

clearly demonstrated by fishery investigators in other parts of the world. They remain matters of obscurity with regard to New Zealand fishes, though statistical records of the fisheries, even without biological investigations, would have thrown a great deal of light on these questions. The same observation may be made with regard to our oyster, toheroa, and crayfish resources. In respect of oysters, it has not been difficult with our existing staff and with the willing assistance of those engaged in the industry at the Bluff to keep a satisfactory statistical record of the results of the dredging operations in Foveaux Strait, which prevents us from entertaining either any anxiety on the score of the rational conservation of the stocks or, what is equally undesirable, any unfounded optimism as to the possibilities of enormously augmented exploitation. There are—or have been—other oyster-beds, of less extent but nevertheless of definite economic value, in other parts of the coast, of which very little is known in the Department, which have been exploited in an uncontrolled manner and to an unknown degree. The question of their better control and possible development is worthy of serious consideration.

Exports.—The statistics provided by the Customs Department and shown in Table V give the main features of the export trade during the year. A very appreciable improvement is seen in every important category. The total value of New Zealand fish and shellfish exported amounts to £98,417 compared with £51,321 for the preceding year. The general trend over the last five years is indicated in the statement which follows:—

	1929–30.	1930–31.	1931–32.	1932–33.	1933–34.
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Frozen fish	22,760	17,678	14,098	19,584	34,738
Fish smoked, dried, pickled, or salted ..	414	1,128	638	521	1,243
Potted or preserved in tins—	lb.	lb.	lb.	lb.	lb.
Oysters	20,316	15,079	69,497	51,620	128,028
Other kinds	109,172	87,063	112,138	103,186	384,282

As to the causes of this increase, the operations of exporters have doubtless been stimulated and assisted by the lowering of prices brought about by the impaired purchasing-power of New Zealand consumers. While the fishermen's loss has thus been the exporters' gain, it must be recognized that, but for their presence and the effect of their requirements in saving the market from the losses arising from gluts, the returns to fishermen would in many cases have been insufficient to pay for working-expenses. A further important reason for the improvement in the export trade in fish is that some merchants are realizing that the key to better business is better quality. Improved methods of freezing have been adopted and more attention given to the careful cleaning and handling of fish for export than was the case under the easier trading conditions of former years. There is, however, still much room for improvements in this direction, improvements which are hindered by lack of suitable modern plants for fish refrigeration. It cannot be doubted that the trade in the future will come more and more into the hands of those who are by virtue of their equipment and organization in a position to bring the best-quality fish to the consumer, whether in New Zealand or overseas; and quality for export depends more on careful handling, rapid freezing, and proper transport than on anything else.

Among the items shown in Table V it will be seen that the greatest increase is shown for the vaguely defined category of "Other kinds, frozen." Under this heading will be included the exports to England of frozen crayfish tails, a comparatively new branch of the industry which will be the subject of further remarks later in this report.

ROCK-OYSTERS.

Oyster-picking for the 1933 season began on the 22nd May and closed on the 6th September. The number of sacks taken from the different areas was as follows: Bay of Islands, 1,762; Kaipara, 853; Hauraki Gulf, 1,802 (Takatu to Gull Point, 192; South Shore, Tamaki Strait, 56; Kawau, 144; Rakino, 168; Rangitoto, 385; Motutapu, 117; Brown's Island, 24; Motuihi, 28; Waiheke, 555; Ponui, 133; Coromandel, 300: total, 4,717 sacks; value, £5,254.

The beds in Whangarei Harbour, Manukau Harbour, on Great Barrier Island, and on Pakihi Island were not picked this season.

The quality of the oysters marketed, though not reaching the very high standard of the previous season, was very satisfactory on the whole, and the sales exceeded those of 1932 by 303 sacks. Increased use of washing-machines was made, two being in operation at the Kaipara and one at the Bay of Islands.

OYSTER-CULTIVATION.

From the necessity of keeping down expenditure this year the cultivation work was reduced to a minimum, and with the exception of the transference of oyster-bearing stone from Kawau and Mahurangi, the replacement of some of the capstones shifted in the course of this work and the deposit of clean stone at Timber Bay, Kaipara, the operations shown in the statement given below were