

ANIMAL ECOLOGY SECTION

Officer in Charge : Dr. K. A. Wozniczki

The establishment of the Animal Ecology Section was approved by Cabinet on 17th July, 1948. The first meeting of the Animal Ecology Research Committee took place on 17th November, 1948. The Committee includes the following representatives : Dr. R. A. Falla (Royal Society of New Zealand), Professor B. J. Marples and Mr. F. R. Callaghan (Council, Department of Scientific and Industrial Research), Mr. A. P. O'Shea (Federated Farmers of New Zealand), Mr. W. J. McGibbon (South Island Acclimatization Council), Mr. K. R. Allen (Marine Department), Mr. D. A. Campbell (Soil Conservation and Rivers Control Council), Mr. W. C. Barry (Department of Agriculture), Mr. C. M. Smith (State Forest Service), Major G. F. Yerex (Internal Affairs Department), Mr. P. McLean (North Island Acclimatization Council), and Dr. W. M. Hamilton (Department of Scientific and Industrial Research).

The survey of introduced mammals was completed by the end of 1948. It is intended that the survey should be published as a departmental bulletin. This bulletin will include the sixteen mammals surveyed in the original cyclostyled report completed in 1947, as well as the survey of the remaining thirteen introduced mammals completed in 1948.

A preliminary field survey of bird damage in orchards of the Nelson district was completed. A summary of Mr. Peter C. Bull's work on the feeding habits of the black-bird in the Auckland area was prepared, and a paper for publication will be completed shortly.

At its first meeting the Animal Ecology Research Committee approved the general policy that attention should be concentrated on the rabbit problem, first priority being given to a detailed study of the biology of the rabbit. In order to select a suitable experimental area (following the approval by the Animal Ecology Research Committee of the Section's research programme), Hawkes Bay, North Canterbury, and North Otago have been inspected. This field survey also provided an opportunity of studying various aspects of the rabbit problem in Hawkes Bay.

In collaboration with the Botany Division, a report was prepared on rabbits and their effect on the vegetation of Mount Highfield, Waiau. A report on the effect of rabbit poisoning on game-birds was also prepared, in collaboration with the Dominion Laboratory. One member of the Section began an Honours thesis this year at Victoria University College on the parasites of the rabbit.

A number of specimens of various predatory mammals were collected during the year and the skins preserved. This material and other data will in due course be a useful basis for a taxonomic study of these species.

Two members of the staff took part in the Fiordland Expedition. The collaboration of Dr. Olaus J. Murie, scientific leader of this expedition, will be of great value to the future work of the Section. The Seventh Pacific Science Congress provided an opportunity of meeting several wild-life experts and ecologists from Australia, Canada, and the United States of America, and of discussing problems of common interest. The possibility of some prominent ecologists visiting New Zealand again, and the exchange of personnel, were also discussed.

AUCKLAND INDUSTRIAL DEVELOPMENT LABORATORIES

Director : Mr. J. B. BROOKE

With the arrival of more equipment from overseas, and the securing of slightly more space, the final establishment of the laboratories is in sight. The Electrical Test Laboratory should be set up within three months, and the Tinsley potentiometer installed and calibrated. A start has been made on the Mechanical Test Laboratory, which is now available for a limited range of work, although there is likely to be some delay in obtaining the 50-ton Universal testing-machine.