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## ON THE OCCURRENCE OF *HALIOTIS POURTALESII* DALL, 1881, OFF SURINAM (SOUTH AMERICA)

by

J. NIJSSEN-MEYER

*Haliotis pourtalesii* Dall, 1881 has so far only been reported from the Gulf of Mexico. The localities are given in fig. 1. The following material has been reported upon in the literature:

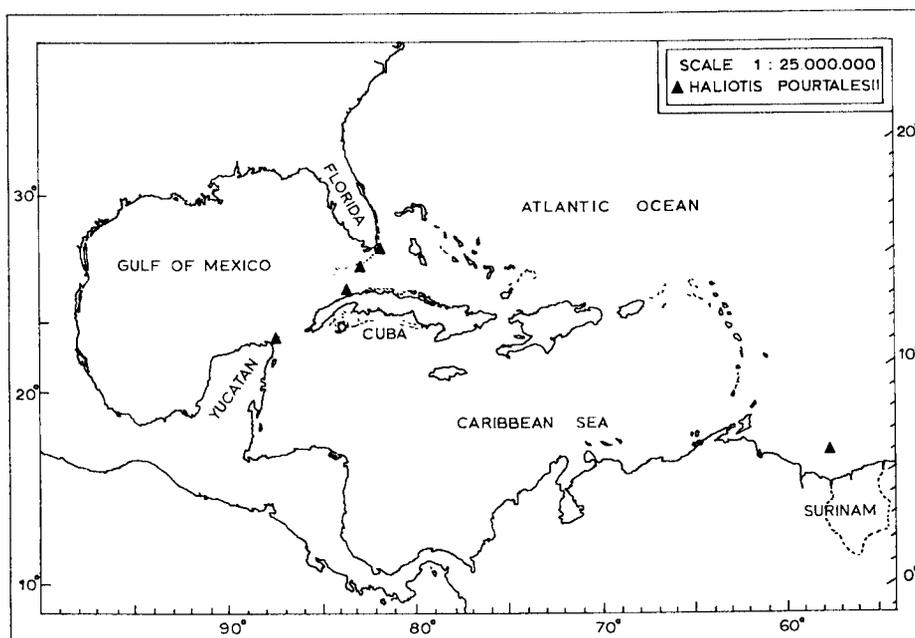


Fig. 1. Distribution of *Haliotis pourtalesii* Dall

The holotype (Dall, 1881: 79) was found in: "bed of the Gulf Stream in 200 fathoms, near the Florida reefs". This holotype was destroyed before its description, which was made by Dall from memory.

One specimen, made the neotype by Henderson (1915: 660, pls. 45, 46) was "dredged off Key West in 90 fathoms" (Henderson, 1915: 659). This locality was described in more detail on page 660 as: "dredged about 2 miles off Sand Key, Florida in 90 fathoms, on sand patches among rocks, on the edge of the 'Pourtales plateau'".

Five imperfect shells were collected by Henderson in 1916 in the Key West region in 90, 85 and 65 fathoms (Foster, 1946: 39).

One nearly complete specimen and several shell fragments were collected by L. A. Burry off Key Largo and Sombrero Light in 92-100 and 66 fathoms (Foster, 1946: 38, 39, pl. 22). The description and photographs in Foster's paper were made after the nearly complete specimen. The detailed locality where it was found is given as: "5.5 miles S.E. of the Elbow, Key Largo, in 92-100 fathoms".

One specimen was found off Yucatan peninsula in 67 fathoms at 21° 21' N 86° 30' W (Harry, 1966: 207, pl. 30).

Eighty eight complete and thirteen incomplete specimens were dredged off the coast of Havana, Cuba, in 20-35 fathoms (Sarasua, 1968: 4, figs. 1, 2).

Until recently *H. pourtalesii* was considered to be a rare species. However, Sarasua (1968: 1) listed one hundred and one specimens. This fairly large number of specimens can be explained from the fact that these shells were found in large quantities of sand dredged for commercial purposes. As this material was from many dredgings, it does not give a good impression of the frequency of *H. pourtalesii*.

The few finds of this species might be due to the fact that it prefers a relatively rare habitat, viz. a bottom with rocks, stones, sand and shell debris, or reef.

In 1966 an extensive collecting trip was made along the continental shelf of Surinam by H.M. "Snellius" of the Netherlands Navy. Among the material collected four nearly complete specimens and eight fragments of *H. pourtalesii* were taken on 11 May 1966 at 7° 35.7' N 56° 52.6' W.

At this station two samples were taken. One of these with a rectangular dredge at 51-53 fathoms. The haul contained a fragment of calcareous rock with some solitary corals, furthermore Coelenterata, Porifera, Decapod Crustacea, Mollusca, Pisces, Bryozoa, Brachiopoda and one incomplete specimen of *H. pourtalesii*. The other sample was obtained with a Van Veen grab at 51 fathoms. The haul consisted of coarse sand with some mud and coarse shell fragments, furthermore Mollusca, Foraminifera, Brachiopoda and 4 specimens and 7 fragments of *H. pourtalesii*. In the rich molluscan assemblage of the second sample the following shells occur frequently:

*Nucula* sp., Arcidae, *Limopsis* sp., *Crenella* sp., *Plicatula* sp., *Crassinella* sp., Veneridae, *Corbula* sp., *Caecum* sp., *Calyptraea* sp., and Pteropoda.

The material found off the coast of Surinam extends the range of *H. pourtalesii* by approximately 800 miles in southern and 1300 miles in eastern direction. The bathymetric range given by Harry (1966: 207) as 65 to 200 fathoms should be extended to 35 to 200 fathoms (Sarasua, 1968: 1 "20-35 fathoms", and the Surinam specimens from 51-53 fathoms).

Of the eight incomplete shells in the "Snellius" material usually only the first shell whorl remained. Only one of these fragments had one and a half whorl, showing 14 closed shell pores. The four nearly complete shells have the following measurements (for the method used for measuring see fig. 2):

specimens	length	width	height
a	10.4 mm	7.8 mm	3.1 mm
b	9.4 mm	7.0 mm	3.2 mm
c	13.2 mm	10.2 mm	4.1 mm
d	11.3 mm	8.5 mm	3.7 mm

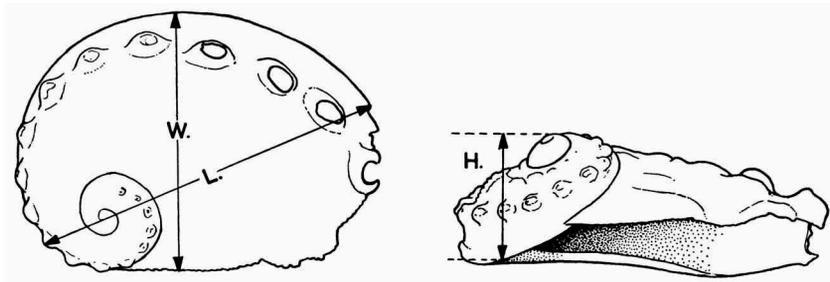


Fig. 2. Method used for measuring the shells. W. = width; L. = length; H. = height.

Specimen a has four open pores, the margin with fifth pore is broken off. Specimen b has four open pores, its outer margin is broken off through the fifth pore. Specimen c has all five open pores, the ridge on the ventral side is slightly damaged.

Specimen d is a fresh looking shell, four open pores are present, the outer margin is broken off through the fifth pore. This shell, which is figured here on plate I, has a broad orange band dorsally, running spirally halfway between the first whorl and the body pores. Here and there green blotches can be seen, the larger part of the shell being beige coloured. The ventral surface of the shell is nacreous, but also shows the orange and green colouring. It has fourteen closed and five open body pores. Whorls two and three-quarters. Between the first two body whorls and the last-formed pore about thirty two cords are present; on the other side of the pore there

are three more cords, followed by an angular peripheral ridge and three more cords. The axial sculpturation, roughly corresponding to the position of the body pores, is slightly developed. The dorsal surface is covered by numerous fine growth lines.

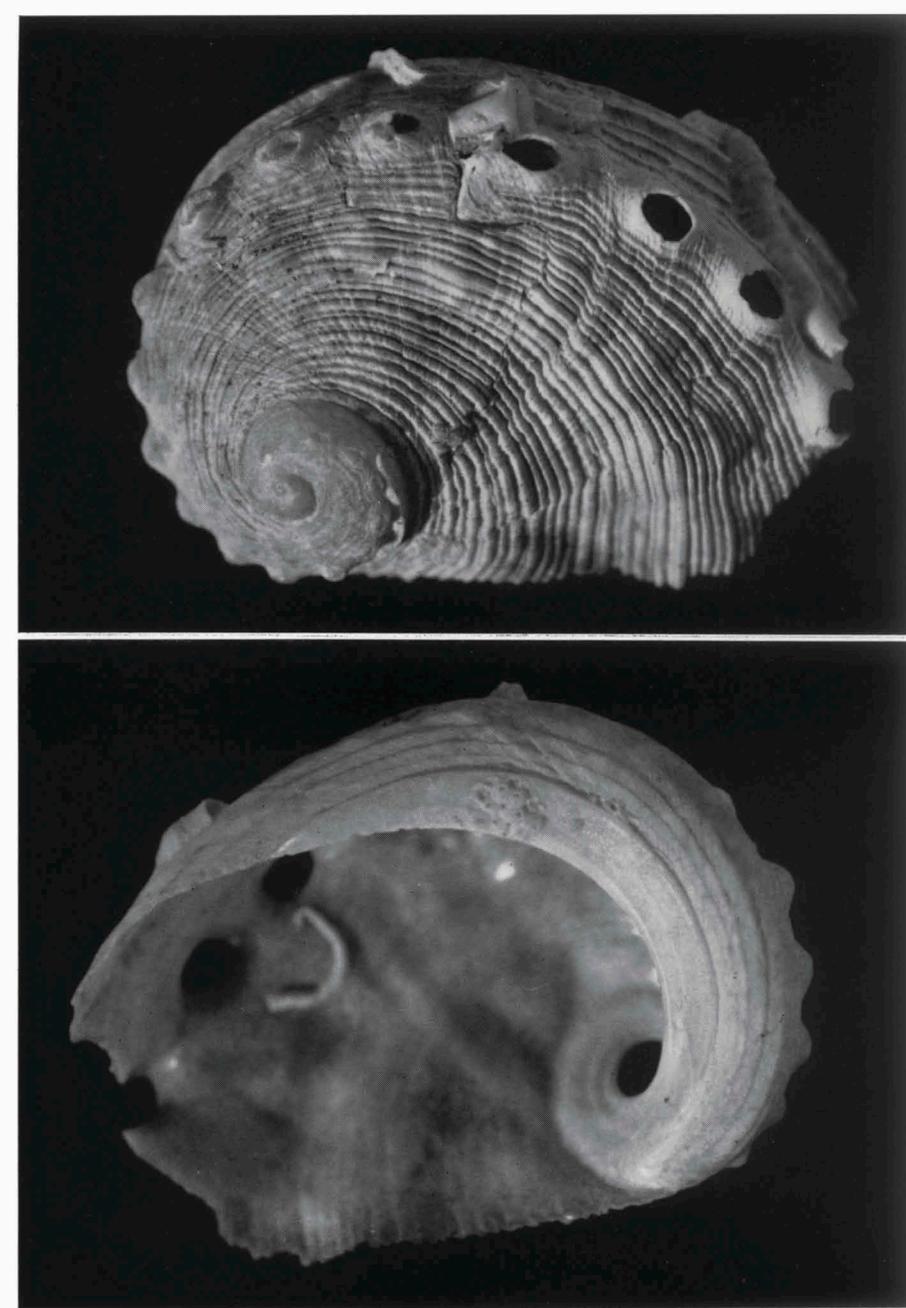
I wish to express my gratitude to Dr. C. O. van Regteren Altena (Rijksmuseum van Natuurlijke Historie, Leiden) for reading the manuscript and Drs. H. E. Coomans (Zoologisch Museum, Amsterdam) for his kind help with the references. The photographs were made by Mr. Chr. Hoorn and the drawings by Mr. W. C. G. Gertenaar, both of the Rijksmuseum van Natuurlijke Historie, Leiden.

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#### ADDENDUM

While the present paper was in press, the note by Guice (1968) came to my attention. Guice's new record of *H. pourtalesii* (from 24° 56.8' N 83° 40' W, 45 fathoms) is not included in the distribution map (fig. 1); it falls within the known range of the species.



*Haliotis pourtalesii* Dall, specimen d, dorsal and ventral view (× 8.4)