

effort of individual farmers—*e.g.*, the destruction of winter cover for ticks in conjunction with appropriate spraying and hand-picking.

Intensive investigational work is being carried out at Wallaceville in connection with mammitis of dairy cows, which seems not to have diminished. An increased number of farmers will avail themselves in the coming season of the mammitis-control scheme which was introduced a few seasons ago and which involves monthly laboratory examination of milk from all cows in a herd, and subsequent division of the cows into free and infected groups. The incidence of contagious abortion has not been abnormal. This disease is widely disseminated through our herds, but immunity against actual abortions has been established to a large extent. Despite world-wide research no practical reliable method of preventive inoculation has yet been introduced. A considerable amount of investigational work into sterility has been carried out, and it shows that probably several factors, including the following, are involved: (1) Mineral deficiency, (2) partially infertile bulls, (3) infection. Speaking generally, the use of a bone-meal and salt-lick is likely to be beneficial whenever a shortage of phosphate and lime is probable. While the control of bloat in cows is considered largely to be a question of management, there appear to be certain undetermined points, and an investigation of these during next season has been planned. Grass staggers in cows, the incidence of which has declined, has been the subject of much thorough investigation without any conclusive results being yet obtained.

The incidence of disease in sheep was particularly low. To obviate as far as possible carcasses of lamb and mutton affected with lymphadenitis reaching the overseas market, the Department has instituted a very thorough system of inspection at meat-works. The adoption of precautionary measures at shearing-time tends to lessen greatly the occurrence of this trouble. Some farmers are following the measures recommended by the Department for the control of the disease. More should do so. Apart from those in Central Otago, losses of lambs from pulpy kidney were light. In continuation of work started by Mr. Gill, a number of lambs were inoculated with antitoxin; the results were promising, but definite conclusions are not yet possible. An inflammatory condition of the sheep's skin (mycotic dermatitis) has been noted in different districts, and especially in Canterbury. The disease, for which there is no known treatment, causes considerable economic loss. It is contagious, and to prevent spread sheep-farmers should report suspicious cases to the Department.

The most momentous occurrence relative to diseases of pigs was the outbreak of swine fever which occurred near Wellington in May, 1933. It is gratifying that the outbreak was quickly suppressed, and, seeing that no further cases have occurred since, it can be concluded that this most serious disease was completely eradicated. Inconclusive evidence suggests that the outbreak of the disease resulted from illegal feeding on garbage from overseas vessels, which is prohibited. An increasing number of deaths in young pigs has been recorded. While investigation has shown some of these to be associated with certain infections, it also points strongly to the probability that the nature of the feed-supply is an important factor.

CONTROL OF NOXIOUS WEEDS.

Despite the difficult times, a fair measure of control has been obtained. Ragwort has called for much attention. The Unemployment Board's No. 11 Scheme was applied to work relative to ragwort with considerable benefit. Approximately 500 tons of sodium chlorate were consumed during the season. Though many farms have been cleared of ragwort, others probably are more heavily infested with it than they were a year ago. Other common weeds, such as blackberry, Californian thistle, sweetbrier, though less serious than ragwort, are troublesome, and considerable work is being done in respect to their control.

THE RABBIT NUISANCE.

The year was favourable climatically for the increase of the rabbit pest. In addition, the low prices ruling for skins and the financial difficulties of many farmers also operated against the fullest action against the pest. The Rabbit Boards throughout the Dominion are all obtaining excellent results, and the pest has been kept well in hand.

RUAKURA STATE FARM AND FARM TRAINING COLLEGE.

Though the season was to some extent an unfavourable one, because of a rainfall of 39.34 in. in place of the normal one of about 50 in., the production of Ruakura State Farm was well maintained, this being partly due to a considerable top-dressing programme. The returns in