

## Rock Shrimp Research and Marketing

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As far back as the 1950's, Department of Natural Resources' research biologists (then the Florida Board of Conservation) were recommending the use of rock shrimp as an additional shrimp resource. These shrimp were taken in fair abundance during normal shrimping operations on the Tortugas pink shrimp grounds, but were always discarded by the shrimpers for lack of a market. Similar recommendations were also made for the northwest coast and the Florida east coast where rock shrimp populations appeared large. Because of the hard shell and the resultant difficulty in splitting these very tasty shrimp, their major commercialization did not occur until a machine was found that could handle this operation. Rock shrimp are now marketed both split and unsplit, but the split product is by far the most popular. This discovery, plus a strong marketing and consumer education program by both state and federal agencies which included development of promotional materials, television and institutional demonstrations, and the use of rock shrimp at several national trade shows, finally succeeded in bringing to fruition the biologists' recommendations.

Major populations of rock shrimp thus far found in Florida are located on the east coast centered near Cape Canaveral, the Tortugas grounds, and the northern Gulf of Mexico off Apalachicola. There are also very important grounds in Mexican waters near Contoy Island. Although restaurants were the first and are still the major consumers, sales to individuals are increasing rapidly as is the overall demand for rock shrimp. Thus the biggest problem presently encountered by the rock shrimp industry is consistency of supply.

Since the initial commercialization of this animal did not occur until the last 3 or 4 years, relatively nothing is known about its basic biology other than that gained during study of the other more important shrimp. Virtually nothing is known about the seasonal abundance, movements, and migration patterns or even growth rates, spawning or nursery grounds. This lack of information is one of the reasons for the rather erratic supply. Nevertheless, rock shrimp production in Florida, including landings from Contoy, Mexico, may reach 3 million pounds in 1974.

In an effort to answer these biological questions, Florida's Department of Natural Resources Marine Research Laboratory has been actively involved in shrimp research over the past several years. We have always provided the information learned about rock shrimp during research on other species of shrimp. In addition, a major review of rock shrimp catches during Project Hourglass on Florida's west coast was published in early 1973. A major research project on rock shrimp is presently under way. Federally assisted under PL 88-309, it is headquartered at Port Canaveral, Florida, and consists of two types of data collections: (1) sys-

tematic biological samples are taken at selected stations monthly; and (2) exploratory transects from Cape Canaveral to the Georgia-Florida boundary are conducted as time and weather conditions permit. The main objectives of this project are to determine the basic natural history biology of this increasingly important seafood resource. Determination of growth rates, movement and migration patterns, location of spawning and nursery grounds, seasonality and population abundance are among the major aspects being considered. Data gathered over the first 2 years of this 3-year study has been excellent and it is felt the major goals will be achieved.

With the receipt of this biological information and a continued strong marketing effort, rock shrimp will become a major fishery specialty for Florida. It is quite possible that as demand for these delicacies increases, production could reach 10 million pounds a year, greatly benefitting the fishing industry and the seafood purchasing consumer.

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