

the most heavily infested and that the Trust had anticipated that about one thousand deer would be killed in the Waimakariri River watershed, the following results were obtained :—

In Waimakariri River watershed : Deer killed, 2,885 ; chamois killed, 17 ; skins recovered, 1,306.

In Hurunui and Hope Rivers watersheds : Deer killed, 1,124 ; skins recovered, 542. A total of 4,026 deer and chamois killed, and 1,848 skins recovered.

Operations were commenced simultaneously by a party of three men on Mount White Station, in the Waimakariri River area, and one party of two men in the valley of the north branch of the Hurunui River above Lake Sumner. The spheres of operations of these two units differ so widely topographically, with regard to the proportion of bush-clad country, their degree of infestation, and the habits of the deer in each, that it is necessary to refer to them separately.

The operations in the Waimakariri area being commenced so early in the year, all high country was then under snow and work was confined chiefly to the lower and more sheltered sheep-grazing country for the first two months.

In the valley of the Esk River, which comprises a large part of "Mount White," there is little bush, and the deer live at that time of the year on scrub-covered slopes and sunny "faces," where good results were obtained. As the season advanced and the snow receded, the party maintained contact with the deer by pushing on into the higher country above the timber-line in the vicinity of the Candlesticks, and finally concentrated on the main divide at the sources of the rivers during February, March, and April. While the foregoing was the general trend of the tactics pursued, every sector was revisited at least once and most of it twice, not being left until practically no deer were seen, with the result that an exceedingly large proportion of the deer population was killed. By the end of November it was found that it would not be possible to thoroughly cover the whole area in the season with the personnel then engaged, so the party was increased to four hunters and one packman-hunter. Towards the end of January the officer in charge of the party and one other man were taken into the region lying between Arthur's Pass and the head of the Waimakariri River. These two men remained and operated in this area for a month, after which they returned to the Poulter Valley and took part in the general move towards the main divide. Deer were found to be comparatively scarce in the Arthur's Pass—Upper Waimakariri area, but as a very large proportion of the few seen (and fifteen chamois) were killed, the effect of the expedition would be beneficial. In the upper bush-clad portions of the valleys of all the rivers and streams rising in the Candlesticks, the Dampier Range and the neighbouring portion of the main divide, considerable damage had been done by deer to the bush and alpine vegetation above the timber-line. A disquieting feature noted was evidence of very considerable numbers of deer having "wintered" in small sheltered hollows just above the timber-line where, apparently, having been hemmed in by snow for considerable periods, they had completely killed the snow-tussock and other vegetation in patches of considerable size. All the evidence pointed to this herd having increased very rapidly since its establishment in 1907, and the damage caused, though severe, is comparatively recent in its present intensity. The damage to alpine vegetation referred to has not, therefore, yet had time to reveal its full potentialities for inducing serious erosion, but this would undoubtedly have soon occurred had these operations been long postponed. The amazing increase of this herd can be understood when the Inspector states that nowhere else has there been such a high rate of fecundity combined with such a low rate of mortality amongst juveniles. In fact, every adult hind of breeding age had a strong, healthy fawn at foot after the end of the "calving" season. The manager of Mount White Station has advised since the operations terminated that deer are now very scarce and feed is far more abundant. Operations were actually extended over the main divide and down the valleys of the Teremakau River and its tributaries for some little distance so as to deal with the deer which regularly cross the range.

In the Hurunui River area, owing to the fact that the sides of the valleys are entirely bush-clad, the deer, at the time operations were commenced, were living chiefly in the bush and the thick scrub immediately above the timber-line. After once going over the Hurunui country the party moved into the valley of the Doubtful River, near the Lewis Pass, where they resumed at the point where the operations of two seasons earlier terminated. The country was then worked systematically to the south, the party returning to the Hurunui towards the end of February, and thence working out over the main divide and making contact with the party in the Waimakariri area in the vicinity of Harper's Pass. In this sector, also, operations were extended on to the western side of the divide, so as to include the upper portions of the watershed of the Ahaura River. In comparison with the areas to both the north or south thereof, deer were not very numerous in the watersheds of either Hope or North Hurunui Rivers, and it is apparent that this area is the actual point of contact of the herds which had their origins in the Nelson and Poulter River districts, and is, therefore, the last point to feel the full effect of the increase and spread.

Visit to South Westland.

It was very gratifying to me to have had an opportunity of accompanying you on your visit to South Westland to gain first-hand information as to the necessity for a vigorous continuance of the campaign against the deer. It revealed the amount of organization necessary for the continuance of operations on the extensive scale to which they had developed. A most encouraging feature was the fine spirit in which the men were carrying out the work entrusted to them : they were indeed rendering a national service under most difficult conditions.

Deer-skins.

The policy of making payments to private commercial hunters where difficulty is experienced in disposing of skins has been continued, and the skins are marketed at the same time as those saved by departmental parties. A very definite standard of general treatment and condition of skins has been