

ous periods of extended duty as well as the keeping of equipment operational in spite of frequent breakdowns. Thanks are also due to Mr. George Snow and staff, Bureau of Commercial Fisheries, for providing timely catch data.

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Studies on the Distribution of Migrating Juvenile Pink Shrimp in Buttonwood Canal, Everglades National Park

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Abstract

In June, 1964, a study was begun on the vertical and horizontal distribution of migrating juvenile pink shrimp as they move out of the nursery grounds into Florida Bay on their way to the Tortugas grounds. The sampling gear consisted of 13 conical nets suspended in a canal on 5 iron frames. Sampling was at night on full moon, new moon, and quarter moon ebb tides. Sampling was continuous for 13 months.

Results indicate a significant change in vertical distribution with a change in moon phase. An average of about 91% of the shrimp caught on full moon tides were taken on or close to the surface; only about 75% were caught in the surface layers during new and quarter moon tides. There were also significant variations in lateral distribution in the surface layers. This is perhaps related to wind.

As a result of this research we can predict with considerable confidence where in the water column juvenile shrimp will be most abundant under various environmental conditions. This led to the design of sampling gear, easily operated and highly mobile, for use in other exits in the Everglades National Park nursery area and in other important nursery areas along the Gulf coast.