

PROSECUTIONS.

During the year prosecutions for offences under and breaches of the various Acts administered by the Department were taken as follows: Fisheries Act, 47; Harbours Act, 10; Inspection of Machinery Act, 49; Shipping and Seamen Act, 58.

G. C. GODFREY,
Secretary.

MARINE FISHERIES INVESTIGATION STATION.

SIR,—

Portobello, 5th May, 1926.

I have the honour, on behalf of the Board of the Portobello Station, to forward the following report of the work carried on during the year ending 31st March, 1926.

As stated in last year's report, the introduction of foreign fishes and crustacea into these waters has ceased for the time being, and only one female lobster remains in the pond. The circular issued by the Marine Department in 1922, offering a bonus of £5 per pair for live European edible crabs (*Cancer pagurus*) or live lobsters (*Homarus vulgaris*) has not been taken advantage of. It is advisable, however, to keep the offer open, as it is always possible that some enthusiast may be met with, especially in the engineering staff of outward-bound steamers from Britain, who may feel inclined to endeavour to bring out some of these crustaceans. All the earliest shipments of lobsters were made in this manner, and several were successful.

Investigations into the occurrence and distribution of sprats and pilchards along the coast have not made satisfactory progress; the fish have not been in any numbers to observe.

In his report to the Board on the work of the station, Mr. W. Adams, the curator, states that, as in past years, the stomachs of all fishes caught, whether by the trawl, seine net, or line, were examined and their contents noted. He adds: "The sprats and pilchards were not seen in numbers on the surface, though a sharp lookout was always kept. During June these small fish were no doubt plentiful on the bottom off Cape Saunders, as all large fish caught were found to contain large quantities of sprats. The nets were put out, but the fish were invariably too deep, as none were caught in the meshes close to the lead-line. Of the larger fish caught in the same locality during July, none contained sprats or pilchards, the stomach-contents being large quantities of whalefeed (*Munida subrugosa*). During October sprats were reported to be in large shoals north of Moeraki. At the latter part of the same month one of the local fishermen reported that small numbers were seen on the surface at Sandfly—that is a little to the south of Cape Saunders. These fish have also been reported as abundant pretty well all the year round at the Nuggets, but of course the resources of the station do not permit of our making investigations so far from the station, as the insurance on our launch limits us to ten miles from Otago Heads. The only method would be, if satisfactory evidence were forthcoming of the occurrence of these fish, for Mr. Young to proceed to the Nuggets overland and arrange to go out in local boats. The reports usually received are too vague to be accepted as good evidence: they can only be taken as indications of the general occurrence of these small fish. The record of the last three years shows how very erratic is the occurrence of these clupeids on the coast. At times in past seasons they have been recorded as present in enormous numbers, but for the past three seasons they have been chiefly conspicuous by their absence. This is similar to what is found to be the condition in Australian waters, and shows that fishing for pilchards and sprats in these southern seas would appear to be only an occasional and very erratic occupation, except, perhaps, in one or two localities. This question requires further examination, for a good sardine industry would be a valuable addition to the fishery resources of the Dominion. In this connection it may be noted that a paper "On the Occurrence of Clupeids in New Zealand Seas," prepared by Mr. Maxwell Young, the Biologist, and the Chairman, was read at the Science Congress held by the New Zealand Institute in Dunedin in January, and this will probably be printed in the forthcoming volume of the Institute Transactions.

Referring to the general conditions of the past season, Mr. Adams states that "the work carried out with dredge, trawl, and hand-lines on the offshore fishing-grounds has not been satisfactory, owing to the unsettled weather which prevailed throughout the greater part of the year. During April and May fine weather was experienced and we were able to go out regularly. Towards the latter part of June stormy weather set in, and throughout the remaining months of the year unfavourable conditions continued to prevail. There has been an exceptional scarcity of flat fish on the local grounds. All the trawlers that were able to make the journey have been going as far south as the Nuggets, where large hauls of soles have, for the past seven years, been caught. During the past year only two small trawlers have regularly worked the local grounds, and their catches have been the poorest on record. Throughout the winter months the spells of fine weather were too short to allow the grounds which the fish were on to become clear of weed. During October flat fish were more plentiful than at any other time of the year. Fair numbers were taken in the shallow water of Blueskin Bay, but in the deeper water some three miles north-east and east of Otago Heads the grounds were found to be almost bare of fish. On these grounds a greater variety of fish is usually caught than on the grounds well off shore."

Since his appointment as Scientific Adviser to the Fisheries Branch of the Marine Department it has seemed desirable to the members of this Board that Mr. E. A. Hefford should be appointed a member, in order that the station might be brought more directly into touch with the Department, and that its work should be definitely guided by his scientific advice. After discussions between the Chairman, Mr. Hefford, and Mr. G. C. Godfrey, Secretary to the Department, this course was laid