

THE RABBIT PEST.

The rabbit pest, and the question of the most efficacious methods of coping with it, demand special attention. A review of what has been done for several years past shows a record of hard work on the part of the Department's staff, the expenditure of a considerable sum of money annually, with undoubted good results in some districts; and yet, when it is considered that the extermination of the pest so far as is practically possible is the ultimate object aimed at, it must be realized that greater progress is necessary. Recent legislation has enabled more Rabbit Boards to be formed, and though sufficient time has not yet elapsed to enable the results of the work of these Boards to become apparent, they are, generally speaking, handling their responsibilities on the right lines. Further, in many districts settlers realize the necessity for effective work and are assisting the Department well. It is where trading in rabbits and rabbit-skins has become established that the outlook for anything approaching complete eradication is most discouraging. Rabbit-skins have of late become a quite valuable article of commerce, and their export brings into the country a good deal of money, but this only brings about conditions, resulting from trapping, which appear to keep an ample supply of rabbits available and at the same time cause a heavy slaughter of the trapped natural enemy. Thus, in the districts concerned, a conflict of interests has arisen between those interested in the commercial side of the rabbit trade on the one hand and the Department's officers, together with the settlers who are in earnest in rabbit-destruction, on the other. Hence a position has been reached where a new policy which will cut the present knot of conflicting interests needs to be determined upon. It must be based on bringing about the final eradication of the pest to such a degree as is practically possible, and how best to do this under the present circumstances constitutes a very definite problem. The investigations and experiments concerning pastoral country conducted by the Department in Central Otago indicate that given protection for a time from grazing stock and from rabbits large areas can be regenerated into good grazing-land at very little cost. In this connection the following quotation from an interim report by Dr. L. Cockayne is worthy of note:—

"These experiments are so designed as to show (1) the effect of spelling alone; (2) the effect of spelling together with the sowing of various pasture-plants; (3) the methods and best time for sowing; (4) the behaviour of the different plants sown, or otherwise introduced. The experiment plots, securely fenced from stock and rabbits, are so situated as to include all kinds of soil and aspect, while they extend from the base of the Dunstan Mountains to the line where depletion ceases at about 3,000 ft. altitude. A full account of the methods and results of the experiments after two years' experience of hot dry summers and cold winters is being published in the Department's *Journal*. Here it is gratifying to record that lucerne, cocksfoot, tall fescue, yarrow, and other pasture-plants are now well established and growing with full vigour in the majority of the plots, while even in those of stony, scanty, arid soil, exposed to the full sunshine and to the frequent gales, there is a fair amount of growth. In many cases good results have come about by mere surface-sowing, but there is better germination where, after such sowing, the hard ground was raked with one or two spokes of a garden rake. As many thousands of acres could be readily harrowed, such germination after light raking is an important feature of the experiments. The only water available for the plants has been the low annual rainfall of about 14 in. to 18 in. at the higher levels. For many successive days there were hot dry winds and burning sun, which on more than one occasion reached 102° F. in the shade. The results, so far, are highly satisfactory, and hardly to have been expected. Seeds of other species are to be tried, mostly from abroad, in order to cope with the maxima of drought, heat, and wind, while such as will tolerate excessive grazing are specially desired. Native grasses, almost dead, have quite recovered in the upper plots, but, generally, spelling alone has done little. The results so far are distinctly encouraging, and give strong hope that before long effective measures will be devised not merely for restoring the original tussock-grassland, but for clothing much of the depleted areas of the South Island, which cannot be irrigated, with a pasture of higher food-value than was that of the early days. Obviously, however, without a very great reduction of the rabbit pest, the best methods will be unsuccessful."

This having been done without irrigation, the possibilities of Central Otago, when the extensive irrigation-works now in progress reach their full and proper activity, can be realized. But rabbits must go and farm stock take their place if this extensive area is to attain its true value to the Dominion.

In working out a new policy those representing conflicting interests should be brought together in discussion, and, given a genuine desire on both sides to do the best possible under existing circumstances, such a discussion should bring about good results, and enable a new and more co-operative line of action to be adopted. The main points to be dealt with would appear to be—(1) The adaptation of the present lucrative trade in rabbit-skins to assisting practically and financially in the gradual eradication of the pest so far as is practically possible; (2) stringent control and regulation of rabbit-trapping; (3) the formation, outside Rabbit Board districts, of settlers' rabbit associations for bringing about simultaneous poisoning and concerted action generally; (4) the establishment of a system under which rabbit-netting fences will be utilized with Government co-operation to the fullest extent rendered possible by financial considerations; (5) a readjustment of the departmental system of inspection. A representative conference dealing with the rabbit question on these lines should mark the beginning of a valuable forward step. Under present conditions the Department has to depend upon its powers in enforcing the Rabbit Nuisance Act and its amendments, and very good work has been done, especially where settlers have shown the right spirit of co-operation. I am glad to say that this good spirit has been shown in a very large majority of districts. What is wanted is still more co-operation and less necessity for enforcement.