

LIST OF VASCULAR PLANTS IN Bush remnant and swamp on Davies family property (That part of Wairarapa Plains PNA site 232 south of the road)

Grid ref Topomap S27 907.875. Alt.20m asl

T. Silbery, A. Rebergen 13/2/00 (1 hour)

Peter Beveridge, Pat Enright, Olaf John 20/5/00 (4 hours) Eastern bush margin

Pat Enright, Olaf John 26/5/00 (4 hours) Swamp and remaining bush areas

* Herbarium specimen lodged (AK or WEL)

unc = uncommon (only one or two plants seen)

1. Seen in the creek bed to the east of the main site

Site Description:

The site is a depression with a north east/south west aspect. A small stream runs down from the southwest and at the head of the main swamp it splits with one channel running off to the north where it feeds another wetland. The south-eastern margin is bounded by a steep bank which has a north westerly aspect and is consequently quite dry. Manuka (*Leptospermum scoparium*) fringes the swamp but as the slope steepens it is replaced by kanuka (*Kunzea ericoides*). Pasture bounds the area to the northwest and the northeast between the swamp and the road. The southwest is fenced before running into pine plantation. An electric fence surrounds the area although the fence was down on the north west side at the time of the survey.

The area would originally have been forested with some remnant species giving an idea of what may originally have been present. Pukatea (*Laurelia novae-zelandiae*) would probably have been dominant in the main swamp area and is now represented by one healthy young tree and one older specimen that is nearly dead. The presence of some stunted mamaku (*Cyathea medullaris*) supports this as this species is normally forest dwelling. Beech would have been on the slopes along with kamahi and rewarewa and some podocarps. (There is a solitary rimu (*Dacrydium cupressinum*) about 4 metres high near the swamp margin)

Kamahi is present in several places along the banks of waterways draining down into the swamp. There are scattered specimens of black beech (*Nothofagus solandri* var. *solandri*) hard beech (*Nothofagus truncata*) and rewarewa (*Knightia excelsa*) to be found growing in the kanuka with regeneration evident. Several other species are represented by seedlings only and their continued presence must be at risk from grazing. The same can be said for several on the fern species. The slope is well tracked probably as a result of stock movement over the years. The area has been fenced for a number of years and is lightly grazed by mainly yearling stock in wet winters when other pasture is being rested. The present manuka cover has mainly arisen since the area was fenced. There is a paucity of grasses and sedges under the kanuka and manuka which may be attributed to the grazing history.

The possum population has been knocked right back by recent poisoning campaigns. (per. comm. by the owners). There is not a major weed problem either in the bushed area or in the swamp. Two or three 2-metre specimens of Spanish heath (*Erica lusitanica*) and quite a few seedlings were seen under the kanuka and should be dealt to. Tall fescue (*Festuca arundinacea*) and other exotic grasses are present in the swamp.

A further survey in spring/early summer to find the orchid and early flowering species should be made.

Notable plants found in this area are:

Asplenium appendiculatum subsp. appendiculatum. This fern is uncommon in the Wellington conservancy and particularly on the Wairarapa plains ecological district. One plant was seen.

Carex maorica. A sedge that is not common in the area mainly due to the drainage of wetlands and stock browse.

Carex sinclairii. This sedge is found at several places around Lake Wairarapa where the water level tends to fluctuate. (Ogle 1994), but is not common elsewhere in the conservancy.

Gratiola sexdentata. This is another plant that is indicative of a fluctuating water level and was seen growing in the same area as *C. sinclairii* on the north side of the swamp.

Gunnera prorepens. Uncommon in the Wellington conservancy. The patches seen in this area could be at risk of being overgrown by rank exotic grasses. The species in this area is red fruited.

Hypolepis dicksonioides. This is an uncommon fern in the Wellington/Wairarapa area. It is often found growing in swampy areas but usually under bush not as here on *Carex secta* bases in the open. The very much reduced size and the very harsh feel to the plant must be as a result of its exposed situation..

Isachne globosa. A grass that is common in the top of the North Island and locally common around Lake Wairarapa in wetlands. This is present throughout most of the swamp

Korthasella salicornioides. A small mistletoe that is growing parasitically on manuka around the wetland. This plant is locally common on manuka around the lake but is nationally listed as a vulnerable species. The manuka on the northern margin is of much smaller stature and plants as low as 100cm were seen to be carrying mistletoe. Some plants carried a very heavy infestation and looked very unhealthy. Whether the poor health means that it is easier to parasitise or whether the parasitisation causes the plant to be unhealthy, it is interesting to speculate. It seems to go against the rules of nature to kill the host on which the life of the parasite depends.

Pomaderris phyllicifolia var ericifolia. This species is more common in the drier hotter area of Eastern Wairarapa. The dry clay bank is well sited to get the sun and the area gets very little frost (per. comm. owners)

References:

Ogle, C. C. March 1994 Recognition of Ephemeral Wetlands from their Plant Species Assemblages. *Science & Research Series No. 67*. Dept. of Conservation.

Gymnosperm trees and shrubs

Dacrydium cupressinum (unc)

rimu

Dicotyledonous trees and shrubs

Alectryon excelsus subsp. excelsus

titoki

Brachyglottis repanda (unc) seedling

rangiora

Carpodetus serratus

putaputaweta, marbleleaf

Coprosma propinqua subsp. propinqua

mingimingi

Coprosma rhamnoides

Coprosma robusta

karamu

Coprosma tenuicaulis

swamp coprosma

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| Coprosma propinqua x C. robusta | |
| Coriaria arborea | tree tutu |
| Cyathodes juniperina (unc) | mingimingi |
| Fuchsia excorticata | kotukutuku |
| Hebe stricta var. atkinsonii | koromiko |
| Helichrysum aggregatum (unc) | |
| Knightia excelsa | rewarewa |
| * Korthasella salicornioides | mistletoe |
| Kunzea ericoides | kanuka |
| Laurelia novae-zelandiae (unc) | pukatea |
| Leptospermum scoparium | manuka |
| Leucopogon fasciculatus | mingimingi |
| Leucopogon fraseri | |
| Melicytus ramiflorus | mahoe |
| Myrsine australis | red matipo |
| Nothofagus solandri subsp. solandri | black beech |
| Nothofagus truncata | hard beech |
| Ozothamnus leptophylla (unc) | tauhinu |
| Pittosporum tenuifolium (unc) seedling | kohuhu |
| Pomaderris phyllicifolia var ericifolia | whatitiri |
| Pseudopanax arboreus | five finger |
| Weinmannia racemosa | kamahi |
| <u>Monocotyledonous trees and shrubs</u> | |
| Cordyline australis | ti, cabbage tree |
| <u>Monocotyledonous lianes</u> | |
| Ripogonum scandens | supplejack |
| <u>Dicotyledonous lianes and related trailing plants</u> | |
| Calystegia sepium | pink convolvulus |
| Clematis foetida | |
| Clematis forsteri | |
| Clematis paniculata | puawhananga |
| Muehlenbeckia australis | pohuehue |
| Muehlenbeckia complexa | pohuehue |
| Parsonsia heterophylla (unc) | kaihua, N.Z. jasmine |
| Rubus australis | swamp lawyer |
| <u>Ferns</u> | |
| * Asplenium appendiculatum subsp. appendiculatum (unc) | |
| Asplenium flaccidum | hanging spleenwort |
| Blechnum chambersii | nini |
| Blechnum fluviatile (unc) | kiwakiwa |
| Blechnum novae zelandiae | kiokio |
| Blechnum novae zelandiae (B. minus of NZ authors) | swamp kiokio |
| 1 Blechnum pennamarina | |
| Cyathea medullaris | mamaku |
| Dicksonia squarrosa (unc) juvenile | wheki |
| Diplazium australe (unc) | |
| Histiopteris incisa | mata, water bracken |
| Hypolepis ambigua | |
| * Hypolepis dicksonioides (unc) | |
| Lindsaea linearis | |
| Microsorium pustulatus (unc) | kowaowao, hounds tongue |

Paesia scaberula matata, scented fern
Polystichum richardii (unc) 1 young plant
Pteridium esculentum rauaruhe, bracken
Pyrrosia eleagnifolia ota, leather-leaf fern

Orchids

Acianthus sinclairii
Microtis unifolia onion leaved orchid
Pterostylis alobula
Thelymitra sp.

Grasses

Cortaderia fulvida toetoe
Isachne globosa swamp millet
Microlaena stipoides
Poa anceps subsp. anceps (unc)
Poa imbicilla
Rytidosperma gracile

Sedges

Baumea rubiginosa
Baumea tenax
Carex breviculmis
Carex dissita
Carex geminata
Carex maorica
Carex secta purei
Carex sinclairii
Carex virgata
Cyperus ustulatus
Eleocharis acuta
Eleocharis gracilis
Isolepis prolifer
Isolepis reticularis
Schoenus maschalinus

Rushes and allied plants

Juncus australis
Juncus caespiticius
Juncus gregiflorus
Juncus planifolius
Juncus sarophorus
Luzula picta var picta

Remaining Monocotyledonous plants

Astelia fragrans karearea
Phormium tenax harakeke, flax
Triglochin striata arrow grass
Typha orientalis raupo

Daisy-like herbs (Composites)

Cotula coronopifolia bachelors buttons
Craspedia uniflora agg.
Euchiton audax
Euchiton gymnocephalus
Euchiton involucratus (unc)
Euchiton limosus

Helichrysum filicaule
Lagenifera pumila (unc)
Pseudognaphalium luteoalbum
Senecio minimus (unc)
Senecio sp. (glomeratus)

Dicotyledonous herbs other than Composites

- Acaena anserinifolia (unc) bidibidi
- 1 Callitriche muelleri
- Cardamine sp. (C. debilis agg.) (“Narrow Petal” of Pritchard 1957)
- Centella uniflora
- Dichondra brevifolia agg.
- Dichondra repens
- Drosera peltata
- Epilobium insulare
- Epilobium pallidiflorum
- Geranium microphyllum
- Gonocarpus micranthus
- Gonocarpus incanus
- Gratiola sexdentata
- Gunnera prorepens
- Haloragis erecta
- Hydrocotyle moschata
- Hydrocotyle novae-zelandiae
- Hypericum japonicum
- Leptostigma setulosum
- Lobelia anceps (unc)
- Oxalis exilis yellow oxalis
- 1 Plantago raoulii
- Polygonum salicifolium
- Ranunculus reflexus maruru, hairy buttercup
- Stellaria decipiens chickweed
- Solanum americanum
- Wahlenbergia violacea

Birds:

Eastern rosella
Fantail
Grey warbler
Kingfisher
Magpie
Marsh harrier
Pukeko