

In "Sand movement and the protection of natural areas on Pouto Peninsula, Northland, Conservancy Advisory Science notes 145. Do C, Wellington 1996. C.C. Ogle.

APPENDIX 2: Indigenous vascular plants of three forest areas on dunes:

- (a) Pakipaki, near Hokio, Levin, Horowhenua district (Druce 1972 [1991 revision]; Cooksley and Townsend 1992; Rapson et al. 1992)
- (b) Pretty Bush, Pouto Peninsula, north head of Kaipara Harbour, Northland (Forester and Beechman 1987; Wright 1991; pers. obs. 1994)
- (c) Tapu Bush, Pouto Peninsula, Kaipara, Northland (Miller 1992; Reid 1977; Wright and Young 1991)

- X = recorded as present  
 (X) = previously present (now extinct on site)  
 O = not within recorded geographic range for this species

GYMNOSPERMS

		Pakipaki	Pretty	Tapu
<i>Dacrycarpus dacrydioides</i>	kahikatea	X		
<i>Podocarpus totara</i>	totara	X	X	X
<i>Prumnopitys ferruginea</i>	miro	X		
<i>Prumnopitys taxifolia</i>	matai	X		

MONOCOT TREES

		Pakipaki	Pretty	Tapu
<i>Cordyline australis</i>	ti kouka, cabbage tree	X	X	X
<i>Rhopalostylis sapida</i>	nikau			X

DICOT TREES AND SHRUBS

		Pakipaki	Pretty	Tapu
<i>Alectryon excelsus</i>	titoki	X	X	X
<i>Beilschmiedia tarairi</i>	taraire	O		X
<i>B. tawa</i>	tawa			X
<i>Brachyglottis repanda</i>	rangiora	(X)		X
<i>Carmichaelia cunninghamii</i> (incl. <i>C. aligera</i> , <i>C. flagelliformis</i> )	NZ broom	X	X	X
<i>Carpodetus serratus</i>	putaputaweta			X
<i>Cassinia leptophylla</i> (incl. <i>C. retorta</i> )	tauhinu	X	X	X
<i>Coprosma acerosa</i>	sand coprosma	X	X	X
<i>C. areolata</i>		X		X
<i>C. crassifolia</i>		X	X	X
<i>C. grandifolia</i>	kanono, raurekau		X	X
<i>C. lucida</i>	shining karamu		X	X
<i>C. macrocarpa</i>	coastal karamu	O	X	X
<i>C. propinqua</i>		X		
<i>C. parviflora</i> s.s.		O		X
<i>C. rhamnoides</i>		X	X	X
<i>C. rigida</i>		X	?	X
<i>C. robusta</i>	karamu		X	X
<i>C. spathulata</i>				X
<i>C. macrocarpa</i> x <i>C. robusta</i>			X	
<i>Coriaria arborea</i>	tutu	X		
<i>Corokia cotoneaster</i>	korokio	X	X	X
<i>Corynocarpus laevigatus</i>	karaka		X	X
<i>Cyathodes juniperina</i>	prickly mingimingi	X	X	X
<i>Discaria toumatou</i>	matagouri	(X)		
<i>Dodonaea viscosa</i>	akeake	X	X	X
<i>Dysoxylum spectabile</i>	kohekohe		X	X
<i>Elaeocarpus dentatus</i>	hinau	X <sup>1</sup>		X

<sup>1</sup> Druce (1972, 1991) recorded *Elaeocarpus dentatus*; Cooksley and Townsend (1992) recorded *E. hookerianus* in their species list (p. 65), but *E. dentatus* in their figure on p. 67; Rapson et al. (1992) recorded *E. hookerianus* only. No observer has recorded both species unambiguously, so only *E. dentatus* is retained at present on the above list.

<i>Gaultheria macrostigma</i>		(X)	O	O
<i>Geniostoma rupestre</i> ssp. <i>ligustrifolium</i>	hangehange	X	X	X
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko	(X)	X	X
<i>H. sp. (H. diosmifolia</i> agg.)		O	X	X
<i>Hedycarya arborea</i>	pigeonwood	X		
<i>Ileostylus micranthus</i>	mistletoe	(X)		
<i>Knightia excelsa</i>	rewarewa	X	X	X
<i>Korthalsella salicornioides</i>	dwarf mistletoe	(X)		
<i>Kunzea ericoides</i> s.l.	kanuka	X	X	X
<i>Laurelia novae-zelandiae</i>	pukatea			X
<i>Leptospermum scoparium</i>	manuka	X	X	X
<i>Leucopogon fasciculatus</i>	mingimingi	X	X	X
<i>L. fraseri</i>	patotara	(X)		
<i>Litsea calicaris</i>	mangeao	O		X
<i>Lophomyrtus bullata</i>	ramarama			X
<i>L. obcordata</i>	rohutu	X	X	X
<i>Macropiper excelsum</i>	kawakawa	X	X	X
<i>Melicope ternata</i>	wharangi			X
<i>Melicytus micranthus</i>				X
<i>M. ramiflorus</i>	mahoe	X	X	X
<i>Metrosideros robusta</i>	northern rata			X
<i>Myoporum laetum</i>	ngaio	X		
<i>Myrsine australis</i>	mapou		X	X
<i>M. divaricata</i>	weeping mapou			X
<i>Nestegis cunninghamii</i>	black maire	X		
<i>N. lanceolata</i> <sup>2</sup>	white maire		X	X
<i>N. montana</i>	narrow-leaved maire	X	X	X
<i>Olearia albida</i>		O	X	X
<i>O. furfuracea</i>	akēpiro	O	X	X
<i>O. paniculata</i>	akiraho	X		
<i>O. rani</i>	heketara			X
<i>Pennantia corymbosa</i>	kaikomako	X		
<i>Pimelea tomentosa</i>		(X)		
<i>Pittosporum tenuifolium</i> s.l.	kohuhu	X	X	X
<i>Pomaderris ericifolia</i>		X		X
<i>Pseudopanax arboreus</i>	five finger	(X)	X	X
<i>P. crassifolius</i>	lancewood	X	X	X
<i>P. ferox</i>	fierce lancewood		X	X
<i>P. lessonii</i>	houpara	O	X	
<i>P. crassifolius</i> x <i>P. lessonii</i>			X	
<i>P. ferox</i> x <i>P. lessonii</i>			X	
<i>Schefflera digitata</i>	pate		X	
<i>Sophora microphylla</i>	kowhai	X	X	X
<i>Streblus heterophyllus</i>	small-leaved milk tree			X
<i>Vitex lucens</i>	puriri	O		X

## DICOT LIANES

<i>Clematis cunninghamii</i>				X
<i>C. forsteri</i>		X		
<i>C. paniculata</i>		X		
<i>Metrosideros diffusa</i>	white rata vine, aka			X
<i>M. perforata</i>	white rata vine, aka			X
<i>Muehlenbeckia australis</i>	pohuehue	X		
<i>M. complexa</i>	small-leaved pohuehue	X	X	X
<i>Parsonsia capsularis</i>	NZ jasmine	X	X <sup>3</sup>	X <sup>3</sup>
<i>P. heterophylla</i>	NZ jasmine	X		
<i>Rubus australis</i>	bush lawyer	(X)		

<sup>2</sup> The only *Nestegis* species recorded by Druce (1972, 1991) is *N. montana*, a species I also saw at Pakipaki in 1991. Cooksley and Townsend (1992) and Rapson et al. (1992) record *N. cunninghamii* (but not *N. montana*), and Rapson et al. also list *N. lanceolata*. The latter record may be an error for *N. montana* and is not retained in the above list.

<sup>3</sup> Most references for the Northland forests do not identify the *Parsonsia* to species level, except that Reid (1977) listed *P. heterophylla* and not *P. capsularis*. Broad-leaved forms of *P. capsularis* are locally common in Northland, and only the latter is retained in the above list.

<i>R. cissoides</i>	bush lawyer	(X)		X
<i>R. schmidelioides</i>	bush lawyer	X		
<i>Tetragonia trigyna</i>	NZ spinach	X		

## MONOCOT LIANE

<i>Ripogonum scandens</i>	supplejack		X	
---------------------------	------------	--	---	--

## FERN ALLY

<i>Lycopodium varium</i>	clubmoss			X
--------------------------	----------	--	--	---

## FERNS

<i>Adiantum aethiopicum</i>	maidenhair fern			X
<i>A. cunninghamii</i>	maidenhair fern		?	X
<i>A. hispidulum</i>	rosy maidenhair		X	X
<i>Asplenium flabellifolium</i>		X		
<i>A. flaccidum</i>	hanging spleenwort	X	X	X
<i>A. gracillimum</i>		X	X	X
<i>A. hookerianum</i>		X		X
<i>A. oblongifolium</i>	shining spleenwort	X	X	X
<i>A. polyodon</i>	sickle spleenwort	X	X	X
<i>A. flaccidum</i> x <i>A. gracillimum</i>		X		
<i>Blechnum filiforme</i>	climbing blechnum			X
<i>Cyathea dealbata</i>	ponga			X
<i>C. medullaris</i>	mamaku	(X)	X	X
<i>Dicksonia squarrosa</i>	wheki	X		
<i>Doodia media</i>	pukapuka		X	X
<i>Grammitis ciliata</i>				X
<i>Hymenophyllum bivalve</i>		(X)		
<i>H. dilatatum</i>			X	X
<i>H. flexuosum</i>				X
<i>H. multifidum</i>		(X)		
<i>H. revolutum</i>				X
<i>H. sanguinolentum</i>		(X)	X	X
<i>H. scabrum</i>				X
<i>Hypolepis ambigua</i>		(X)		
<i>Paesia scaberula</i>	ring fern	X	X	
<i>Pellaea rotundifolia</i>	button fern	X	X	X
<i>Phymatosorus pustulatus</i>	hound's tongue fern	X	X	X
<i>P. scandens</i>				X
<i>Polystichum richardii</i>		X	X	X
<i>Pteridium esculentum</i>	bracken	X	X	X
<i>Pteris tremula</i>	shaking brake	X	X	X
<i>Pyrrosia eleagnifolia</i>	leather leaf fern	X	X	X
<i>Trichomanes reniforme</i>	kidney fern	(X)	X	X

## MONOCOT HERBS

<i>Acianthus sinclairii</i>		X	X	X
<i>Astelia solandri</i>	perching lily		?	X
<i>A. trinervia</i>	kauri grass	O		X
<i>Bulbophyllum pygmaeum</i>				X
<i>Caladenia catenata</i> (?)		(X)		
<i>Carex dissita</i>		(X)		
<i>C. dipsacea</i>		(X)		
<i>C. virgata</i>		X		
<i>C. sp.</i> (cf <i>C. raoulii</i> , <i>C. testacea</i> ) <sup>4</sup>		X	X	X
<i>Chiloglottis cornuta</i>		X		
<i>Collospermum hastatum</i>	perching lily			X
<i>C. microspermum</i>	perching lily			X
<i>Cortaderia splendens</i>	toetoe	O	X	X
<i>Corybas cheesemanii</i>		(X)		
<i>C. trilobus</i> agg.	spider orchid	X	X	X
<i>Cyperus ustulatus</i>		X		
<i>Cyrtostylis oblonga</i>		X		
<i>Dendrobium cunninghamii</i>	bamboo orchid			X
<i>Dianella nigra</i>	turutu		X	X
<i>Drymoanthus adversus</i>			X	X

@ Pakipaki on Kapuka, rewaewa  
white hair and grass

<sup>4</sup> This unnamed *Carex* species has double-folded leaves (similar to those of *C. raoulii*) and, like *C. testacea*, has glabrous (not hispid) utricles, and the male spikes without fruits at their distal ends. The unnamed species seems to be largely acaetal or semi-acetal. I lodged a voucher from Betty Bush (CHR).

<i>Earina autumnalis</i>	autumn orchid	X		X
<i>E. mucronata</i>		X	X	X
<i>Gahnia setifolia</i>				X
<i>G. xanthocarpa</i>				X
<i>Gastrodia minor</i>		(X)		
<i>Isolepis nodosa</i>	club sedge	X	X	X
<i>I. reticularis?</i>			X	
<i>Lepidosperma australe</i>	four square	(X)		
<i>L. laterale</i>		O		X
<i>Leptocarpus similis</i>	jointed wire-rush			X
<i>Microlaena polynoda</i>	bamboo ricegrass		X	X
<i>M. stipoides</i>	meadow ricegrass	X	X	X
<i>Microtis unifolia</i>	onion-leaved orchid	X		
<i>Morelotia affinis</i>				X
<i>Oplismenus imbecillus</i>			X	X
<i>Phormium tenax</i>	harakeke, NZ flax		X	X
<i>Poa anceps</i> s.l.		X	X	X
<i>P. pusilla</i>				X
<i>Pterostylis alobula</i>	greenhood orchid	X	X	X
<i>P. montana</i> s.l.	greenhood orchid	(X)		
<i>Rytidosperma gracile</i>	danthenia			X
<i>Schoenus tendo</i>		O		X
<i>Uncinia banksii</i>	hook grass		?	X
<i>U. distans</i>	hook grass		X <sup>5</sup>	
<i>U. uncinata</i>	hook grass	X	X	X
<i>U. zotovii</i>	hook grass			X

## DICOT HERBS

<i>Acaena anserinifolia</i>	bidibidi	(X)		
<i>Cardamine debilis</i> agg.	bittercress	X		
<i>Dichondra repens</i>	Mercury Bay weed	X		
<i>Drosera peltata</i> ssp. <i>auriculata</i>	sundew	(X)		
<i>Galium propinquum</i>		X		
<i>Gnaphalium gymnocephalum</i>	cudweed	X		
<i>Gonocarpus incanus</i>				X
<i>Hydrocotyle moschata</i>	hairy pennywort	X		
<i>Lagenifera pumila</i>		X		
<i>Oxalis exilis</i>	creeping oxalis	X		
<i>Parietaria debilis</i>		X		
<i>Pseudognaphalium</i> sp. ( <i>P. luteo-album</i> agg.)	cudweed		X	
<i>Ranunculus reflexus</i>	bush buttercup	X		
<i>Senecio hispidulus</i>	fireweed	(X)		X
<i>S. minimus</i>	fireweed	(X)		X
<i>S. quadridentatus</i>		(X)		
<i>Solanum americanum</i>	small-flowered nightshade	X	X	X
<i>Stellaria decipiens</i>		(X)		X
<i>Urtica incisa</i>		(X)		

<sup>5</sup> Most plant lists from Pretty Bush contain one *Uncinia* species in addition to *U. uncinata* (Wright 1991 recorded "*U. ?rubra/scabra*" and Forester and Beachman recorded *U. banksii*). In 1994 I saw only one fine-leaved species of *Uncinia* in Pretty Bush, *U. distans*.

## DOUBTFUL RECORDS

NAME USED	AUTHOR(S) <sup>a</sup>	PLACE	PROBABLE IDENTITY
<i>Agropyron scabrum</i> (sic!)	C	Pakipaki	<i>Elymus rectisetus</i> agg. (adventive; see Connor 1994, Duguid 1990)
<i>Asplenium bulbiferum</i>	Ra, Re	Pakipaki, Tapu	<i>A. gracillimum</i>
<i>Asplenium bulbiferum</i> x <i>A. flaccidum</i>	C	Pakipaki	<i>A. flaccidum</i> x <i>A. gracillimum</i>
<i>Astelia banksii</i>	Re	Tapu Bush	<i>A. solandri?</i>
<i>Carex fluviatilis</i>	C	Pakipaki	?
<i>Carex littoralis</i>	C	Pakipaki	?
<i>Carex testacea</i>	Wr, Wy	Pretty, Tapu	<i>Carex</i> sp. unnamed (see plant list above)
<i>Cladium baumea</i>	C	Pakipaki	?
<i>Coprosma lucida</i> x <i>C. macrocarpa</i>	F	Pretty	? <i>C. macrocarpa</i> x <i>C. robusta</i>
<i>Cortaderia fulvida</i>	M	Tapu Bush	<i>C. splendens?</i>
<i>Elaeocarpus hookerianus</i>	C, Ra	Pakipaki	<i>E. dentatus</i>
<i>Hydrocotyle elongata</i>	C	Pakipaki	<i>H. moschata?</i>
<i>Isachne globosa</i> ("small bush grass")	M	Tapu Bush	? <i>Oplismenus imbecillus</i>
<i>Mida salicifolia</i>	C	Pakipaki	<i>Nestegis</i> sp. or spp.
<i>Nestegis lanceolata</i>	Ra	Pakipaki	<i>N. montana</i>
<i>Parsonsia heterophylla</i>	Re	Tapu Bush	<i>P. capsularis?</i> (see footnote , p. )
<i>Pterostylis areolata</i> (sic!) [reported seen 13.7.92]	Ra	Pakipaki	<i>P. alobula?</i>
<i>Sophora tetraptera</i>	C	Pakipaki	<i>S. microphylla</i>
<i>Stellaria gracilentia</i>	C	Pakipaki	?
<i>Uncinia banksii</i>	F	Pretty	<i>U. distans?</i>
<i>Uncinia "rubra/scabra"</i>	Wr	Pretty	<i>U. distans?</i>
<i>Urtica linearifolia</i>	C	Pakipaki	Not in forest portion?
<i>Wahlenbergia gracilis</i>	C	Pakipaki	<i>W. marginata</i> (adventive to NZ)

At Pakipaki: 20/7/96  
Red poll + fantail recorded

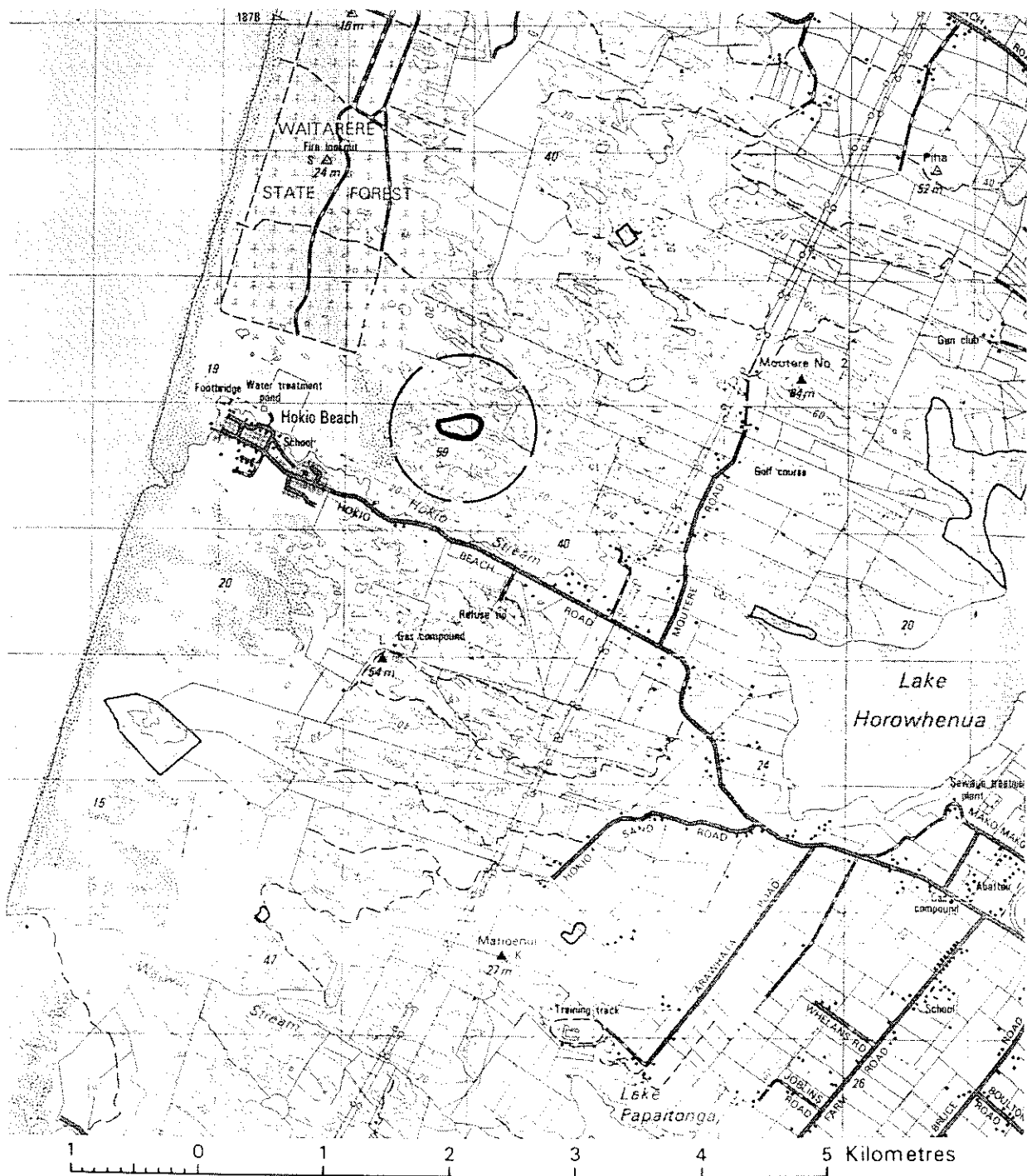
Lupinus sp.

boxthorn.

Echinopogon ovatus

<sup>a</sup> C = Cooksley and Townsend (1992); F = Forester and Beachman (1987, 1990); M = Miller (1992); Ra = Rapson et al. (1992); Re = Reid (1977); Wr = Wright (1991); Wy = Wright and Young (1991)

RAP 16 Pakipaki Dune Forest



Study Area: 90  
GR Centre: S25 969658  
Area: 10 ha  
Survey Date: 21/12/89

