

in Sheep-dipping, including the Design and Construction of Sheep-dipping Baths.' The title is self-explanatory, and the bulletin, which is free to farmers, has met with a ready demand from farmers and mercantile firms handling dips, so it can be reasonably concluded that it has filled a definite want. At the same time a further series of models of sheep-dip were designed and were built in the Departmental workshops to a scale of half an inch to the foot, complete in every detail. They have formed a very instructive display and have attracted much attention at the various A. and P. shows where they have been exhibited. At each of these shows a wool exhibit along similar lines to that used at the Centennial Exhibition has been prepared, with the addition of a series of large-scale maps showing the distribution of the various breeds of sheep in New Zealand.

"During the year a comprehensive trial of all the commercial wool branding and marking substances has been carried out, and the final results will be available shortly. Tests were made of both the lasting qualities of the various substances in the fleece, and their ability to be completely removed in the scouring process. The former characteristic is, of course, the one which is mainly of interest to the farmer, but the necessity for complete and easy removal during the scouring process is of great importance to the manufacturer, since any branding material left in the wool may cause extensive and often irreparable damage. Rough-and-ready tests are useless in determining 'scourability,' and a miniature scouring plant was therefore designed with which it is possible to duplicate on a small scale the exact working-conditions of a full-sized commercial plant. This experimental unit has now been built and installed, and has already proved its worth. It will be useful in other ways besides the trial at present in progress, and will be required to interpret certain of the results from the sheep-rugging experiments which we still have under way. At the end of the present season (1941-42) it may be possible to publish the final results of these rugging trials, several of which are being continued in the Canterbury district again this year.

"In addition to the above-mentioned trials, a number of lantern lectures and demonstrations to farmers' organizations have been given. Reports have been made on various wool samples submitted, and an experiment has been carried out on the question of using steel clips for closing woolpacks if sewing-twine becomes unprocurable."

RABBIT NUISANCE.

Following a favourable season and the depletion of man-power owing to war requirements, there was an increase in the rabbit pest throughout most districts, and although this increase did not create the same problem in all districts, particularly in the North Island, any increase under war conditions where man-power is deficient is a matter for grave concern if a repetition of the conditions following the Great War is to be avoided.

In an attempt to establish some greater measure of control, arrangements were made, in co-operation with the National Service Department (Employment Division), for a liberal subsidy on wages to be made available for men employed on rabbit-destruction during the late spring and summer months—September to March. It was expected that in badly-infested districts in Otago and Canterbury this scheme would assist in control at a time when little work would, in the circumstances, be carried out. One of the great weaknesses in rabbit-control work is that, outside Rabbit Boards, and even including some Boards, little or no work is done following the winter kill, which, of course, pays for itself, and quite often provides a substantial dividend, thus commercializing the rabbit pest.

Although there was some criticism of the subsidy scheme, a very considerable amount of rabbit-destruction work was carried out which, but for the scheme, would not have been undertaken, and reports indicate that in many localities a great improvement resulted. A very substantial rise in the price of winter rabbit-skins is forecast, and this should result in a further reduction of the pest. It will, however, be necessary to devise some means of continuous work being carried on after the winter operations if the spring breeding increase is to be kept in check, as no relaxation of effort can be permitted.

Rabbit Boards have now reached the total of seventy-four, excluding Fencing Boards. Four new Boards were constituted during the year, and two Boards amalgamated. In some others, additional areas were taken in; and it is noted that the formation of further Boards is under way in a number of districts, particularly in Southland, where eleven new districts are expected to materialize. With few exceptions, Board control has been an unqualified success, the rabbit position being under quite good control in most areas. Subsidies paid to Boards on rates collected during the year amounted to £29,705.

NOXIOUS WEEDS.

The scheme of assistance to local bodies, particularly County Councils, in controlling noxious weeds, particularly ragwort, was continued during the year. Difficulty in obtaining sufficient supplies of sodium chlorate or Atlacide was experienced at times, but this was overcome, and on the whole normal quantities eventually became available. County Councils in ragwort-infested areas again took advantage of the scheme, and allocations amounting to £54,235 to cover wages and material costs were made. After deducting recoveries from farmers, the net cost was £47,416.

The operations under this scheme over the past few years has enabled control over large areas of ragwort country to be effected and production to be maintained. As has been stated in past years, the continued settlement of many of the farms in these areas was seriously threatened, and it has only been by reason of the operation of this scheme that many farms have not been abandoned by their occupiers.