

CHECKLIST OF VASCULAR PLANTS OF THE KAWERUA AREA

Compiled by D.J. Court*

SUMMARY

A list of vascular plants growing within an area of approximately 5km radius from Kawerua is presented. Both native and adventive species are included and are placed in 11 communities or habitats which are described briefly. The list names 293 taxa; 62 of these are exotic species of which 28 grow as weeds in other parts of New Zealand. Man has probably deliberately planted 35 species in several small once-settled areas and in forestry plantations.

INTRODUCTION

Many of the communities near Kawerua (Grid reference 962062, NZMS 1 Waipoua sheet N18, 2nd edition, June 1967) are of great interest to botanists. Original and unspoiled kauri forests are close by but the larger area consists of scrub derived from the milling, burning and clearing of forest. Considerable regeneration of tree species, especially kauri may alter the scrub in the next few decades. Short scrub on gumland and other badland is probably relatively stable and may not change for many years. Many interesting species are to be found in a complex of lacustrine, estuarine, swamp, lagoonal and coastal habitats. A number of very worthwhile studies are possible and the present checklist may be of future assistance.

The following past and present members of Auckland University Field Club have contributed to the collection: Drs J.E. and R.E. Beever, Mr G. Body, Mr D.J. Court, Mrs E.M. Miller (nee Dickson), Mrs L.R. Ferguson and Mr A.E. Wright.

Plant species have been obtained from a wide area and the list is designed to cover those species to be found within a 5km radius from the Kawerua Hut; from the mouth of the Waimamaku River to the north, inland to Pawakatutu (Grid reference 997097 NZMS 1 Waipoua sheet N18) and to Waipoua River in the south. Maps of the area have also been drawn by Hayward⁷ and Atwell⁸.

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COMMUNITIES AND HABITATS

The following lettered classification is provided so that species given in the checklist are placed in context with the major plant communities.

- B Broadleaf dicotylous – podocarp forest (in proximity to Kauri)
- C Coastal dunes (fixed and unfixed)
- D *Dracophyllum* – *Leptospermum* – *Cyathodes* scrub
- F Lacustrine, estuarine, lagoonal and stream habitats
- G Grazed grassland
- K Kauri (*Agathis australis*) forest
- M Marine habitat (*Zostera*)
- P Pohutukawa (*Metrosideros excelsa*) coastal forest (remnant only)
- R Rocky shore
- S Plant species associated with settlement or forestry operations. (Exotic timber species planted over large areas by N.Z. Forest Service, and garden remnants at Pawakatutu and the Kawerua Hut)
- T *Leptospermum* scrub

NOMENCLATURE

All native vascular plants excepting grasses are listed and ordered according to Volumes 1 and 2 of 'Flora of New Zealand'^{1,9}.

Native grasses follow Cheeseman³ and Connor⁵. Two minor exceptions to this scheme include the renaming of *Pseudopanax*⁶ and the transfer of an unidentified 'Erechtites' to *Senecio* (Drury unpubl.).

Exotic species (marked with asterisk) are named from Clapham, Tutin and Warburg (Flora of the British Isles)⁴ and other sources. Exotic, non-European grasses follow Lambrecht⁸.

Plant families are listed in the order found in 'Flora of New Zealand'. Additional families (marked with dagger) not in the native flora are added in alphabetical order after the native families in each class. Genera within families are ordered alphabetically. Species are treated similarly.

Well known common names are given in brackets and where applicable, follow 'Standard Common Names for Weeds in New Zealand'¹⁰.

Voucher specimens of almost all taxa are lodged in the Herbarium of the Botany Department, University of Auckland.

CHECKLIST

PSILOPSIDA

Psilotaceae

- Tmesipteris tannensis* B, K
(Primitive epiphyte)

LYCOPSIDA

Lycopodiaceae

- Lycopodium billiardieri* B
L. cernuum D, T
L. deuterodensum D, T
L. laterale D
L. volubile D, T

FILICOPSIDA			
Osmundaceae			
<i>Todea hymenophylloides</i>	B		
Schizaeaceae			
<i>Lygodium articulatum</i> (mangemange)	B, K, T		
<i>Schizaea fistulosa</i> (comb fern)	D		
Gleicheniaceae			
<i>Gleichenia cunninghamii</i> (umbrella fern)	T		
<i>G. flabellata</i>	T		
<i>G. microphylla</i> (tangle fern)	D, T		
Loxomaceae			
<i>Loxoma cunninghamii</i>	B		
Hymenophyllaceae			
<i>Hymenophyllum atrovirens</i>	B		
<i>H. demissum</i>	B, K		
<i>H. dilatatum</i>	B, K		
<i>H. flabellatum</i>	B, K		
<i>H. multifidum</i>	B		
<i>H. revolutum</i>	B		
<i>H. sanguinolentum</i>	B, K		
<i>Trichomanes elongatum</i>	B		
<i>T. reniforme</i> (kidney fern)	B, K		
<i>T. venosum</i>	B		
Dicksoniaceae			
<i>Dicksonia lanata</i>	K		
<i>D. squarrosa</i> (wheki)	B, K, T		
Cyatheaceae			
<i>Cyathea dealbata</i> (ponga)	B, K, T		
<i>C. medullaris</i> (mamaku)	B, K, T		
Polypodiaceae			
<i>Anarthropteris lanceolata</i>	B, K, T		
<i>Phymatodes diversifolium</i>	B, K		
<i>Pyrrosia serpens</i>			
Grammitidaceae			
<i>Grammitis heterophylla</i>	B		
Thelypteridaceae			
<i>Thelypteris pennigera</i>	B, K, T		
Lindsaeaceae			
<i>Lindsaea linearis</i>	D, T		
<i>L. trichomanoides</i>	B		
Pteridaceae			
<i>Paesia scaberula</i> (scented fern)	D, G, T		
<i>Pteridium aquilinum</i> var. <i>esculentum</i> (bracken)	C, D, G, T		
Aspleniaceae			
<i>Asplenium bulbiferum</i> (hen and chickens)		B, K	
<i>A. falcatum</i>		B, K, T	
<i>A. flaccidum</i>		B, K, T	
<i>A. lucidum</i>		B, K	
Blechnaceae			
<i>Blechnum capense</i> (kio kio)		B, K, T	
<i>B. discolor</i>		B, K	
<i>B. filiforme</i>		B, K	
<i>B. fraseri</i>		B, K, T	
<i>B. lanceolatum</i>		B, K	
<i>B. membranaceum</i>		B, K	
<i>Doodia media</i>		B, T	
Dryopteridaceae			
<i>Rumohra adiantiformis</i>		K	
<i>R. hispida</i> (hairy fern)		B, K, T	
Adiantaceae			
<i>Adiantum cunninghamii</i> (maiden hair)		B, K, T	
<i>A. hispidulum</i>		B	
SPERMATOPSIDA			
GYMNOSPERMAE			
Podocarpaceae			
<i>Dacrydium cupressinum</i> (rimu)		B, K, T	
<i>Phyllocladus trichomanoides</i> (tanekaha)		B, K, T	
<i>Podocarpus dacrydioides</i> (kahikatea)		B, K, T	
<i>P. ferrugineus</i> (miro)		B, K, T	
<i>P. hallii</i> (Hall's totara)		B	
<i>P. spicatus</i> (matai)		B, K, T	
<i>P. totara</i> (totara)		B, K, T	
Cupressaceae			
<i>Cupressus macrocarpa</i> * (macrocarpa)		S	
<i>Libocedrus plumosa</i> (kawaka)		T	
Araucariaceae			
<i>Agathis australis</i> (kauri)		D, K, T	

Pinaceae†			
<i>Pinus pinaster*</i>		↵	
(maritime pine)			
<i>P. radiata*</i>		S	
(radiata pine)			
ANGIOSPERMAE			
DICOTYLEDONES			
Lauraceae			
<i>Beilschmiedia tarairi</i>		B, K	
(taraire)			
<i>B. tawa</i> (tawa)		B, K	
<i>Cassytha pubescens*</i>		C, D, G,	
(twining parasite)		T	
<i>Litsea calicaris</i>		B, K	
(mangao)			
Monimiaceae			
<i>Hedycarya arborea</i>		B, K	
(pigeonwood)			
<i>Laurelia novae-zelandiae</i>		B, K	
(pukatea)			
Ranunculaceae			
<i>Clematis paniculata</i>		T	
(clematis)			
Cruciferae			
<i>Cardamine sp</i>		T	
Piperaceae			
<i>Macropiper excelsum</i>		B, P	
(kawakawa)			
Violaceae			
<i>Melicytus macrophyllus</i>		B, K	
<i>M. ramiflorus</i>		B, K	
(mahoe)			
Crassulaceae			
<i>Sedum sp*</i>		S	
Droseraceae			
<i>Drosera auriculata</i>		T	
(sundew)			
<i>D. binata</i> (sundew)		B	
Aizoaceae			
<i>Disphyma australe</i>		C, R	
(iceplant)			
<i>Mesembryanthemum edule*</i>		C	
<i>Tetragonia trigyna</i>		C, R	
(NZ spinach)			
Caryophyllaceae			
<i>Scleranthus biflorus</i>		F	
<i>Spergularia marginata</i>		R	
Polygonaceae			
<i>Muehlenbeckia complexa</i>			C, G, R
(pohuehue)			
<i>Polygonum hydropiper*</i>			F
(water pepper)			
Chenopodiaceae			
<i>Atriplex novae-zelandiae</i>			C
<i>Chenopodium sp*</i>			C
<i>Salicornia australis</i>			F, R
(glasswort)			
Geraniaceae			
<i>Pelargonium sp*</i>			S
(‘geranium’)			
Oxalidaceae			
<i>Oxalis ?corniculata</i>			C, R
(yellow oxalis)			
Haloragaceae			
<i>Haloragis erecta</i>			D, T
<i>H. micrantha</i>			F
<i>H. procumbens</i>			D, T
<i>Myriophyllum elatinoides</i>			F
Onagraceae			
<i>Fuchsia excorticata</i>			B
(kotukutuku)			
<i>F. magellanica (cv)*</i>			S
<i>F. procumbens</i>			T
(creeping fuchsia)			
<i>F. sp (cv)*</i>			S
Callitrichaceae			
<i>Callitriche ?stagnalis</i>			F
Thymelaeaceae			
<i>Pimelea prostrata</i>			C, D, R,
(pinatoro)			T
<i>P. tomentosa</i>			D, T
Proteaceae			
<i>Hakea sp*</i>			D
<i>Knightia excelsa</i>			B, K, T
(rewa rewa)			
Coriariaceae			
<i>Coriaria arborea</i>			B, K, T
(tutu)			
Pittosporaceae			
<i>Pittosporum cornifolium</i>			B, K
<i>P. eugenioides</i>			K
(tarata)			
<i>P. kirkii</i>			K
<i>P. tenuifolium</i>			B, T

Passifloraceae		<i>Rubus australis</i>	B, K, T
<i>Passiflora edulis*</i>	S	(bush lawyer)	
(passion fruit)		<i>R. cissoides</i>	B, K, T
<i>P. sp.*</i>	S	(bush lawyer)	
Myrtaceae		<i>R. fruticosus agg.*</i>	T
<i>Eucalyptus sp.*</i>	S	(blackberry)	
<i>Eugenia maire</i>	B, K	Papilionaceae	
(maire)		<i>Carmichaelia aligera</i>	B, K, T
<i>Leptospermum ericoides</i>	T	(NZ broom)	
(kanuka)		<i>Lotus pedunculatus*</i>	G, T
<i>L. scoparium</i>	C, D, T	(lotus major)	
(manuka)		<i>Lupinus arboreus*</i>	C, R, S
<i>Lophomyrtus bullata</i>	B, K	(tree lupin)	
(ramarama)		<i>Ulex europeus*</i>	T
<i>Metrosideros excelsa</i>	P	(gorse)	
(pohutukawa)		Corynocarpaceae	
<i>M. fulgens</i>	B, K	<i>Corynocarpus laevigatus</i>	B, K
(rata)		(karaka)	
<i>M. perforata</i>	B, K		
(rata)		Santalaceae	
Elaeocarpaceae		<i>Mida salicifolia</i>	K
<i>Aristotelia serrata</i>	B	(NZ sandalwood)	
(wineberry)		Rhamnaceae	
<i>Elaeocarpus dentatus</i>	B, K	<i>Pomaderris phyllicifolia</i>	D, T
(hinau)		(tauhinu)	
Tiliaceae		<i>P. prunifolia var. edgerleyi</i>	D, T
<i>Entelea arborescens</i>	T		
(whau)		Rutaceae	
Malvaceae		<i>Melicope simplex</i>	T
<i>Hoheria populnea</i>	B, K	<i>M. ternata</i>	T
(houhere)		(wharangī)	
Euphorbiaceae		<i>Phebalium nudum</i>	K
<i>Euphorbia peplus*</i>	C	(mairehou)	
(milkweed)		Meliaceae	
Cunoniaceae		<i>Dysoxylum spectabile</i>	B, K
<i>Ackama rosaeifolia</i>	B, K, T	(kohekohe)	
<i>Weinmannia silvicola</i>	B, K, T	Sapindaceae	
Escalloniaceae		<i>Dodonea viscosa</i>	B, K
<i>Escallonia sp.*</i>	S	(akeake)	
(hedge-plant)		Araliaceae	
<i>Ixerba brexioides</i>	B, K	<i>Pseudopanax arboreus</i>	B, K, T
(tawari)		(five-finger)	
<i>Quintinia serrata</i>	B	<i>P. crassifolius</i>	K, T
Rosaceae		(lancewood)	
<i>Frageria vesca*</i>	S	<i>P. laetus</i>	
(wild strawberry)		<i>Schefflera digitata</i>	B, K
<i>Malus sp.*</i>	S		
(?apple)			

Cornaceae			
<i>Corokia buddleioides</i>	T	<i>C. lucida</i> (karamu)	B, K, T
(korokia)		<i>C. repens</i> (taupata)	C, P, R
<i>Griselinia lucida</i>	K	<i>C. rhamnoides</i>	T
(puka)		<i>C. robusta</i>	B, K
Umbelliferae		<i>C. spathulata</i>	T
<i>Apium australe</i>	R	<i>Nertera cunninghamii</i>	B, T
(NZ celery)		<i>N. setulosa</i>	B, T
<i>Centella uniflora</i>	T	Compositae	
<i>Lilaeopsis orbicularis</i>	F, R	<i>Brachyglottis repanda</i>	B, K
Ericaceae		(rangiora)	
<i>Gaultheria antipoda</i>	D, T	<i>Cassinia retorta</i>	C, R
(snowberry)		(tauhinu)	
<i>Rhododendron sp(cv)*</i>	S	<i>Cirsium vulgare*</i>	C, G, T
		(scotch thistle)	
Epacridaceae		<i>Cotula coronopifolia</i>	C, F
<i>Cyathodes fasciculata</i>	D, T	(bachelor's button)	
(mingi-mingi)		<i>Dahlia sp*</i>	S
<i>C. fraseri</i>	D, T	<i>Erigeron floribundus*</i>	B, C, D,
<i>Dracophyllum latifolium</i>	K		R, T
(neinei)		<i>Gnaphalium sp A</i>	C
<i>D. lessonianum</i>	D, T	(cudweed)	
<i>Epacris pauciflora</i>	D, T	<i>G. sp B</i>	T
Myrsinaceae		<i>G. sp C</i>	B
<i>Myrsine australis</i>	B, K, T	<i>Olearia albida</i>	T
(mapau)		(Auckland tree-daisy)	
<i>M. salicina</i>	K	<i>O. rani</i> (heketara)	B, K
(toro)		<i>Senecio kirkii</i>	B, K, T
Oleaceae		(Kirk's tree-daisy)	
<i>Nestegis lanceolata</i>	B, K	<i>S. kirkii var. angustior</i>	D, T
(white maire)		<i>S. sp</i> ('Erechtites')	C
<i>N. montana</i>	B, K	<i>Sonchus asper*</i>	C
(mountain maire)		(prickly sowthistle)	
Loganiaceae		<i>S. oleraceus*</i>	C
<i>Geniostoma ligustrifolium</i>	B, D, K,	(sowthistle)	
(hangehange)	T		
Apocynaceae		Primulaceae	
<i>Parsonsia heterophylla</i>	B, K	<i>Anagallis arvensis*</i>	C, G, T
Caprifoliaceae		(scarlet pimpernel)	
<i>Aseuosmia macrophylla</i>	K	Plantaginaceae	
(NZ honeysuckle)		<i>Plantago major*</i>	C, G, T
<i>Viburnum macrocephalum*</i>	S	(broad-leaved plantain)	
Rubiaceae		Campanulaceae	
<i>Coprosma acerosa</i>	C, R	<i>Wahlenbergia gracilis</i>	C, D
(sand coprosma)		(native harebell)	
<i>C. acerosa x repens</i>	C	Lobeliaceae	
(C. kirkii Cheesem.)		<i>Lobelia anceps</i>	R, T
<i>C. arborea</i>	B, K	(shore lobelia)	
<i>C. australis</i>	B, K, T		

Convolvulaceae			
<i>Calystegia soldanella</i> (sand convolvulus)	C		
<i>C. ?turgoriorum</i> (NZ convolvulus)	T		
Solanaceae			
<i>Physalis peruviana</i> * (cape gooseberry)	S		
<i>Solanum ?laciniatum</i> (poroporo)	S		
<i>S. nigrum</i> * (black nightshade)	C, T		
Scrophulariaceae			
<i>Antirrhinum sp</i> * (snapdragon)	S		
<i>Glossostigma sp</i>	F		
<i>Hebe stricta var. stricta</i>	D, T		
<i>Limosella lineata var. spathulata</i>	F		
<i>Veronica sp</i> * (speedwell)	T		
Myoporaceae			
<i>Myoporum laetum</i> (ngaio)	R		
Labiatae			
<i>?Ajuga sp</i> *	S		
<i>?Mentha sp</i> *	S		
Verbenaceae			
<i>Vitex lucens</i> (puriri)	B		
Hydrangeaceae†			
<i>Hydrangea hortensis (cv)</i> *	S		
Orobanchaceae†			
<i>Orobanche minor</i> * (broom rape)	C		
Phytolaccaceae†			
<i>Phytolacca octandra</i> * (inkweed)	C		
Theaceae†			
<i>Camellia japonica (cv)</i> *	S		
Vitidaceae†			
<i>Vitis vinifera</i> * (grape)	S		
MONOCOTYLEDONES			
Juncaginaceae			
<i>Triglochin striatum</i>	F		
Zosteraceae			
<i>Zostera capricorni</i> (sea grass)	M		
Potamogetonaceae			
<i>Potamogeton sp</i>		F	
Liliaceae			
<i>Astelia solandri</i>		K	
<i>A. trinervia</i>		K	
<i>Collospermum hastatum</i>		B, K	
<i>Dianella nigra</i> (blueberry)		B, K, T	
Smilacaceae			
<i>Ripogonum scandens</i> (supplejack)		B, K, T	
Agavaceae			
<i>Cordyline australis</i> (cabbage tree)		B, F, K, T	
<i>C. banksii</i>		B	
<i>Phormium tenax</i> (NZ flax)		B, C, F, K, P, R, T	
Juncaceae			
<i>Juncus maritimus var. australiensis</i>		F	
<i>J. planifolius</i>		F	
Restionaceae			
<i>Leptocarpus similis</i> (jointed rush)		C, D, F, R	
Typhaceae			
<i>Typha orientalis</i> (raupo)		F	
Iridaceae			
<i>Libertia pulchella</i> (NZ iris)		B, K	
<i>Watsonia sp</i> *		D, F, G, T	
Palmae			
<i>Rhopalostylis sapida</i> (nikau)		B, K, T	
Pandanaceae			
<i>Freycinetia banksii</i> (kiekie)		B, K	
Orchidaceae			
<i>Acianthus fornicatus var. sinclairii</i>		B, K	
<i>Bulbophyllum pygmaeum</i>		B, K	
<i>Corybas orbiculatus</i>		B	
<i>Dendrobium cunninghamii</i>		B, K	
<i>Earina autumnalis</i>		B, K	
<i>E. mucronata</i>		B, K	
<i>Prasophyllum pumilum</i>		D	
<i>Pterostylis trullifolia</i>		T	
<i>Thelymitra sp</i>		D, T	

Cyperaceae			
<i>Baumea juncea</i>	F	<i>Cortaderia ?splendens</i>	C, R, T
<i>B. rubiginosa</i>	F	(toetoe)	
<i>B. tenax</i>	F	<i>Cynodon dactylon*</i>	C, G, R
<i>B. teretifolia</i>	F	(Indian doab)	
<i>Carex pumila</i>	C	<i>Glyceria sp*</i>	F
(sand sedge)		<i>Microlaena avenacea</i>	B, K, T
<i>Cyperus congestus*</i>	F	(bush rice grass)	
<i>C. ustulatus</i>	F	<i>Notodanthonia sp</i>	D, R, T
<i>C. sp*</i> (papyrus type)	F	<i>Oplismenus imbecillus</i>	B, D, K,
<i>Desmoschoenus spiralis</i>	C		T
(pingao)		<i>Paspalum dilatatum*</i>	G
<i>Eleocharis acuta</i>	F	<i>P. paspaloides*</i>	F
<i>E. sphacelata</i>	F	<i>Pennisetum clandestinum*</i>	G
(tall spike rush)		(kikuyu)	
<i>Gahnia pauciflora</i>	B, K, T	<i>Spinifex hirsutus</i>	C
<i>G. setifolia</i>	B, K, T	<i>Sporobolus africanus*</i>	C
<i>Lepidosperma australe</i>	T	(ratstail)	
<i>L. laterale</i>	B, D, F,	<i>Stenotaphrum secundatum*</i>	C, G
	K, T	(buffalo grass)	
<i>Morelotia affinis</i>	D, K, T	<i>Stipa teretifolia</i>	C, R
<i>Schoenus tendo</i>	C, D, T		
<i>Scirpus cernuus</i>	F	Alliaceae †	
<i>S. lacustris</i>	F	<i>Agapanthus sp (cv)*</i>	S
<i>S. nodosus</i>	C, F, R,	Amaryllidaceae †	
	T	<i>Narcissus sp (cv)*</i>	S
<i>S. ?sulcatus</i>	F	Araceae †	
<i>Tetraria capillaris</i>	C, F	<i>Colocasia esculentum*</i>	S
<i>Uncinia banksii</i>	T	(taro)	
(hooked sedge)		<i>Zantedeschia aethiopica*</i>	S
<i>U. ?zotovii</i>	T	(arum lily)	
(hooked sedge)		<i>Z. ?elliotiana*</i>	S
Gramineae		Cannaceae †	
<i>Ammophila arenaria*</i>	C, S	<i>Canna ?lutea*</i>	S
(marram)		Commelinaceae †	
<i>Bromus sp*</i>	G	<i>Tradescantia fluminensis*</i>	S
		(wandering Jew)	

Asterisk*: species not native to New Zealand
 cv: cultivar
 Dagger†: family not native to New Zealand

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REFERENCES

- ¹Allan, H.H. 1961 'Flora of New Zealand' Volume 1, Government Printer, Wellington.
- ²Atwell, E.G.; Puch, G. F.; Lawn, R. 1973 Archaeology of the Waipoua Region, Northland, Part 1. *Tane* 19: 103-10.
- ³Cheeseman, T.F. 1925 'Manual of the New Zealand Flora' Second Edition, Government Printer, Wellington,
- ⁴Clapham, A.R.; Tutin, T.G.; Warburg, E.F. 1962 Flora of the British Isles, Second Edition, Cambridge University Press.
- ⁵Connor, H.E. 1971 *Cortaderia splendens* Connor sp. nov. (Gramineae) NZ J. Bot. 9: 519-25.
- ⁶Edgar, E. 1973 Names in *Pseudopanax* C. Koch (Araliaceae) NZ J. Bot. 11: 171-2.
- ⁷Hayward, B.W. 1972 Geology of the Kawerua Coastline, North Auckland. *Tane* 18: 149-68.
- ⁸Lambrecht, N.C. 1972 'What Grass is That?' NZ DSIR Information Series – No. 87, Government Printer, Wellington.
- ⁹Moore, L.B.; Edgar, E. 1970 'Flora of New Zealand' Volume 2, Government Printer, Wellington.
- ¹⁰'Standard Common Names for Weeds in New Zealand', 1969, N.Z. Weed and Pest Control Society, Editorial Services Limited, Wellington.