

can find some cheap timber that will retain its bark in salt water for at least three and a half years and at the same time resist the attacks of teredo, the method must be regarded as impracticable in New Zealand.

A series of experiments in which rock-oysters contained in wire cages were kept below the low-tide level has demonstrated that they will survive and maintain their condition in this zone. The experiment is being continued to ascertain what effects an abnormal environment will have on the shell-form of this species. The study of the fixation and growth of oysters at different levels and under different environmental conditions by means of observations on concrete slabs placed at selected points in different areas has been continued. Observation of the effects of clearing a portion of the rocky foreshore of "grape-weed" at two localities in the Bay of Islands has shown that this operation may be carried out with useful results for increasing the natural oyster-beds.

DREDGE OYSTERS.

During the open season—from February to September inclusive—the Foveaux Strait oyster-beds were worked by the Bluff fleet of seven steamers. The landings for the season totalled 42,176 sacks of a wholesale value (estimated at 10s. per sack at Bluff) of £21,088. The number of landings averaged 93 per month with a minimum of 76 landings in April and a maximum of 105 landings in June. The catch per day remained fairly uniform with an average of 136·8 boxes, the lowest average per landing for the month being 127·4 boxes in April and the highest 145·2 in March (2·42 boxes = 1 sack = 3 bushels). The catch per landing (or per day's dredging) was evidently influenced by the market demand which was obviously lowered by the depressed purchasing-power of consumers.

The quantities of oysters landed yearly at the Bluff for the last five years have been as follows: 1929, 39,331 sacks; 1930, 42,744 sacks; 1931, 36,538 sacks; 1932 37,484 sacks; 1933, 42,176 sacks.

As will be seen from reference to Table V, an increased quantity of oysters was canned at Bluff during the 1933 season. There was also a marked increase in the quantity exported in the fresh state from this port—105,941 dozen, valued at £966, as compared with 22,560 dozen, valued at £200, for the previous year.

TOHEROA.

After having suspended operations in 1932 owing to the depression, and more particularly to the slump in "luxury trades," the two North Auckland factories resumed canning in the winter of 1933, and a total of 453 cwt. of canned toheroa and soup was packed during the season. Six licenses for taking fresh toheroa for sale were issued in the North Kaipara district, but there is no record of the quantities obtained by these licensees. There is an increasing tendency for the general public to make use of the toheroa resources of the various beaches for their own consumption, and, generally speaking, an increasing tendency for the available stocks to diminish on the more accessible of the beds. The necessity of a more thorough system of patrol of toheroa beaches by fisheries officers for the more rigorous enforcement of the regulations and of a more comprehensive survey of the stocks is indicated.

CRAYFISH.

Although varying in the density of their occurrence according to locality and as a result of seasonal migrations, marine crayfish (or crawfish) may be found in fair abundance off the New Zealand coast wherever the bottom is rocky. In the past the principal and almost the only fisheries have been in connection with the supply of crayfish for retail in the larger towns. The demand has thus been limited, and there has rarely been any difficulty in meeting it except owing to rough weather.

Only in the vicinity of the bigger towns has anything like intensive fishing been carried on, and, although in these cases some depletion of fishing-grounds has evidently taken place, there has never been any doubt but that the potential supplies were considerably in excess of the demands made on them by the fishing. There has therefore been no apparent necessity for restrictive regulations regarding the catching of crayfish. The fishery has afforded a useful side-line to line fishermen and a means of earning a livelihood to those who have insufficient capital to lay out on the boats and gear required at the present day for the pursuit of the whole-time fisherman's calling.

Considerable developments in the crayfishing industry have to be recorded for the year now under review. These were to meet a comparatively new market for frozen crayfish tails in London. After starting in a more or less tentative way in 1932 the export trade grew very considerably in 1933. A precise knowledge of what the importer at home required was obtained through the medium of the High Commissioner's Office in London and circulated in the Dominion by the Department of Industries and Commerce. Increasing consignments were regularly shipped, and to supply the demand there was some increase in the number of boats and men pursuing this fishery and a prolongation of the fishing-season for most of the ports. Comparing this year's returns with those of the two preceding years it will be seen that the number of boats engaged was as follows:—

	Whole Time.	Part Time.
1931-32	11	115
1932-33	10	173
1933-34	3	196

These figures, however, do not truly represent the actual increase in the intensity of fishing. The boats returned as employed for the whole time are certainly not all whole-time crayfishing boats in the