

Settlers' dairy stock is, on the average, of good quality and capable of increased production.

The inexperience of some of the settlers in stock husbandry and grazing control has militated against marked improvement in the production. It is hoped that this position will be overcome as the settlers gain the necessary experience in these branches of farming practice.

Until such time as settlers generally are capable of getting the best out of their stock and taking full advantage of any opportunities to raise the quality, efforts at stock improvement must necessarily be less effective than might be desired. For this reason every effort is being made to ensure that settlers understand stock and the need for care from the earliest stage both in the winter period as well as during the milking season. Until this stage is reached no sound progress towards stock improvement can be expected but, once these fundamental factors are generally recognized, improvement should be marked.

The percentage of culled stock from settlers' herds has been low throughout the period of the scheme's operation, and this year the figure probably will not exceed 3 per cent. Mammitis is not so prevalent amongst small hand-milked herds as in larger herds, but, nevertheless, it is still the most serious cause of the culling of dairy stock.

During the year settlers' stock was condemned as follows—viz., tuberculosis, 5; actinomycosis, 2. In addition, two other herds were treated for actinomycosis and recovered. Several settlers lost one or more cows through tympanites (bloat), whilst other complaints encountered and treated were ragwort-poisoning, post-calving troubles, ante-partum paralysis, milk-fever, abortion, and foot-rot.

The following scheme stock was disposed of in February after crushing on new grass had been completed for the season—viz., 26 steers, 1 heifer, and 1 cow with calf. At about the same time 203 ewes and 5 rams were transferred from the scheme to the hill lands, where ragwort is becoming difficult to control. These are now the only bulk stock on the scheme and it will be necessary to purchase a draft of about one hundred cattle early in the season for the effective crushing of the new grass sown this year.

The Department keeps a draught entire on this scheme in order to encourage the settlers to engage in breeding the right type of farm horse.

Practically the whole of the money income of settlers on this scheme is derived from the dairy produce supplied either for butter or cheesemaking. During the year under review the Department's deductions from Ruatoki settlers' cheques amounted to £9,504. It is estimated that the total returns under this heading for the year would be in the vicinity of £25,000, or an increase of £9,000 over the previous year. The grading of the milk and cream generally has shown satisfactory improvement in view of the fact that many of the sections have yet no dependable water-supply and a few only have adequate means of heating water for cleansing dairy utensils.

At the local dairy factory, where the methylene blue test and the curd test are now used and give a definite standard of grading, the milk-supply for the year was approximately 90 per cent. first grade and 10 per cent. second grade. A small percentage, chiefly milk held on the farm for more than one day through floods, has had to be returned as unsuitable for cheesemaking. It is interesting to record that this factory, of which there are only seven European suppliers, won the Auckland Provincial and New Zealand Championships at the Auckland Winter Exhibition last year. In the case of cream supplied by Ruatoki settlers to the dairy factory at Opouriao the grading for the year was approximately as follows: Finest, 35 per cent.; first grade, 60 per cent.; second grade, 5 per cent. These figures are considerably better than those shown last year, particularly in regard to the percentage of finest cream obtained.

The returns of butterfat produced on the scheme since the season of 1931–32 have been given in previous reports. The following are the returns for the year ended the 31st March, 1937, together with comparative tables for the two years preceding:—

Year.	Total Butterfat.	Total Return.	Number of Cows.			Butterfat per Cow (in Milk).	Returns per Cow (in Milk).
			Total.	Milking.			
				Number.	Per-centage of Total.		
	lb.	£				lb.	£
1934-35 ..	261,330	9,626	2,018	1,707	84.6	153	5.6
1935-36 ..	387,858	15,759	2,462	1,994	81.0	195	7.9
1936-37 ..	443,070	24,875	2,754	2,376	86.3	193	10.8

In contrast with the two latter seasons 1934–35 was unfavourable climatically from the aspect of dairy production.

A survey of the proposed water-supply schemes to serve the whole of the flats area east and west of the river has been carried out this year by the Public Works Department, and it is hoped that an early start will be made on this important project. Whilst gravitation systems will overcome the difficulty encountered on unwatered sections on the flats, simultaneous consideration will be given to the claims of the hill settlers for improvement in their water-supply from springs or by pumps according to the nature of the individual sections.

The total number of buildings erected on unit properties on this scheme to date is fifty cottages and fifty-eight cow-sheds. The design of the cottages erected this year has made provision for a larger kitchen and an additional room as compared with the three-room-and-porch design of those erected in