

to Gull Point, 433; South Shore, Tamaki Strait, 42; Kawau, 65; Rakino, 162; Rangitoto, 258; Motutapu, 221; Motuihi, 9; Waiheke, 470; Ponui, 333; Pakatoa and Rotoroa, 16); Coromandel, 341; Great Barrier Island, 91; total, 6,219 sacks; value, £7,150.

There has been so little spawning among the oysters on the beds in the Hauraki Gulf and the Bay of Islands during the summer 1929-30 that it may be said that for practical purposes reproduction has failed to take place. Certain individual oysters examined at the beginning of November in the Bay of Islands appeared to be on the point of spawning, but no sign of reproduction having taken place was noticed as late as the middle of February, and it was feared that they might spawn so late in autumn as to be in poor condition at the usual date for the opening of the picking season. The vast majority, however, do not appear to have spawned at all. In the Kaipara there is evidence of a general spawning having taken place during the summer or autumn, but it is too early to say how far the fixing of young has been successful. This difference between the east and west coasts is doubtless due to the higher temperature of the water on the Tasman Sea side, as to which further details will be given in another place. The wet, cold, and boisterous weather experienced in December, January, and part of February has undoubtedly been the cause of the general failure of oyster reproduction.

OYSTER-CULTIVATION.

The cultivation work carried out during the year is summarized in the table given below:—

Area.	Number of "Borers" destroyed.	High-water Oyster-rock removed.	Other Work.	Cost.
		Sq. yds.		£ s. d.
I. Bay of Islands	943,500	4,648	5,985 "pupu" destroyed	231 8 4
II. Whangarei Harbour	263,500	602	80 sq. yds. of dead shell cleaned from rocks	19 1 8
III. Kaipara Harbour	1,892,000	12,244	40 yds. of capstone renewed; 5,110 "pupu" destroyed	267 11 8
IV. Takatu to Gull Point (with Mahurangi Harbour)	1,014,000	150	360 yds. new rock walls; 160 yds. capstones renewed; 300 sq. yds. of dead shell removed	59 13 4
VI. Coromandel Coast	1,280,500	64 0 6
VII. Kawau	91,000	40	270 yds. of new rock wall; 850 yds. capstones renewed	30 0 0
XIII. Waiheke	495,000	200	450 yds. capstones; 300 sq. yds. rock cleared of weed	43 0 0
XIV. Ponui	178,000	10 5 0
XVI. Great Barrier Island	209,000	1,920	95 yds. new wall; 775 yds. capstones renewed	39 13 0
Totals	6,366,500	19,804		764 13 6

A great effort was again made to get rid of the "borer" pest which is still so abundant as to take considerable toll of young oysters. When the beds are densely stocked with young oysters the "thinning" thus effected may be comparatively negligible, but with sparse reproduction the "borers" count as a very considerable adverse factor. A system of paying borer pickers by contract has resulted in a substantial increase in the number destroyed without unduly adding to the cost; but this method is not everywhere applicable. In addition to the common borer (*Thais scobina*), which is small in size but abundant in numbers, a further gastropod enemy of the oyster is being dealt with. This is the large whelk-like mollusc *Thais succincta*, commonly known by its Maori name "pupu," which is able to open an oyster by muscular suction. Over 11,000 of these were gathered and destroyed during the season.

DREDGE OYSTERS.

The fleet of oyster-dredgers at the Bluff has been maintained at the same number (five vessels) as the previous year, but with a slight increase of efficiency. The total landings for the season amounted to 39,331 sacks, an increase of 538 sacks on the previous season's total. The quality of the oysters was excellent; but occasionally an appreciable number of oysters too small to represent economical exploitation found their way to the market, and it is a matter for consideration whether it would not be advisable to alter the present legal size-limit of 1½ in. to 2 in.

TOHEROAS.

The production of canned products from the toheroa-beds of the Ahipara (Ninety-mile) Beach and the North Kaipara Beach shows an increase on the preceding year's output. A total of 6,532 cases, valued at £12,442, has been packed during the past season. Although the main beds are well stocked with large toheroas, a somewhat alarming scarcity of the younger generations was noted early in the year. It has subsequently been reported from the Ahipara Beach that a great abundance of young has appeared since the summer of 1929-30. This good propagation is probably due to the prevalence of cool and damp weather this summer.

It may be mentioned in passing that this species of bivalve is known to occur in the following localities: Ahipara (Ninety-mile) Beach, North Kaipara Beach (also at certain parts of the coast in between these two), Muriwai Beach, Otaki Beach, Ohope Beach (Bay of Plenty), near Palmerston South (*vide* Professor Benham), Riverton Beach, Te Waewae Bay.