

(Carr, 1967a, b), several authors have reported finding hatchling sea turtles associated with sargassum, both in the sea adjacent to nesting beaches and in weed wrack deposited on shore by storms (Carr, 1967a; Caldwell, 1968; Smith, 1968; Frick, 1976). When Hurricane David moved up the Florida coast in September of 1979, masses of sargassum came ashore at Cocoa Beach, and with it hundreds of loggerhead hatchlings, some alive, some dead. Of the latter, 15 were sent to us by Dr. Lew Ehrhart. When the stomachs of these were opened food was found in five. The most prevalent items were sargassum floats and leaf parts. In one, two tiny snails (*Litiopa melanostoma*) known only from sargassum were found. Other items were the pelagic snail *Diacria trispinosa*, and fragments of crustacean appendages. This evidence of feeding indicates that the hatchlings were not simply swept on shore in front of incoming rafts, but had been incorporated in the sargassum ecosystem before the storm began. This reinforces the significance of Fletemeyer's observation (1978) of Florida loggerheads going into sargassum. It should be pointed out, however, that sargassum rafts must not be the only possible lost-year habitat, because in some areas through which hatchlings move, sargassum does not occur, as in the Agulhas Current system mentioned above (Hughes, pers. comm.).

The observations reported here, in which grouped green turtle hatchlings were found at a considerable distance from a known nesting beach, lend support to the theory that hatchlings continue their association with sargassum rafts, probably as ecologically integrated members of the raft community. Moreover, knowledge of existing currents in the region in which our observations were made permits speculation as to the possible subsequent displacement during the lost year.

Our contribution to the sargassum-refuge theory was made during the recent Green Turtle Expedition of the Research Vessel Alpha Helix. On 11 Sept. 1978 at 1500 CST, a mature female green turtle that we had been radio-tracking since the evening before crossed a band of sargassum 40.2 km off the Panamanian coast (9°49.4'N 82°17.4'W; Fig. 1). The depth at the locality was approximately 1,600 m. A scattering of coconuts, logs, and other land-derived debris was mixed into the well-consolidated line of sargassum mats. Fish and feeding birds were numerous. The ship stopped briefly in the weedline for the express purpose of

Copeia, 1980(2), pp. 366-368
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EVIDENCE OF PASSIVE MIGRATION OF GREEN TURTLE HATCHLINGS IN SARGASSUM.—One of the remaining gaps in knowledge of marine turtles is the so-called "lost year" mystery. After entering the sea, hatchling sea turtles of all kinds disappear from human sight for about one year. Despite wide interest and diligent searching, little progress has been made in finding places where post-hatchling sea turtles predictably occur. One notable exception is the discovery by Hughes (1970, 1974) that Tongaland loggerhead and leather back hatchlings are picked up by the south-trending Agulhas Current off the east coast of South Africa and remain in it for as long as three months.

A prevailing hypothesis to explain the disappearance of hatchlings is that after going through the surf the hatchlings swim offshore until they encounter sargassum rafts, take refuge in these, and drift with long-range currents. After about a year, they somehow make their way into coastal and reef-system habitats, in which dinner-plate sized turtles are regularly found. Since this theory was first proposed

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