H.—22.

#### Opossums.

No trapping seasons were declared in 1932. Open seasons for 1933 have been decided upon.

### DEER.

#### General Policy.

The policy outlined in previous reports in regard to the deer menace has been continued and further progress made. The rough inaccessible country in the South Island which has in the past provided the spreading-grounds for deer is being dealt with by the Department's parties, while commercial hunters are operating in the more accessible areas in both islands also. There is ample evidence to show that these operations are making considerable inroads on the parent stocks of deer. Many letters of appreciation have been received from South Island property-owners as to the beneficial results derived from these deer-destruction operations.

The Department's policy of endeavouring to commercialize the work of deer destruction by, if possible, establishing a market for the skins, is proving satisfactory and the right one for gaining effective control of the position. Towards this end a bonus on skins has been paid to commercial hunters where difficulty is experienced in otherwise disposing of the skins. The skins become the property of the Department on payment of the bonus and are included with skins saved by the official parties and sold. Private enterprise at one stage entered actively into the purchase of skins from hunters, and the Department's bonus was then withdrawn. Private buying, however, ceased, and the bonus scheme was again introduced. It has been possible to educate hunters to treat and care for skins based on the experience gained from the handling of skins saved by official parties, and buyers have expressed appreciation of the stage to which it has been possible to bring the standard. In addition to disposal of skins for oversea orders, large numbers have been sold for use in New Zealand. One Dominion firm is going in extensively for the manufacture of deer-skin leather and articles made from the leather, and is purchasing supplies of skins from the Department. A new industry is thus in a fair way of being established in the Dominion; a commodity previously largely wasted is being turned to commercial account, and new avenues of employment have been found for many men.

## Year's Operations.

The principal operations during the year were carried out in South Westland, but a small party also worked in the Makarora District. The campaign carried out in South Westland by the Department's official parties this year was more difficult than anything previously attempted. It was realized that it would not be possible to save the usual proportion of skins, even under normal conditions. Abnormal weather conditions greatly added to the difficulties experienced, and numbers of skins which it was possible to save in spite of transport difficulties were subsequently lost. Owing to almost continuous rain and recurring floods, the skins could not be dried, and, becoming putrefied, had to be abandoned. Parties were marooned for lengthy periods, and a heavy fall of snow nearly a month earlier than usual abruptly and unexpectedly terminated the operations.

Great progress has been made in dealing with the deer-menace in the Makarora, Hunter, Dingle, Ahuriri, Hopkins, and Dobson Valleys, but, owing to their contiguity, the problem of keeping the deer effectively in check there is bound up with that of South Westland, and no more effective blow can be struck than further action in the latter places. Commercial hunters are operating and doing good though limited work in the valleys referred to, but it appears to be imperative that this Department deal with South Westland, as no one else will do so, and efforts elsewhere will fail to produce the desired result.

Since the commencement of the Department's policy of saving and marketing deer-skins, over 15,000 have been sold. The result of the parties' operations from November last to April was that 6,357 deer were destroyed and 1,746 skins saved. The average number of deer killed per man for the season was the highest so far attained. In the Landsborough Valley one man operating entirely alone shot sixty-eight deer in one day. Owing to the more accessible nature of the country, a larger proportion of skins was recovered in the Makarora district than in South Westland.

# Need for Continued Operations.

In addition to the heavy infestation of the better-known valleys of the South Westland region, it was found that the previously almost unchecked natural increase of the deer was resulting in a gradual widening of the infested area, as the deer were compelled by the depletion of the food-supplies in their old haunts to move into other valleys. All of these valleys were penetrated to and can be satisfactorily dealt with. Fortunately the spread has not yet proceeded any very great distance and can be successfully checked if action is taken at once.

Comprising as they do the main divide of the South Island and the source of many very important rivers, the South Westland native forests have a very important function in regulating the flow of water and preventing erosion. The very heavy rainfall has produced a very abundant flora, which is but a provision of Nature to protect the mountains from the erosion which would inevitably result from such a heavy rainfall were it not for the presence of such bush.

Both forest damage by deer and erosion are conditions which develop suddenly, as deer can live for some time in a forest before they actually gain the ascendancy of the natural regenerative growth. When this stage is reached the end comes quickly, and in a very short time the forest community is composed only of adults with no protective floor-covering. Simultaneously erosion sets in, and, as