

Bay, Wairarapa, and Southland flax areas, where the grub does no material damage and is in many places totally absent, the swamp-hen is present and in several cases very abundant. Also, where there are large flocks of starlings the grub is by no means serious. It is said that the grub became more apparent in the Makerua Swamp after the extermination of the swamp-hen. Though this may be one of the causes of the increase of *Xanthorhoe* in this district, it will probably be found that other changes in the environment have influenced the insect directly or indirectly.

It would prove invaluable to secure swamp-birds from various localities and dissect the crop in order to ascertain what forms their staple diet, and whether they are partial to *Xanthorhoe* when other foods exist, as it is well known that certain insects are unpalatable to birds. I have also observed several small brown lizards amongst the flax in those districts where no *Xanthorhoe* exists, and the same may apply to these animals as to birds. It would be a simple matter to confine two or three swamp-hens within an area of flax badly attacked by the grub, and keep them under close observation. A wire-netting fence would be suitable if the wings of the birds were cut. Lizards could be kept under observation within a much smaller area than the birds.

Live-stock would no doubt play an important part in freeing the swamps of undergrowth and rubbish. As already indicated, the larvæ, being nocturnal, doubtless require some such shelter as decaying leaves, &c., to protect them from the sun and daylight. In the Makerua no stock are run, but on the other side of the Manawatu River—the Moutoa—where the grub is not serious, there is a dense growth of grass, and stock are allowed access to the flax area. In many parts where the grub is not serious stock are allowed to graze upon the grass of the swamps. Such is the case in Auckland, Southland, Nelson, &c.; but at Wairoa and other large blocks, though the grub is practically absent, no stock are grazed, since the flax is so dense that beasts would be unable to move about without damaging the leaf.

If stock were employed it would be necessary to fence in each area as it is cut until the young flax had attained a sufficient growth not to be eaten by the animals. This would necessitate fencing off the newly cut areas, and for this reason I suggest that sheep would prove the most satisfactory in this case, as they are not so liable to inflict damage as cattle frequently do, chewing off the succulent parts of the leaves to about half their length and leaving the fibre stripped. Besides, the outlay on fencing for cattle would no doubt be prohibitive. It would also be necessary to know at what periods the stocking of the swamps