

Statistical Records.—Much valuable information has been gained from the monthly records compiled in connection with temperatures of waters, biology, meteorology, trout-food, &c.

Tagging.—A trap was again built in the Waingaihe Stream at Rotorua. Fish to the number of 100 were tagged. One tagged fish was taken in Rotorua at the west end of the Ohau Channel.

Culling.—In view of the generally good condition of fish no extensive culling was undertaken. Males numbering 221 and females 135 were destroyed.

Facilities for Anglers.—The popularity of the huts provided at the Department's Camping-ground on the Tongariro River has been again demonstrated by the number of anglers who have patronized them. Already huts have been booked for various periods next season.

At Taupo it was possible by a certain amount of clearing and filling to have made available sites for boat-sheds. The evidence of the demand for such sites was shown in the way in which they have been readily taken up. Roads and tracks leading to numerous fishing waters were kept in repair and blackberry and scrub cut back.

Ranging.—The Department's Rangers were actively engaged in their duties during the year.

Successful prosecutions numbered twenty-five, and fines amounted to £67.

Opossums.—Seven permits and thirty-one licenses were taken out for the open season of two months. Royalty was paid on 7,239 skins.

Deer.—With no protection, week-end parties and others have made a practice of going after deer. The policy of granting permits to accredited persons to enter the sanctuary at Waikaremoana for deer, wild pigs, and wild cattle has been continued, and the returns indicate that 105 deer, fifty wild pigs and twelve wild cattle were shot by the permit-holders.

DEER.

The Year's Operations.

The Department had parties operating against deer in two localities (1) South Westland and (2) Waimakariri and Hurunui watersheds, and accounted for 8,917 deer and chamois.

In South Westland work was commenced about the middle of October. A total of 4,891 deer were killed and 1,189 skins saved. This may be regarded as highly satisfactory, as nearly 5,000 were killed in the same locality the previous season. Eight hunters comprised the main personnel of the parties engaged. The average number of deer killed per man this season was slightly lower than for the previous season, but the value of operations cannot be gauged entirely on numbers of deer killed, but rather from the point of view of the proportion of the deer population destroyed, thus giving a lasting benefit in abating the nuisance. Moreover, more remote and difficult country was worked this season.

As was to be expected as a result of last season's operations, deer were found to be not nearly as numerous in the country previously covered, and after subjecting the area to one shoot the parties moved on to new ground in the Okuru, Ngatau, Franklin, and Turnbull Valleys, and over the passes out of the western side of the watersheds of the Clarke and Landsborough Rivers into those of the Moeraki, Paringa, Otoko, Mahitahi, and Karangarua Rivers. It was found that, while the area wherein excessive damage had been done to the bush continued for some distance beyond the sphere of last season's operations in each direction of new penetration (*i.e.*, south, west, and north), the limit of intense infestation was eventually reached, after which the forest was found to be damaged to only a comparatively slight extent, being inhabited only by the pioneers of the spread which (prior to operations) was being produced by the excessive population by deer of the original habitat of this herd. It having been proved that the greatest factor in inducing the spread of deer is this overpopulating of the "home forest," it is pleasing to state it has been established that, inversely, not only do intensive operations check that spread, but actually result in the ultimate diminution of the stock of deer in areas contiguous to the "home forest." Some areas are more attractive to deer than others, and it is reasonable to assume that such is the case with the "home forest," where the progenitors of the herds first established themselves. These, becoming more attractive with an abundance of feed as the result of intensive operations, produce the effect referred to. This conclusion has been arrived at after close observation in many localities and is important, as it facilitates the ultimate control of deer by permitting of their destruction in areas that are more accessible and with which the Department's operatives have become familiar during earlier operations and by scattered deer becoming thus concentrated. It has also been found that in such localities as South Westland, where the area of bush-clad country greatly preponderates, the deer do not leave the bush for the open "Tops" in great numbers until the summer is well advanced. This fact is being taken full advantage of by increasing the personnel and working the higher country with greatest intensity during the latter part of the summer and the early autumn.

The Waimakariri River Trust, having approached the Department with a request for co-operation by engaging in operations in areas contiguous to the Waimakariri River watershed simultaneously with operations which the Trust proposed conducting in the area under its control, an inspection of deer country in both the Waimakariri and Hurunui Rivers watersheds was made during July. The Department's Inspector then attended a conference at Christchurch on the conclusion of his investigations, when the Trust asked the Department to permit its deer-destruction organization to undertake the whole of the operations, and for their control and supervision to be placed at the Department's disposal. On the Trust agreeing to contribute the sum of £200 to the cost thereof, the Department acceded to the request and agreed also to operate in the watersheds of the Hurunui and Hope Rivers. Operations commenced at the beginning of September and terminated at the end of April. They can be regarded as very successful, as, in spite of the facts that the area was not one of