The whole trend of present-day experience indicates that a greater benefit can be conferred upon settlers by an expansion of instructional services, combined with small demonstration or experimental areas, than by the continued operation, or the expansion, of the State-farm system. The practical demonstration farms established at Stratford and Manaia by local effort, and subsidized by the Department, are doing excellent work, and it seems evident that it is with farms of this type in suitable areas, rather than large State farms, that the best work for the future can be done.

The Ruakura Farm has had a good year. The permanent farm-school established there in 1923 is progressing satisfactorily, there being now some forty students in residence. Taking the figures as shown on the estimates (which do not include the cost involved by the salaries of permanent officers) the total expenditure at Ruakura for the year was £10,909, and the total receipts £9,706. The expenditure includes the cost of maintenance of the farm school and of board and lodging of the students. The figures as a whole show an improvement over the preceding year, which in turn showed better financial results than the previous year.

The Weraroa Farm also had a good year. The expenditure (not including permanent officers' salaries) being £8,289, while the receipts were £9,603. As previously, this establishment was operated largely on commercial lines, though a certain amount of instructional work was done, and the question of what is to be the future of the farm requires consideration. The present Manager, who took up his duty in November, 1923, is doing very good work.

## LIVE-STOCK.

Early in 1924 the Live-stock Division commenced a special investigation into those troublesome and expensive diseases of dairy cows-contagious abortion, sterility, and vaginitis-selected veterinary officers being detailed for this duty. Respecting the diseases in question, a great deal of investigation work has been done both in Europe and America, without sufficiently satisfactory results accruing, and the question of how best to combat them, particularly by preventive measures, still needs a great deal of research and investigational work. Having regard to the great importance of the dairy industry to New Zealand, it was felt that, while taking the fullest advantage of all information derived from the work of scientists in other countries, we should do all that is possible ourselves to carry out research work in the Dominion. While it cannot yet be stated that any definite results have been obtained, it is satisfactory to note that in some respects an advance upon our previous knowledge has resulted. The work is carried on by three officers doing field-work, in association with the Officer in Charge at the Veterinary Laboratory at Wallaceville, and when a point has been reached where information of use to farmers can be put together from the results of the investigation an interim report will be made public. It must be realized that in the case of diseases which have so far baffled investigators throughout the world, a quick and easy way of coping with them is not likely to be secured, but anything which will advance us and put us a step further ahead in dealing with these troubles to the best advantage will be of distinct value.

Another troublesome disease in dairy cows—contagious mammitis—has been the subject of a good deal of discussion of late, largely as the result of vaccines for preventive purposes having been put on the market. Experimental tests of these vaccines are being carried out at the Wallaceville Laboratory and also at the Ruakura Farm, but no definite pronouncement regarding them can be made pending completion of the tests.

Quite apart from these special investigations, both the veterinary and live-stock officers of the Department have dealt with many cases of specific disease affecting stock, and have always been available for advising stockowners whenever they have had difficulty in the shape of preventable sickness among their farm-animals, or in animal management generally.

New Zealand is fortunate in being free from many serious diseases which cause losses to farmers in other countries, and the necessity for doing all that is possible to maintain this freedom renders warrantable the very thorough, and in some cases extreme, measures adopted in order to obviate the risk of introduction of disease.

As the result of foot-and-mouth disease breaking out in the State of California and later in Texas, severe restrictions were placed upon the importation from the United States of produce derived from the land, these being supplementary to the already existing prohibition of the importation of live-stock other than horses from that country. Foot-and-mouth disease is, unfortunately, still prevalent in Britain, consequently the prohibition of the importation thence of cattle, sheep, and pigs has been continued, while the general quarantine regulations have been enforced strictly.

It is proposed to strengthen the scientific staff at the Wallaceville Laboratory, and to still further extend the activities of that institution in dealing with the various animal troubles which already exist in the Dominion.