

and the affected animals lost condition. Bloat in cows was further investigated, one result being that acidulation of the drinking-water was reported as being of no value in prevention. The possibility of correlation between bloat and lime deficiency is being investigated. Internal animal parasites continue to be the cause of considerable losses in young cattle. The value of good feeding in combating such parasitic troubles often is ignored in practice; drenching without good feeding is apt to give unsatisfactory results.

In the North Island generally the wet summer favoured the development of parasitic troubles in sheep, and considerable attention has been given to the task of bringing under the notice of farmers the danger of losses in the absence of proper control measures. As anticipated, some losses have already occurred. No serious outbreak from facial eczema took place. The conditions associated with facial eczema did not prevail, but ewes affected in the previous season wintered badly, and in many instances had little milk after lambing. In the South Island facial eczema occurred in Mackenzie Country, and, relative to this, investigational work is planned.

The incidence of pulpy kidney in Otago tended to increase. The possibility of control of pulpy kidney by means of vaccination of the ewes was investigated during the year with most promising results. Briefly, on two farms the results were: of 812 vaccinated ewes, the number of lambs lost because of pulpy kidney was 2—*i.e.*, 0·24 per cent.—whereas of 840 unvaccinated ewes receiving the same treatment apart from vaccination the number of lambs lost because of pulpy kidney was 59—*i.e.*, 7·02 per cent. These initial trials well warrant continuation of the investigation. The year yielded no evidence of a lessened need for attention to lymphadenitis, which necessitates the rejection for export of carcasses in which it occurs. Practical control consists of giving attention at shearing-time to the precautions recommended. Sheep blow-fly has been fairly prevalent in most sheep districts, and considerable advice about methods of control has been necessary. Measures of control employed overseas have been under trial, and require further trial before reliable conclusions can be formed. Increased attention has been given to lice and ticks by the inspection staff.

The continued substantial expansion in pig-keeping intensifies the advisability of paying greater attention to those management-factors which are known to affect greatly the incidence of disease. The final results of current investigations should provide information of value in evolving methods of eliminating the present heavy losses from tuberculosis. But improvement in the present disease-position is not dependent on obtaining additional information from research; a great deal could be done towards minimizing the present heavy losses from disease simply by reasonable efficiency in applying the knowledge now available. It is known that feeding, hygienic conditions, and housing of the kind being recommended as the result of past experience would serve to bring about a sharp decline in the incidence of such serious troubles as tuberculosis, pleurisy, and necrotic ulceration of the skin.

THE RABBIT NUISANCE.

Despite the prevalence in the spring and summer of conditions unsuitable for effective poisoning operations, improvement is shown in the control of rabbits, much of which is now carried out by Rabbit Boards. Recently in districts in which Boards do not function local committees operated under the Employment Board's scheme, which provided for subsidizing labour for the purpose of rabbit suppression. When these committees were suitably organized they obtained valuable results. Board control is being generally favoured, because the various Boards have operated successfully. During the year several new Boards have been formed under the Act.

CONTROL OF NOXIOUS WEEDS.

On the whole, noxious weeds have been reasonably well controlled. However, the control of ragwort is giving much concern in some districts, and especially in the Auckland Province. Fortunately, a definite improvement is reported, this being attributable to the increasing use of sodium chlorate and the grazing of sheep. A proprietary preparation known as "Atlacide" has been compared in field trials with sodium chlorate, with which it has been found comparable in its efficiency in the destruction of ragwort. The practical interest attaching to this lies in the fact that Atlacide is safer than sodium chlorate on account of its inert matter nullifying the explosive properties of the sodium chlorate which it contains—sodium chlorate alone is dangerous when handled carelessly, but relatively safe when used with reasonable caution. As yet, completely satisfactory economic control of ragwort has not been evolved in regard to central portions of the North Island, but the Department plans to take special measures for the control of ragwort during next season in some of the districts most seriously invaded.