Wanganui Plant List No. 166

Higher plants of forest remnant on terrace between Williams Road and Hautapu River, Mataroa, NNW of Taihape

500 m (Grid ref. NZMS260, T21/447709). 24 June 2004

C Ogle¹, V Nicholls², G La Cock³, D Hurley⁴

- 1. 22 Forres St Wanganui
- 2. Dept. of Conservation, Palmerston North
- 3.Dept. of Conservation, Wanganui
- 4. Dept. of Conservation, Mangaweka
- * = adventive species

unc = uncommon (only one or a few individuals seen, or a very localised colony)

p = planted specimens only; p+=planted and natural to area

Gymnosperm Trees

Dacrycarpus dacrydioideskahikateaPodocarpus totara s.s. (p+)totaraPrumnopitys taxifoliamatai

Monocot Tree

Cordyline australis (p+?) cabbage tree, ti kouka

Dicot Trees and Shrubs

Carmichaelia australis var. (unc) NZ broom Coprosma grandifolia kanono

Coprosma propinqua ssp. propinqua

Coprosma rigida

Coprosma robusta (unc) karamu

Coprosma rotundifolia round-leaved coprosma

Coprosma rubra

Coprosma tenuifolia (unc)

* Cotoneaster simonsii cotoneaster * Euonymus europaeus spindle tree Hoheria populnea var. lanceolata (unc) (juvenile only) lacebark, houhere

Hoheria angustifolia x H. populnea (unc - 1)

Korthalsella lindsayi s.s. dwarf mistletoe

* Ilex aquifolium (unc) holly
Lophomyrtus obcordata rohutu
Melicope simplex poataniwha

Melicytus lanceolatus (unc) narrow-leaved mahoe
Melicytus micranthus (unc) small-leaved mahoe

Melicytus ramiflorus mahoe

Myrsine divaricata s.s. weeping mapou Nestegis cunninghamii (unc) black maire Nestegis lanceolata (unc) white maire

¹ Parasitic on Melicope simplex, Lophomyrtus obcordata, Myrsine divaricata.

Pittosporum tenuifolium ssp. tenuifolium (p+) kohuhu

Pseudopanax crassifolius lancewood, horoeka

Sophora microphylla ² kowhai Sophora godleyi ² kowhai

Dicot Lianes

Clematis foetida scented clematis

* Clematis vitalba³ (unc - 1) old man's beard

Muehlenbeckia australis pohuehue

Parsonsia capsularis NZ jasmine

Parsonsia heterophylla (unc) NZ jasmine

Rubus cissoides var. (leaflets narrower than

in var. cissoides) (unc - 1) lawyer Rubus schmidelioides var. schmidelioides lawyer

* Tropaeolum speciosum Chilean flame-creeper

Ferns

Asplenium flaccidum (unc) hanging spleenwort

Asplenium gracillimum Blechnum penna-marina (unc)

Dicksonia fibrosa (juveniles only) wheki-ponga Pellaea rotundifolia button fern

Polystichum silvaticum (unc)

Monocot herbs

* Arum italicum

* Bromus willenowii

Cortaderia toetoe (p)

* Dactylis glomerata

* Iris foetidissima

Juncus edgariae

Italian arum

prairie grass

toetoe

* cocksfoot

stinking iris

a rush

Phormium cookianum (p) mountain flax, wharariki Phormium tenax (p) NZ flax, harakeke

Poa matthewsii (?) (unc)

Dicot Herbs

Acaena juvenca bidibidi (piripiri)

* Arctium minus burdock

Cardamine sp. (i)(C. debilis agg.)

* Conium maculatum

* Galium aparine

Hydrocotyle elongata

* Lamium purpureum (unc)

* Mycelis muralis

hemlock

cleavers

pennywort

red dead nettle

² From Heenan and de Lange (2001) in a taxonomic revision of *Sophora*, we list two species of kowhai. *S. microphylla* has divaricating juveniles, trees not markedly weeping and leaflets with almost hairless upper surfaces. *S. godleyi* has non-divaricating juveniles, a markedly weeping adult form and upper leaflet surfaces with dense cover of fine, sometimes erect, hairs.

One slender vine found and eradicated. Where did it come from? Are there mature *C. vitalba* in the area?

* Ranunculus repens

* Trifolium pratense

creeping buttercup red clover

Vegetation

Fenced area of podocarp (matai, kahikatea) trees emergent over a broad-leaved forest canopy (mahoe, kowhai) and an understorey dominated by divaricating shrubs (*Coprosma rubra*, *Melicope simplex* among the most common); ground cover of rank pasture grasses except in heaviest shade. Some plantings of native trees, shrubs, toetoe and flaxes has been done in open areas on the fringe of the forest.

Among the rarer native plants of the region were:

Acaena juvenca: a forest bidibid that occurs mostly in east of the axial ranges in North and South Islands *Coprosma rubra*: a shrub that is more common east of the axial ranges in North and South Islands *Korthalsella lindsayi*: a dwarf mistletoe with a scattered distribution in NZ, mostly growing on divaricating shrubs.

However, unlike the lower end of Puketi Creek, none of the really rare plants of the Mataroa area were found here. An sad feature of the forest is the large number of weeds, some of them serious environmental threats. The area seems to have been part of, or close to, a garden in the past, and was probably heavily grazed at some time. Several woody shrub species, including holly, cotoneaster and spindle tree should be be fairly easy to remove by pulling, or by cutting and treating the cut stump with a weed killer such as glyphosate (e.g. Roundup) or picloram (e.g. Vigilant). Stinking iris is readily pulled. Burdock is summer-green from a tap-root; it is perhaps more of a nuisance (in autumn for its hooked seeds) than a major threat to the forest, though it may be possible to kill it with spot-spraying.

The weed of most immediate concern is old man's beard. We found just one plant and were able to pull it up, but it is almost certain that other adult (seeding) vines are in the area, perhaps beyond the fenced patch of forest. The existence of old man's beard in the Mataroa area is of great concern and searches should be made for the source of the plant we found.

The most abundant serious weed in the fenced area is Chilean flame-creeper. It is a soft vine that smothers ground cover, shrubs and regeneration of larger plants. It dies down to fleshy underground stems in winter, then re-sprouts and flowers in summer. Birds disperse the seeds from fleshy fruits. A small area of Chilean flame creeper in Paengaroa Scenic Reserve (actually the end of the reserve nearest this patch of forest) has been targeted for some years by DOC staff, without completely removing the weed. Herbicides burn off the foliage but the plant resprouts. Current management includes hand-pulling the stems when they come into flower, before any fruits are set. This way, no further plants establish.

The forest contains some fine native trees and a reasonably intact understorey in places, with several plant species of local importance. However, its potential as a protected natural area will be realised only if the worst weeds can be eradicated or (as in the case of Chilean flame creeper) at least controlled. If a major effort were to be planned for the weeds, one option would be to turn stock into the area for a few days or weeks beforehand (the time depends upon how many stock and time of year) to reduce the sward of tall grass and soft weeds like Chilean flame creeper and burdock. Browsing damage to trees and shrubs will not be great if the grazing is removed as soon as access for weed control is obvious. Sheep would be less damaging than cattle. If grazing were done in late spring or early summer, the iris would be visible before it seeds and regrowth of weeds like burdock and flame creeper can be sprayed.