

for gum during the last two decades of the nineteenth and the first two decades of the twentieth century. The gum-diggers left the land in a much worse condition than it was originally: they repeatedly burnt off the surface covering and left the country in a very broken condition. The soils, mature podzols, are acid and of low fertility, and were long neglected for farming. Recent development work has shown that satisfactory dairying pastures can be established, provided the land is thoroughly cultivated, and certified grass and clover seeds are applied with adequate lime and phosphates. The present tendency in land development is to restrict work to the easier ploughable or "tractor" country, and the grassing of the gumland soils is likely to receive increasing attention in future years. Unfortunately, large areas are not well watered, and special water-supply schemes will be a necessary prerequisite to pasture development in order to provide drinking-water for live-stock.

In addition to these scrub-land areas, which are capable of early development, there are other scrub areas which are more intractable, and the ironstone soils and sandy gumlands with an intricate pan formation are likely to remain in an unimproved state for many years to come.

The emphasis which has just been given to the manuka heaths and paspalum pastures should not be allowed to obscure the high farming development which occurs on the more fertile soil areas. Farms on the basic volcanic plateaux, backed by steep-sided scoria cones, with fields of rye-grass pastures, divided by neat stone walls and protected with groves of handsome puriri and taraire trees, present as charming a landscape and as favourable an example of efficient grassland farming as can be found in most parts of the Dominion.

Evidence before us showed that there are 250,000 acres of developable land in the far north, but as the greatest proportion of this is future dairying land it is beyond the scope of the sheep industry. The problems of the North are largely in the development of its gumlands soils.

(b) *South Auckland* (Manukau, Franklin, and Raglan Counties)

Sheep-farming practices are rather different in each county, but it is not possible to fit them into any other region. Breeding-ewes account for 391,000 of the increase of 530,000 in sheep numbers in the region since 1925. Most of this is in Raglan, where ewes were more than three times as many in 1945 as in 1925. In this county the expansion of sheep numbers has taken place in spite of the deterioration of steeper and wetter hill country towards the southern end, this being offset by the improvement of the easier limestone and volcanic areas and the development of the scrub country in the northern half of the county. Here top-dressing and the improvement of ploughable land continue to raise carrying-capacity, and most of the fat-lamb production, requiring a third of the ewes of the county, is in this portion. Surplus cull and cast-for-age ewes from Raglan are readily absorbed by Waikato fat-lamb producers.

Manukau County includes the islands in the Hauraki Gulf. Here and in the eastern hills pasture deterioration of bush-burn sowings is evident, especially on danthonia country, but this decline in carrying-capacity has been overtaken by the improvement of ploughable valleys. Franklin County is predominantly a dairying district, but fat-lamb farming has expanded on the easier parts of the eastern foothills and in the Karaka