

Since the passing of the Soil Conservation and Rivers Control Act in 1941 there has been steady progress in the acquisition for conservation purposes of land unsuitable for agriculture, and up to the present time the Council has been an active agent in negotiating for the retirement of over 50,000 acres in the North Island and nearly 20,000 acres in the South Island. In accordance with a Cabinet decision, all such areas are first inspected by officers of interested Departments to ensure that no land which should legitimately be retained for farm production is retired for protection forest. In most cases representatives of the Department of Lands and Survey, the State Forest Service, the Department of Agriculture, and the Soil Conservation Council make these inspections jointly; but where special circumstances make it desirable, officers from the State Hydro-electric Department, the Department of Internal Affairs, or the Department of Scientific and Industrial Research may also be consulted. If large areas are involved, and more particularly where existing forest reserves adjoin, the State Forest Service has normally arranged to acquire the land and accept responsibility for its management; for smaller areas, control by Catchment Boards has been the rule; and it is the Council's practice to acquire as soil conservation reserves only those areas which are to be made use of as experimental and demonstration farms or where erosion problems are so severe as to require special treatment.

Of particular interest in the North Island is the afforestation scheme now being planned in the headwaters of the Esk River, in Hawkes Bay District. Here an area of 7,400 acres of steep, comparatively infertile country, most of which should never have been cleared for farming and which has been further impoverished by rabbits and other pests, was acquired by the Council as a soil conservation reserve, and later transferred to the State Forest Service for management and rehabilitation. Houses and hut accommodation for forest workers are being built, access roads constructed, and land for a tree nursery prepared. With the establishment of a settlement of forest workers in this remote submarginal country, the way will lie open for the completion of an ambitious scheme, first to exterminate pests and prevent bush fires, second to assist regeneration on the steeper slopes where protection forest is essential to control run-off and soil erosion, and third to plant production forests on the easier slopes in order to supply the timber needs of a district seriously deficient in forest resources.

In the South Island similar work has yet to be undertaken; and, in addition, a special problem of a different nature now faces the Council. Fire, overgrazing, and the ravages of pests have created almost desert conditions in the grassland of the high country. The tussocks and associated species are fast disappearing; and bare, gullied hillsides, scree, and shingle fans dominate the scene. Adverse environmental conditions now render hazardous the re-establishment of grasses; and the fact that much of the country lies outside the habitat range of native trees adds greatly to the difficulty of restoring a vegetative cover to the ground. To remedy this situation in the Waitaki Soil Conservation District, the Council is investigating the possibilities of certain exotic trees which are capable of thriving in conditions of low rainfall, poor soil, and severe winter frost. The stabilization of steep slopes and watercourses with these trees may yet prove not only the answer to flood and shingle-movement problems in the lower reaches of the rivers, but also provide conditions under which other plant species may be successfully reintroduced on the hills.

The work already undertaken by the Council is evidence of a growing realization that conservation forestry has a vital part to play in controlling erosion and run-off on hill country and in protecting the valuable agricultural land below; but attention must also be drawn to the formidable task which still lies ahead. Not only is the area surveyed to date a mere fraction of the total requiring examination, but there is also an urgent need for further research into conservation problems. Taking into consideration only the more obvious biological aspects of the work, it must be accepted that existing knowledge is inadequate: much has still to be learnt regarding the ecology of native