

Auckland maintains its dominating position as the leading port of the Dominion. Its landings have declined by 1·6 per cent. in quantity, but show an increase of 13 per cent. in value. Increases are shown for Thames (66·8 per cent. in quantity and 32·9 per cent. in value), Tauranga and district (20 per cent. in quantity and 22·1 per cent. in value), Timaru (9·2 per cent. in quantity and 26·9 per cent. in value), and Bluff with Stewart Island (31·8 per cent. in quantity and 38·9 per cent. in value). Fish landings at Lyttelton declined by 17·5 per cent., but total value showed a slight rise of 1·1 per cent. Wellington shows a fall of 34·6 per cent. in quantity landed and of 14·1 per cent. in value. Gisborne is down in quantity by 25 per cent. and in value by 15·9 per cent. Napier's landings are 23·4 per cent. less than those of last year, with a decline of 13·7 per cent. in value. The landings at Port Chalmers were 38·1 per cent. less in quantity and 11·5 per cent. lower in value.

The very interesting question as to why landings have increased or decreased, as the case may be, is one that cannot be answered simply or briefly; the results are usually due to various factors. In the case of Thames the number of vessels and fishermen engaged has declined, but the quantities of fish caught have been appreciably augmented. The marked increase has been in the landings of snapper—from 5,125 cwt. to 9,911 cwt. In some cases losses of fishing-time through the difficulty of making replacements and repairs under wartime conditions have had a substantial effect in reducing supplies. The most significant light is thrown on the figures representing fish catches when they can be correlated with the time spent in actual fishing. So far as possible, data on this factor have been collected, but the task of working them up cannot be undertaken at present.

METHODS OF CAPTURE

The quantities of each kind of fish caught by each of the principal methods of fishing are shown in detail in Table IIb.

The following table gives a general summary:—

Method of Fishing.	Quantity.		Value.	
	Hundredweight.	Percentage of Total.	£	Percentage of Total.
Trawl	69,105	23·47	137,204	28·04
Danish seine	113,033	38·39	150,522	30·76
Long- and hand-line	68,850	23·38	138,291	28·26
Set and drag net or seine	43,457	14·76	63,251	12·93
Totals	294,445	..	489,268	..

In the year 1938-39 corresponding percentages of fish taken by each method were: trawl, 33·7; Danish seine, 33·75; lines, 24·5; seine and set-net, 8·1 per cent. To-day's differences may be ascribed chiefly to wartime conditions.

WHALING, 1943 SEASON

Operations from the Tory Channel station were attended by unfavourable weather with bad visibility and further hampered by a serious mishap which caused the death of a harpoon-gunner. The total catch was ninety humpback whales, the first being captured on 12th May and the last on the 10th August. The yield of oil amounted to 630 tons.

SARDINES

The fishery for sardines or pilehards (formerly known popularly as the "Picton herring") is carried on mainly in Queen Charlotte Sound, and of late years has been growing in importance. Since they have been found to be by far the most satisfactory bait for groper, the Cook Strait long-line fishermen have made a practice of making periodic visits to Queen Charlotte Sound to catch sardines, which are then kept in cold storage till required. With the establishment of the fish cannery at Picton one boat has confined its operations exclusively to sardine-fishing for the cannery, though a small proportion of its catches has occasionally been made available to the line-fishermen for bait. The cannery has been in operation since 1942. During the past year the industry has been considerably hampered by the uncertainty of supplies and the decline in the quantity of the fish landed. Returns of the sardines for the year 1942-43 totalled 8,228 cwt.; the corresponding total for this year is 5,679 cwt., a decline of 30 per cent. Pelagic fish of the sardine kind are particularly liable to variation in their local and seasonal distribution, and the effect of this on an industry depending on them for its raw material is likely to be intensified when supplies are drawn from a very restricted fishing area and with very limited fishing-power. It has been stated that the fish have often been present in the Sound, but have been so widely scattered as to be catchable only in small quantities and at the expense of considerable effort. The movements and density of the sardine shoals must necessarily be due to natural causes; probably the distribution of the small organisms (plankton) on which they feed; and this again will depend on the occurrence of the microscopic plant and other organisms on which the animal plankton must feed, which will be affected by such physical factors as the presence of nutrient salts in the water, on temperature, and on sunshine; and all of these may be and probably are due to other than local causes,