

Large tracts of new country, much of which was previously unexplored, was thus brought within the scope of surveillance and operations where necessary, and it can be accepted that the whole of this vast region of fiords, lakes, rugged mountains, rivers, and forests is now known to members of the staff and included in the general plan of campaign.

With the exception of the "new" country, this area was subjected to operations during the season 1934-35, and it was most gratifying to note on this occasion that on all areas previously worked the degree or intensity of infestation was very materially less than in 1934-35. Although the numbers killed during the season just ended were as high as in 1934-35, this result was achieved by improved methods and the inclusion of "new" country, and there can be no doubt that such inroads have now been made into the "capital" stock of deer that very material progress has been made towards the saving of this National Park from the danger that has threatened it.

In the Lake Wakatipu region, which is separated from the National Park by a non-infested area, improved technique and the greater skill of the personnel engaged resulted in a marked decrease in the numbers of fallow deer, which do so much damage there while the already small numbers of red deer were further greatly reduced.

*Wapiti*: The separate campaign against this species in the country extending from the western shores of the northern half of Lake Te Anau to the west coast from Caswell Sound to Bligh Sound is worthy of special mention. These animals, the progenitors of which were liberated at the head of George Sound in 1905, have increased very considerably in numbers and now inhabit the whole of the region mentioned above, and their ultimate spread throughout the whole of the National Park was inevitable had preventive action not been taken. In addition to accounting for one hundred wapiti and one red deer, the party explored much country which was previously either unexplored or had been visited by only a very few individuals and the area and degree of infestation was ascertained. The time at the disposal of the party was, unfortunately, very limited, but much information which will prove of value in future operations was obtained.

It was ascertained that only a very few wandering red deer have penetrated to this region, and are accountable for the few red-wapiti hybrids to be found there, and there is good reason to hope that the operations in the red-deer-infested country near Lake Manapouri will frustrate the previously threatened infestation of the large portion of the National Park lying between Lake Manapouri and the northern boundary of the park to the north of Milford Sound.

*Stewart Island*.—Early in the season a series of experiments were conducted with a view to discovering, if possible, some more efficacious method of dealing with the wary bush-dwelling Virginian deer than shooting, or, if no such method could be discovered, of investigating all possible means whereby the technique and tactics of the shooting method could be improved. The attempt to discover an alternative method to shooting ended in failure as far as Stewart Island is concerned, but some data which it is anticipated will be of value in other localities were obtained.

In the latter field of investigation a considerable degree of success was achieved by discovering—(1) The strategical value of tracks and permanent base-camps; (2) that specially trained dogs could be employed with advantage; (3) improved tactical methods. These lessons are now being applied: some tracks have been cut and others will be cut as required, permanent hut and camp sites have been selected, dogs are being obtained, and a plan has been put into operation that, although results will not be spectacular, gives every promise of producing ultimate control.

*Kermadec Islands*.—In connection with the establishment by the Government of a radio-station on Sunday (or Raoull) Island, in the Kermadec Group, this Department sent a field officer with the expedition to investigate means of dealing with the goats, cats, and rats which almost nullify attempts at growing fruit, vegetables, and grain, and are inimical to the welfare of the bush and bird-life.

A very wide range of experiments were carried out by this officer. The good work thus started by this Department's officer has been carried on by an officer of the Lands and Survey Department, and a further one hundred and fifty goats were killed by the end of May.

#### *General Progress and Results.*

Reference has already been made to the fact that, in the case of the Fiordland National Park, there was abundant evidence to show that earlier operations there had proved very successful, in that the natural increase during the whole of the intervening period had fallen considerably short of overtaking the reduction then effected. The further, and even greater on a percentage basis, reduction effected this season means that the back of the job has been broken in this region, and the establishment of a more permanent and easily conducted method of control is now possible.

In the case of Stewart Island it was found that the red deer had, in spite of the long period since the previous operations—1930-31—never recovered from the reduction in their numbers then effected.

The campaign against the Virginian deer can be regarded as having just started this season, and it is too early to forecast its result. It has, however, been definitely established that this species is not present in such numbers as is often represented, as they inhabit the coastal strip only, and, although thinly scattered along almost all the coast-line, are not in any large concentrations in any locality.

In the case of the Lake Waikaremoana area, although the small-scale winter operations of seven years ago abated the menace for some time, the lapse of such a long period without a resumption of this undertaking means that the more comprehensive campaign of this season can be regarded as a new beginning.

The other North Island campaign conducted this season was entirely on country not previously subjected to operations.

#### *Personnel.*

It was again found that, although there was an abundance of men applying for employment on deer-destruction work, it was difficult to obtain a full supply of men of the skill, stamina, and energy essential in this undertaking.

It is pleasing to be again able to report the absence of any fatal accident or any other than a very few injuries of the most minor nature.