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THE SYNONYMY AND DISTRIBUTION OF THE ESTUARINE HYPANIOLA FLORIDA (HARTMAN) FROM THE EAST COAST OF THE UNITED STATES (POLYCHAETA: AMPHARETIDAE)

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In 1953, I described some ampharetids from James Pond, a salt pond on Martha's Vineyard, Massachusetts, under the name of Hupaniola gravi. Some years later, I identified some ampharetids from St. Johns River in Florida as H. grayi. A later review of the literature of the polychaetes from Florida and the Gulf of Mexico has revealed that my species had been briefly described previously by Hartman (1951) under the name of Amphicteis gunneri floridus. It is, thus, belatedly and with regret, that I must now synonymize my species grayi, established in honor of the late Milton (Sam) Gray, my good friend and collector par excellence, with the species H. florida. This synonymy was suggested verbally to Robert Zottoli, then a graduate student at the University of New Hampshire, and his study on the development of this species was published under the name Amphicteis floridus Hartman (Zottoli, 1974). The purpose of this paper is to record the synonymy and to expand the known distribution of the species, based on previous published records, as well as collections sent to me for identification. The latter material is now deposited in the Smithsonian Institution (USNM).

Annotated Synonymy of *Hypaniola florida* (Hartman), new combination

Amphicteis gunneri floridus Hartman, 1951:110 [Englewood, at lower end of Godfrey Creek, emptying into Lemon Bay, western Florida, and Ochlockonee Bay, northwest Florida].—Carpenter, 1956:93, 106 [Alligator Harbor, Franklin County, Bald Point, south side mouth of Ochlockonee Bay, northwest Florida].—Oglesby, 1961:233 [Estuary of Apalachicola River at Apalachicola, Franklin County, northwest Florida; host of Cercaria hartmanae Oglesby].

Hypaniola grayi Pettibone, 1953:384 [James Pond, Martha's Vineyard, Massachusetts].—Stickney, 1959:17, 18 [Sheepscot River Estuary near Wiscasset, Maine].—Jones and Burbanck, 1959:123 [Upper Estuary of Pocasset River, Cape Cod, Massachusetts].—Sanders, Mangelsdorf and Hampson, 1965:R222 [Upper Estuary of Pocasset River, Cape Cod, Massachusetts].—Wall, 1973:682 [West Harwich, Barnstable County, Cape Cod, Massachusetts].—Kinner, Maurer and Leathem, 1974:689

[Delaware Bay].—Williams, Hogan and Zo, 1975:27, 28, 30 [Hudson River, vicinity of Ossining, New York].—Harrel, Ashcraft, Howard and Patterson, 1976:75, 76, 78 [Neches River estuary, Texas].

Amphicteis floridus.—Zottoli, 1974:78 [Upper reaches of Piscataqua River, New Hampshire; observations on early development].

Material examined.—NEW HAMPSHIRE: Mouth of Johnson's Creek, Durham, upper reaches of Piscataqua River, July 1960, May and June 1962, November 1964, M. Pettibone, L. Scott, R. Zottoli and R. Gilmore, collectors —15 specimens (USNM 54037, 54041-2, 54045). MASSACHUSETTS: James Pond, Martha's Vineyard, summer 1944, August 1950, 1951, 1952, M. B. Gray and M. Pettibone, collectors—7 syntypes (USNM 24734-5) and 8 specimens (USNM 54028-9). West Harwich, Barnstable County, Cape Cod, July 1968, W. J. Wall, collector—7 specimens (USNM 54046). Pocasset River, Cape Cod, December 1957, W. Burbanck, collector—9 specimens (USNM 54032). Pamet River, small creek at extreme end of Cape Cod near Provincetown, October 1957, W. Burbanck, collector-6 specimens (USNM 54031). Stony Brook, Cape Cod, May 1958, W. Burbanck, collector -4 specimens (USNM 54034). CONNECTICUT: Old Mystic on Mystic River, head of estuary, 4°23'15"N, 71°57'43"W, November 1962 and June 1964, J. Rankin and M. Mazurkiewicz, collectors-17+ specimens (USNM 54043-4). DELAWARE: Indian River, Millsboro Dam, east of Millsboro. Sussex County, March 1970, R. D. Jones, collector—2 specimens (USNM 54050). MARYLAND: Salt marsh north of Ocean City, Eastern shore, May 1953, M. Pettibone, collector—28 specimens (USNM 54030). Wiscomico River, Charles County, head of estuary, May 1958, J. P. E. Morrison, collector—7 specimens (USNM 54033). Patuxent River at Long Point, I mile south of Benedict, August 1968, S. L. H. Fuller, collector-3 specimens (USNM 54047). Salt marsh west of Colton, St. Mary's County, July 1959. F. W. Grim, collector—50+ specimens (USNM 54035). VIRGINIA: Machodoc Creek, May 1961, M. Wass, collector-25+ specimens (USNM 54039). NORTH CAROLINA: Morton's Mill Pond, North Harlowe, backwater of Albermarle Sound, summer 1961, J. L. Taylor, collector—12 specimens (USNM 54040). Currituck Sound, October 1960, J. A. Kerwin, collector-4 specimens (USNM 54038). EASTERN FLORIDA: St. Johns River, Brevard County, February 1955, Wm. McLane et al., collectors.-1 specimen (USNM 27387). NORTHWESTERN FLORIDA: Estuary of Apalachicola River, July 1960, L. Oglesby, collector—3 specimens (USNM 54036). Keaton's Beach, Suwannee River, December 1959, L. C. Oglesby, collector—50+ specimens, including many small ones (USNM 39664, 50474-5). Haven Point, North Bay, Panama City, surface of Diplanthera flats, October 1957, M. L. Jones, collector—5 specimens (USNM 50473). Woodlawn, St. Andrews Bay, Panama City, October 1957, M. L. Jones. collector—4 specimens (USNM 50472). MISSISSIPPI: Ocean Springs, on Escatawpa River just north of Orange Grove, 30°26′N, 88°27′W, March 1969, W. W. Langley, collector—1 specimen (USNM 54048). LOUISIANA: Lake Pontchartrain, July 1975, M. A. Poirrier, collector—3 specimens (USNM 54466-7). TEXAS: Upper part of Galveston Bay, about 6 miles above mouth of Cedar Bayou (very polluted tributary of Trinity Bay), December 1969, G. E. Williams, collector—54 specimens (USNM 54049). Fence Lake in Sea Rim State Park, Jefferson County, 13 September 1975, B. J. Callahan, collector—4 specimens (USNM 54902).

Remarks.—Hypaniola florida is a small ampharetid polychaete (up to 30 mm in length) occupying tubes up to several times its length composed of mucus, sand, mud and debris. It forms a part of the infauna, and is found in salt ponds, marshes, estuaries and river mouths, often in considerable numbers. At times it may be the dominant animal in the estuary (Sanders, et al., 1965). It is found on bottoms of sand, mud, muddy sand, firm clay, with gravel, plant debris and places rich in bio-detritus.

H. florida may be classed as oligo- and mesohaline, being found in waters of low salinity from less than 1‰ to 30‰. It may be found associated with other estuarine polychaetes, such as the nereids Nereis diversicolor O. F. Müller and Laeonereis culveri (Webster), the glycerid Glycera dibranchiata Ehlers, the orbiniid Scoloplos fragilis (Verrill), the spionids Scolecolepides viridis Verrill, Polydora ligni Webster and Streblospio benedicti Webster, and the capitellid Heteromastus filiformis Claparède. In Johnson's Creek, New Hampshire, the ampharetids were observed being engulfed by the minute mud anemone Nematostella sp. (L. Scott, in litt.). In New Hampshire, large yolky eggs were laid in the tubes of the females, from late May to early September, where they were fertilized and developed into nonpelagic larvae. The latter left the adult tubes at the two- to three-setiger stage, when they crawled on the surface of the mud, began feeding and formed mucous tubes (Zottoli, 1974).

Distribution.—Estuaries along the east coast of the United States from Maine to Florida and Gulf of Mexico (Florida to Texas).

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