

Allan Hancock Pacific Expeditions, 2  
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MARINE MOLLUSKS FROM PANAMA COLLECTED BY  
THE ALLAN HANCOCK EXPEDITION TO THE  
GALAPAGOS ISLANDS, 1931-1932

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INTRODUCTION

During the course of an expedition to the Galapagos Islands on Captain Allan Hancock's motor cruiser *Velero III*, the junior author had the opportunity to collect marine mollusks on shore and by dredging at four localities along western Panama. This occasion is taken to thank Captain Hancock, whose generosity made the collection of the material for this report possible. Acknowledgment is also due to Mr. Charles Swett, chief officer on the *Velero III*, as well as members of the crew; also Mr. Karl Koch and Mr. C. B. Perkins, of the Zoological Society of San Diego, and Mr. John Garth of Long Beach, and other members of the party who accompanied the expedition, all of whose genial cooperation made collecting a pleasure. Acknowledgment is due the late Mr. Herbert N. Lowe of Long Beach, California, for assistance in the determination of certain of the species; also to Dr. G. Dallas Hanna of the California Academy of Sciences, for criticism of the manuscript and for many helpful suggestions during the course of the work. Mr. Allyn G. Smith gave helpful suggestions regarding the arrangement of some of the plates. The photographs illustrating the species in this paper were made by Mr. Frank L. Rogers. These photographs are the result of work accomplished during a government Works Progress Administration project.

Only the more important papers on Panama mollusks will be mentioned here. The first comprehensive report on the marine mollusks of Panama was made by C. B. Adams<sup>1</sup> in 1852. A few years later, Car-

<sup>1</sup> Adams, C. B., Catalogue of Shells collected at Panama, with Notes on Synonymy, Station, and Habitat. Ann. Lyceum Nat. Hist. New York, vol. 5, 1852, pp. 229-548 [also unnumbered page "Concluding Remarks"]. [Also separate of the same.] See also Carpenter's review of this work in the Proc. Zool. Soc. London, 1863, pp. 339-369. Reprinted in Smithsonian Miscellaneous Collections, No. 252, 1872, pp. 173-205.—See also, Presbrey, E. W., Collecting in Panama. Nautilus, vol. 26, no. 11, 1913, pp. 121-125.

Panama. L. G. Hertlein collector. Six additional specimens were dredged at the same locality, and 7 specimens at Loc. 27,229 (C.A.S.) in Bahia Honda, Panama.

The two distinct folds on the columella are sufficient to separate this form from all other west coast species in the genus. It is the first Recent species in the subgenus *Cylichnella* as defined by Dall,<sup>23</sup> to be described from the west coast of the Americas.

This species is named for Taboga Island, in Panama Bay, the type locality of this species.

#### *Terebra (Strioterebra) montijoensis* Pilsbry & Lowe

*Terebra (Strioterebra) montijoensis* Pilsbry & Lowe, Proc. Acad. Nat. Sci. Philadelphia, vol. 84, 1932, p. 42, pl. 1, fig. 1. "Montijo Bay."

Two adult and 7 young specimens were dredged at Loc. 27,229 (C.A.S.) in Bahia Honda, Panama. These differ slightly from the type in having 12 axial ribs and finer spiral sculpture but are otherwise very similar.

#### *Mitrella harfordi* Strong & Hertlein

Plate 18, Fig. 6

*Mitrella harfordi* Strong & Hertlein, Proc. Calif. Acad. Sci., ser. 4, vol. 22, no. 6, December 31, 1937, p. 167, pl. 35, fig. 15. "Lat. 16°38'N., Long. 99°27'30"W., to Lat. 16°39'N., Long. 99°24'30"W., dredged in 20 to 45 fathoms, about 33 miles eastward of Acapulco, Guerrero, Mexico, and 32 miles west of Dulce Bay."

Hypotype: No. 733 (Calif. Acad. Sci. Paleo. Type Coll.), from Loc. 27,228 (C.A.S.), dredged in from 3 to 9 fms., off Taboga Island, Panama. L. G. Hertlein collector. Thirteen additional specimens were dredged at the same locality.

Some of the specimens show the outer lip strongly dentate and the columella with a raised edge which is less strongly grooved. One specimen in particular shows a strongly developed varix on the back of the body whorl. Most of them are bleached a dull white. The indications

<sup>23</sup> Dall, W. H., Bull. Mus. Comp. Zool., vol. 43, no. 6, 1908, p. 242. "*Cylichnella* Gabb, s.s., type *C. bidentata* Orb. Pillar with two distinct plaits."

- Oliya spicata* Bolten, Loc. 27,229 (C.A.S.)  
*Olivella volutella* Lamarck, Loc. 27,257 (C.A.S.)  
*Phyllonotus hippocastanum* Philippi, Locs. 27,228; 27,229 (C.A.S.)  
*Phyllonotus princeps* Broderip, Loc. 27,229 (C.A.S.)  
*Phyllonotus (Muricanthus) radix* Gmelin, Loc. 27,228 (C.A.S.)  
*Planaxis planicostatus* Sowerby, Loc. 27,229 (C.A.S.)  
*Polinices uber* Valenciennes, Locs. 27,228; 27,229 (C.A.S.)  
*Pustularia pustulata* Lamarck, Loc. 27,229 (C.A.S.)  
*Pyramidella (Longchaeus) conica* C. B. Adams, Locs. 27,228; 27,229 (C.A.S.)  
*Pyramidella (Pyramidella) hancocki* Strong & Hertlein, n. sp., Loc. 27,228 (C.A.S.)  
*Rissoina adamsi* Bartsch? var., Locs. 27,228; 27,229 (C.A.S.)  
*Rissoina clandestina* C. B. Adams, Locs. 27,228; 27,229 (C.A.S.)  
*Rissoina signae* Bartsch, Loc. 27,229 (C.A.S.)  
*Rissoina* sp., Loc. 27,229 (C.A.S.)  
*Seila assimilata* C. B. Adams, Locs. 27,228; 27,229; 27,257 (C.A.S.)  
*Strombiformis healeyi* Strong & Hertlein, n. sp., Loc. 27,229 (C.A.S.)  
*Strombiformis* cf. *varians* Sowerby, Loc. 27,228 (C.A.S.)  
*Strombiformis* sp., Loc. 27,229 (C.A.S.)  
*Strombina dorsata* Sowerby, Locs. 27,228; 27,229 (C.A.S.)  
*Strombina gibberula* Sowerby, Locs. 27,228; 27,229 (C.A.S.)  
*Strombina maculosa* Sowerby, Locs. 27,228; 27,229 (C.A.S.)  
*Strombina* sp., Loc. 27,228 (C.A.S.)  
*Strombus galeatus* Swainson, Loc. 27,229 (C.A.S.)  
*Strombus gracilior* Sowerby, Loc. 27,229 (C.A.S.)  
*Strombus granulatus* Mawe, Locs. 27,228; 27,229 (C.A.S.)  
*Strombus peruvianus* Swainson, Loc. 27,229 (C.A.S.)  
*Tegula reticulata* Wood, Loc. 27,257 (C.A.S.)  
*Tegula rubroflammulata* Koch, Loc. 27,228 (C.A.S.)  
*Teinostoma* cf. *amplectans* Carpenter, Locs. 27,228; 27,229 (C.A.S.)  
*Teinostoma* cf. *carinata* Carpenter, Locs. 27,228; 27,229 (C.A.S.)  
*Teinostoma hemphilli* Strong & Hertlein, n. sp., Locs. 27,228; 27,229 (C.A.S.)  
*Teinostoma ochsneri* Strong & Hertlein, n. sp., Loc. 27,229 (C.A.S.)  
*Terebra elata* Hinds, Locs. 27,228; 27,229 (C.A.S.)  
*Terebra ira* Pilsbry & Lowe, Loc. 27,229 (C.A.S.)  
*Terebra lingualis* Hinds, Loc. 27,229 (C.A.S.)  
*Terebra (Strioterebra) montijoensis* Pilsbry & Lowe, Loc. 27,229 (C.A.S.)  
*Thais biserialis* Blainville, Locs. 27,243; 27,257 (C.A.S.)  
*Thais crassa* Blainville, Locs. 27,229; 27,257 (C.A.S.)  
*Thais kiosquiformis* Ducloux, Loc. 27,257 (C.A.S.)  
*Triphora alternata* C. B. Adams, Locs. 27,228; 27,229 (C.A.S.)  
*Triphora dalli* Bartsch, Loc. 27,229 (C.A.S.)  
*Triphora inconspicua* C. B. Adams, Locs. 27,228; 27,229 (C.A.S.)  
*Triphora marshi* Strong & Hertlein, n. sp., Locs. 27,228; 27,229 (C.A.S.)  
*Triphora palmeri* Strong & Hertlein, n. sp., Locs. 27,228; 27,229 (C.A.S.)  
*Triphora* sp., Loc. 27,228 (C.A.S.)  
*Tritonalia incisa* Broderip, Loc. 27,228 (C.A.S.)  
*Turbo fluctuosum* Wood, Loc. 27,257 (C.A.S.)