

# The Relationship of the Pink Shrimp Emigrating from Everglades National Park to Commercial Catches on the Tortugas Grounds

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## Abstract

Studies to investigate the relationship between the number of pink shrimp (*Penaeus duorarum*) emigrating from Everglades National Park and the commercial landings on the Tortugas fishing grounds were conducted from 1962-68. Monthly indices of relative abundance were established for juvenile shrimp emigrating from two stations at the edge of the Whitewater-Coot Bay estuary, and for the commercial landings of small shrimp.

When a time lag related to the size of the emigrants is used, the index for the number of juveniles leaving the Buttonwood Canal shows a strong positive correlation with the catch per unit of effort of small shrimp on the Tortugas grounds. Based on this relationship a predictive index can be established from a single station in Buttonwood Canal for the commercial catch of small shrimp on the Tortugas grounds. The relationship using the index from the second station in Little Shark River shows more variation and is not useful in forecasting commercial catches.