

oat and potato crops, and manurial tests of mangolds. In addition, the usual crops of barley, linseed, rye, maize, and white turnips were grown for farm purposes. Eleven acres of lucerne were sown about the middle of November last, also a further three acres in the autumn. It is considered that lucerne should replace much of the maize specially grown in this district by dairy-farmers to tide over the usual dry months of December, January, and February. To effect the better cultivation of fields generally a system of rotational cropping has been initiated, and it is anticipated the results will demonstrate to farmers generally the value of systematic methods.

Owing to the condition of practically the whole of the boundary and divisional fencing it has been necessary to completely renew the same. The greater portion of this work has been completed; totalling over eight miles. It was, fortunately, not necessary to purchase any new wire, which, at the present high values ruling, was a very great saving. During the year the scheme for connecting the farm with the Levin high-pressure water-service was completed, and fills a long-felt want.

The three breeds of dairy-cattle—Friesian, Red Poll, and Guernsey—kept on the farm are maintaining their reputations. The Red Polls have this year proved satisfactory milk-producers, and have well justified the term of “dual-purpose cattle.” All purebred Shorthorn cattle were transferred to Ruakura during the year. The usual spring clearance sale of young stud bulls (together with certain female Friesian cattle) was held in October, the prices realized being very satisfactory, one yearling Red Poll bull bringing 120 guineas.

Calf-feeding experiments were carried out on the same lines as at Ruakura, and all the test calves are being carried through winter in order to watch the effect of the different methods of feeding, if any, on the constitutions of these young animals. It is intended during the coming season to carry out certain experiments in depasturing pigs, in order, if possible, to eliminate feeding by-products of the dairy. With this end in view six acres of land have been ploughed, and certain portions have already been sown in lucerne and crimson clover. It is hoped to make a start with this grazing system about next July or August. It is intended to introduce Tamworth-Berkshire crosses, and with this end in view a purebred Tamworth boar has been purchased.

The number of farmers visiting the farm has greatly increased. Apart from individual visitors, two large gatherings representative of branches of the Farmers' Union were held on the farm in the form of field-days.

The training of discharged soldiers has been effectively undertaken at this station. Accommodation is provided for twenty-four men, and a systematic course of training in practical farming has been carried out. In addition lectures embracing agricultural subjects were given during the four-monthly course of tuition.

The present Farm Manager, Mr. W. J. McCulloch, took charge in July last, and with the loyal co-operation of the farm staff has done much good work for the farm under somewhat difficult conditions.

Moumahaki Experimental Farm, Waverley.

Lack of efficient labour retarded general operations, nevertheless useful demonstration work has been accomplished. A judicious system of cropping, whereby the land is enabled to feed a greater number of cattle and sheep, together with the laying-down of good pasture and reasonable attention to same, has been continued as a strong feature. Top-dressing pastures with various fertilizers and the renovation of old clover on old pasture are under test. Among other operations, a field of 6 acres is in course of preparation for depasturing pigs during next season.

Despite the unfavourable spring weather fine crops were grown. Rape and peas provided excellent forage for lambs, and store lambs are being fed on good crops of turnips and swedes. Mangolds though somewhat patchy, will yield well, and carrots are a very good crop. Peas proved an excellent crop, but owing to rain some difficulty was experienced in harvesting. Oats and barley were secured in good condition, the area in cereals being limited as compared with previous years. Owing to the dry spring, potatoes were a light crop; the quality is, however, very good.

The health of live-stock has been good, and sales of fat stock exceeded those of the previous year. The herd of Ayrshire cattle continues to hold its place, and has secured awards wherever exhibited. The flock of Ryeland sheep is increasing, and all rams for sale meet with a ready market. All the Berkshire pigs bred are easily disposed of. New piggeries on a good practical plan have been erected. These will supply a long-felt want, greatly facilitating work and effecting economy in feeding.

During the year the farm has continued under the efficient management of Mr. T. W. Lonsdale.

INSTRUCTIONAL WORK, AND LESSER EXPERIMENTAL AREAS.

The work of the fields instructional staff in the various districts is carried out principally on the following lines: Investigational and demonstrational work on selected areas; advice and instruction to farmers regarding soils, manures, pastures, and field-crops in general; lectures, practical demonstrations, and field talks; fertilizer control; collection of soil-samples for analysis; collection of limestone and lime-samples for analysis and report.

The following information is furnished by officers in charge of instructional work in each district:—

Auckland: T. H. Patterson, Instructor in Agriculture, Auckland.

Under the recent scheme of reorganization the work of fields instruction to farmers in the Auckland Province was placed under my charge in November last.

Investigation and Demonstration.—Experimental areas are in operation at Albany and at Puwera (near Whangarei). The chief investigation that has been attempted at Puwera is a set of experiments the aim of which is to find the best and most economic method of establishing permanent pasture of the best possible type on poor gum-lands. Trials are also in progress for the growing of suitable and profitable supplementary fodder crops. In so short a period one cannot generalize with any degree of certainty; however, present knowledge indicates that drainage, preliminary long fallow, liming, and deep cultivation, including subsoiling, are effective means of soil-treatment preparatory to cropping. Subsoiling, both at Albany and Puwera, has proved so useful an operation in securing better crops of roots, including turnips, swedes, and mangolds, that other trials are being carried on for further