Job Report

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Project No.   M-5-R-2   Date January 5, 1962

Project Name: Oyster and Fisheries Investigations of Area M-5

Period Covered: July 1, 1960 to June 30, 1961   Job No.   A-2, A-3, B-2, B-3

Survey of Shallow Water Areas
of Ecological Importance as Nursery Areas

Abstract: An investigation of the shallow water portions of Area M-5
shows that, for the most part, they are heavily vegetated. Juveniles of
sport and commercial fish inhabit these areas for food and protective cover.
Adult of these species frequent shallow portions during the warm months of
the year. All of these shallow "lakes" and "bayous" should be retained in
their present natural state.

Objectives: To investigate the shallow water regions of this area. To
determine game and commercial species present and the ecological importance
of nursery grounds.

Procedure: Game and commercial species were collected throughout the
study period with otter trawls and seines. Records were kept of the relative
abundance of each species. These were correlated with ecological factors when
possible. See Project M-5-R-2, Job Report A-2.

Findings: This study was conducted primarily to determine usage of
shallow vegetated bays, lakes, and inlets of Area M-5 by game and commercial
fish species. No attempt was made to develop a species checklist of these
portions of Area M-5 since an area-wide checklist has already been prepared.
    Four times during the study period at approximately three month intervals,
seine samples were taken throughout the shallow vegetated portions of Area
M-5. (See Figure 1 for location and distribution of these shallow vegetated
areas.)
    These samples show that game and commercial species are present in these
areas during the warm months of the year, roughly April through October.
These shallow vegetated areas are used by juvenile and adult fishes. Figure
2 shows species distribution as indicated by seine and trawl samples.

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Figure 1
Location and Distribution
of Vegetated Areas

See Project M-5-R-2
Job Report C-2, C-3
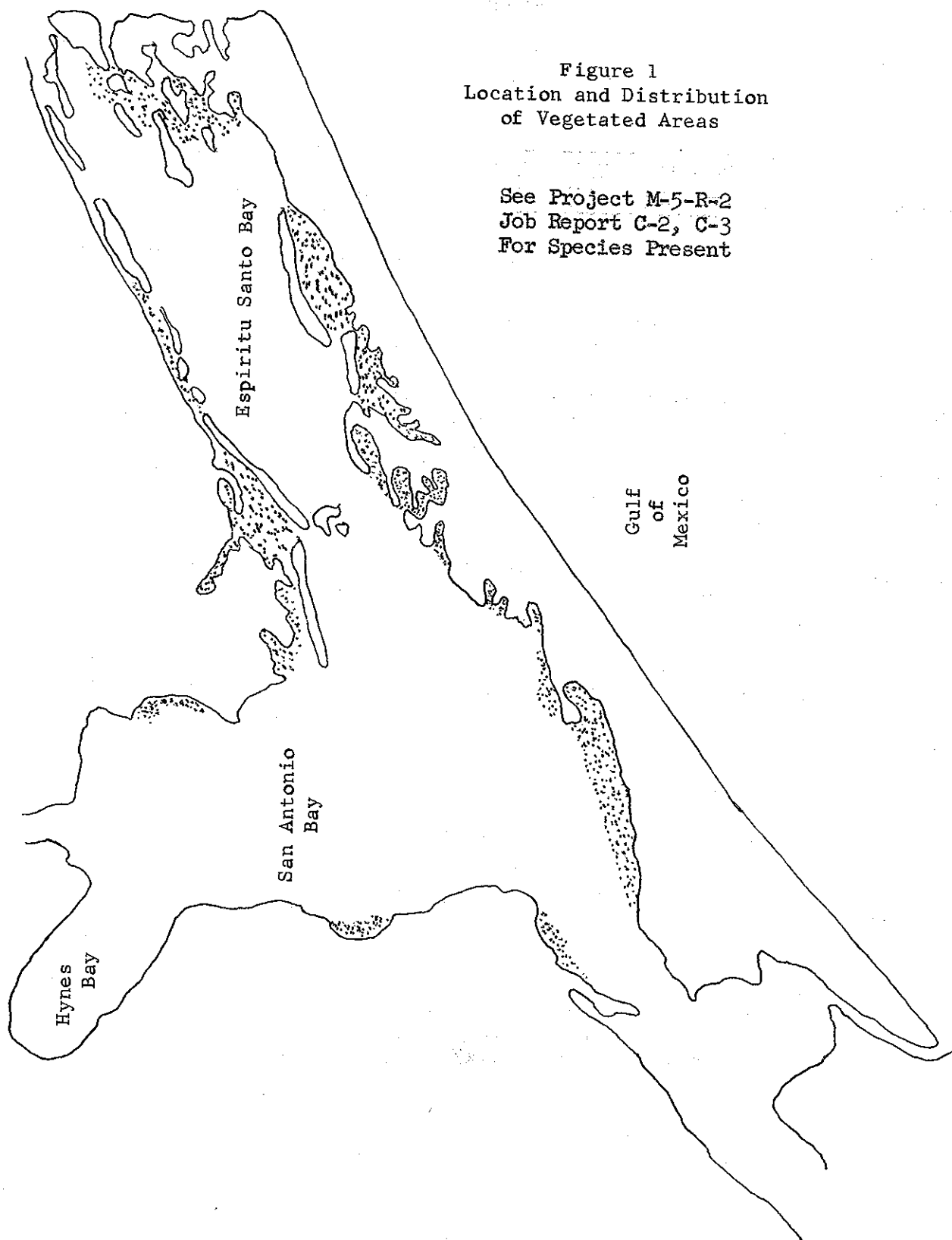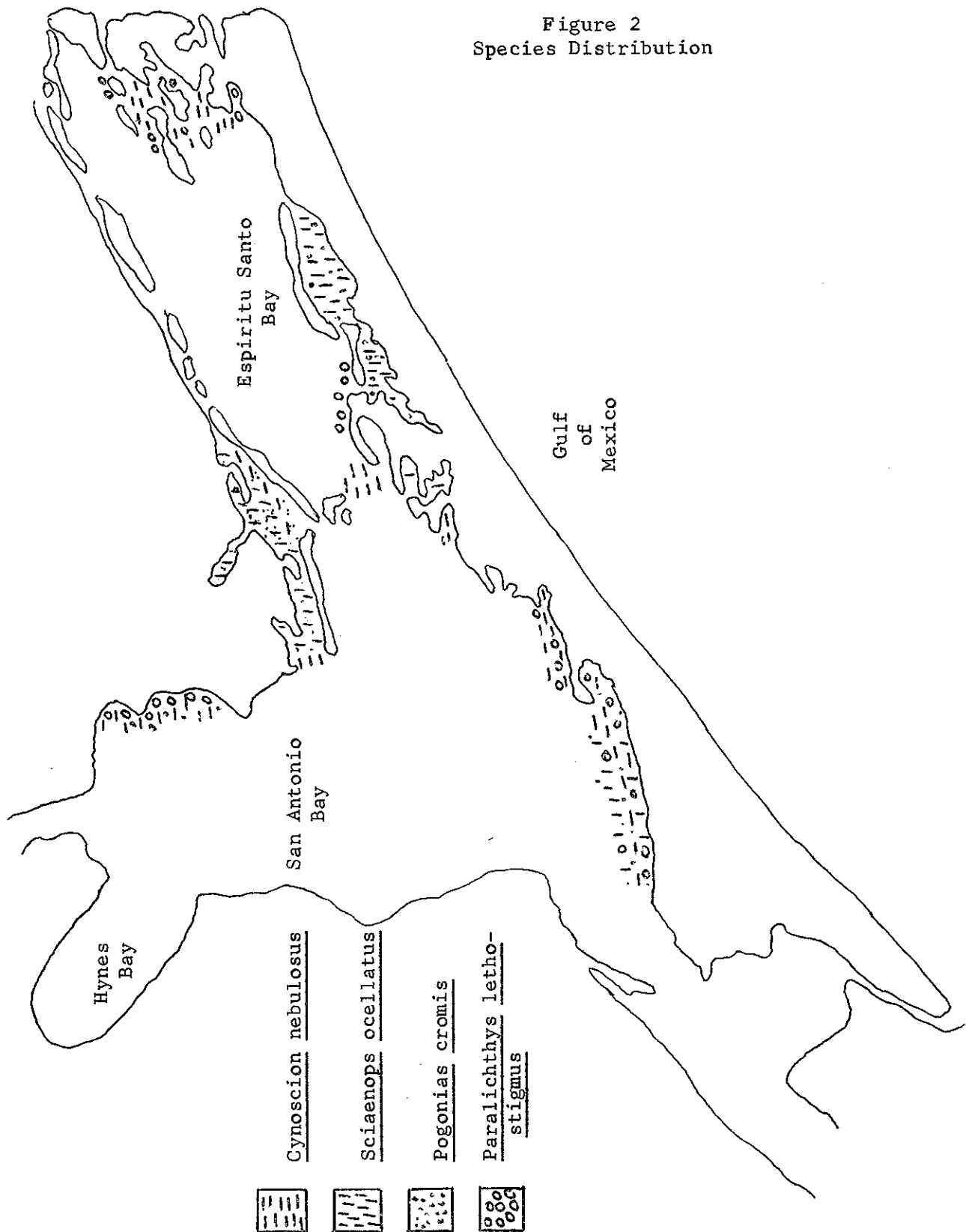For Species Present

Espiritu Santo Bay

Gulf
of
Mexico

San Antonio Bay

Hynes Bay

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Figure 2
Species Distribution

Espiritu Santo Bay

Gulf
of
Mexico

San Antonio Bay

Hynes Bay

Cynoscion nebulosus

Sciaenops ocellatus

Pogonias cromis

Paralichthys letho-
stigmus