



To cope with the drying, windy conditions of sand dunes, plants have developed special forms. Prostrate broom has no leaves, while woollyhead *Craspedia lanata* shown here is covered in hairs — Kaitorete Spit.

Photo S. Courtney

been planted at the site of a sand quarry near the eastern end. However it is virtually confined to these areas from which it could readily be removed. Several hundred pines, planted 15 years ago on the fore-dunes for about 2 kilometres, are now dropping their first cones. They are serving no useful purpose, are an incongruous element in the landscape, and should be eradicated before spreading further. No other introduced species appear to represent a threat to the native vegetation through competition.

Reserves at risk

In 1979, two areas of the Spit were gazetted as Scientific Reserves. The larger of these, comprising 169 hectares, was intended to constitute a core area representing some of the most interesting biological features. However, since then little effort has been made to protect the Reserve which is still being used for grazing sheep and cattle by the lessee of the adjoining Crown land block. Rabbits and hares, together with the stock, represent a most damaging factor in such a fragile ecosystem where the natural physical factors already impose severe limitations on the plants. It is also important to exclude four-wheel drive vehicles and trail bikes from the dunes. A draft management plan is due out shortly for public comment.

Mining

Since 1952, sand extraction from the



Sand mining operations by Habgoods Ltd have now destroyed 11 hectares of pingao covered foredunes at Kaitorete. The sand is used for concrete blocks. Photographed March 1984.

Photo M. Peace