

## Job Report

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Project Name: Ecological Survey of Area M-2.

Period Covered: 1 November 1959 to 1 November 1960. Job No. C-2

A Checklist of Marsh and Marine Flora in Area M-2

Objectives: To identify the marsh and marine plants present in Area M-2, prepare a checklist with each species and determine the relative abundance.

Procedures: Marsh and marine flora were collected in Area M-2 by hand picking, dredge, trawl, plankton net, and other suitable methods. Most of the collecting was done by wading in shallow areas and collecting vegetation by hand. The plants were brought back to the Field Laboratory at Seabrook for identification. Hydrographic data were recorded at the time the vegetation was collected. All the plants are included in a checklist with that important data pertaining to each species. Distribution of maps were drawn. (Figures I, II, III). Vegetation was also collected in conjunction with other projects.

Findings: All plants collected were identified and grouped into either marine or marsh flora. With this classification in mind the following checklist was devised:

MARINE FLORA

Kingdom Plantae

Subkingdom Thallophyta

Phylum Cyanophyta

Lyngbya sp. A blue-green algae that was commonly found in the summer months attached to mud and shell in the marsh areas. This algae was observed in a water temperature of 27 to 33° C. and salinity of 9 to 10 o/oo.

Enteromorpha sp. This green algae was observed during the spring, summer and fall in Area M-2. It was collected in a water temperature of 9 to 33° C and a salinity of 2 to 15 o/oo. Its normal habitat was on sand and mud from the shore to a depth of approximately 2 feet in the bay.

Ulva lactuca. Another of the green algae that was common during the latter part of the winter through the early spring of the year. This plant was collected in a water temperature of 10 to 27° C. and a salinity of 10 to 15 o/oo. Ulva was collected on clay, mud and shell bottoms from the shore to a depth of approximately two feet in the bay.

Phylum Rhodophyta

Polysiphonia sp. A red algae that was commonly found attached to stalks of Spartina or to pilings and piers. The algae was common during the summer months in a water temperature of 27 to 34° C. and a salinity of 10 to 19 o/oo.

Subkingdom Spermatophyta

Division Angiosperma

Ruppia maritima. This is the only submerged aquatic spermatophyte found in Area M-2. Beds of this marine grass were found in only three areas of the bay this year. The areas of plant growth are shown in Figure I. Ruppia was observed from spring to fall growing on a sandy substratum from about 1 foot to a 3 foot depth in a water temperature of 13 to 33° C. and a salinity of 2 to 19 o/oo.

MARSH FLORA

Monanthochloe littoralis. A perennial salt grass commonly found on the muddy-sandy beach in the salt marsh habitat.

Spartina alterniflora. This cord grass, a perennial plant, is commonly found growing in the salt marsh. Plants that grow in the shallow bay offer a protective nursery area for juvenile fish and shrimp.

Spartina patens - Another perennial cord grass of the marsh habitats. This plant is not as abundantly distributed as Spartina alterniflora.

Distichlis spicata. A common perennial salt marsh plant of Area M-2.

Scirpus robustus. The rush plant is a perennial that is commonly found in the salt marsh habitats of Area M-2.

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Date

13 January 1961

Bibliography

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Figure I  
Known Areas of Distribution in Area M-2

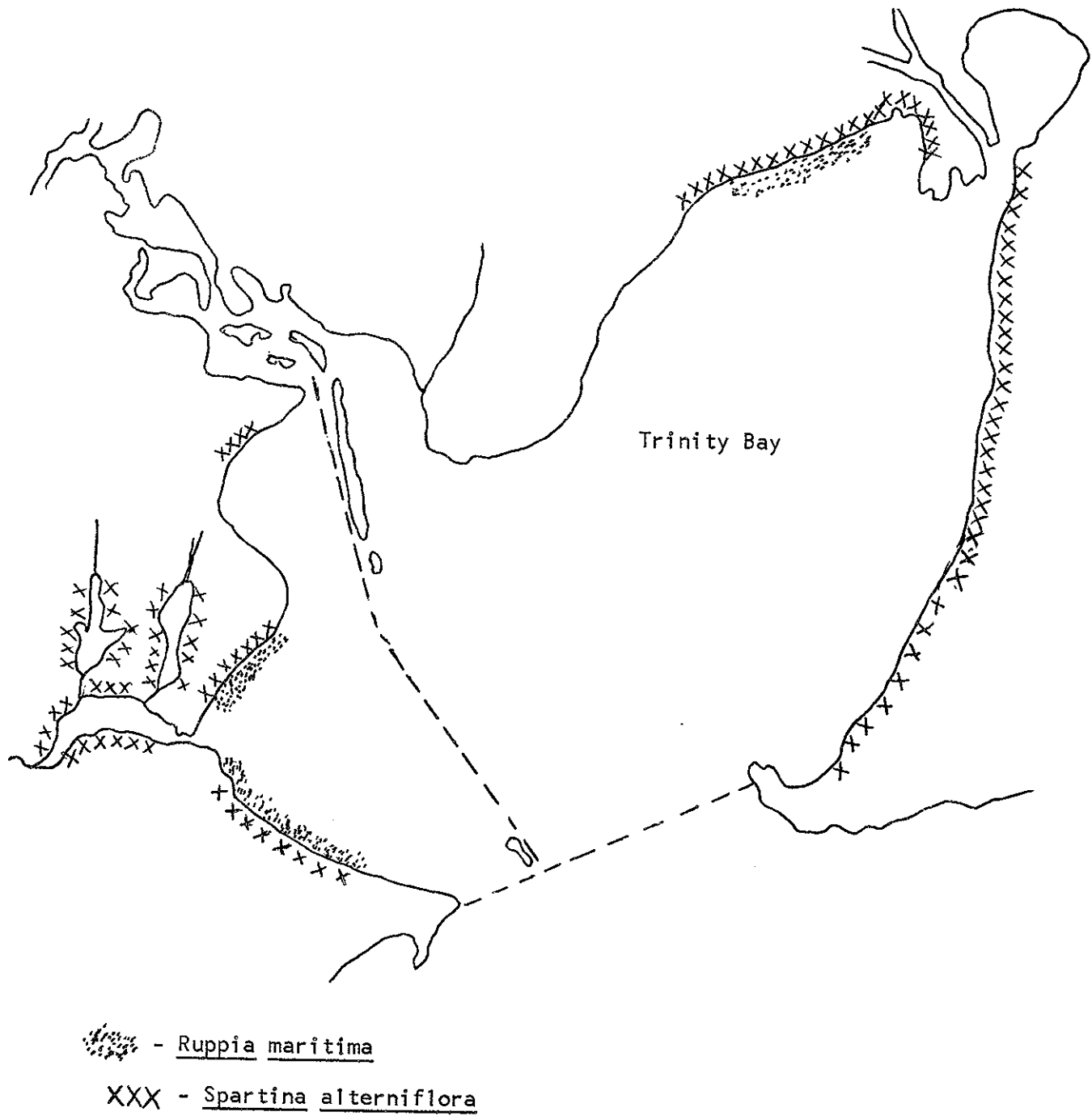
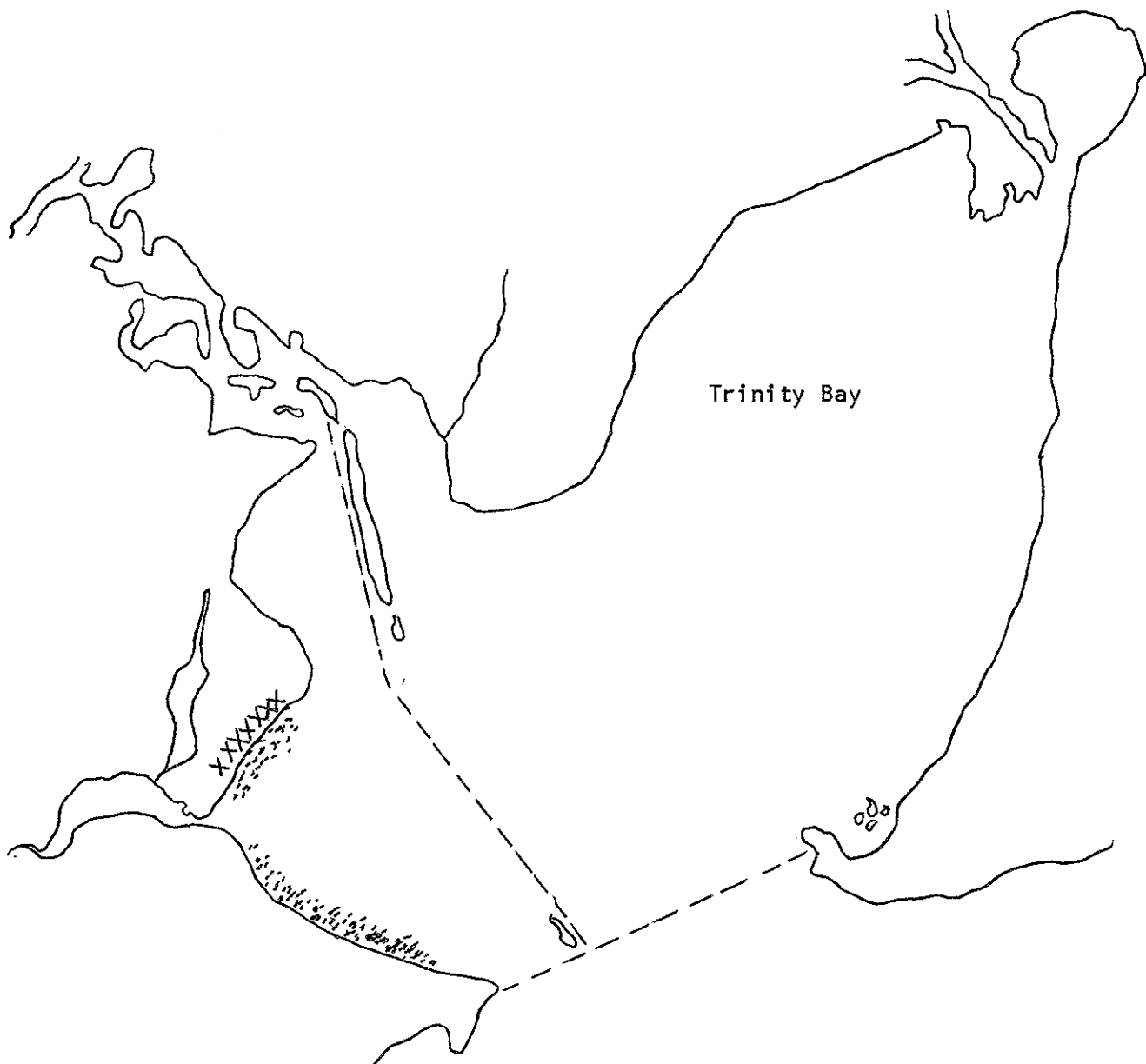


Figure II

Known Areas of Distribution in Area M-2

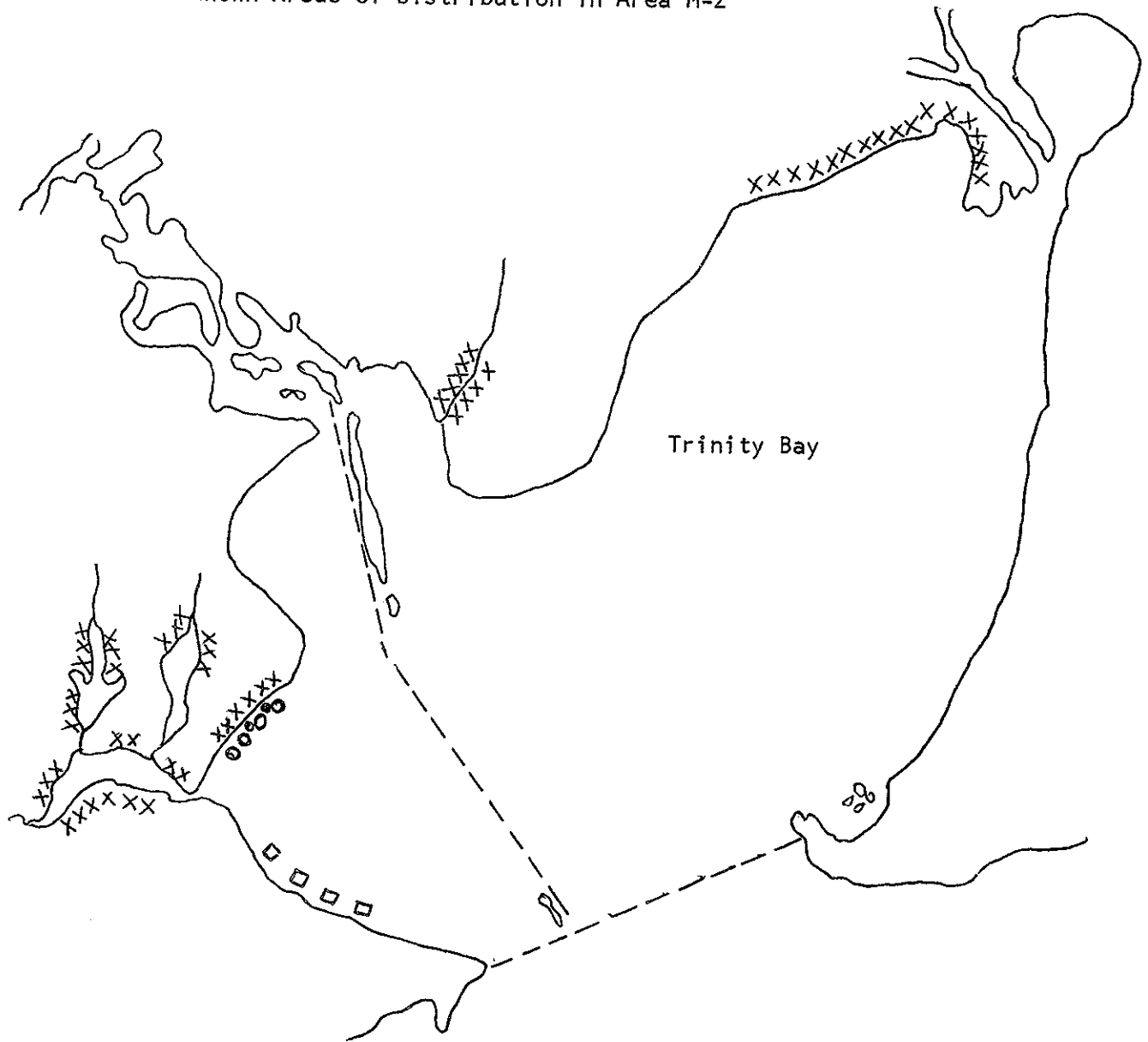


Stippled pattern - Enteromorpha sp.

XXX - Monanthochloe littoralis,  
Spartina patens,  
Distichlis spicata.

Figure III

Known Areas of Distribution in Area M-2



XX - Scirpus robustus

oo6o - Lyngbya sp.

□□ - Ulva lactuca

••• - Polysiphonia subtilissima