Vol. 98(1)

(Palacio, 1977) and Virgin Islands (Hanlon & Hixon, 1979).

Distribution-Mediterranean Sea; Cabo Verde; vacinity of Dakar; Ghana; Angola; Florida, U.S.A.; Costa Rica; Colombia; Panamá; Virgin Islands; Rio de Janeiro, Brazil; Venezuela.

Acknowledgments

We are grateful to Dr. Gilbert L. Voss and Mrs. Nancy A. Voss for their assistance at Rosenstiel School of Marine and Atmospheric Science, Miami, to Dr. C. F. E. Roper and Mr. Michael Sweeney for their help at the U.S. National Museum of Natural History, Washington, D.C. and to Mrs. Violeta Sanchez and Georgina Spirutova for reading the manuscript.

LITERATURE CITED

- Hanlon, R. T. and R. F. Hixon. 1979. The "Macrotritopus problem" solved: Octopus defilippi raised from a wildcaught, pelagic Macrotritopus. The Bulletin of the American Malacological Union. 1979, page 70.
- Palacio, F. J. 1977. A study of coastal cephalopods from Brazil with a review of Brazilian zoogeography. Ph. D. Dissertation, University of Miami, 310 pp.
- Roper, C. F. E. 1978. Cephalopods. in: Fischer, W., ed., FAO Species Identification Sheets for fishery purposes. Western Central Atlantic (fishing area 31), vol. VI.
- Voss, G. L. 1963. Cephalopods of the Philippine Island. U.S. National Museum Bulletin 234, 180 pp.
- 1964. Octopus defilippi Verany, 1851, an addition to the cephalopod fauna of the Western Atlantic. Bull. Mar. Sci. Gulf and Carib. 14(4):554-560.
- 1968. Octopods from the R/V Pillsbury Southwestern Caribbean cruise, 1966, with a description of a new species, *Octopus zonatus. Bull. Mar. Sci.* 18(3): 645-659.

FUSINUS LIGHTBOURNI (GASTROPODA: FASCIOLARIIDAE), A NEW SPECIES FROM BERMUDA

Martin Avery Snyder

745 Newtown Road Villanova, PA 19085

ABSTRACT

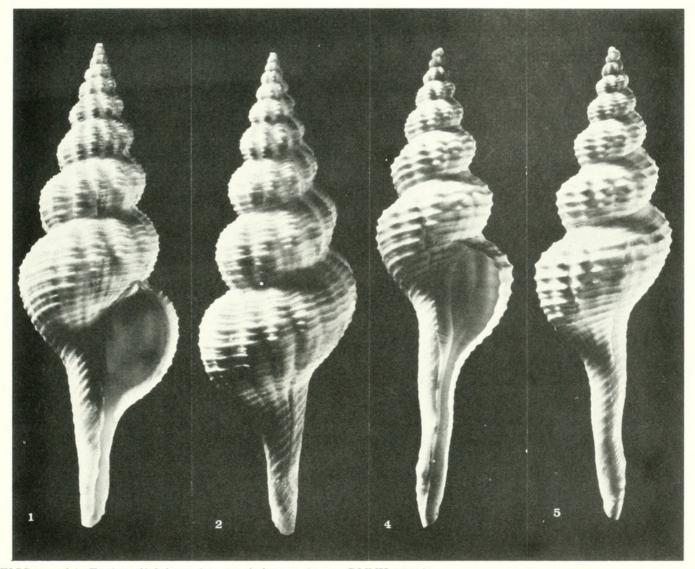
Fusinus lightbourni, n. sp., from 100-200 fms (183-366 m) depths off the south coast of Bermuda differs from F. frenguellii (Carcelles, 1953) by its sculpture, lip, and coloration. It grows to about 70 mm while F. frenguellii grows to at least 143 mm. The range for F. ceramidus (Dall, 1889) is extended to Bermuda.

For several years Jack R. H. Lightbourn and Arthur T. Guest have set specially designed mollusk traps in 100-200 fms off the south shore of Bermuda and obtained dead mollusks borne by hermit crabs. Notable among the material collected in this manner are specimens of *Pero*trochus quoyanus (Fisher and Bernardi, 1856) and *Perotrochus adansonianus* (Crosse and Fisher, 1861). During a recent trip to Bermuda the author was able to examine various *Fusinus* specimens obtained in this matter. One lot represents a range extension of a known taxon; another shell represents a new taxon described herein.

Specimens of the new species are deposited in the collections of the Delaware Museum of Natural History (DMNH), Academy of Natural Sciences of Philadelphia (ANSP), and the United States National Museum in Washington (USNM). Additional specimens are in the Jack Lightbourn collection and the collection of the author.

Fusinus lightbourni, new species (Figures 1-3)

Description: Shell moderately large for the genus, 45 mm-70 mm. Profile somewhat inflated, fusiform, with about 10 whorls. Embryonic whorls are smooth, quite pointed, and waxy white in color (DMNH 154462, 66 mm). Teleconch bears strong axial ribs which are not evanescent on the body whorl. Later whorls bear 13 or 14 such ribs. These ribs present a slightly angular profile, being crossed by about



FIGS. 1 and 2, *Fusinus lightbourni*, n. sp., holotype. 61 mm DMNH 154461. FIGS. 4 and 5, *F. frenguellii* (Carcelles, 1953) 71 mm, by fishermen in 30 fms off Rio de Janeiro, Brazil, December 1968; author's collection.

10 strong spiral lines, the two strongest on the shoulder giving the angular appearance to the profile. Between these 10 stronger spiral lines are finer lines. These in turn are crossed by very fine axial lines giving the surface of the shell between the axial ribs and strong lines the texture of linen. The aperture is ovate, pinched at the anterior and posterior ends. The parietal callous is extended forming sharp, thin lamina on the inner lip along the columellar border of the aperture. The inner surface of the outer lip is calloused and strongly denticulate with about 16 lirae. Base and anterior siphonal canal are straight and slender, being about one half of the total length of the shell. The shell is white with pale-brown bands of color just before and just after the suture. In some specimens the canal is recurved. The operculum and soft parts are unknown.

Holotype: Length 61 mm, crabbed specimen from a fish pot in 100-120 fms taken $1\frac{1}{2}$ miles due south of Gurnet Rock, south shore of Bermuda, summer 1979 (DMNH 154461).

Other Material: 3 paratypes DMNH 154462 (46 mm, 61 mm, 66 mm), 1 paratype ANSP 356701 (60 mm), 3 paratypes USNM 819199 (54 mm, 63 mm, 65 mm), and 3 paratypes in the author's collection (51 mm, 59 mm, 70.5 mm). All paratypes from the same locality as the holotype, but in different collecting hauls and depths down to 200 fms.

Etymology: The species is named for Jack R. H. Lightbourn who has done much to extend our knowledge of the Bermudian molluscan fauna.

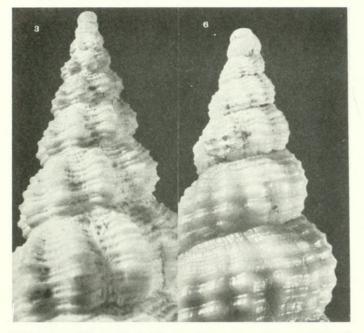
30 THE NAUTILUS

Vol. 98(1)

lightbourni

1½ whorl small pointed nucleus
13-14 axial ribs on body whorl
colored bands
10 spiral grooves
heavy calloused toothed lip
slightly angular profile
ribs often prominent on body whorl

frenguellii 2 whorl large mammillate nucleus 10-18 axial ribs on body whorl essentially uncolored 7-8 spiral grooves with smaller ones between thin lirate lip rounded profile ribs usually evanescent on body whorl grows twice as large and has a proportionately longer canal.



FIGS. 3 and 6. **3**, *F. lightbourni*, paratype, 66 mm, DMNH 154462; protoconch and early whorls. **6**, *F. frenguellii*, 129 mm, by fishermen in 27 fms, sand and mud bottom, off Rio de Janeiro, Brazil, August 1975, author's collection; protoconch and early whorls.

Discussion: Fusinus lightbourni seems most closely related to F. frenguellii (Carcelles, 1953) (Fig. 4-6). The most obvious differences are its smaller adult size, the pale brown bands of coloration, and the details of its body sculpture. The comparison is facilitated with the aid of a table. In the same collecting hauls, we identified a fair number of *Fusinus ceramidus* (Dall, 1889) previously known from Barbados. These are completely typical specimens of *F. ceramidus*, although a bit smaller than usual (28-32 mm). This represents a significant range extension for this taxon.

Acknowledgements

Mr. Jack R. H. Lightbourn of Bermuda donated all of the type material as well as various other specimens in the Delaware Museum of Natural History and the author's collection. The author had an enjoyable and helpful discussion regarding these shells with Russell Jensen of the Delaware Museum of Natural History. The photographs were furnished by Mr. Hal Lewis of Philadelphia, Pa. The author extends his appreciation to each of these individuals.

LITERATURE CITED

Carcelles, A. 1953. Nuevas sp. de gastropo des del Uruguay y Argentina. *Com. Zool. Mus. H. Nat. Mont.*, 4(70):16 pp and 5 pls.

Dall, William Healey. 1889. Reports on the Results of Dredging under the Supervision of Alexander Agassiz in the Gulf of Mexico (1877-78) and in the Caribbean Sea (1879-80) by the U.S. Coast Survey Steamer *Blake*: No. 20, Report on the Mollusca, Part 2, Gastropoda and Scaphopoda. *Bull. Mus. Comparative Zool.* 18:1–492, pls. 1–40.

NEWS

William J. Clench is recovering from an operation undergone in Boston in October. He is now in California with his son who is attending to his correspondence. Bill would welcome news from his friends and used postage stamps which he enjoys collecting. Write c/o Carleton W. Clench, 25431 Classic Drive, Mission Viejo, CA 92691.

Margaret C. Tesky, former Secretary of the A.M.U., after a serious fall has been hospitalized in North Carolina, and may be reached through William Dobo, P.O. Box 424, Wrightsville Beach, N.C. 28480.



1984. "Fusinus lightbourni (Gastropoda: Fasciolariidae), a new species from Bermuda." *The Nautilus* 98, 28–30.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/34232</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/34034</u>

Holding Institution MBLWHOI Library

Sponsored by MBLWHOI Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder. Rights Holder: Bailey-Matthews National Shell Museum License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.