

A FURTHER COMPARISON.

In April, 1923, a further $13\frac{1}{2}$ acres of temporary pasture were put down, the mixture being a little different from the previous one, having 10 lb. of perennial rye-grass included. This rye species, being more permanent, should give the pasture a longer life. During the past season this pasture was cut twice for hay, the first cut yielding 8 tons 18 cwt. of green material per acre, and the second cut yielding 7 tons 11 cwt., making a total of 17 tons 9 cwt. per acre for the season. The carrying-capacity of this area for the year ended June, 1924, was 2.78 sheep per acre. For the period between June and the shutting-up of the area for hay it carried just over three sheep. Although it is hardly fair to compare these results with that of the lucerne stand, which is now in its seventh year, it may be noted that the yield of the lucerne for the past season was 16 tons 15 cwt. of green material.

CONCLUSIONS.

The experience at Marton Experimental Area seems to indicate that temporary pasture of Italian rye-grass and cow-grass should there not be kept down longer than four years, as there is a considerable reduction in yield after that period; while in the case of the lucerne the yield in its sixth year was equal to the average of the previous five years. In any comparison between lucerne and temporary pasture at Marton the cost of renewal of the pasture has to be taken into consideration. As £4 per acre will be more than sufficient for renewal, allowing four years as the duration of the temporary pasture, it has to be weighted with £1 per year in excess of the lucerne. The high grazing-capacity of the temporary pasture would, however, in the case of soil similar to that of the Marton Area make any comparison distinctly in favour of temporary pasture.

WINTER DAIRYING AT HANMER SPRINGS.

THE Queen Mary Hospital farm at Hanmer Springs, North Canterbury, is operated primarily for the purpose of supplying milk to the hospital, and the supply must thus be kept up all through the year. The farm is situated 1,200 ft. above sea-level, and the locality is subject to heavy falls of snow in winter. The land is very poor, and owing to the comparatively short growing season the dairy herd has to be hand-fed for six months of the year, during which period the pastures are practically negligible. For four months of the winter the cattle are housed and all food is supplied in the bails. The food consists of oat-sheaf chaff, bran, oil-cake, mangolds (in season), hay, and rock salt. The cattle are given the following daily rations: Chaff, 14 lb.; bran, 2 lb.; oil-cake nuts, 2 lb.; mangolds, 40 lb.; and as much hay as they will consume. All this fodder is of the best quality, and the ration varies according to the time each cow has been in profit. Thus a cow six or seven months in milk will not be getting so large a ration as a cow at full profit.

During the winter of 1924 the herd consisted of fifteen to seventeen head, and ranged from cows fresh in profit to others seven and eight months in milk. During the six feeding-months, from April to September inclusive, eight cows were turned out dry and replaced with fresh ones, so the winter ended as it began with cows ranging from fresh in to others six and seven months in profit. The milk produced during the six months was 8,943 gallons, which averages close on 3 gallons per cow per day. The experience here recorded is claimed as a demonstration that winter dairying can be profitably conducted if carried out on right lines even under unfavourable natural conditions. The particulars were supplied by the farm-manager, Mr. W. B. Willis.