

The temperature of the water in various rock-oyster localities in the Bay of Islands and in the Hauraki Gulf is being regularly taken by the local Inspectors. It is expected that from a continuous series of these observations some light may be thrown on the causes of variability in the fattening and propagation of the oysters in different localities and in different years, and that information may be obtained to afford a basis for improved cultivation methods.

In connection with the Foveaux Strait oyster-fishery the special survey and biometric work carried out last year has been followed up by a scheme for obtaining statistical returns from the dredging-vessels showing the quantities brought in from the various beds.

Toheroas.

Additions to the material required for a study of the rate of growth and the relative abundance of different generations of this bivalve have been made by the measurement of samples from the North Kaipara, Muriwai, and Otaki beaches, and a preliminary study of the food of the toheroa has been made, but a comprehensive investigation of the biology of the toheroa, its distribution, rate of growth, feeding and spawning habits, still remains an undertaking for the future. The results obtained confirm the indications from last year's observations, that the average annual increase in the length of the shell of this species is approximately 1 in. It is also found that the species spawns on the northern beds in late spring or early summer, and feeds and grows most vigorously in autumn and winter.

Other Fishery Research.

It is a matter for satisfaction to be able to record an extension of scientific research on fisheries subjects in the Dominion during the past year.

Dr. H. J. Finlay, with the assistance of a grant from the Department of Scientific and Industrial Research, has been making an investigation of the food of various marine fishes, and has examined samples of plankton taken off the Otago coast. He has also made a preliminary investigation of the otoliths and scales of certain fishes with a view to assessing their value for purposes of age-determination. The material has been provided by the Portobello Fisheries Investigation Station.

Mr. J. S. Phillipps, B.A., who was appointed to the Fellowship of Victoria University College for Fresh-water Fishery Research, founded by means of a grant made by the Wellington Acclimatization Society, has been investigating the fauna of rivers in the Wellington District. More recently a similar scheme of investigation directed towards the elucidation of trout problems in Canterbury has been commenced by the co-operation of the North Canterbury Acclimatization Society and the Biological Department of Canterbury College.

With the assistance of a small grant from the Marine Department, Mr. L. T. Griffin, of the Auckland Museum, has continued his investigation of the big-game and other fishes of the Auckland District, some of the results of which have been published in the "Transactions of the New Zealand Institute," Vol. 58, (Parts 1, 2). In the same volume appears a paper on New Zealand fishes by Mr. W. J. Phillipps, of the Dominion Museum.

Professor Johannes Schmidt, of Carlsberg Laboratory, Copenhagen, the eminent authority on the fresh-water eels of the world, has published a paper on the "Fresh-water Eels of New Zealand" in the "Transactions of the New Zealand Institute," Vol. 58, Part 4. Much of the material for this research was provided with the help of collectors in various localities through the agency of the Marine Department and through the co-operation of the staffs of the Dominion, Auckland, Canterbury, and Otago Museums. In the same number appears a paper by Mr. D. Hope, Curator of the North Canterbury Acclimatization Society, on "The Whitebait (*Galaxias attenuatus*); its growth and Value as Trout-food."

During the year the Department has published, as Fisheries Bulletin No. 1, a "Bibliography of New Zealand Fishes," compiled by Mr. W. J. Phillipps, of the Dominion Museum. This bibliography will be of considerable assistance to any one interested in the general study of New Zealand fish fauna. It is proposed to follow this with a series of bulletins on fishery subjects of a more special character as the material from different inquiries and investigations can be collected and worked up into a form suitable for publication.

A report by the Chairman of the Board of Management of the Marine Fisheries Investigation Station, Portobello, on the work of that institution has been submitted to the Department.

I have, &c.,

A. E. HEFFORD,

The Secretary, Marine Department, Wellington.

Chief Inspector of Fisheries.

MARINE FISHERIES INVESTIGATION STATION.

SIR,—

Portobello, Dunedin, 5th June, 1928.

I have the honour to submit the report of the Marine Fisheries Investigation Station Board for the year ending 31st March, 1928.

On the 9th August last Mr. C. S. W. Chamberlain, who has held the position of Honorary Secretary and Treasurer to the Board since its inception in 1903, asked to be relieved from these duties. The Board accepted his resignation with regret, and expressed its great appreciation of the valuable services rendered by him during his long association with the establishment and work of the station. Mr. Chamberlain remains an active member of the Board. Mr. W. G. Howes has been elected to the position of Honorary Secretary and Treasurer.