

JOB REPORT

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Project No: M-9-R-1. Date: August 14, 1959

Name of Project: Biological Survey of the Waters of the Laguna Madre of
Cameron and Willacy Counties and Adjacent Waters.

Period Covered: June 1, 1958 to May 31, 1959. Job No: E-2

A Checklist of the Flora and Fauna of the Waters of the Project Work Area With Notes on Variations in Abundance

Objective: To determine the number of species of marine fauna and flora present; their effects on each other, their relative abundance and normal range, and the effects of various factors upon their abundance in the area.

Procedure: Standard equipment for the collection of biological, chemical, and meteorological samples were used to collect data at the twelve established locations in the project area and at various temporary locations as the situation merits. The stations were sampled monthly, if possible, and at other times when the situation merited. Samples were identified, analyzed, cataloged. Factors affecting the distribution and abundance of the floral and faunal forms will be correlated.

Findings: Very few new species of either flora or fauna have been added to the list of biological components included in the completion report of M-9-R-1 - S1, in report on the ecological survey of the project area from September 1, 1953 through June 30, 1958. All of the common forms had been reported, and although new forms have been collected since this report was submitted, they are for the most part rare or incidental in occurrence and do not contribute materially to the overall ecology of the project area. Of those species collected, positive and reliable identification has been slow for two reasons. First, it is better to ship specimens to authorities in batches rather than as individuals, and as a result of this practice, many specimens are awaiting company before shipment. Second, most of the forms collected since Job S2 Completion Report was submitted belong to the more unfamiliar groups of which there is a serious shortage of authorities. Some of these groups are the sponges, anthomedusae, anthozoans, platyhelminths, nemathelminths, trocholmenths, annelids, chaetognaths, aphiuroids, grinoids, and holotheroidians. While the collection of species continues, efforts are being made to contact authorities in these groups in an effort to obtain positive identifications. In some groups, authorities seem to be non-existent, while in others, time does not now permit identification.

The majority of work on this job during the past year has been on the variations in abundance of the known forms. Only additional information learned since the completion of Job S1 is included here.

Spermatophyta - No new forms have been collected, nor has there been any noted extension of ranges except for Ruppia maritima and Diplanthera wrightii. Widgeon grass has been extending its range northward since the project area has been worked (1953). Widgeon grass has most recently extended its range to the Port Mansfield area, particularly at Station 22 and along the East Channel from the Intracoastal Canal to Padre Island. While no definite mapping of extension of range has been done for D. wrightii, increase in amount of cast-off blades of this grass has been noted for several years, which seems to indicate an increase in production of this important vegetation.

Porifera - Three more forms or species collected for a total of twelve collected thus far. No identifications made.

Annelida - Additional specimens have been collected, principally among the oyster clumps of South Bay and Port Isabel and recently on the experimental oyster reefs of Port Isabel Bay. No additional identifications are available at this time.

Cirripedia - Two additional species have been collected from the Brazos Santiago jetties but have not yet been identified.

Mollusca - Several new species have been collected from the oyster clumps of South Bay as well as the Brazos Santiago jetties, but no identification has been made at this time.

Chordata - No more species have been taken in the project area within the past year. Particular emphasis is being made to collect and identify such groups of fishes as the sharks, rays, anchovies, pipefish, silversides, mullet, jacks, sea horses, snappers, grunts, parrot fishes, sea robins, and gobies. In most cases, all species of a group have been placed together with a common range, and efforts are now being made to separate each of these groups to species and to treat each as species in regards to habits, range, etc. Work among the sports and commercial species of fish is included in Job E-1.

Comments: While it may appear that little work has been done or few results achieved on this job within the past year, it should be remembered that this job is one of lesser importance as compared to other projects and jobs underway at this time, and that little time and expense is available for this job. It should also be remembered that work on this job is done in conjunction with work on other jobs, and that further results can be obtained only on a year to year basis. This job, then, should be done on a continuing basis and can end only when all research is finished in the project area.

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