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THE ORGANISATION OF
DAIRY FARMING
IN THE
WAIKATO, NEW ZEALAND.

By F.B. STEPHENS.

PREFACE.

The present study is an attempt to ~~re~~combine a descriptive account of the technical and financial organisation of Waikato Dairy Farms with an analytical discussion of the factors affecting ^{efficient} butterfat production. Management is perhaps the greatest need in the Dairying Industry today. While there is evident a "Desire to know" how to overcome the present ~~impracticable~~ difficulties, there is still a great deal of attachment to the routine of habit and custom. This fact is frequently lost sight of and the popular description of farming in New Zealand generally err by discussing farming practice in terms of the best farmers. In the present essay an attempt is made to discuss things as they are and to indicate, where possible, the lines on which advance is being made.

The present study is occupied with Dairy Farm ^{organisation} occupation in the Waikato and as a consequence does not discuss the marketing of Dairy Produce. It is agreed that marketing has repercussion on Farm practice and it will be impossible to avoid absolutely the question of marketing. In ^{Part} Section III where finance is being discussed, there is naturally presupposed some knowledge of the Dairy Company system of "Pay-Out."

One of the prime interests of the present study is the fact that there is at present in progress a remarkable change in the technique of Dairy-farming. The last great change took place immediately after the war, in the mechanisation of the milking process. In the interim electric power has been widely applied. In the last two years the problem of "grass-land" farming has assumed enormous importance. Not only is there an attempt to produce more grass by heavier and more scientific fertilising but there is also the problem of the more effective use of available grass growth, a problem intimately bound up with smaller paddocks, rotational grazing and the conservation of surplus grasses as hay and ensilage. As a consequence it is thought that in a year or two the present area will carry at least

50% more stock at little extra expense.

New Zealand methods differ entirely from methods of Dairy farming in other countries. Practically no supplementary feed except grass conserved as hay or ensilage, is used; cows are ^{not} stalled in the winter, and very few cows in the North Island are rugged. Again though the Dairy farm of 100 acres is a small scale farm when compared with a 10,000 acre sheep run, yet it is on a much larger scale than Dairy farming in the older countries. Again such a farm would carry 50 to 60 cows which is much more than is handled on the average, by, say, a Danish farmer. Finally the almost complete mechanisation of the Industry differentiates it from Dairying in older lands.

Although the specific object of this study is the Waikato area, much of the discussion would describe Dairy Farming and Dairy Farm practice at least throughout the North Island of New Zealand, if not throughout New Zealand as a whole. The Waikato is easily the largest Dairying area in New Zealand and it is to some degree the centre of the Dairying Industry of New Zealand.

The knowledge upon which this study is based is derived from the following sources:-

1. I was a resident in the district for three years engaged in work which brought me into intimate contact with the "Farming problem."

2. As a result of the above activities there arose a demand from some farmers for the formation of a farm costing group. This was organised under the direction of the Auckland University College. There were nine farmers in the group. The full method of the investigation is discussed in chapter ^{2 Part I}. The intimate knowledge of farm affairs gained on the very frequent visit to these farms convinced me of the desirability of a wider investigation, into farm organisation, but with particular reference to (a) factors affecting butterfat production and (b) the influence of fertilisers on butterfat production. An attempt is made to correlate

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the results of the investigation into the affairs on the nine farms with the results of the wider investigation discussed below. Probably the most important results from this more intensive study are those in Part. ^{IV} relating to farm costs. It will be suggested that the farms chosen are representative farms and hence there is some ground for thinking that the results are indicative, at least, of the cost of the Dairying Industry today.

3. Finally a wider investigation was carried out by means of a questionnaire submitted through the New Zealand Co-operative Herd Testing Association. For the privilege of being allowed to use that channel, ~~and~~ for personally overlooking the questionnaire returned and for adding to each questionnaire certain further data I am deeply indebted to Mr A H Ward the Secretary of the Association. A discussion of the questionnaire appears in chapter ^{Part I} 3. The fact that some 970 questionnaires were returned gives some ground for considering the tabulated results to be very representative of conditions in the dairying industry.

In addition to a ground survey of the area covering several weeks, the writer was able to make an extensive aerial survey of the whole district. In these ways an intimate knowledge of the distribution of the industry was gained.

When this study was more than 75% complete an authoritative publication on New Zealand Dairying by Mr. E.J. Fawcett M.A., Farm Economist of the Department of Agriculture, appeared. Chapter ^{Part I} 3 ... which contains a broad description of the place of dairying in the National economy owes much to the above publication. In one or two other cases (each case is acknowledged) use was made of certain of Fawcett's figures ~~which~~ which were otherwise unavailable to the writer.

Although certain of the most pressing of the problems of the farmer today are relative to marketing problems, yet such factors as the efficient use of fertilisers,

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the economy of high producing cows, the relation of wages to the net returns, the relative merits of raising or purchasing stock for replacements and many similar questions are all vital not only to the individual farmer but also to the industry as a whole, and ultimately to the whole Dominion. The present study aiming at a study of Dairy Farm Organisation has sought to isolate some of these problems.

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