

PAPAMOA DUNES

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On Sunday 5 July a strong contingent of members and several DoC staff took the opportunity to visit Papamoa to look at the flora of the dune systems in this rapidly developing area. We were fortunate to have DoC staff member and local resident Carol Long to show us around. We began at the Papamoa Surf Club where we looked at the work done by the Environment Bay of Plenty CoastCare group. They have fenced off sand dune areas and planted spinifex (*Spinifex sericeus*), pingao (*Desmoschoenus spiralis*) and sand tussock (*Austrofestuca littoralis*).

Later we moved further south-east along the beach to briefly look at another area of dunes. This area had largely reverted to bracken fernland with only a narrow margin of spinifex (*Spinifex sericeus*) on the foredunes. We noted a large range of weed species present. Here we saw the only known specimens of sand pimelea (*Pimelea arenaria*) from the Papamoa dunes. The three plants were growing near the foredune in amongst spinifex and bracken. This plant is classified as 'local' (Cameron *et al* 1995) with the main population in the Bay of Plenty being on Matakana Island.

We proceeded along the beach to Marjorie Lane at the end of Papamoa Beach Road and from there walked further along to a sunny lunch spot. In the afternoon we looked at the dune systems south-east of Papamoa. This land is part of the Maori land blocks 7B and 14 of the Te Tumu Kaituna Land Block, Papamoa, and there has recently been a resource consent application for sand mining of the back dune areas.

This area of dunes (51 ha) is one of the best examples of relatively unmodified sand dune communities remaining in the Bay of Plenty. The foredunes are composed largely of spinifex with scattered patches of pingao and the nationally threatened sand tussock *Austrofestuca littoralis* classified as rare (Cameron *et al* 1995). The back dunes are characterised by knobby sedge (*Isolepis nodosa*) and areas of wire vine (*Muehlenbeckia complexa*).

We spent several hours wandering around the dune systems. Carol was able to show us a range of sand tussock sites. Her research on the species at Papamoa (Long, in press) has shown that there is still a healthy population of sand tussock present in this area with 394 plants counted at 13 sites. The eastern Papamoa dunes are considered to have the best population of sand tussock in the Bay of Plenty.

The other significant feature of these dune systems is that they are relatively free of ecological weeds unlike so many other nearby dune systems. We noted only a few gorse (*Ulex europaeus*) plants. Boxthorn (*Lycium ferocissimum*) and pampas (*Cortaderia selloana*), both common weeds of the Papamoa dunes further west are virtually absent from this area. Other exotic species noted in the dune systems included lupin (*Lupinus arboreus*), Yorkshire fog (*Holcus lanatus*), catsear (*Hypochaeris radicata*) and haretail (*Lagurus ovatus*).

CHECKLIST OF THE FLORA

<i>Austrofestuca littoralis</i>	sand tussock
<i>Cakile edentula</i>	sea rocket
<i>Calystegia soldanella</i>	shore bindweed

<i>Carex pumila</i>	sand sedge
<i>Carex testacea</i>	
<i>Cassinia leptophylla</i>	tauhinu
<i>Coprosma acerosa</i>	sand coprosma
<i>Cortaderia selloana</i>	pampas
<i>Desmoschoenus spiralis</i>	pingao
<i>Holcus lanatus</i>	Yorkshire fog
<i>Hypochaeris radicata</i>	catsear
<i>Isolepis nodosa</i>	knobby sedge
<i>Lagurus ovatus</i>	harestail
<i>Lupinus arboreus</i>	lupin
<i>Lycium ferocissimum</i>	boxthorn
<i>Muehlenbeckia complexa</i>	wire vine, pohuehue
<i>Pinus radiata</i>	radiata pine
<i>Pteridium esculentum</i>	bracken
<i>Spinifex sericeus</i>	spinifex
<i>Ulex europaeus</i>	gorse

REFERENCES

- Cameron, E.K.; de Lange P.J.; Given D.R.; Johnson P.N. and Ogle C.C. 1995. New Zealand Botanical Society. New Zealand threatened and local plant lists. *New Zealand Botanical Society Newsletter* 39: 15-28.
- Long, C. (in press). Population of *Austrofestuca littoralis* in sand dunes at Papamoa. Unpublished report for Department of Conservation, Tauranga.