

GRAZING.

Investigations on this subject have been continued this year wherever opportunity has allowed. Low stock markets, especially for cattle, to which most of the grazing is suited, has militated against much extension of this branch of the Service. Grazing which the Forest Service has to offer is practically confined to the actual forest, there being very little open country, speaking generally, as the lands over which the Service has control stop at the forest-edge.

Actual grazing within the precincts of the forest, when the production of future timber crops has to be taken into consideration, is a matter in which great caution must be observed. The adverse effect on regeneration combined with that on the already growing crop shows clearly in direct ratio to the degree to which the forest has been grazed. This is most noticeable upon isolated areas which have been left for shelter and scenic purposes upon settled land. Where these blocks are unfenced, and stock have free access to them, regeneration is practically absent. All undergrowth which provides the forest-floor is dead or dying, and the adverse effect is shown upon the adult trees by dead upper limbs, and in many cases the tree itself succumbs. Fenced areas, on the other hand, appear to be well preserved. The actual extent to which forests can be subjected to grazing, without suffering harm, is a matter that will take some years of study to determine, and for that purpose it will be necessary to fence several representative portions, and subject each to varying degrees of grazing.

Returns from grazing during the past year amounted to £3,310 14s. 9d.



THE EFFECT OF GRAZING UPON BEECH REGENERATION.

In the foreground (unfenced) the floor is bare, inside the fenced area regeneration is good.

[L. Cockayne, photo.]

GAME AND RECREATION.

The progress of civilization in New Zealand and the consequent diminution of unoccupied lands is fast centering game and recreational pursuits upon the lands under the control of the State Forest Service. Appreciation of the forests is expressed in the greater use made of them by tramping clubs, tourists, &c., year by year. Probably some thirty thousand persons found relaxation and recreation in hunting, fishing, tramping, and picnicking within the precincts of State forests during the past year. In addition 381 trappers entered the forest for the opossum-trapping season, and some hundreds more in pursuit of such animals as goats, pigs, and deer.

Deer.

An investigation of the relation of deer to the silvicultural policy of this Service, and to agriculture, has been carried out, and a report dealing with the subject was prepared and brought under the notice of Parliament during its last session (C. 3A, 1922). A summary of this report discloses the fact that, introduced in 1861, with further importations up to 1909, deer have now spread over large areas throughout New Zealand, their present numbers approximating some 300,000 head. The damage done to agriculture by the unrestricted roaming of these animals over farming country has become such a serious matter that in several cases large areas have had to be abandoned for grazing purposes. In one case 23,000 acres were rendered useless for stock and the owner gave up his lease, while in another instance the carrying-capacity of a run was reduced from 10,000 sheep and 100 cattle to 6,500 sheep. The effect on the indigenous forests is also most serious, regeneration in localities infested by deer being completely ruined, every young tree and plant being eaten bare to the forest-floor. At an estimation of 300,000 head the deer have displaced approximately 450,000 sheep, involving a monetary loss of some £180,000 per annum.