

pasture in lighter, less consolidated parts of paddocks become obvious about the end of February, the patches increasing in size by winter. During the next few years grubs attack the rest of the pasture, and when the infestation is over little, if any, of the farm pasture remains undamaged.

Pastures which have been eaten out by the grub and have recovered appear to be free from severe infestation for a number of years. The reason remains unexplained; possibly food supplies in the soil are insufficient to encourage egg laying, or the topsoil may become toxic after a heavy infestation. In some cases damaged pasture, ploughed and re-grassed, even after two crops, has been reinfested after the first year, though severe infestation of the remainder of the farm has ceased.

Consolidation and Oversowing

For recovery of damaged pasture under suitable climatic conditions consolidation of the pulverised soil is essential. Even cocksfoot and white clover in the loosened soil are likely to be pulled out by grazing stock. Feeding of hay on affected paddocks, in the normal routine during winter and early spring, brings about the consolidation essential for rerooting of damaged grass and recovery generally.

If a large proportion of the farm paddocks is damaged, stocking is limited unless travelling stock can be used, but heavy rolling and some reseeding in late autumn hasten recovery. Good results after

consolidation have been obtained by oversowing up to 30lb. of ryegrass and white clover seed per acre, with 2 or 3cwt. of superphosphate, and closing the paddock until spring. Unfortunately, temporary loss of carrying capacity and lowered income are a deterrent, and south Taranaki farmers usually do not sow after a grass-grub infestation.

Damaged pastures should not be harrowed, even for spreading stock droppings, as the turf is easily pulled away, leaving paddocks rough.

Cropping on Affected Areas

Small areas in swedes and chou moellier have been grown on affected farms, but many farmers have depended solely on hay, largely bought in. Butterfat production usually falls to 10 to 25 per cent. below normal and stock do not thrive.

During the past 2 years several farmers in the Fraser Road area, with the aid of swedes and chou moellier as winter feed and kale for autumn feed, have maintained production fairly well despite the grub. Each crop is fed off and disced for the new seed-bed before grass is sown in autumn. No infestation takes place until the following November, when the young sward, being vigorous, is able to withstand the grass-grub attack, but in later seasons grass-grub effect can be expected.

One prominent farmer has autumn-sown temporary pasture for winter feed, and a hay crop will be taken before the land is ploughed again for

OF GRASS-GRUB IN SOUTH TARANAKI

