PAGURID CRABS (DECAPODA ANOMURA) FROM ST. JOHN, VIRGIN ISLANDS, WITH DESCRIPTIONS OF THREE NEW SPECIES 1)

BY

ANTHONY J. PROVENZANO, Jr.
Institute of Marine Science, University of Miami, Florida, U.S.A.

INTRODUCTION

As part of a survey of the marine fauna and flora of the recently established U. S. Virgin Islands National Park at St. John, a series of collections have been made by Marine Laboratory personnel. Among the Crustacea taken were a number of new records for the Virgin Islands, including three species not referable to any yet named. The present report deals with the hermit crabs of the families Diogenidae and Paguridae; these families corresponding to those of MacDonald, Pike & Williamson (1957).

Synonymies are restricted to the original description and one or more references usually containing more complete information. Size of specimens where given refers to carapace length. The station numbers refer to records kept by Herman Kumpf while at St. John; the field data being on file in the Marine Laboratory Museum. Unless otherwise noted, the general locality for material examined is St. John.

Holotypes are deposited in the U. S. National Museum, while most of the remaining material is deposited in the University of Miami Marine Laboratory Museum (UMML).

The writer is indebted to Dr. Marvin L. Wass of the Virginia Fisheries Laboratory for examining the three new species and for comments incorporated in the manuscript. He would also like to thank Dr. John Randall and his co-workers who made special efforts to collect hermit crabs during their general field studies. Dr. L. B. Holthuis kindly provided information relative to the several titles of Saussure's (1858) paper and also permitted me to examine material of Pylopagurus holthuisi from Suriname. Mr. Donald Moore of the Marine Laboratory provided the identifications of the Mollusca.

SYSTEMATIC RESULTS

Although there have been a series of papers dealing with the pagurid fauna of the West Indies (see Provenzano, 1959) published records of hermits from

1) Contribution No. 329 from The Marine Laboratory, University of Miami.
the Virgin Islands appear to be limited to three species. A. Milne Edwards & Bouvier (1893) reported Pagurus bicristatus (A. Milne Edwards & Bouvier) from "Blake" Station 136 off Frederickstadt in 508 fathoms. The same authors treated a number of other deep water species collected near St. Kitts in the nearby Leeward Islands. Benedict (1901) listed 12 species from Puerto Rico and seven others which might be expected to occur there. A later paper by Schmitt (1935) dealt with 17 species from Puerto Rico of which only two, Coenobita clypeatus (Herbst) and Paguristes depressus Stimpson, were taken in the Virgin Islands, at St. Thomas. Paguristes depressus has not yet been taken at St. John, but the land hermit Coenobita clypeatus is present.

Diogenidae

Calcinus tibicen (Herbst)

Cancer tibicen Herbst, 1791: 25, pl. 23 fig. 7.

Calcinus tibicen, Provenzano, 1959: 365, fig. 4; 1960: 120.

Material.
1 frag.; stomach of Diodon hystrix L., Cabritte Horn Pt., at 40 ft., with Paguristes wassi, P. anomalous and Pagurus miamensis, 4 Jan. 1959, J. Randall.
1 spec.; SJHK 59-4, Mary's Creek, reef and grass flat, intertidal - 4 ft., 21 Jan. 1959, H. Kumpf and G. Voss.
4 spec.; SJHK 59-6, E. shore of Lesser Lameshur Bay, littoral and sublittoral rock area, with Clibanarius tricolor, Pagurus marshi, Paguristes puncticeps, 22 Jan. 1959, H. Kumpf, G. Voss, C. Adams.
1 spec.; SJHK 59-19, Mary's Creek, seaward reef, 14 Feb. 1959, H. Kumpf.
1 frag.; from stomachs of large adult hogfish, Lachnolaimus maximus (Walbaum), Eagle Shoal, St. John, with Paguristes cadenati, P. grayi, P. tortugae, P. wassi, Pagurus miamensis and Pylopagurus holthuisi, 1 Feb. 1961, J. Randall.

Clibanarius antillensis Stimpson

Clibanarius antillensis Stimpson, 1862: 85; Provenzano, 1959: 368, fig. 5B; 1960: 119.

Material.

Clibanarius cubensis (de Saussure)

Pagurus cubensis de Saussure, 1858: 455.

Clibanarius cubensis, Provenzano, 1959: 369, fig. 5C.

Clibanarius sclopetarius, Holthuis, 1959: 145 (discussion only, under C. vitatus).