

AGRICULTURAL INSTRUCTION AND EXTENSION.

The giving of advice and instruction to farmers is one of the major activities of the Division, and every endeavour is made to meet the position. Unfortunately, the position attained in this respect is not as satisfactory as one would wish, due largely to the extensive districts officers have to attend to and to the fact that they are called on to undertake new spheres of work and other urgent matters. During the year, however, a number of new Instructors were appointed, and steps are in train at the moment for the appointment of others. This gradual building up of the instructional staff allows of more intensive instruction, and cannot but help have a most beneficial effect on the production of the country.

EXPERIMENTAL FARMS AND AREAS.

The experimental farms and demonstration areas scattered throughout the Dominion, and which are seven in number, continue useful work. Some of the work is demonstrational in character, but a considerable amount is of a highly technical nature and is performed in close co-operation with specialist officers engaged on grassland research.

The majority of the areas are not actually conducted by the Department, but in consideration of the Government making an annual grant the body responsible for the conduction of each place agrees to the Division having a representative on the Committee, and thus we are very closely in touch with all the work undertaken.

In my two previous reports I have stressed the need for an experimental farm in the South Island. The establishment of such a place has not yet eventuated, and, being satisfied as I am of the need for it, I trust the necessary finance can be made available during the incoming year.

RUAKURA FARM OF INSTRUCTION.

Ruakura Farm Training College.—The attendance at the Ruakura Farm Training College has been disappointing. For the first term of 1938 there were eleven students, for the second twelve students, and for the first term of 1939 thirteen students. This poor attendance is accounted for largely by the shortage of labour on farms and the demand for boys in city business. It is proposed to close the training college at the end of 1939 and devote the facilities of the farm to short courses.

Winter Farm Schools.—Three special winter farm schools were held at Ruakura during the year. The courses, which were attended by 109 students, comprised dairy-farming, fat-lamb production, and pork and bacon production. In November a party of boys from the Whangarei High School spent a week at Ruakura. It is hoped that during the coming year parties of boys from other high schools will be given short courses at Ruakura.

Farm Advisory Committee.—The Ruakura Farm Advisory Committee was set up in March, 1938, and consists of the following :—

Mr. P. W. Smallfield, Department of Agriculture, Hamilton.
 Mr. W. T. Collins, Department of Agriculture, Auckland.
 Mr. T. E. Rodda, Manager, Ruakura Farm.
 Dr. H. E. Annett, Waikato District Pig Council, Matangi.
 Mr. G. T. Crawley, New Zealand Farmers' Union, Hamilton.
 Mr. W. L. Ranstead, New Zealand Co-operative Herd-testing Association, Hamilton.
 Mr. H. J. Finlayson, Waikato Agricultural and Pastoral Association, Tuhikaramea.
 Mr. M. B. Iggulden, New Zealand Loan and Mercantile Agency Co., Hamilton.
 Mr. W. Marshall, New Zealand Co-operative Dairy Co., Ltd., Hamilton.
 Mr. E. F. J. Peacocke, Waikato County Council, Hamilton.

The Committee meets quarterly in March, June, September, and December, inspects experimental areas, and considers a general report on the experimental work.

Pastures and Crops.—Pasture-production was not as great as usual and difficulty was experienced in closing the usual area for hay and silage. Eighty-two acres were harvested for hay and twenty-seven acres for silage. In the silage harvest, trials were made with molasses silage and the usefulness of covering silage stacks with earth. Eighteen acres were sown in new grass and 502 acres top-dressed.

Annual cropping is being reduced to a minimum; roots and forage crops are grown for the milk-production herd and for pig-feeding and other experiments.

Milk-production Herd.—The milk-production herd was milked in three sheds—two large herds and a small herd at the feed-flavour farm. The cows in milk were as follows :—

	1st April, 1938.	31st March, 1939.
No. 1 shed	73	85
No. 2 shed	31	25
No. 3 shed	12	12

All the cows were tested under the group herd-testing scheme during the year. Experimental work for the control of mastitis was continued. To enable this work to be carried on according to the programme laid down, the numbers of the animals in the herds at Nos. 1 and 3 sheds were varied from time to time according to the intensity of the infection.