Checklist of indigenous vascular plants seen at: Onoke Spit

Grid Ref: R28 853.784 to R28 883.773

Altitude 10m.asl

Visited: 14.02.2000, T. Silbery, A. Rebergen

Time on site: 4 hours

LIST #39

Site description:

The site may be divided comfortably into two distinct parts, east and west of the vehicle access track.

To the east of the track there is a foredune on the crest of the gravel beach. Behind this there is a wide, gently sloping area of consolidated fine gravels, sand and pebbles. At the rear of the site there is area of wetland at the base of cliffs.

Mats of *Raoulia australis* and *Pimelea* cf. *urvilleana* are common on the gravel and sand between the fore and rear dunes, but few reach more than 1 metre in diameter.

The foredune area has small hummocks of spinifex (*Spinifex sericeus*) and a long, low spinifex dune. Spinifex cover on the dune is over 99%, with only very small areas occupied by marram (†*Ammophila arenaria*). The largest marram infestation covered an area of approximately 150m. Over most of the area marram is apparently in the early stages of invasion, and easily controlled by hand pulling. Pingao (*Desmoschoenus spiralis*) is present, but not common, a few tussocks are present.

The sand tussock (*Austrofestuca littoralis*) is present as scattered plants over much of this part of the site, with the sand convolvulus (*Calystegia soldanella*) and *Carex pumila* by far the most common and widespread species.

The rear part of the site is mostly spinifex, with *Juncus gregiflorus* in small hollows. There is a wetland here, between the rear dune and at the base of cliffs, where the water flow is impeded. *Isolepis basilaris* has been recorded in this area in small areas of low turf.

There is some gorse ($\dagger Ulex\ europaeus$) on the ecotone between the swamp and the rear dune.

Off road vehicles have free access to this area and are causing some damage to the *Pimelea* cf. *urvilleana* / *Raoulia australis* association. While the consolidation of the substrate in this part of the site does offer some buffer, the damage is such that the plants will not be able to persist in the longer term.

On the eastern side of the access track there I no seaward foredune for the first few hundred metres . The beach here arises directly from the sea and after the crest,

slopes to Lake Onoke. Vegetation on this gravel comprises *Carex pumila* and *Calystegia soldanella*.

Once the foredune becomes established on the beach crest, the *Raoulia australis / Pimelea* cf. *urvilleana* association establishes in its lee.

The substrate here is noticeably softer than on the western side, possibly a result of the formerly shifting nature of the Lake Onoke exit not allowing the gravel and sand to consolidate over a period of time. The damage resulting from the use of this part of the spit by off road vehicles is correspondingly more severe.

There are vehicle tracks all through this area and some *Raoulia australis* mats are completely destroyed. Even though there are a number of small, young plants present, their future is uncertain. The same may be said for the *Pimelea* cf. *urvilleana*.

The moth species *Notoreas* "hudsonii" and *Ericodesma aerodana*, though not seen during this survey, are likely to be present. These species make their homes among mats of *Pimelea* cf. *urvilleana* and are found at sites to the east and west of Onoke Spit.

Pingao enters the association some 1km from the access track and starts to build a small foredune. *Austrofestuca littoralis* and pingao also colonise the open gravels. Where the pingao dune is more established (1.5m high) the growth of the plants is more lush and a fine grade of sand is selectively trapped and surrounds the plants. Spinifex is often associated with the pingao and there is no vehicle damage to these raised dunes.

In this general area there are at least many hundred and probably over 1,000 plants of *Austrofestuca littoralis*.

Near the gull colony there is a more extensive series of dunes to the rear of the site, while the colony itself occupies a raised plateau of consolidated gravels with a dense cover of *Carex pumila* and *Calystegia soldanella*. Horned poppy (†*Glaucium flavum*) is also prevalent in this area.

Search effort Recce Moderate Thorough

Nomenclature generally follows Indigenous Higher Plants of New Zealand, 8th revision, 1992 by A.P. Druce

* indicates species listed on the Wellington Conservancy plant database

(unc) = uncommon, one or few plants seen. (sw) = seen only in the wetland at the western end.

Dicotyledonous trees and shrubs

Ozmanthus leptophylla (unc) Pimelea cf. urvilleana Plagianthus divaricatus* (sw)

Dicotyledonous lianes and related trailing plants

Calystegia soldanella

Monocotyledonous herbs:

Grasses

Austrofestuca littoralis* Poa cita (unc) Spinifex sericeus*

Sedges

Carex pumila Cyperus ustulatus (sw) Desmoschoenus spiralis* Isolepis cernua (sw)

Rushes and allied plants

Apodasmia (Leptocarpus) similis (sw) Juncus gregiflorus Juncus sarophorus

Monocotyledonous herbs other than orchids, grasses, sedges, rushes and allied plants

Phormium cookianum* (unc) Typha orientalis (sw)

Dicotyledonous herbs other than composites

Raoulia australis Selliera radicans (sw)

Birds

Banded dotterel
Bar tailed godwit
Black backed gull
Black shag
Caspian tern
Pipit
Red billed gull
Variable oystercatcher