

SHORT NOTE

Distribution of four shallow water marine fishes on the Namib Desert Coast

by

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The detailed distribution of non-commercial marine fish along the coast of South West Africa/Namibia, is poorly known. In part this is due to the lack of collecting attention the west coast has received in comparison with the much richer east coast, but the major reason is that large portions of the coast are extremely difficult to visit. Much of the coast-line lacks any type of access roads, and is isolated from the rest of the country by the large sand-dunes of the dune-seas of the Namib Desert.

Notes on the distribution of one elasmobranch and three teleosts in SWA/Namibian coastal waters are given below.

Haploblepharus pictus (Muller & Henle) 1841

Material

SMP 37 Lüderitz Mr. W. Ohl

SMP 1811 Palgrave Point 1982-03-25 M.J. Penrith
V.R. Wallis. Rotenone.

The range of *Haploblepharus pictus*, a species long confused with *H. edwardsii* is given by Bass *et al* (1975) as from False Bay to Lüderitz. Examples of *H. pictus* are, however, very common in the lowest intertidal and shallow subtidal zones well to the north of Lüderitz. They are well-known to anglers and have been regularly found while collecting intertidal fish with ichthyocides. Most examples found have been released; but catches of *H. pictus* have been observed and recorded at Walvis Bay, Swakopmund, Palgrave Point, Toscanini, Möwe Bay, and Rocky Point.

At all these localities, as well as at Lüderitz, *H. pictus* has been found in kelp-filled rock pools and gullies at the lowest level of the intertidal zone. Kelp and rock are both extremely rare north of Rocky Point, and no *H. pictus* have been found north of this locality. If they are present they are apparently rare.

SMP 1811, of 435 mm total length is typical of the species as described by Bass *et al* (1975), with the exception of the pale spots on the dark saddles, which are roughly equal in size to the spiracles, rather than larger which is usual further south. SMP 37, an example of similar size (415 mm Lt) from Lüderitz has the spots clearly larger than the spiracle.

The range of *H. pictus* is extended from Lüderitz (26° 38'S: 15°10'E) to Rocky Point (18°59'S: 12°29'E).

Cheilodactylus fasciatus Lacépède 1803

Material SMP 1799 Bosluisbaai 82-01-27 M.J. Penrith
Gill-netted.

The range of *Cheilodactylus fasciatus* has recently been extended on the west coast from Port Nolloth to Rocky Point (Penrith, 1976(b); Smith 1980). The range is here extended to Bosluisbaai (17°22.5'S).

C. fasciatus is commonly found in the intertidal and shallow subtidal zones among rocks although both Barnard (1927) and Smith (1949) also recorded the species from trawl catches in 75-150 metres. The present example is unusual in being caught in a surface set gill net, laid approximately two kilometres offshore.

Finding *C. fasciatus* at Bosluisbaai only 14 kilometres south of the Kunene River suggests that the species could be expected to occur in the southernmost portion of the CLOFETA area.

Lithognathus aureti Smith, 1962

Material SMP 1817 Orange River Mouth April 1982
Mr. J.J. Irish
Angling from boat.

The west coast steenbras or witvis, *Lithognathus aureti* although one of the major angling fishes along the SWA/Namibian coast was only described by Smith in 1962. The range was given by Smith as Walvis Bay northwards. In the same paper the range of *L. lithognathus* was stated to be from the Cape (?Saldanha Bay) eastwards. Later the range of *L. lithognathus* on the west coast was extended to the Orange River Mouth (Penrith & Penrith 1969) and subsequently to Sandvis (Penrith 1976(a)), from where *L. aureti* was also recorded.

The two species are easily separated in the field by the head and body shape. Reports of both species being caught at the few localities open to angling south of Sandvis had been received from anglers but no examples of *L. aureti* had been available for examination.

The example from the Orange River caught in the tidal portion of the mouth, confirms that *L. aureti* does reach much further south than previous literature records suggest. It is of interest that with the fish Mr. Irish sent a photograph of this fish together with three other examples of *L. aureti* and one of *L. lithognathus*, all caught at the same locality and date.

The Orange River example of *L. aureti* is 307 mm Ls. Fin counts are Dorsal X10, Anal III 9. As percentage of standard length, head 30,1; eye 5,4; interorbital 10,9; pectoral fin 33,1; pelvic fin 19,5. Depth at preopercle 28,9; at opercle 33,3 at dorsal origin 37,1.

The two species *L. lithognathus* and *L. aureti* are sympatric over a considerable length of coast-line, in the region of 700 km. Both species are found in the same broad ecological habitats, sandy beaches, lagoons and estuaries but *L. aureti* appears to feed on bivalve molluscs to a considerably greater degree than *L. lithognathus*. The latter, at least in estuaries feeds mainly on crustacea (Mehl 1973).

Congiopodus torvus Gronovius 1772

Material: SMP 249. Walvis Bay. 1966-01-01 J.D. Moller. Washed up during sulphur eruption. 2 examples. SMP 1907 Swakopmund 1982-07-30 D. Pieterse. "Foul hooked" while angling.

The distribution of *Congiopodus torvus* is usually given as from the Cape (Saldanha Bay) eastwards to Pondoland (Barnard 1927; Smith 1949), although the west coast limit was extended, without comment, to Walvis Bay by Penrith (1976(b)).

The large example (302 mm Ls) from Swakopmund (SMP 1907) has the thick smooth skin typical of the adult, whereas the two smaller fish (SMP 249) of 92,5 and 118,5 mm LS have a papilliform, almost spiniform skin similar to that of *C. spinifer*. They lack any trace of the paired spines on the snout, diagnostic of *C. spinifer* and have only 8 anal rays, as opposed to 9-10 in *C. spinifer*. These two fish do, however, have a clear lateral line with a series of pairs of spinules along its length. A lateral line is stated to be absent in *C. torvus* (Barnard 1927; Smith 1949). There is no trace of a lateral line in SMP 1907 with the exception of a few tiny papillae which from their position appear to be remnants of the lateral line spinules present in the smaller fish.

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REFERENCES

- BARNARD, K.H.
1927: A monograph of the marine fishes of Southern Africa. *Ann. S. Afr. Mus.* 21: 419-1065.
- BASS, A.J., D'AUBREY, J.D. and KISTNASAMY, N.
1975: Sharks of the east coast of southern Africa II. The families Scyliorhinidae and Pseudotriakidae. *Invest. Rep. Oceanogr. Res. Instit.* (37): 1-63.
- MEHL, J.A.P.
1973: Ecology osmoregulation and reproductive biology of the white steenbras *Lithognathus lithognathus* (Pisces: Sparidae) *Zool. Afr.* 8: 157-230
- PENRITH, M.J.
1976(a): First confirmed record of *Lithognathus lithognathus* sympatric with *L. aureti* (Pisces: Sparidae) *Madoqua* 9: 53-54.
1976(b): Distribution of shallow water marine fishes around southern Africa. *Cimbebasia* (A) 4: 137-154
- PENRITH, M.J. and PENRITH, M-L.
1969: A new species of *Lithognathus* (Pisces: Sparidae) from the northern coast of South West Africa. *Cimbebasia* (A) 1: 99-111
- SMITH, J.L.B.
1949: *The sea fishes of southern Africa*. Cape Town Central News Agency.
1962: The sparid genus *Lithognathus* Swainson. 1839, with description of an interesting new species. *S. Afr. J. Sci.* 58: 109-114.
- SMITH, M.M.
1980: A review of the South African Cheilodactylid fishes (Pisces: Perciformes) with description of two new species. *Ichthyol. Bull. J.L.B. Smith Instit. Ichthyol.* (42): 1-14.