bracken and a notable forest fragment including mahoe, Macropiper, five finger and some kanuka.

#### W93 PUKERUA BAY

Grid refs. - NZMS1 N160 440532 NZMS260 R26 690180

Length – 0.5 km

Structure - Very low sand mounds

Material – Sand Trend – Stable

Hinterland - Road, housing

Communities - Ice plant. Spinifex. Boxthorn. Taupata

Present use - Intensive recreation, urban

Grazing - Low

Observer – I. A. E. Atkinson

Rating – Diversity 2 Natives 1 Modification 0 Weeds 1

 $\frac{\text{Total} = 4}{\text{Total}}$ 

Sand mounds between the road and the beach carry ice plant with tree mallow and taupata shrubland, and patches of Indian doab. Spinifex, flax and boxthorn are all present.

#### W94 HONGOEKA BAY

Grid refs. - NZMS1 N160 404487 NZMS260 R26 656140

Length – 0.5 km

Structure – Gravel beach

Material – Gravel Trend – Stable

Hinterland - Farmland, some housing

Communities – Taupata Present use – Recreation

Observer – I. A. E. Atkinson

Rating – Diversity 1 Natives 1 Modification 0 Weeds 1

Total = 3

The gravel beach has some taupata with Senecio angulatus.

### W95 MAKARA BEACH

Grid refs. - NZMS1 N164 277298 NZMS260 R27 535971

Length – 0.25 km Structure – Gravel beach Material – Gravel Trend – Stable

Hinterland - Hilly farmland and baches

Communities - Silver tussock/ice plant/Scirpoides

Present use - Recreation

Observer – I. A. E. Atkinson

Rating – Diversity 1 Natives 2 Modification 1 Weeds 1

Total = 5

The gravel carries silver tussock with Scirpoides, ice plant and horned poppy.

# W96 WHATARANGI

Grid refs. - NZMS1 N168 732980 NZMS260 S28 943668

Length – 3 km

Structure – Low regular flat-topped dunes varying in width between 5 and

50 m

Material – Sand and gravel
Trend – Unstable in places
Hinterland – Farmland, road

Communities - Spinifex/sand sedge/pingao. Lupin. Gorse

Present use - Farming
Grazing - Medium

Observer – G. M. Rodgers

Rating – Diversity 2 Natives 2 Modification 3 Weeds 2

Total = 9

Marram is absent from these dunes. The vegetation consists of a spinifex/sand sedge mixture with pingao, lupin and gorse. Horned poppy and harestail are also present.

# W97 TE HUMENGA POINT

Grid refs. - NZMS1 N168 725930 NZMS260 S28 935622

Length – 6 km

Structure – High hummocky dunes. Foredune hummocks are irregular and there is a sand plain behind. Rear dunes occur some 200

m back from the beach and are about 50 m wide

Material - Coarse sand

Trend - Foredune is unstable and eroding in places, and the rear dunes are also unstable

Hinterland - Road, hills 1949 RM ha

Communities - Spinifex/pingao. Spinifex/sand sedge/Scirpoides. Cyperus

Other values - Conservation—absence of marram

Observer – G. M. Rodgers



# The Sand Dune and Beach Vegetation Inventory of New Zealand

# I. North Island

Trevor R. Partridge

DSIR Land Resources, Lincoln

DSIR Land Resources Scientific Report No. 15

**DSIR Land Resources** Private Bag Christchurch 1992