

Vascular Plants of the Taupo Mire, recorded 1977-78 by Victoria University Department of Extension Study Group, under Mr R. G. Bagnall. (List compiled by C. C. Ogle, with additions from Wellington Botanical Society Visit 2.2.80)

NOTES: Once an arm of the sea - a lagoon cut off by deposits of shingle across mouth of bay at Plimmerton - progressive decrease in salt water influence - 1855 earthquake completed change to fresh water. Silty-peat accumulation, mainly from sedges; surface 2m a.s.l. behind Plimmerton to 23m a.s.l. at Airlie Road. Water table mostly at surface - locally above or below the surface.

Complex mosaic of veg. types - successional stages from lagoon/swamp to dry ground, also from flax harvesting, grazing, bulldozing of adjacent ridges and infilling.

Wet areas: Sedgeland: (Mostly *Carex lessoniana* dominant locally, *Baumea rubiginosa*, *Carex secta*)

Tussocklands: flax dominant - conspicuous (but minor cover %) shrubs at north end.

Herbfields: various species locally dominant, including *Bidens*, *Polygonum* species, *Ranunculus repens*, *Mimulus*.

Dryer Areas: Fernlands: (Bracken dominant)

Grasslands: (South end - rank pasture growth)

Shrublands: (blackberry dominant)

Raised slopes and ridges - not surveyed in detail - grassed in places, also low and tall manuka and/or kanuka scrub - some with other forest tree and shrub species.

The species list is for the total area enclosed by S.H.1, the NIMT Railway, Airlie Road, and a line from Winstone's to the railway at the south.

	<u>On mire (some also on higher ground)</u>	<u>Only on raised ground</u>	<u>TOTALS</u>
Indigenous	81	73	154
Adventive	83	96	179*
	<u>164</u>	<u>169</u>	<u>333</u>

*Includes several native species adventive to district, e.g. karo. In the list, * = adventive species, + = in mire proper, - = rare in area.

GRASSES

+*	<i>Agrostis stolonifera</i>	Creeping Bent
*	<i>A. tenuis</i>	Browntop
+*	<i>Anthoxanthum odoratum</i>	Sweet Vernal
+*	<i>Arrhenatherum elatius</i>	Tall Oat Grass
+*-	<i>Avena sp ?</i>	Wild Oat
*	<i>Briza media</i>	Quaking Grass
*	<i>Bromus diandrus</i>	Ripgut brome
*	<i>B. mollis</i>	Soft Brome
+*	<i>B. unioloides</i>	Prairie Grass
+	<i>Cortaderia toetoe</i>	Toitoi
*	<i>Cynosurus cristatus</i>	Crested Dogstail
+*	<i>Dactylis glomerata</i>	Cocksfoot
	<i>Dichelachne crinita</i>	Plume Grass
+*-	<i>Ehrharta erecta</i>	Veldt Grass
+*	<i>Festuca arundinacea</i>	Tall Fescue
+*	<i>Glyceria declinata</i>	Floating Sweetgrass
+*	<i>G. maxima</i>	
+*	<i>Holcus lanatus</i>	Yorkshire Fog
+*	<i>Lolium multiflorum</i>	Italian Ryegrass
+*	<i>L. perenne</i>	Per. ryegrass
	<i>Microlaena stipoides</i>	Meadow Rice Grass
*	<i>Paspalum dilatatum</i>	Paspalum
*-	<i>Pennisetum clandestinum</i>	Kikuya Grass
*-	<i>Phalaris sp.</i>	Canary Grass
+	<i>Poa anceps</i>	
*	<i>P. annua</i>	Annual poa
-	<i>P. laevis</i>	Silver Tussock
+*-	<i>P. trivialis</i>	
-	<i>Rytidosperma (=Notodanthonia) sp (R. racemosum?)</i>	Rat's Tail
*	<i>Sporobolus africanus</i>	Hairgrass
*	<i>Vulpia bromoides</i>	

TREES AND SHRUBS

*-	<i>Acacia longifolia</i>	Golden Wattle
*-	<i>Albizzia lophantha</i>	Brush Wattle
*-	<i>Brachyglottis repanda</i>	Rangiora
+	<i>Carmichaelia arborea</i> var.	N.Z. Broom
	<i>Cassinia leptophylla</i>	Tauhinu
*-	<i>Chrysanthemodes (=Osteospermum) moniliferum</i>	Stoneseed
+	<i>Coprosma areolata</i>	
-	<i>C. propinqua</i>	
-	<i>C. propinqua</i> x <i>C. robusta</i>	
-	<i>C. repens</i>	Taupata
+	<i>C. rhamnoides</i>	
+	<i>C. robusta</i>	Karamu
+	<i>C. tenuicaulis</i>	
+/-	<i>Cordyline australis</i>	Cabbage tree
+	<i>Coriaria arborea</i>	Tutu
*-	<i>Crataegus</i> sp.	Hawthorn
*-	<i>Cupressus macrocarpa</i>	Macrocarpa
	<i>Cyathodes fraseri</i>	Patotora
++	<i>Cytisus monspessulanus</i>	Montpellier broom
++	<i>C. proliferus</i>	Tree Lucerne
++	<i>C. (Sarrothamnus) scoparius</i>	Common Broom
++	<i>C. stenopetalus</i>	
+/-	<i>Dacrycarpus (=Podocarpus) dacrydioides</i>	Kahikatea
+	<i>Elaeocarpus dentatus</i>	Hinau
+	<i>Fuchsia excorticata</i>	Tree Fuchsia
+	<i>Geniostoma ligustrifolium</i>	Hangehange
+	<i>Hebe stricta</i> var. <i>atkinsonii</i>	Koromiko
+*-	<i>Hydrangea macrophylla</i>	
+*-	<i>Hypericum androsaemum</i>	Tutsan
-	<i>Knightia excelsa</i>	Rewarewa
+	<i>Leptospermum ericoides</i>	Kanuka
+	<i>L. scoparium</i>	Manuka
++	<i>Lupinus arboreus</i>	Lupin
++	<i>Malus domestica</i>	Apple
+	<i>Melicytus ramiflorua</i>	Mahoe
-	<i>Myoporum laetum</i>	Ngaio
+	<i>Olearia rani</i>	Heketara
+/-	<i>Olearia solandri</i>	
-	<i>Paratrophis microphylla</i>	Small-leaved Milk Tree
+	<i>Pennantia corymbosa</i>	Kaikomako
-	<i>Pimelea prostrata</i> var. <i>prostrata</i>	N.Z. Daphne
*-	<i>Pinus radiata</i>	
++	<i>Pittosporum crassifolium</i>	Karo
+	<i>P. tenuifolium</i>	Matipo, kohuhu
+*-	<i>Populus nigra</i> var. <i>italica</i>	Lombardy poplar
*-	<i>Prunus persica</i>	Peach or nectarine
*-	<i>P. domestica</i>	Plum
+	<i>Pseudopanax arboreus</i>	Five-finger
+	<i>P. crassifolius</i>	Lancewood
*-	<i>P. lessonii</i>	Coastal 5-finger, houpara
++	<i>Pyrus communis</i> (?)	Pear
++	<i>Salix caprea</i>	Pussy or Goat Willow
++	<i>S. fragilis</i>	Crack willow
++	<i>Sambucus nigra</i>	Elder
+	<i>Solanum laciniatum</i>	Poroporo
++	<i>S. pseudocapsicum</i>	Jerusalem Cherry
*-	<i>Sophora</i> sp (<i>S. micro.</i> x <i>S. tetr.</i>)	Kowhai
++	<i>Ulex europeus</i>	Gorse
+*-	<i>Ulmus carpinifolia</i>	Elm
	<i>Urtica ferox</i>	Shrub Nettle

WOODY LIANES

+	<i>Calystegia</i> sp. (<i>C. sepium</i> agg., white fls only)	Convolvulus
+	<i>C. sp.</i> (<i>C. sepium</i> agg. white & pink striped fls.)	Convolvulus
+	<i>C. tuguriorum</i>	Convolvulus
-	<i>Clematis forsteri</i> (inc. <i>C. hookeriana</i>)	
-	<i>C. paniculata</i>	
+*	<i>Lonicera japonica</i>	Japanese honeysuckle
	<i>Metrosideros diffusa</i>	White rata
-	<i>M. perforata</i>	White rata
+	<i>Muehlenbeckia australis</i>	pohuehue
+	<i>M. complexa</i>	pohuehue
+	<i>M. australis</i> x <i>M. complexa</i>	
+	<i>Parsonsia heterophylla</i>	N.Z. Jasmine
-	<i>Ripogonum scandens</i>	Supplejack
-	<i>Rubus australis</i>	Bush Lawyer
+	<i>R. cissoides</i>	Bush lawyer
+*	<i>R. fruticosus</i>	Blackberry
*-	<i>R. laciniatus</i>	Cut leaved blackberry
*-	<i>R. sp.</i> (<i>R. phoenicolasius</i> ?)	Japanese wineberry
-	<i>R. australis</i> x <i>R. cissoides</i>	
*-	<i>Senecia angulatus</i>	
*	<i>S. mikanioides</i>	Cape Ivy
+*	<i>Solanum dulcamara</i>	Bittersweet
+-	<i>Tetrapathaed</i> (=Passiflora) <i>tetrandra</i>	N.Z. Passionfruit

DICOT. HERBS & SUB-SHRUBS

+	<i>Acaena anserinifolia</i>	Bidibid = Piripiri
*	<i>Achillea millefolium</i>	Yarrow
*-	<i>Amaranthus deflexus</i>	Prostrate Amaranth
*	<i>Anagallis arvensis</i>	Scarlet Pimpernel
*-	<i>Anthemis cotula</i>	Stinking Mayweed
*-	<i>Arctium lappa</i>	Burdock
*	<i>Aster subulatus</i>	Sea Aster
*-	<i>Barbarea sp. (B. verna?)</i>	Wintercress
++	<i>Bidens frondosa</i>	Beggar's Ticks
++	<i>Brassica campestris</i>	Wild Turnip
++	<i>Callitriche stagnalis</i>	Starwort
++	<i>Cardamine flexuosa</i>	Bittercress
*	<i>C. sp. (C. debilis agg.)</i>	Bittercress
*	<i>Carduus tenuiflorus</i>	Wingled thistle
*	<i>Centaureum erythraea</i>	Centaury
+	<i>Centella uniflora</i>	
++	<i>Cerastium glomeratum</i>	Annual mouse-eared chickw
*	<i>C. holosteioides</i>	Mouse-eared chickweed
*-	<i>Chenopodium album</i>	Fathen
*-	<i>C. murale</i>	Nettle-leaved Fathen
++	<i>Cirsium arvense</i>	Californian Thistle
++	<i>C. vulgare</i>	Scotch Thistle
++	<i>Conium maculatum</i>	Hemlock
*	<i>Coronopus didymus</i>	Twin Cress
*	<i>Cotula australis</i>	
++	<i>C. coronopifolia</i>	Batchelor's Button
*	<i>Crepis capillaris</i>	Hawksbeard
*	<i>Cryptostemma calendula</i>	Cape Weed
++	<i>Digitalis purpurea</i>	Foxglove
	<i>Drosera auriculata</i>	Sundew
+	<i>Epilobium pallidiflorum</i>	Willowherb
++	<i>Erigeron (Conyza) floribunda</i>	Canadian Flea Bane
*	<i>Erodium moschatum</i>	Stork's Bill
++	<i>Euphorbia peplus</i>	Milkweed
++	<i>Foeniculum vulgare</i>	Fennel
*	<i>Fumaria muralis</i>	Fumitory
++	<i>Galega officinalis</i>	Goat's Rue
++	<i>Galium aparine</i>	Cleavers
	<i>G. propinquum</i>	
+	<i>G. trilobum (petiolate form and apetiolate form)</i>	
*-	<i>Gernium dissectum</i>	Cut-leaved Geranium
	<i>G. microphyllum</i>	
*	<i>G. molle</i>	Soft-leaved Geranium
!	<i>Gnaphalium audex</i>	Cudweed
	<i>G. gymnocephalum</i>	Cudweed
-	<i>G. involucratum</i>	Cudweed
*	<i>G. spicatum</i>	Cudweed
	<i>G. sp. (G. luteo-album agg.)</i>	Cudweed
-	<i>Gonocarpus montanus</i>	
+	<i>Haloragis erecta</i>	
-	<i>Hydrocotyle americana</i>	Pennywort
-	<i>H. moschata</i>	Pennywort
+	<i>H. sp. (H. novae-zelandiae agg)</i>	Pennyworth
++	<i>Hypochoeris radicata</i>	Cat's Ear
*-	<i>Lactuca serriola var integrata</i>	Wild Lettuce
++	<i>Lathyrus sp (L. latifolius?)</i>	Everlasting Pea
*	<i>Leontodon taraxacoides</i>	Hawkbit
*	<i>Lepidium sp.</i>	
*	<i>Linaria purpurea</i>	Purple Linaria
*-	<i>Linum marginale</i>	Just. Flax

+*	<i>Lythrum Hyssopifolia</i>	Loosestrife
*	<i>Malva sp.</i>	Mallow
*	<i>Matricaria matricarioides</i>	Rayless Chamomile
*	<i>Medicago arabica</i>	Spotted Burr Medick
*-	<i>M. lupulina</i>	Black Medick
*	<i>M. polymorpha</i>	Burr Medick
+-	<i>Melilotus indica</i>	King Island Milelot
+*	<i>Mentha x piperita</i>	Peppermint
+*-	<i>M. x villosa</i>	
+*	<i>Modiola caroliniana</i>	Creeping Mallow
+*	<i>Myosotis caespitosa</i>	Forget-me-not
*-	<i>Orobanche minor</i>	Broomrape
+-	<i>Oxalis articulata</i>	
* (?)	<i>O. sp.</i>	Yellow flowers
*-	<i>Papaver sp.</i>	Poppy
*	<i>Parentucellia viscosa</i>	Tarweed
-	<i>Pelargonium inodorum</i>	
*-	<i>Petroselinum crispum</i>	Parsley
*	<i>Picris echioides (ox-tongue)</i>	Ox-tongue
*	<i>Pisum sativum</i>	Garden Pea
*	<i>Plantago coronopus</i>	Buck's Horn Plantain
*	<i>P. lanceolata</i>	Narrow-leaved Plantain
*	<i>P. major</i>	Broad-leaved Plantain
*	<i>Polycarpon tetraphyllum</i>	Allseed
*	<i>Polygonum aviculare</i>	Wireweed
+*	<i>P. hydropiper</i>	Water Pepper
*	<i>P. persicaria</i>	
+	<i>P. sp. (c.f. P. decipiens)</i>	
	<i>Ranunculus hirtus</i>	Bush Buttercup
+-	<i>R. macropus</i>	
+*	<i>R. repens</i>	Creeping Buttercup
+*-	<i>R. sceleratus</i>	Celery leaved buttercup
+*	<i>Raphanus raphanistrum</i>	Wild Radish
+*	<i>Rorippa microphylla (=Nasturtium microphyllum)</i>	Water-cress
+*	<i>Rumex acetosella</i>	Sorrel
+*	<i>R. conglomeratus</i>	Clustered Dock
+*	<i>R. crispus</i>	Curled Dock
+*	<i>R. obtusifolius</i>	Broad leaved dock
+*	<i>R. sagittatus</i>	Climbing Dock
*-	<i>Sagina apetala</i>	
*	<i>S. procumbens</i>	Pearlwort
*	<i>Senecio bipinnatisectus</i>	Fireweed
+	<i>S. glomeratus</i>	Fireweed
!	<i>S. hispidulus</i>	Fireweed
+*	<i>S. jacobea</i>	Ragwort
-	<i>S. quadridentatus</i>	
*	<i>S. vulgaris</i>	Groundsel
*-	<i>S. spathulatus</i>	
*	<i>Silene gallica</i>	Catchfly
*	<i>Silybum marianum</i>	Variegated Thistle
*-	<i>Sisymbrium orientale</i>	Oriental Mustard
+*	<i>Solanum nigrum</i>	Black nightshade
+	<i>S. nodiflorum</i>	Small flowered Nightshade
+*	<i>S. sublobatum</i>	Velvety Nightshade
+*	<i>Sonchus asper</i>	Prickly sowthistle
+*	<i>S. oleraceus</i>	Puwha, sowthistle
*	<i>Spergula arvensis</i>	Spurrey
*	<i>Spergularia rubra</i>	Sand Spurrey

*	<i>Stachys arvensis</i>	Stagger Weed
+*	<i>Stellaria media</i>	Chickweed
	<i>S. parviflora</i>	N.Z. Chickweed
-	<i>Tetragonia trigyna</i>	N.Z. Spinach
*	<i>Trifolium arvense</i>	
*	<i>T. dubium</i>	Suckling Clover
*-	<i>T. pratense</i>	Red Clover
+*	<i>T. repens</i>	White Clover
*	<i>T. subterraneum</i>	Subt. Clover
+*-	<i>Tropaeolum majus</i>	Garden Nasturtium
-	<i>Urtica incisa</i>	
+	<i>U. linearifolia</i>	N.Z. Swamp Nettle
*	<i>Veronica arvensis</i>	Field Speedwell
*-	<i>V. sp. (V. serpyllifolia?)</i>	
+*	<i>Vicia hirsuta</i>	Hairy Vetch
+*	<i>V. sativa</i>	Vetch
	<i>Wahlenbergia marginata</i>	Harebell

SEDGES

+	<i>Baumea rubiginosa</i>	
+	<i>B. tenax</i>	
-	<i>Carex breviculmis</i>	
+ -	<i>C. dissita</i>	
+	<i>C. flagellifera</i>	
+	<i>C. geminata</i>	Cutty Grass, Rautahi
+	<i>C. lessoniana</i>	Cutty Grass, Rautahi
+ -	<i>C. maorica</i>	
+	<i>C. secta</i> var. <i>secta</i>	Niggerhead
	<i>C. solandri</i>	
+	<i>C. virgata</i>	
	<i>C. sp</i> (un-named: c.f. <i>C. testacea</i> and <i>C. raoulii</i>)	
+* -	<i>Cyperus eragrostis</i>	
+	<i>C. ustulatus</i>	
+	<i>Eleocharis actua</i>	
+ -	<i>E. gracilis</i>	
+ -	<i>Schoenus maschalinus</i>	
-	<i>Scirpus nodosus</i>	
-	<i>S. platycarpus</i>	
+	<i>S. prolifer</i>	
+ -	<i>S. reticularis</i>	
* -	<i>S. setaceus</i>	
	<i>Uncinia uncinata</i>	Hook Sedge
	<i>U. sp.</i>	Hook Sedge

RUSHES

+*	<i>Juncus articulatus</i>	Jointed leaved rush
+	<i>J. australis</i>	Leafless rush
+*	<i>J. bufonius</i> var. <i>bufonius</i>	Toad rush
-	<i>J. caespiticius</i>	Leafy rush
+*	<i>J. effusus</i>	Leafless rush
+	<i>J. gregiflorus</i>	Leafless rush
+	<i>J. pallidus</i>	Leafless rush
+	<i>J. planifolius</i>	Flat leaved rush
+	<i>J. sarophorus</i>	Leafless rush
	<i>Luxula picta</i> s.s.	Woodrush

ORCHIDS

- *Acianthus fornicatus* var. *sinclairii*
- *Caladenia carnea*
- *Microtis unifolia* Onion-leaved orchid
- *Orthoceras strictum*
- *Pterostylis alobula* Hood orchid
- *P. sp. (P. graminea?)* Hood orchid
- + *P. sp. (P. montana?)* Hood orchid
- *Thelymitra longifolia* Sun orchid
- *T. pauciflora* Sun orchid

OTHER MONOCOT. HERBS

++	<i>Alisma lanceolatum</i>	Water plantain
++	<i>Allium triquetrum</i>	3-square garlic
*-	<i>Canna indica</i>	
*	<i>Crocosmia x crocosmifolia</i>	Montbretia
+ -	<i>Lemna minor</i>	Duckweed
+	<i>Phormium tenax</i>	N.Z. Flax
+*-	<i>Potamogeton sp. (P. crispus?)</i>	Curled Pondweed
*	<i>Sisyrinchium iridifolium</i>	Blue-eyed grass
++	<i>Tradescantia fluminensis</i>	Wandering Jew
*-	<i>T. virginiana</i>	Purple spiderwort
-	<i>Triglochin striatum</i>	
*-	<i>Tritonia sp. (T. crocata?)</i>	
+	<i>Typha orientalis</i>	Raupo
+*-	<i>Zantedeschia aethiopica</i>	Arum

FERNS AND FERN ALLIES

-	<i>Adiantum cunninghamii</i>	Maidenhair
	<i>Asplenium bulbiferum</i> subsp. <i>bulbiferum</i>	Hen and Chicken
	<i>A. flabellifolium</i>	
+	<i>A. flaccidum</i> subsp. <i>flaccidum</i>	
	<i>A. hookerianum</i> (including <i>A. colensoi</i>)	
+	<i>A. oblongifolium</i> (= <i>A. oucidum</i>)	Shining Spleenwort
+ -	<i>A. polyodon</i> (= <i>A. falcatum</i>)	
+	<i>Blechnum chambersii</i>	
	<i>B. filiforme</i>	
+	<i>B. minus</i>	
+	<i>Cyathea dealbata</i>	Ponga
+	<i>C. medullaris</i>	Mamaku
	<i>Dicksonia squarrosa</i>	Wheki
+	<i>Histiopteris incisa</i>	Waterfern
-	<i>Hymenophyllum</i> sp. (<i>H. dilatatum</i> ?)	Filmy fern
+	<i>Hypolepis tenuifolia</i>	
+	<i>Lastreopsis glabella</i>	
	<i>Lycopodium volubile</i>	Club-moss
+	<i>Paesia scaberula</i>	Pig fern
	<i>Pellaea rotundifolia</i>	
-	<i>Phymatosorus</i> (= <i>Phymatodes</i>) <i>scandens</i>	
+	<i>Pneumatopteris pennigera</i>	
	<i>Polystichum richardii</i>	
+	<i>Pteridium esculentum</i>	Bracken
+	<i>Pteris macilenta</i>	
	<i>P. tremula</i>	
+ -	<i>Pyrrrosia serpens</i>	

POSSIBLE EXTINCTIONS since 1953 (N.T. Moar in "Vegetation and Peat of a Small Mire at Plimmerton, North Island, N.Z.", N.Z. J. Sc. Tech 34.6 April 1953, and his M.Sc. Thesis.)

- *Drosera binata*
- *Euphrasia cuneata*
- *Lagenifera* sp. (recorded as *Lagenophora cuneata*, but may have been *L. pumila*?)
- # *Leptocarpus similis* (rec. as *L. simplex*)
- *Lobelia anceps*
- *Potamogeton cheesemani*
- *Schoenus nitens* (recorded as *S. concinnus*)

· #Was locally dominant just north of Winstone's, beside Main Road.