

(d) *Bulletins*.—The production of further bulletins is under action and supplies of those already published are exhausted. Reprints of technical papers published have been circulated freely.

(e) *Newsletter*.—Three quarterly cyclostyled newsletters have been distributed in a mailing-list of approximately five hundred. This feature is proving popular with staff and farmer members of Catchment Boards.

(f) *Film Strips and Lantern-slides*.—Production of new film strips and lantern-slides for use by district officers is being proceeded with as both are popular with teachers and lecturers.

(g) *Agricultural and Pastoral Show Displays*.—Comprehensive displays of models, photographs, diagrams, and specimens of material of use in soil conservation practice have been exhibited at the principal agricultural and pastoral shows in the North and South Islands. Catchment Boards co-operated freely in their respective districts to adapt the display to cater for the needs of the particular region.

(h) *Press*.—Considerable information has been made available through the good offices of the press, particularly the local press in the respective catchment districts, and the farmers' periodicals. To both, information and articles have also been contributed by the Council's staff.

(i) *Educational Committee*.—Close liaison with the Catchment Boards is maintained by this Committee, consisting of Catchment Boards Association representatives and Council's staff.

2. SOIL CONSERVATION RESERVES AND DEMONSTRATION AND EXPERIMENTAL FARMS

The Council's policy of directly tackling soil erosion and conservation problems on a practical basis on typical farm units in various problem areas in the country has been proceeded with, and positive encouraging results are already coming to hand.

(a) *Wither Hills, Blenheim*.—In a little over four years 400 acres of the worst sheet- and gully-eroded land in New Zealand has responded remarkably well to recuperative treatment. The benefits of comprehensive conservation treatment—spelling, fire and pest control, control of cattle and sheep grazing, contour cultivation, contour banks, modern pasture management, tree-planting, debris dams, adequate fencing and water-supply—are reflected in reduced run-off, control of sheet and gully erosion, as a result of good establishment of sown pastures and regeneration of native pastures.

Most important of all, the carrying-capacity has been doubled. The maintenance of this improvement is being further investigated by comparing cattle only with a sheep and cattle utilization on two comparable catchments on the farm. Data on pasture regeneration, run-off, soil loss, stream flow, soil structure, and costs and behaviour of sown pastures is being collected to record the recuperative changes taking place, and costs are being analysed. This project has revealed the beneficial effect on stream flow of comprehensive and inexpensive conservation measures applied over entire catchments.

(b) *Esk, Hawkes Bay*.—This reserve of approximately 7,400 acres was abandoned farming-land acquired in the interests of protecting the upper Esk Catchment. Control of fire has resulted in regeneration of protective fern and scrub, but since the greater part of the reserve is not suitable for farming, the Council has arranged for the State Forest Service to take it over and progressively afforest the area, reserving a small area for farming operations if such are found to be practicable.

(c) *Waerenga-o-Kuri, Poverty Bay*.—This farm unit of 998 acres was acquired in the Gisborne district in 1947 on typical slip and gully eroded unstable mudstone country for demonstration and experimental purposes. Comprehensive conservation measures are being applied in a unified farming programme to ascertain the cost and feasibility of soil conservation work on such country.