

will be sufficient to keep up the required number of cows for milk-production. Milking Shorthorns and Jerseys are the two breeds kept. The demand for stud bulls is still on the increase, and the prices obtained for this year's stock exceeded those of last year. Sheep: The stud flock of Southdown sheep showed a greater return this year than in former years. In connection with the fat-lamb trade there was a brisk demand for Southdown rams, and all rams bred were disposed of at satisfactory prices. Forty stud ewe hoggets bred on the farm were added to the flock. The ordinary sheep flock comprises five hundred crossbred ewes mated to Southdown rams, and about one hundred wethers. Pigs: The herd of pedigree Berkshire pigs now consists of thirty breeding-sows, and the stock usually carried varies in number from one hundred and fifty to two hundred pigs. With the new buildings erected it has been possible to increase the number of pigs reared, and thus meet the demand. From the list of transfers recorded in Volume 2 of the Herd-book of the New Zealand Pig-breeders' Association it is shown that over 50 per cent. of the total number of pedigree pigs sold on transfer in the Dominion were bred at the Ruakura Farm of Instruction.

*Horticultural Section.*—A considerable amount of valuable work is undertaken by this branch, such as the propagation and cultivation of all classes of plants and trees, the planting of hedges and shelters, and the laying-out and maintenance of grounds and drives on the farm. The large collections of grasses, clovers, forage plants, and root crops are all located in the nursery area, and for instructional purposes the section is one of the most useful in Ruakura. Seed-selection plots, vegetable-gardens, and orchards are also included under horticulture, and most of the work in connection with the preparation of show exhibits is undertaken by the staff in this section.

*Poultry Section.*—A special endeavour was made to raise the number and further improve the standard of the stock in this section, and the work will be followed up. The number of discharged soldiers anxious to enter into poultry-keeping as a livelihood is greater than ever. There have been as many as twenty trainees receiving instruction at one time.

*Apiary Section.*—Throughout the season a large number of trainees was receiving instruction in this section, over forty taking advantage of the courses. A better season for honey-production was experienced, and sufficient honey was gathered for local requirements. This section is, however, almost entirely an instructional and experimental branch, and nearly all the time of the officer in charge is engaged in giving demonstrations and delivering lectures to trainees and beekeepers.

*Central Development Farm, Weraroa: W. J. McCulloch, Farm-manager.*

Satisfactory progress has been made at this farm during the year. Together with the practice of up-to-date farming methods, improvements and repair work in fencing, plantations, and buildings have received careful attention.

Climatically the season experienced was somewhat abnormal. The swede crop was specially affected, this interfering with the variety and manurial tests. Mangolds, however, gave satisfactory results. The lucerne stand of 11 acres established during the previous season is giving opportunity for dealing with local problems in the maintenance of this crop, especially as regards weed-control, and it is intended to treat the stand in plots by various methods of cultivation. Heavy crops of oats and tares, affording a good demonstration of weed-smothering, were harvested for hay. Cereal crops for chaffing and threshing gave very satisfactory yields. A further 90 acres was laid down in various grass mixtures.

Live-stock on the farm has been maintained in excellent condition. As regards dairy cattle, the testing of milk-yields was again carried on, and gave very satisfactory results in both the Friesian and Red Poll herds. The minimum yield of mature Friesians has now been brought to something over 400 lb. of butterfat. Both herds carried off a number of first-class honours at various agricultural shows. The annual sale of surplus animals was held with successful results. A large number of sheep was fattened commercially, and a prolific lamb crop disposed of satisfactorily. The pig section was further developed, and a fair number of stud Berkshires sold, also a large number of commercial animals not required as studs. Tests in pig-feeding gave considerable practical information as regards grazing and the use of concentrates.

A number of field-days were held during the season at the request of various branches of the Farmers' Union, all proving successful. Visits were also received from the Palmerston North Boys' High School agricultural pupils.

The training of discharged soldiers was carried on as previously, and every opportunity given to those willing to learn the practical side of farming. The men also had opportunities of acquiring further knowledge by means of lectures.

*Moumahaki Experimental Farm, Waverley: T. W. Lonsdale, Farm-manager.*

Useful demonstration work on the best farming practices for this part of the Dominion has been continued at Moumahaki, and the farm has been maintained at a high standard generally.

Cereals and field-peas yielded well, and harvesting was completed during ideal weather. Owing to dry weather, crops of rape were light; turnips, swedes, and mangolds were fairly good. Potatoes are small, but of good quality and sound.

During the year various new manurial trials were inaugurated, comprising top-dressing of pasture and tests with mangolds and potatoes. Calf-rearing trials with various foods, to a great extent eliminating milk, were again conducted. Experiments in the fattening of lambs on peas and the winter management of hoggets were carried out. A bankside pit system of ensilage-making was tried and proved a decided success. An area of 7 acres has been devoted exclusively to the production of cocksfoot, and will be cut for seed during the coming summer.

The general health of live-stock on the farm has been good. The Ayrshire herd is maintaining its reputation, and all bulls bred met a ready market. The flock of Ryeland sheep is increasing in numbers, with a high standard of breeding. The herd of Berkshire pigs is being well maintained.