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NOTES ON OCCURRENCE OF EUPLEURA SULCIDENTATA DALL (GASTROPODA: MURICIDAE)

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ABSTRACT

Eupleura sulcidentata is reported from estuarine and coastal sites in southeast Florida, Cuba, and two Bahamian Islands, demonstrating that the species is not a west Florida endemic, and confirming Dall's original record from Cuba.

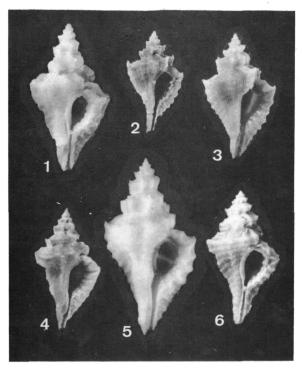
In 1972, I collected six freshly dead shells of *Eupleura* (Fig. 1) in beach drift along a sand spit at White Sound on the lagoonal side of Elbow Cay, Great Abaco, Bahamas. A literature search (part of an ongoing treatment of the shallow water Bahamian molluscan fauna) failed to reveal any Bahamian records of *Eupleura*, so specimens were sent to Dr. Emily Vokes, Tulane University, who identified them as *E. sulcidentata* Dall, 1890. The specimens are deposited in the Marine Research Laboratory invertebrate reference collection (FSBC I) at St. Petersburg.

In his original description, Dall defined the range of *E. sulcidentata* as "Gulf coast of Florida, shores of Cuba." Smith (1937) also listed Cuba within the range of the species, but Dall's Cuban citation was evidently considered erroneous by Johnson (1934), who listed only the Gulf coast of Florida and Florida Keys, and by Abbott (1954, 1968), who further restricted it to west Florida. Lyons et al. (1971) followed the latter in considering the species a west Florida endemic. Abbott (1974) listed *E. sulcidentata* at Bimini, Bahamas, revising its range to include both the west coast of Florida and Bimini. A report of *E. sulciden-*

tata from Caibarién, on the north central Cuban coast (Jaume and Sarasua, 1943) has evidently been overlooked by subsequent authors. Dr. Abbott suggested I contact Mr. J. C. Finlay, who allowed me to examine nine Cuban specimens (Figs. 2. 3) collected by him during 1957-1958 in depths of 3-4 m on the Varadero side of the Bay of Cardenas, about 200 km northwest of Caibarién. Mr. Dan Steger provided an additional specimen from Varadero. Mr. Finlay also provided three specimens (Fig. 4) collected off Rickenbacker Causeway, Biscayne Bay, Miami, Florida, during 1949-50. Most recently, I have examined 12 specimens (Fig. 5) collected by Mr. Gene Everson while night diving in depths of 5-6 m immediately off Lake Worth Inlet, north of West Palm Beach, Florida.

Eupleura sulcidentata occurs in estuaries along the entire Florida west coast. Tabb and Manning (1961) report specimens from Cape Sable and northern Florida Bay, Cooley (manuscript) has found the species at Pensacola Bay, and others have been reported at many points intermediate to these localities. The snails are common in Tampa Bay (Fig. 6), where they usually live on rocks over sand, on oyster reefs, or in grassbeds in higher salinity portions of the Bay; they also

¹ Contribution No. 290.



FIGS. 1-6. Eupleura sulcidentata Dall: Fig. 1 — Elbow Cay, Gt. Abaco (FSBC I 10131). Figs. 2, 3 — Cardenas Bay, Cuba (Finlay Coll.). Fig. 4 Biscayne Bay (Finlay Coll.). Fig. 5 -Lake Worth Inlet (Everson Coll.). Fig. 6 - Tampa Bay, Florida (FSBC I 2672). All figures ×2.

occur near beaches where conditions remain essentially estuarine. Habitat near the beach at Elbow Cay included sand and turtle grass, (Thalassia testudinum König) with occasional rocks scattered throughout the area. Mr. Finlay states that he commonly dredged E. sulcidentata in 2-3 m on muddy sand in the Bay of Cardenas. At Biscayne Bay, specimens were "not infrequently found clinging to the outside of smooth objects such as bottles, cans, etc." Lake Worth Inlet specimens were found in shell rubble on sand, apparently similar to areas where the species occurs in nearshore waters of west Florida. The Bahamian, Cuban, and Biscayne Bay sites are relatively estuarine compared to other tropical habitats, but faunal assemblages differ considerably from those where E. sulcidentata occurs along west Florida.

Lake Worth Inlet may approach the northern range limit of E. sulcidentata on the Florida east coast. Extensive collecting by me at St. Lucie Inlet, 45 km to the north, has not produced this species, although its northern congener, E. caudata (Say, 1822) has been found there.

Mr. Finlay's specimens, as well as the report by Jaume and Sarasua, confirm Dall's original contention that E. sulcidentata is a component of the Cuban fauna. Specimens from Lake Worth, Biscayne Bay, and two Bahamian localities demonstrate that the range of the species is considerably greater than has been recently recognized.

ACKNOWLEDGMENTS

I thank Messrs. John C. Finlay, Newark, Delaware, the late Dan Steger, Tampa, Florida, and Gene Everson, Ft. Lauderdale, Florida, for graciously loaning specimens, and Mrs. Sally D. Kaicher, St. Petersburg, for preparing the figures. Dr. R. Tucker Abbott, Greenville, Delaware, provided additional information and comment. David K. Camp and Mark J. Poff kindly read the manuscript.

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