

Job Report

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Vegetation Found in Association with Shrimp

Abstract: Widgeon grass, Ruppia maritima, was found to be the dominant species of vegetation present at tertiary shrimp stations. Juvenile shrimp were taken in various degrees of abundance along with this plant.

Objectives: To determine the vegetation found in association with commercially important shrimp on nursery grounds as an aid in the management of these nursery grounds.

Procedure: Six stations were established in the Aransas-Copano Bay system (Figure 1). Semi-monthly samples for shrimp were made at these stations with a 10-foot 1/4-inch mesh otter trawl, a 20-foot 1 1/2-inch mesh otter trawl, and a 6-foot 1/4-inch mesh seine.

The trawls were pulled behind a work boat at 1200 rpm's for periods of 15 minutes. At the end of each trawl period the contents of the trawl were inspected and any vegetation taken with shrimp was identified and recorded.

The 6-foot bar seine was pulled by hand for periods of five minutes, the catch inspected and the vegetation recorded in the manner described above.

Findings: The plant most frequently encountered in tertiary bay samples was widgeon grass, Ruppia maritima Linnaeus.

Discussion: Because of the few sample stations and the limited area sampled, it is difficult to draw any sound conclusions from existing data. Shrimp were taken at all stations while vegetation was found mainly at tertiary stations and occasionally at secondary stations.

The taking of juvenile shrimp and widgeon grass simultaneously in pull seine samples in the majority of the cases indicated that juvenile shrimp in the Aransas-Copano Bay System can usually be found associated with widgeon grass in tertiary areas.

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Figure 1
Aransas Copano Area
Shrimp Stations in Aransas,
Copano, Mesquite, and Mission Bays

