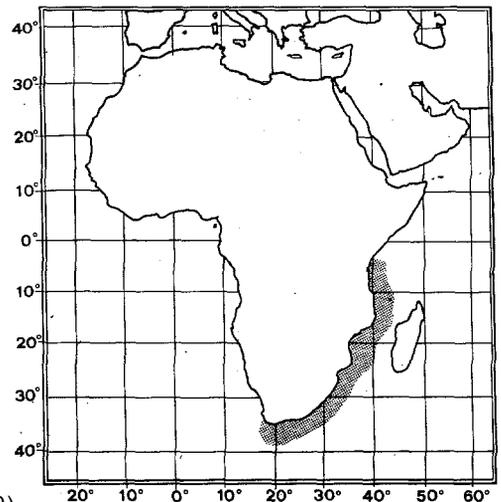
Geographical Distribution : Western Indian Ocean: South Africa, Mozambique, possibly Tanzania (see remarks below).

Habitat and Biology : A small, common bottom-dwelling shark of deepish water of the uppermost continental slopes off Natal and southern Mozambique, but also recorded from Cape of Good Hope and Tanzania (Zanzibar). Off Natal, females are far outnumbered by males, but not off southern Mozambique, indicating partial sexual segregation. Development oviparous, with one egg-case being laid per oviduct at a time. Eats small bony fishes, crustaceans and cephalopods.

Size : Maximum about 34 cm; male adolescent 24 cm, adult males 29 to 34 cm; females immature at 20 cm, adolescent at 22 to 23 cm and adult at 24 to 26 cm. The adult males of this species are considerably larger than females in this species and *H. regani*, something unusual among sharks.

Interest to Fisheries : None at present, taken in bottom trawlers.

Literature : Bass, D'Aubrey & Kistnasamy (1975a); Springer (1979).



Remarks : See Bass, D'Aubrey & Kistnasamy (1975a) for a discussion of the synonymy of this species. These writers note that although the holotype and three of the four paratypes of *Scyliorhinus (Halaelurus) melanostigma* Norman, 1939, collected off Zanzibar and in the British Museum (Natural History) marine fish collection, are based on specimens of *H. regani*, the fourth paratype (BMNH 1939.5.24.5, a 210 mm female) is *punctatus*-like. This Zanzibar specimen differs from Natal *punctatus* in having a single narrow dark bar flanked by light lines on its dorsal fins (Natal specimens have twin V-marks on their dorsals). The writer was able to examine two

additional specimens of this type from Tanzania, collected by G. Bianchi in 1982, and can confirm the colour differences. Additionally, these sharks agree with H. regani and not H. punctatus in having enlarged denticles interspersed with normal smaller ones, but have the shorter anal fin, small size, and general colour pattern of H. punctatus. As suggested by Bass, D'Aubrey & Kistnasamy, these Tanzanian sharks may represent an additional, undescribed species or a geographic variant of H. punctatus, but unfortunately there are no specimens from the intermediate area, northern Mozambique, to determine if the Natal-southern Mozambique and Tanzanian punctatus types intergrade or not. Springer (1979) reported a similar specimen from Tanzania (a 210 mm immature male, possibly not saved).

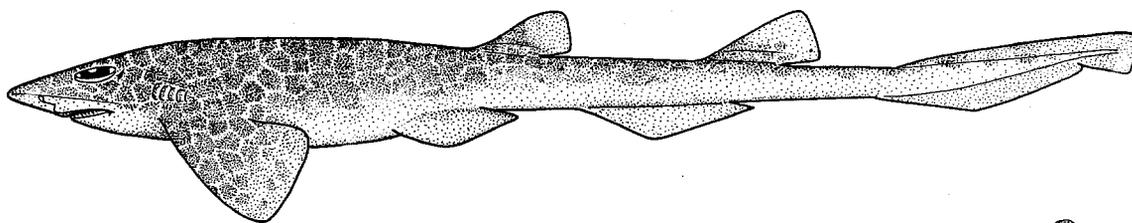
Holohalaelurus regani (Gilchrist, 1922)

SCYL Hol 2

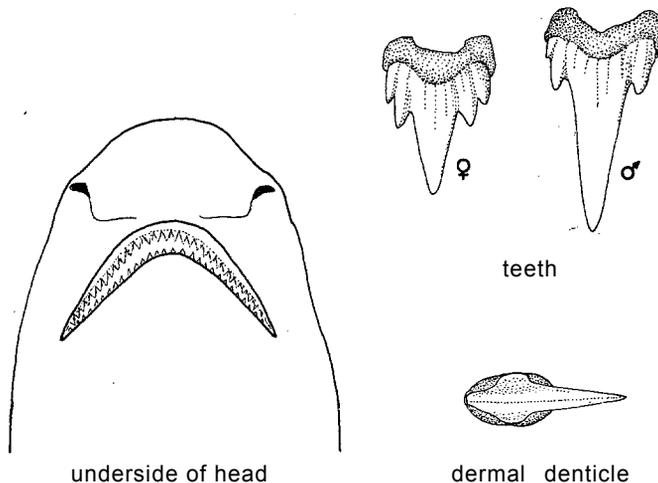
Scylliorhinus regani Gilchrist, 1922, Rep.Fish.Mar.Biol.Surv.Union South Africa, 2(spec.rept.3):45. Probable syntypes: J.L.B. Smith Institute of Ichthyology, Grahamstown, South Africa, RUSI 952, two females, 215 and 269 mm. Type Locality: "Cape Seas" (Cape of Good Hope, South Africa), from 174 to 320 m depth.

Synonymy : Scylliorhinus (Halaelurus) melanostigma Norman, 1939.

FAO Names : En - Izak catshark; Fr - Holbiche isard; Sp - Pejagato reticulado.



Field Marks : A catshark with an extremely broad head, no labial furrows, nostrils separate from each other and mouth, and without barbels or nasoral grooves, dorso-lateral gill slits, second dorsal fin usually somewhat larger than first, first dorsal with origin about over rear end of pelvic bases, second dorsal base partly behind anal base, dorsal surface appearing dark brown with reticular pattern of light lines, underside of head with tiny dark dots, no conspicuous white spot over pectoral insertion in adults.



underside of head

teeth

dermal denticle

Diagnostic Features: Second dorsal fin usually larger than first; anal base over 3 1/2 times its height, usually longer than interdorsal space (except in very young individuals).

Denticles on back and top of head not of uniform size, enlarged spiky denticles scattered among more numerous small denticles. Colour pattern variable but usually with large, irregular, sometimes light-centred, very closely-spaced brown spots on back giving back dark-brown cast with a reticular pattern of light lines; no white spot over pectoral insertion in adults, although young have a line of white spots on sides; dorsal fins of adults generally spotted but without dark lines or double-Vs. A larger species, adult males 50 + cm and females 38 + cm.