THE NEED FOR BIRD PROTECTION IN NEW ZEALAND.

Read at Geneva Conference on 21st May, 1928, by J. G. Myers, Sc.D., F.E.S., New Zealand member of the International Committee for Bird Preservation.

New Zealand is noted for some of the most remarkable birds in the world. No fewer than 78 of the species, including practically all the land birds, are endemic. Nor is this all, for a number of the families and very many of the genera occur nowhere else in the world. I need only mention the Apterygidae (kiwi), the Strigopidae (kakapo), the Xenicidae (wrens), and need then emphasise no further the scientific interest of New Zealand birds, and the paramount ornithological importance of their efficient preservation. The economic value of the indigenous birds has been treated at length in a series of articles by Atkinson and the present writer. It emerged that the vast majority of the species are directly or indirectly beneficial to agriculture and forestry. The forests of New Zealand are immeasurably important from the viewpoint of timber, of water conservation and the prevention of erosion, and their existence is indissolubly linked up with that of the birds which are confined to them. No fewer than 15 per cent. of the forest woody plants and trees are pollinated apparently exclusively by birds, while the seeds of 60 per cent, are dispersed by the same agency. This is apart altogther from the value of birds as destroyers of noxious

The effects of colonisation on the indigenous avifauna have been very great, but it has long been the fashion to exaggerate their inevitability. It is, of course, inevitable that country which is permanently settled should in time take on the semblance of an English landscape without that mellow beauty which is England's own; but there still remain in New Zealand large tracts of forest, and probably a greater proportion of sanctuaries and reserves compared with the total area than in any other country. The effects of colonisation on the birds may be briefly referred to under the following heads:—

1. Total Destruction of Habitat, with consequent wholesale alteration of food supply. The marvel is, not that the indigenous birds should have decreased and in some cases disappeared from the settled districts, but that so many of them should have adapted themselves more and more to such an unparalleled change of conditions. As Guthrie-Smith has remarked, it is almost impossible for a true bird of the forest to live in fields of grass or of turnips. A very pleasing feature is the coming of