

The following notes on the climate of North Auckland are supplied by Mr. C. J. Hamblyn, Instructor in Agriculture, Whangarei:—

A study of the figures giving the average rainfall for the months of December, January, February, and March, for Whangarei, Dargaville, and Kaitaia, over a period of ten years, would indicate that the total fall for each of these months should be adequate for the maintenance of good pasture-growth. The efficiency of this rainfall depends, however, more on the number of days on which rain falls and the distribution of the wet days. A closer study of the rainfall in North Auckland will show that, though the average fall per month during the summer is much the same as that for South Auckland, there are occasional seasons of very little summer rainfall; but the main point is the fact that the average number of days on which rain falls is about half the number given for South Auckland, and, moreover, the maximum fall for one day is generally much greater. Also, the summer rainfall is made up generally of short spells of heavy rain with long spells of much more intensive heat than elsewhere, so that the rain on a dry soil is not effective, though the total for the month may appear to be so. This applies to the soils of the Northern Wairoa basin, where, in addition, the summer rainfall is on the average a good deal less than that for Whangarei, where thunderstorms are much more prevalent.

These points, I think, have a direct bearing on the known fact that were farmers dependent on English pastures and without paspalum there would be generally a very distinct period of summer shortage of pasture-growth. It is through the use of paspalum, and not on account of the favourable summer rainfall, that pasture-growth is maintained during the summer. With paspalum, in spite of an adequate rainfall, there is a distinct early-spring shortage, but this is overcome on a great many farms by wintering-off and commencing the milking season later than would be the case were rye-grass dominant in the pastures.

1. Ruawai Group—Otamatea County.

Bounded by the Kaipara Harbour on one side, Otamatea County runs across the island to the east coast, and is joined by Rodney County on the southern and by Whangarei and Hobson Counties on the northern boundaries. The greater portion is undulating to hilly, the main dairying districts being on the low country adjoining Kaipara Harbour. Much of the undeveloped country is of the familiar gum-land type. The farms dealt with in this section of the survey are all in the Ruawai district, and represent perhaps the best of the dairying farms in the county.

The total occupied area of Otamatea County in 1928 was 237,615 acres, of which a comparatively small percentage was used exclusively for dairying. Of the area occupied, 159,244 acres were improved, consisting of 155,540 acres in grass, of which 433 acres were cut for hay or ensilage in the season under discussion. Some 2,611 acres were under the plough for cropping purposes, mainly preparatory to establishment of permanent pastures. The remainder represented orchards, plantations, &c. Stock in the county consisted of the following: Horses, 2,339; dairy cows in milk or dry, 18,141; other cattle and young stock, 24,156; sheep wintered, 1928, 74,144; pigs, 8,083. On a sheep-unit basis dairy cows represented 36.88 per cent. of the total stock carried.

The sixty-nine farms comprised in this analysis milked 3,102 cows for the 1927-28 season, or 17.1 per cent. of the total dairy cows in the