

Job Report

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Vegetation Found in Association with Adult and Juvenile Game Fish

Abstract: Juvenile trout, Cynoscion nebulosus, are found associated with widgeon grass, Ruppia maritima Linnaeus, in all secondary and tertiary bays. Adult game fish in Area M-6 show no preference for any particular species of vegetation for habitat. More needs to be known on the habits of juvenile drum (Pogonias cromis), flounder, (Paralichthys lethostigma), and sheepshead (Archosargus probatocephalus).

Objectives: To determine the vegetation found in association with adult and juvenile commercial and sports fishes, so sound management practices may be introduced for the conservation of the particular vegetated habitats these fish prefer.

Procedure: Five stations were established in Area M-6 (Figure 1). Monthly samples for juvenile and adult sports and commercial fish were made at these stations with trammel nets or bag seine.

The trammel nets were made up of four sections of 3-1/2 inch mesh netting inside 12-inch brails. The trammel net was set in a rectangular manner 300 feet by 600 feet. One 600-foot side was the shoreline. After the net was set in this manner, it was pulled to shore. All vegetation found in the net was recorded for presentation in this report.

The seine used was of 1/2-inch mesh and 60 feet long, with a bag built into the center. This seine was pulled over distances of 100 to 150 feet, and any vegetation taken during these pulls was noted for presentation in this report.

Findings: The results of this study are summarized in Table 1. Adult and juvenile fish are arranged in correlation with associated species of vegetation.

Discussion: It can be determined from Table 1 that trout, both juvenile and adults, are found in association with widgeon grass, Ruppia maritima. The juveniles, however, are found exclusively associated with this plant. Most widgeon grass beds are found in secondary and tertiary bays; therefore, it can be assumed that these secondary and tertiary vegetated areas are important to the maintenance of trout populations in Area M-6.

Adult trout are very mobile and are found well distributed in the bays. No particular species of vegetation is noted as being important to adult trout.

Juvenile redbait, in contrast to young trout, are found well distributed over all grassy areas in all of the bays in Area M-6. They do, however, need the cover that vegetation affords and are dependent upon shallow grassy areas for nursery grounds. This would indicate the value of vegetated areas to the

Commercial Species of Fish
and Their Association With Plant Types Common to Area M-6

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Figure 1
Aransas - Copano Area
Stations

Adult game fish stations

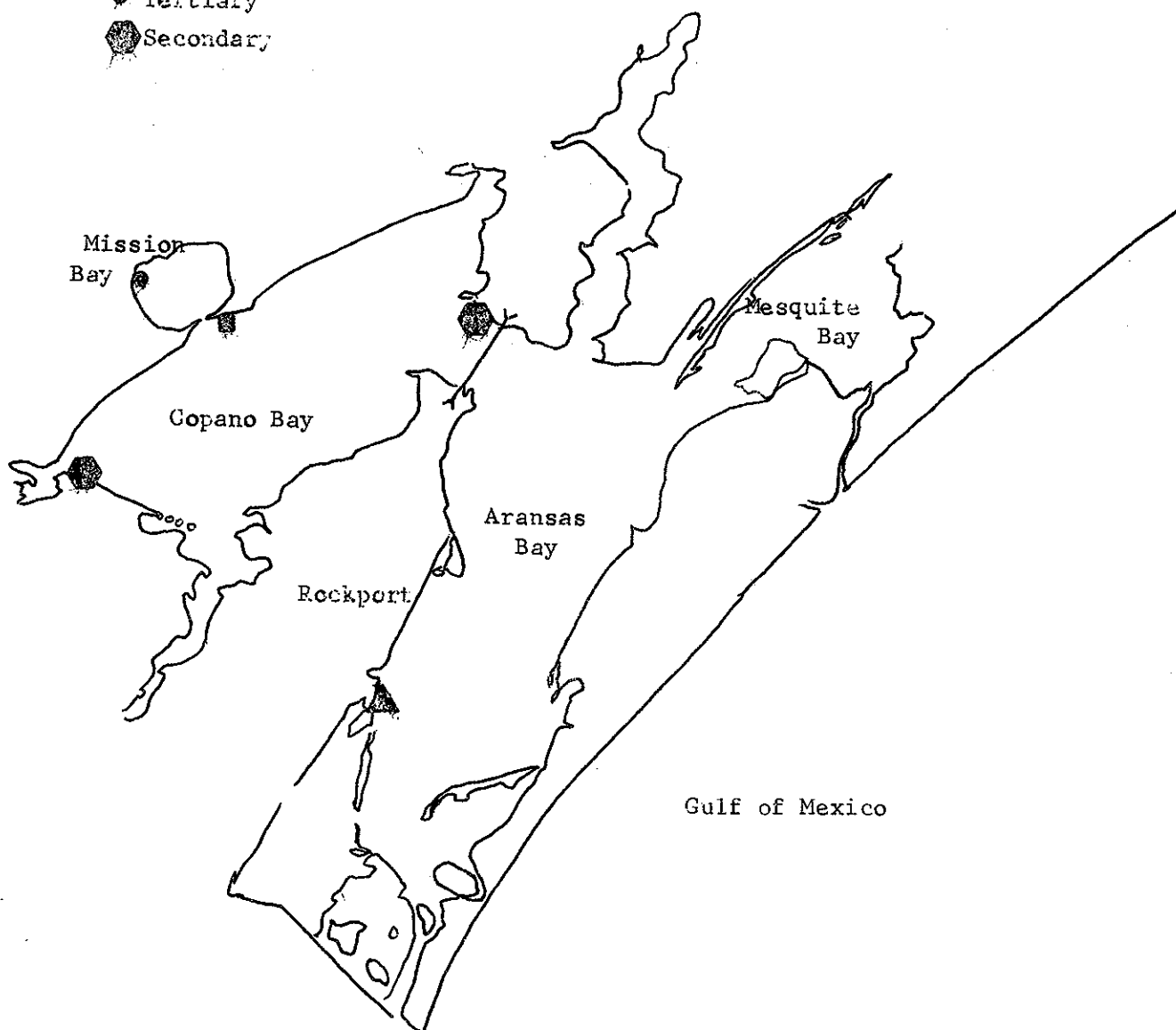
■ Secondary

▲ Primary

Juvenile game fish stations

● Tertiary

● Secondary



maintenance of redfish populations in this area.

Adult redfish, like adult trout, require no specific species of vegetation, as they are well distributed over Area M-6.

Black drum, flounder, and sheepshead were not taken in large enough numbers to determine their preference for any species of vegetation.

The few sheepshead captured were found well distributed in both the adult and sub-adult stages of growth, so no particular habitat preference could be determined.

Conclusions: The juvenile trout was the only species of food or game fish found in association with any one species of vegetation. This species was Ruppia maritima. This study indicates all shallow grassy areas are important to food and game fish, and any reduction of these areas will eventually lead to the reduction of the numbers of fish this area can support.

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