

Job Report

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Project Name: Survey of Oyster Populations and Associated Organisms
Period Covered: September 1, 1961 to December 31, 1962 Job No. 7

Study of Oyster Populations and Experimental Plantings
in Corpus Christi Bay

Abstract: Live oysters, placed in test trays and transplanted to existing reefs with extremely low oyster population, showed high mortality rates within one month of the transplant and by the end of three months had suffered total mortality. There were not enough oysters present to obtain adequate samples of live oysters on any of the major reefs in Corpus Christi Bay, in order to make monthly comparison of the population structure of the reefs.

Objectives: To determine if live oysters could be transplanted on existing reefs in Corpus Christi Bay and, if such a method is successful and economically feasible, to make monthly comparisons of the population structure of the reefs.

Procedure: Test baskets, containing approximately one hundred live oysters, were placed on Alta Vista Reef, Long Reef, Shamrock Reef and Portland Reef, all of which have had past mortalities and now have extremely small populations of oysters. Trays were placed on the reef and marked with buoyed lines. All trays were covered with 1-inch mesh chicken wire tops to retard crab activity. Weekly checks were made to determine occurrence of mortality. Test oysters were obtained from Pintail Reef in Aransas Bay.

Figure 1 shows the locations of the four oyster tray stations in Corpus Christi Bay. The trays were placed on March 23, 1962.

Findings and

Discussion: Average salinity reading at the time of tray placement was 29.34 ppt. and water temperature was 23.6^o C. The first mortality recorded was on April 16, 1962. Total count showed a loss of two per cent. By April 26, 1962 the Long Reef test basket suffered 80 per cent mortality. Shamrock Reef suffered 100 per cent; Portland Reef, 13 per cent; and Alta Vista Reef, 5 per cent.

All oysters in the test trays were dead by the last part of May. Twenty of the oysters were examined for the presence of Dermocystidium marinum. All of these showed no infection. Ten of the oysters were sent to Texas A & M College for examination by Dr. J. G. Mackin. No disease organisms were found in the tissues.

Three fishing reefs of washed mud shell have been constructed as a part of another job this year and it is planned to use these reefs for further study of live oyster transplants in Corpus Christi Bay.

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Figure 1
Oyster Tray Stations



