

Considerable public interest is shown in the Station, and large numbers of visitors inspected the aquarium. This popularity of the aquarium is due largely to the fact that the tanks have been kept well stocked. In fact, during the past year, the live specimens of all varieties of fish and sea-life have been more numerous and of greater variety than in the past few years.

EUROPEAN LOBSTERS.

At the date of the last annual report our stock of lobsters amounted to fourteen males and eleven females. This stock is now reduced to twelve males, nine females. One male cast during August when the temperature was at 5° C., and died three days after casting, the others died from injuries received during casting. Egg-bearing females commenced to hatch out their broods early in November, the last batch hatching in December. The estimated number of larvæ liberated is 134,000, as against 105,000 last year. Owing to our straitened circumstances it was decided that this year we would not make any further attempt to rear young lobsters in the hatchery. The larvæ was allowed to escape into the harbour. This yearly release of a large number of fry we hope will eventually lead to some proportion escaping their natural enemies and establishing the lobster in our waters. There are other methods of release of the fry we would like to try which would give a greater chance of success, but this work must await the time when finance will warrant the expense involved. One method within our means it is proposed to start at once. The present stock have all cast their shells and are in a fine healthy condition.

HYDROGRAPHIC WORK.

Temperature records of air, ponds, and harbour have been taken daily by Mr. Adams throughout the year, but it has been impossible to continue outside the harbour these records and the salinity records. This is regrettable, seeing that it makes a break in the continuous series of observations that we have carried out in the past. Weather reports are sent each week to the Meteorological Department.

Wintry conditions set in somewhat earlier than usual. On the 25th May the temperature of the sea-water was down to 7° C.; three days later 5° C. was recorded. It was then necessary to start heating the water, and this was continued until 19th August. Kelpfish in one of the outside ponds died from the low temperature. Red cod and pigfish survived although the pond temperature dropped to 3° C. The highest temperature recorded during the year in the lobster pond was 19.2° C. during January. During the periods when the temperature was low the fish ate very little food, but the lobsters were feeding freely.

GENERAL WORK OF THE STATION.

The supply of food for the lobsters and fish in the aquarium has been maintained by the use of set nets placed at suitable spots within a short distance of the Station. By this means also a number of attractive specimens were secured for the aquaria. Seine-netting and line-fishing were also carried out for the same purposes when the assistance of Mr. Howes was available. One of the two remaining crayfish-pots was used to secure small fish and other specimens and was specially covered with fine mesh for this purpose. Unfortunately, this was lost in heavy weather owing to the breaking of the float-line which had perished with age.

The launch and dinghy were placed on the slip twice during the year for a complete painting and overhaul, and the launch moorings were brought ashore and strengthened where required before replacement.

The iron frames of the aquaria-tanks were cleaned of rust and painted. A considerable amount of work was done to the jetty, this being necessary to make it safe. We wish specially to thank the Otago Harbour Board for renewing four piles at the end of the wharf and providing a quantity of extra timber for strengthening the jetty. Mr. Adams is carrying out single-handed this repair as opportunity offers.

The paths, including those of both cottages, have been top-dressed with tar and sand. The trees and live fences have been cut back.

Both the seine net and set-net which have been in constant use for twelve years are in bad condition, and will shortly have to be renewed.

The outside ponds have been cleaned and cleared of weed and mud. This was a very heavy job, and approximately 5 tons of material had to be shifted from one pond. A lot of this work would be unnecessary if an extra wall of rock could be placed in this pond to prevent the washing-down of earth from the face of the cliff.

BIOLOGICAL NOTES.

During the summer months Otago Harbour was visited by exceptional quantities of whale-feed and shrimps.

Shrimps (*Nyctiphanes* sp.) made their appearance early in November, swimming on the surface until the end of that month. They were abundant in the harbour for several months, but remained on the bottom. They were so numerous in November that they were thrown up in quantities on the beaches and gulls and fish fed freely on them.

Great shoals of large-sized mullet followed the shrimps into the harbour and also small mullet, red cod, small terakihi and moki, and lesser quantities of warehou and large moki. Towards the end of March pilchards were about in fair quantity. Red cod, during the latter part of the season,