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THE CALIFORNIAN THISTLE

(REPORT ON, BY THE OFFICER IN CHARGE OF THE AGRICULTURAL BRANCH OF THE CROWN LANDS DEPARTMENT).

Presented to both Houses of the General Assembly by Command of His Excellency.

Mr. McKerrow,— Wellington, 25th March, 1887.

A great deal of anxiety is felt among landowners in the Middle Island owing to the spread of the so-called California thistle (carduus arvensis), and though it has been known to exist in several localities in the colony for some years past, it is only lately, apparently, that it has begun to spread in a manner calculated to cause damage to the country; and unless farmers and others on whose land this pest has already appeared set to work seriously to fight and conquer it the pest will, in all probability, increase year by year, as will the difficulty and cost of getting land clean, until legislation will be necessary to compel landowners and occupiers to eradicate the thistle on their properties, as is the case in Victoria and Tasmania. The thistle does not happily appear to increase very fast, but it makes very sure of any land it does gain, as it leaves no chance for any other plant to grow where it is, taking absolute possession of the soil, growing in circular patches and killing out all vegetation as the patch increases in size from the young plants springing up from the creeping roots of the old ones. The slowness of its growth is the only favourable point about it and affords farmers a chance to cope with it successfully. Hitherto the practice out here, that is, where it has not been left to its own devices, has been to heap straw to the height of several feet on the patches and set fire to it, but this method does not kill the thistles, only checks them for a time, and they spring up as healthy as ever; the best way seems to be to poison them out with either chloride of lime, as recommended by Mr. Pearson, Agricultural Chemist in Victoria, or salt. I attempted to make arrangements with a gentleman in North Canterbury to carry out a few experiments on some of these thistles on his land this summer, but unfortunately, up to the present they came to nothing.

Several patches that I saw on a farm in the Eyreton District in North Canterbury, had apparently been killed out by the use of common bacon salt, the method being to mow the thistles down and spread the salt to the depth of about an inch all over the patch. It is necessary to keep a very close and careful watch for any young plants making an appearance a foot or so outside the regular ring, which should be promptly covered with a handful of salt on discovery. Another gentleman in the Ashburton District, who has the misfortune to own land on which this weed has appeared, intends using chloride of lime, and has ordered a quantity direct from England; the price delivered on the trucks at Dunedin or Christchurch by the New Zealand Drug Company is £1 15s. per cwt., in cases of four tins of 28lb. each, less quantity at £2. What quantity is necessary to use to effectually get rid of the thistle is doubtful, and I should much like to find this out by practical experience; no doubt salt would be the cheapest to use, but it is probable a greater length of time would be taken in killing out the thistle. At Stirling, in Otago, the thistle has been growing alongside the railway-line for several years, and, in justice to the adjoining landowners, the railway authorities ought to set about checking the spread of the thistle on their land. If the pest is not strenuously fought wherever it is found the consequences will become very serious, as there is every possibility of the seed being spread about by the use of seeds grown on infected land; as it is there is grave suspicion that the thistle has been introduced into some districts through the use of American clover seeds. In the event of legislation taking place on this subject the services of sheep and rabbit Inspectors might be employed to advantage in authorizing them to give information to the proper quarter of any land they may know or find on which this thistle grows.

I have, &c., W. DE G. REEVES.

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