THORACIC CIRRIPEDIA FROM THE CONTINENTAL SHELF OFF SOUTH CAROLINA, U.S.A. 1)

By

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The Cirripedia of the Atlantic Coast of North America have received little attention since Pilsbry (1907, 1916) produced his two excellent monographs on the American species. Much of Pilsbry's distributional data were based upon widely separated localities which were often related to localized areas of intensive field sampling (e.g. Woods Hole, Cape Hatteras), and several species were described from unique specimens or single lots taken during the early deep sea dredging operations of the “Albatross”. As a result of the lack of more recent faunistic studies, our present knowledge of distribution, specific diversity, and intraspecific variation of Atlantic Coast species is essentially limited by the same factors that confronted Pilsbry. The necessity for additional work is exemplified by Henry's (1958) study of the barnacles of Bermuda, in which 1 new subspecies, 1 species revision, and 2 extensions of range were recorded, and also by the recent paper of Ross et al. (1964) in which the Atlantic ranges of 5 species are extended.

The above mentioned problems are not restricted to the cirripedan element of the Atlantic Coast fauna, but are also apparent to varying degrees in many groups. In his studies of these problems in Atlantic Mollusca, A. S. Merrill established a transect across the relatively unsampled continental shelf off South Carolina. This section of the Carolinian Faunal Province between its northern boundary at Cape Hatteras and the relatively well known Floridian Province to the south is yielding much new information on the abundance, distribution and diversity of marine organisms of the shelf of the southeastern United States. Among the samples dredged from the 12 stations occupied on the transect were 6 species of cirripeds, including 1 lepadomorph and 5 balanomorphs. The stations at which cirripeds were obtained are described as follows (from Merrill, in lit.):

Station 2: 5 fathom creek near entrance to Key Creek, 4½ miles below McClellanville, South Carolina (33° 01.27' N 79° 28.54' W). Shrimp boat “Remus”, 1.8-5.5 m deep, mud bottom, Digby dredge, July 1, 1963.


Station 8: 26½ miles, 130° off Sandy Point, Racoon Key, S. C. (32° 42.4' N 79° 06.2' W). Shrimp boat “Miss Kim”, 27.4 m deep, sand and shell bottom, Digby dredge, July 2, 1963.

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Station 9: 37½ miles, 130° off Sandy Point, Racoon Key, S. C. (32° 34.9' N 78° 51.3' W). Shrimp boat "Miss Kim", 36.6 m deep, sand and shell bottom, Digby dredge, July 2, 1963.
Station 10: 45¾ miles, 130° off Sandy Point, Racoon Key, S. C. (32° 29.5' N 78° 48.8' W). Shrimp boat "Miss Kim", 54.8 m deep, hard sand and shell bottom, Digby dredge, July 2, 1963.
Station 11: 43¼ miles, 130° off Sandy Point, Racoon Key, S. C. (32° 31.2' N 78° 51.0' W). Shrimp boat "Miss Kim", 45.7 m deep, hard sand and shell bottom, Digby dredge, July 3, 1963.
Station 12: 46½ miles, 130° off Sandy Point, Racoon Key, S. C. (32° 28.7' N 78° 47.1' W). Shrimp boat "Miss Kim", 64 m deep, hard sand and shell bottom, Digby dredge, July 3, 1963.

The location of the transect stations is shown in fig. 1.

Prior to the recent report by Ross et al. (1964) citing new records for the Cape Hatteras region, only 3 of the 6 cirripeds collected (Balanus venustus niveus, B. improvisus, and B. galeatus) were known from the Carolinian Province. Balanus calidus was previously reported from the Gulf of Mexico and the West Indies, but not from the Atlantic Coast of the United States. Scalpellum gibbum was originally described by Pilsbry (1907) from the northern Gulf of Mexico and was later found by him (1953) off Palm Beach on the Atlantic coast of Florida. The sixth in the collection is a new species of the subgenus Conopea that was independently discovered by W. A. Newman in Puerto Rico and in subsequent