

NOTES ON SOILS IN THE PASTORAL AREAS OF
TASMANIA

The Midland and Eastern countries are the chief pastoral areas of Tasmania, and are largely for sheep. These sections consist of gently undulating to well-moulded hills, with alluvium on the valley floors. As a rule the soil is shallow and poor having been derived from strata of the coal measure series and intrusive diabase, and their carrying capacity is low. It is found that owing in part to the low rainfall native grasses are the best, thriving where exotic grasses wither and die. Transhumance, or seasonal migration in grazing stock, is practised in the dry areas where conditions of water, temperature and feed render it advantageous. An attempt to improve the shallow sandy soils by irrigating would probably lead to the raising of magnesium and sodium salts from the saline sub-soils, and thereby have a damaging rather than a good effect.

Diabase soils are not rich lacking potash and soda and phosphorous. The little of those elements originally contained in the soil product of that rock is being rapidly depleted and no attempt is being made to remedy the deficiency by the addition of suitable fertilisers. The poor sandy soils derived from the waste of the sandstones, shales, and limestones of the coal measure series also need potash, soda, and phosphorus. The lack must produce an ill-effect upon the constitution of the sheep.

In the northern district, extending from Smithton to Deloraine, we have an almost continuous belt of basaltic lands of wonderful natural fertility. On the basalt lands are grown the larger part of our root crops, particularly potatoes; but a rotation, involving corn, and occasional fallowing is necessary for recuperation.

The basalts are naturally deficient in potash and soda, and are not strikingly rich in phosphorus. New basalt lands will produce potatoes at the rate of 10 tons per acre; the average production of the old is only 2 and a quarter tons per acre. The cause of the falling-off is obvious.

From Deloraine to Launceston stretches the broad belt of deep Tertiary sediments of distinctly different nature, but almost of equal richness. In this basin grain is the staple product. But the continuous and exclusive production of grain is out of the question; mixed farming, including dairying and cattle and sheep raising, is an essential adjunct. Thus, to have permanent and prosperous agriculture in that country, it is necessary to combine the animal industry in order to utilise the forage incident to the rotation requirements of grain and potato culture.

A survey of these soils has not been made, but it is safe to state that the three of the essentials already mentioned are not in excess of requirements, but are certainly in low proportion.

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