

Checklist of indigenous vascular plants seen at: Mokiri Bush

Grid Ref.: NZMS 260 T25 581 480, a high point near the bush edge

Altitude 340 - 460m.asl

Visited: 16.11.2001, T. Silbery, A. Rebergen  
26.03.2002, T. Silbery, G. Foster, H. Wylie

Time on site: 6 hours, 5 hours

## LIST # 65

### Revised

#### Site description:

Mokiri Bush was identified as a Recommended Area for Protection (RAP 7) in the draft Eastern Wairarapa Protected Natural Areas Report.

The forest and shrubland are situated on gullies and spurs that face two directions, divided by a low ridge, though the three streams involved are all tributaries of the Te Hoe Stream. One gully runs north – south, the others east – west.

The east – west streams end in a deep gorge cut into the underlying sandstone.

The original forest, part of the seventy mile bush, would have been rimu/rata/tawa and has been modified by both logging and land clearance for agriculture.

The most obvious human effects are the logging induced change from tall podocarp dominant forest to a lower canopied forest dominated by tawa (*Beilschmiedia tawa*) and other hardwoods on one hand and the recovery of land that had been cleared, now covered in manuka (*Leptospermum scoparium*) dominated scrub, on the other.

There are occasional 30-metre rimu (*Dacrydium cupressinum*) and kahikatea (*Dacrycarpus dacrydioides*) trees that escaped initial logging and clearance still present in the forest and towering over the scrublands.

The gullies are generally quite steep, with occasional flat areas or more gentle slopes on the spurs. There are old slip scars visible, some a result of logging, some also probably natural, caused by a combination of high rainfall and steep slopes. Where the streams are flowing they are downcutting into the basement rocks, leaving a series of small waterfalls in their wake.

Topsoil is deep over most of the site. Where it is thinner, there is deeply weathered greywacke present just below the surface. Outside the forest in a more deeply cut part of the stream, the bedrock is sandstone over a highly stratified greywacke.

Orchids  
on d. base ✓

There are signs of past grazing in the forest and the area is criss-crossed by a network of animal tracks and some of the drier ridge tops were quite eaten out. Both farm stock and deer are likely to be implicated. While some stock sign was seen during the visit, no animals were observed and the owner is in the process of constructing a fence around the unfenced part of the perimeter. Deer are present, both sign and one animal were seen, and six had been shot during the previous couple of days.

Where podocarp / tawa forest had been logged, leaving a residual canopy of low hardwoods, the forest floor is often dark and understorey growth is correspondingly sparse. Leaf litter here is dense. In those parts of the site where the residual cover is older or was less disturbed, there is a more developed ground layer of ferns, mosses and sedges covering most of the available spaces. There is a marked difference in vegetation between the dark gullies and the better-lit slopes above.

At higher altitudes (above c.450 metres) there is a fringing band of toro (*Myrsine salicina*), horopito (*Pseudowintera colorata*) and putaputaweta (*Carpodetus serratus*) bounding the open paddocks. *Olearia virgata* var. *virgata*, manuka and small leaved *Coprosma* spp. are also members of this forest edge community.

At this altitude wind is a major factor in the forest. Everything is slightly stunted and slower growing. There is some wind shaping to the canopy, though this is not severe.

Below the ridges on the southern side of the block there is a wet scrubland where manuka is dominant over rushes, sedges, shrubs and pasture grasses, mixed among a regenerating forest where maire (*Nestegis cunninghamii*) and kahikatea are growing through *Pseudowintera colorata*, *Olearia rani* var. *colorata*, *Hoheria sexstylosa*, *Carpodetus serratus* and *Coprosma rhamnoides*. Many small wetlands, usually associated with stream heads and swampy flats are also present.

There is a narrow terrace above the gorge on the western side, where impeded drainage gives room for a complex of small swamps and wet tolerant shrubland containing *Olearia virgata* var. *virgata* to develop. This is likely to become swamp forest over time.

Totara (*Podocarpus totara*) is a major element in the manuka dominant scrub in this part of the site.

On the western side, with a north facing aspect there are scattered to sparse large (25 – 30metre) podocarps over a mosaic of 5 – 7 metre tall regenerating podocarps, rimu and kahikatea especially and some hardwoods, such as black maire, in their turn emergent through manuka scrubland. Where the aspect takes a southerly turn the vegetation becomes dominated by rewarewa (*Knightia excelsa*).

The canopy height varies from 15 – 20 metres under some of the residual tawa, to 4 metres under the shorter manuka scrub.

The forest is also home to dense thickets of both supplejack (*Ripogonum scandens*) and tree nettle (*Urtica ferox*), the abundance of the latter especially a result of stock opening up the understorey.

There are small clearings scattered about, generally on the higher parts of the slope. These are usually covered with a mixture of grass and small native herbs.

Weed species present are those of disturbed, high light sites, such as †*Geranium molle* and foxglove (†*Digitalis purpurea*).

The birds seen during this visit included rifleman and tomtit. In the Wairarapa both these species are confined to larger areas of "better quality" forest. Long tailed bats have been seen on neighbouring properties and are almost certain to be present in this forest.

Significant or unusual plants/associations:

The wind affected forest edge on the southern margin is an unusual part of the site.

Search effort                  Recce          Moderate                  Thorough

Nomenclature generally follows A. P. Druce's "A Checklist of Indigenous Vascular Plants of New Zealand", 10th revision, 1999 by Shannel Courtney

\* Indicates species listed on the Wellington Conservancy plant database

(unc) = uncommon, one or few plants seen.

### **Gymnosperm trees and shrubs**

Dacrycarpus dacrydioides \*

Dacrydium cupressinum

Podocarpus hallii

Podocarpus totara \* (unc)

Prumnopitys ferruginea

Prumnopitys taxifolia

### **Monocotyledonous trees and shrubs**

Cordyline australis \*

Cordyline banksii (unc) (in gorge only)

### **Dicotyledonous trees and shrubs**

Alectryon excelsus var. excelsus  
Aristotelia serrata  
Brachyglottis repanda  
Carpodetus serratus  
Coprosma areolata  
Coprosma grandifolia  
Coprosma lucida  
Coprosma rhamnoides  
Coprosma rigida \*  
Coprosma rotundifolia  
Geniostoma rupestre var. rupestre  
Griselinia littoralis  
Griselinia lucida  
Hedycarya arborea  
Helichrysum lanceolatum var. aggregatum  
Hoheria sexstylosa  
Knightia excelsa  
Kunzea ericoides agg.  
Leptospermum scoparium  
Leucopogon fasciculatus var.  
Melicope simplex \*  
Melicytus ramiflorus  
Myrsine australis  
Myrsine salicina  
Nestegis cunninghamii \*  
Nestegis lanceolata  
Olearia rani var. colorata  
Olearia virgata ssp. virgata \*  
Ozothamnus leptophyllus ssp. leptophyllus  
Pennantia corymbosa  
Pittosporum cornifolium \* (unc) (in black maire)  
Pseudopanax arboreus  
Pseudopanax crassifolius  
Pseudowintera colorata  
Raukaua anomalus  
Schefflera digitata  
Urtica ferox  
Weinmannia racemosa var. racemosa

### **Monocotyledonous lianes**

Ripogonum scandens

### **Dicotyledonous lianes and related trailing plants**

Clematis foetida  
Clematis forsteri  
Clematis paniculata  
Metrosideros colensoi  
Metrosideros diffusa  
Muehlenbeckia australis \*  
Muehlenbeckia complexa  
Parsonsia capsularis  
Parsonsia heterophylla  
Passiflora tetrandra  
Rubus australis  
Rubus cissoides var. cissoides  
Rubus schmidelioides var.

## **Psilopsids, Lycopods and Quillworts**

### **Ferns**

Adiantum cunninghamii  
Asplenium flaccidum  
Asplenium gracillimum  
Asplenium hookerianum  
Asplenium oblongifolium  
Asplenium polyodon  
Blechnum chambersii  
Blechnum filiforme  
Blechnum fluviatile agg.  
Blechnum pennamarina (unc)  
Blechnum procerum  
Cyathea dealbata  
Cyathea medullaris  
Cyathea smithii  
Dicksonia fibrosa\*  
Dicksonia squarrosa  
Grammitis billardeirei  
Histiopteris incisa  
Hymenophyllum demissum  
Hymenophyllum multifidum  
Hypolepis ambigua  
Lastreopsis glabella  
Lastreopsis hispida (unc)  
Leptopteris hymenophylloides  
Microsorium pustulatum  
Paesia scaberula  
Pellaea rotundifolia  
Pneumatopteris pennigera

Polystichum richardii  
Polystichum vestitum  
Pteris macilenta  
Pyrrosia eleagnifolia

### **Monocotyledonous herbs:**

#### **Orchids**

- ✓Corybas macranthus
- ✓Corybas trilobus
- ✓Earina autumnalis
- ✓Earina mucronata
- ✓Microtis unifolia
- ✓Pterostylis banksii
- ✓"Pterostylis montana Wellington"

#### **Grasses**

Microlaena avenacea  
Microlaena polynoda \*  
Poa anceps

#### **Sedges**

Carex diosita  
Carex lessoniana  
Carex maorica \*  
Carex secta \*  
Carex solandri  
Isolepis reticularis  
Uncinia scabra  
Uncinia uncinata

#### **Rushes and allied plants**

Juncus gregiflorus  
Luzula picta var.

#### **Monocotyledonous herbs other than orchids, grasses, sedges, rushes and allied plants**

Astelia fragrans (unc)

Astelia solandri var.  
Collospermum microspermum

### **Dicotyledonous herbs - composites**

Craspedia minor var. minor (unc)  
Euchiton gymnocephalus (= Gnaphalium gymnocephalum)  
Senecio biserratus  
Senecio minimus

### **Dicotyledonous herbs other than composites**

Acaena anserinifolia  
Cardamine debilis var. macrostylis ("Long style" of Pritchard 1957)  
Cardamine sp. (C. debilis agg.) ("Narrow petal" of Pritchard 1957)  
Centella uniflora  
Dichondra brevifolia  
Epilobium insulare  
Epilobium komarovianum (unc)  
Galium propinquum  
Geranium potentilloides var. potentilloides  
Gonocarpus micranthus  
Hydrocotyle elongata  
Hydrocotyle heteromeria  
Hydrocotyle moschata  
Hypericum japonicum  
Leptostigma setulosa (= Nertera setulosa)  
Oxalis exilis  
Plantago raoulii  
Pratia angulata agg.  
Ranunculus reflexus  
Stellaria decipiens  
Urtica incisa  
Wahlenbergia violacea

### **Birds**

Bellbird  
Fantail  
Grey warbler  
Kereru  
North Is. Rifleman  
North Is. Tomtit  
Shining cuckoo  
Silvereye

Tui  
Welcome swallow

Invertebrates

Stick insect  
Red admiral  
Cicada