

METEOROLOGICAL BRANCH.

During the year the work of the Meteorological Branch has been under review, and a more definite working basis has been adopted and put into operation.

A large increase in the cost of the services performed by the Telegraph Office necessitated a review of the reporting and receiving stations. After considerable negotiations, but at an increased annual cost, the service was maintained.

An equitable distribution of this cost against the Departments concerned is a matter for further consideration.

The principal functions undertaken in this branch of the Department's operations are,—

- (1.) Preparation and distribution of morning and afternoon forecasts.
- (2.) Preparation and distribution of daily weather report.
- (3.) Forecasting and issuing telegraphic notification of special storm or flood warnings.
- (4.) Broadcasting evening weather report to shipping.
- (5.) Week-end weather reports furnished to the Press or others as asked for.
- (6.) Special or extended weather reports in respect to any locality or district furnished as required.
- (7.) Collection and publication of rainfall and climatological statistics.

The staff consists of—(1) Meteorologist, (2) Assistant Meteorologist, (3) three clerks, (4) eight paid observers, and (5) 461 honorary observers.

To what extent the present services are capable of improvement, or in what direction they fall short of the Dominion's requirements, is being carefully investigated.

The policy of the Department is to obtain its data per medium of honorary observers—and the thanks of the Department are due to those who undertake the work.

The policy of economy in administration has prevented any general inspection of observation stations, but it is considered this difficulty can be met for the time being by the issue of additional instructions.

Further expenditure will in the near future require to be undertaken to provide new barometers and thermometers at many of the reporting-stations.

The reports from East Cape Lighthouse, which were suspended during the removal of the lighthouse from the island to the mainland at Matarehua, have been reinstated.

The development of radio telegraphy is being carefully watched.

The messages broadcasted nightly from two stations in the Dominion to shipping generally is the adoption of a principle which it is hoped to enlarge. Arrangements are under consideration to supply the wireless stations at Awanui and Wellington daily with general weather data, so as to be able to answer immediately any inquiries from vessels approaching the Dominion's coast-line.

The question of linking up with the weather-reporting services in the southern Pacific under the control of the External Affairs Department is also receiving consideration.

The development of aviation for commercial purposes in the Dominion that was anticipated has not materialized, and a number of instruments purchased therefor in London after the war have not been utilized.

The location of this branch of the Department is under consideration by the Government Office Accommodation Board.

I have, &c.,

A. D. PARK,
Secretary.

The Hon. the Minister of Marine, Wellington.

Sir,—

Dunedin, 5th May, 1923.

On behalf of the Board of the Portobello Marine Fish-hatchery I beg to forward herewith the report of the work carried on throughout the year ending 31st March, 1923.

The scope and extent of that work is steadily increasing, and this is partly due to the issue of the circular sent out by the Board at the commencement of the year, which drew attention to the capabilities of the station to supply museums and teaching institutions with zoological material.

From the report of Mr. W. Adams, the curator, which shows the regular routine work of the station, the following extracts are taken :—

"Our stock of turbot still stands at fourteen, none having died during the past four years. Although these fish are usually keen for their food, and are in the best of condition, they do not increase in size after reaching 24 in. in length. On several occasions during the summer months the largest fish were taken out of the tank and examined, but no signs of development of the ovaries could be detected in any of them. All are free from fungoid disease.

"The stock of lobsters consists of three males and two females; there have been no deaths during the year. The females were examined early in December, and both were found to be carrying full batches of well-developed eggs. Both broods were hatched out in January, and I estimate the number of larvæ to be 10,000. The male lobsters had cast their shells before the end of November, but so far we have not found the shell of a female since the larvæ were hatched out.

During August practically all our time was taken up in overhauling and fixing the hatching-boxes, and collecting and hatching out sole and flounder eggs. The weather during the spawning season was exceptionally stormy, and the flatfish very hard to locate, being continually on the move. The first batch of sole-eggs were brought to the station on the 20th August, and ten days later the fish taken in the trawl had spawned.