Wider use of these services is still desirable, for it is apparent that in some districts fisheries revenue is often spent very speculatively, and could be spent less so if societies were prepared to ask for the preparation of summaries of evidence on questions at issue.

Fishery Officers' Training Scheme.—Hitherto there have been no special facilities for training young men who may desire to make a career as Fisheries Officers of acclimatization societies or of Departments exercising similar functions. Present district employees have acquired some practical experience in hatchery work and as Rangers, but have not had the adequate basic training which would have enabled them to give the best service and justified their ultimate advancement to more remunerative positions.

It has now been arranged that the Fisheries Branch shall undertake the training of suitable cadets, seconded by the Department of Internal Affairs, for ultimate employment in the Rotorua and Southern Lakes Districts, and a comprehensive training course has started.

There have already been inquiries from individual acclimatization societies to learn if the scheme could be extended to include trainees for their districts. The Department is entirely sympathetic to any move which would assure a standard training for future employees of all districts, but at present awaits evidence of more general support from acclimatization societies and further information as to normal staff-replacement needs.

Fresh-water Research

With the completion of the reorganization referred to in last year's annual report, the research staff have, during the past year, been able to concentrate on the development of the investigations which were then in preparation.

The main fields of work have been :—

Eels.—The ultimate object of the present phase of the work is to determine the extent of the damage which eels may do to trout stocks both as competitors for food and by preying upon the trout themselves. This knowledge is necessary if we are to decide to what extent the resources of fishery-administering bodies may be economically used for eel control. As a first step, data are being collected regarding the quantities and sizes of eels which inhabit waters of various types in different parts of New Zealand. This work has been commenced in the Southland district, where the results of some commercial fishing were available for study and where valuable assistance was provided by the Southland Acclimatization Society. It will in future seasons be extended to other districts. As a beginning, all the available data regarding the trapping of eels for canning in 1946–47 were examined and yielded useful information regarding the quantities removed from various waters by different degrees of trapping effort. Since the information was often approximate and few of the waters were completely trapped out, it was decided to undertake further trapping in the 1947–48 season to obtain more detailed and accurate results. This was done by an officer of the Marine Department, assisted by the staff of the Southland Acclimatization Society. The results show that the amount of cover is one of the principal factors in determining the variations in abundance of eel populations, both from point to point along one and between one river and another. In order to make comparison between rivers of different sizes possible, all results are being expressed in pounds of eels taken per acre of water. With complete trapping, catches for long sections of river have ranged between 15 lb./acre and 90 lb./acre, with local concentrations as high as 400 lb./acre. Commercial trapping in rivers with more abundant cover gave results as much as 500 lb./acre over long stretches. The highest concentrations of eels have, however, been found in the small inland