

SOIL SURVEYS

General Survey, North Island.—Sheets 2, 4, and 5 of the soil map of the North Island have been published. Sheet 3 is in the press, and the preparation of the remaining four sheets is well advanced. The pedological part of the extended legend which will be published to accompany the map is ready for the printer. An arrangement has been made with the Department of Agriculture to supplement the notes dealing with the farming of the soil types.

General Survey, South Island.—The general survey of the South Island has been extended to cover the greater part of Southland and the whole of Westland. Areas not yet examined are the Dunedin and Nelson districts. The mapping of the Nelson district will be carried out in co-operation with the Cawthron Institute, which has already completed surveys of large areas. It is aimed to complete the field-work of this survey during the coming year.

North Auckland.—Eight of the set of ten maps covering the North Auckland Peninsula are now ready for the lithographic draughtsmen. The drafting of the soil and land-utilization maps of Whangarei County has been delayed owing to shortage of staff. As soon as the printing of the North Island map is completed the drafting of the Whangarei maps will be speeded up.

Mid-Hawke's Bay.—The soil maps of mid-Hawke's Bay have been published, and the manuscript of the bulletin is almost complete.

Hutt and Makara Counties.—A survey is being made of the soils of Hutt and Makara Counties. Two-thirds of the area have already been examined.

Canterbury Plains.—The survey of the Canterbury Plains has been continued systematically. In North Canterbury eighty-six square miles have been mapped. In Waimate County two-thirds of the plains between the Pareora and Waitaki Rivers have been covered, including the highly fertile soils of the Willowbridge region, where soils appear to owe their fertility to an admixture of glauconitic sand.

Geraldine County.—The detailed survey of the soils of Geraldine County has been completed. In the eastern part of the county the soils are derived from alluvium, and the soil pattern is complex. Between the Rangitata and Orari Rivers the soils are stony and infertile. South of the Orari River, and extending as far as the Opihi River, the soils are younger and much less leached and include some of the most fertile soils in South Canterbury. These fertile areas are, however, broken by strips of stony soils and, near the coast, by strips of meadow soils which require draining before they can be brought into full production.

Inchelutha.—A detailed survey of the soils of Inchelutha and adjacent valley-floors has been completed for the Clutha River Trust. The soils fall into three main groups—fertile recent soils derived from mica schist alluvium, moderately fertile soils requiring drainage for full utilization, and the peat and peaty loam soils which lie between the Koau Branch of the Clutha River and the hills to the south.

Glen Ledi District.—A survey covering 176,000 acres was made at the request of the State Forest Service to guide them in the selection of land for afforestation. The survey disclosed that the block, which stretches from Saddle Hill to Kaitangata, contains approximately 10,000 acres of ploughable land and 75,000 acres of unploughable land, both classes of land being of low natural fertility. In collaboration with local representatives of the Department of Agriculture an area of approximately 35,000 acres was delineated as being more suited to forestry than to agriculture. A map showing this area, together with a soil map and report of the whole block, was submitted to the State Forest Service.

South Molyneux District.—A soil map and report was prepared for the South Molyneux Development Committee, which represents a community of farmers anxious to raise the level of production in their district. The area surveyed covered 18,000 acres. The chief factor underlying the low production of the district is the general low fertility of the soil, particularly that on the unploughable land. The infertile hill land does not occur in one coherent block, and is therefore not suitable for afforestation by the State. Local afforestation projects, increased use of lime and fertilizers, and possibly adjustment of farm boundaries would go far towards raising the level of production.