

FOREST REMNANT AT SITE OF OLD LION SAFARI PARK

OTAIHANGA, WAIKANAE RIVER

INTRODUCTION

I inspected a remnant patch of native forest in a dune hollow at Otaihanga, in company with the landowner and Philip Lisseman (Queen Elizabeth II National Trust), on 18 January 1989.

A full list was made of native vascular plants present (flowering plants, conifers and ferns), and the larger and/or most abundant exotic plants.

OBSERVATIONS

The forest is almost entirely on the flat floor of a dune hollow, probably underlain by a sandy peat. Although the soil surface was dry when we visited the area, many of the plant species present indicate that the water table would never be far below the surface. Kahikatea is the dominant tree, and other swamp forest species include pukatea, kiekie, supplejack and swamp pennywort. There are also species whose usual habitat is river flood plains, including titoki, climbing fuchsia, a native nettle, and the exotic weed, wandering Jew. These two groups of damp area plants contrast with several species which are usually in dry forest; hedgehog grass, meadow ricegrass and small-leaved pohuehue which, presumably, occupy hummocks or pockets of sand. A fringe of planted eucalypts is partly on slightly higher ground at the foot of a dune; the orchid Gastrodia sesamoides was seen here only. Several epiphytic ferns were found, and also a very large specimen of broadleaf, which had started growth as an epiphyte, but is now terrestrial and self-supporting. A dense stand of short-trunked nikau occupies a small area.

Because the forest is a small patch, and has been open to livestock grazing, intermittently at least, until about 4 years ago, it has a broken canopy and an understorey of mostly young shrubs including much Jerusalem cherry. In addition, there is a weedy dense ground cover of exotic grasses and other herbaceous plants over much of the area. These include localised patches of wandering Jew. Another strong indicator of past disturbance is the common

occurrence of lianes (woody vines), not only on margins of the forest but in light gaps throughout. Ten species of liane were noted; one of these is a plant of native climbing fuchsia, perhaps the single most notable plant in the forest patch. I am not aware of this plant in other forest remnants of the immediate district; it is known at L. Papaitonga and Koputaroa, both near Levin, and at Silverstream and near Sinclair Head.

Excessive growth of the native vine, pohuehue, is probably smothering some potential regeneration and damaging even mature trees. Even more threatening are the vines Japanese honeysuckle and banana passionfruit.

CONCLUSIONS AND RECOMMENDATIONS

Because swamp forest and/or dune forest are extremely rare in the Foxton Ecological District (see attached map and separate map caption), remaining patches tend to differ floristically from each other. This makes it difficult to rank this patch against other patches in the same Ecological District, such as similar-sized remnants in Queen Elizabeth Park (Paekakariki) and just below Southwood's car museum, and larger patches at Ngamanu (Waikanae), L. Papaitonga, and Round Bush (Foxton).

Certainly the patch we inspected at Otaihanga is less intact than any of the others named above, with the exception of the QEII Park remnant, where the only understorey is pasture. It also has considerable problems for future management, particularly in control of certain weeds such as wandering Jew, Japanese honeysuckle, and banana passionfruit. (The abundant Jerusalem cherry is unsightly, but might be used to advantage as a nurse crop in canopy gaps, with judicious releasing of mahoe and other native shrubs from the cherry undergrowth).

The rarity of swamp forest in the Ecological District I believe makes any efforts to protect and enhance the natural qualities of this remnant worthwhile. Consideration should be given to getting a labour force in the remnant shortly, with a view to eliminating certain weeds, especially the 3 worst species noted above. Conservation Corps and/or a Royal Forest and Bird Society (Kapiti Branch) group might assist?

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APPENDIX : LIST OF VASCULAR PLANTS

Abundance: a = abundant, c = common, o = occasional, u = uncommon

* = exotic species

Trees and Shrubs

Alectryon excelsum (titoki)	(o)
Beilschmiedia tawa (tawa)	(o)
Coprosma areolata	(c)
Cordyline australis (cabbage tree)	(o)
Dacrycarpus dacrydioides (kahikatea)	(c)
*Eucalyptus spp. [planted - some natural regeneration?]	
Geniostoma rupestre var. (hangehange)	(u)
Griselinea lucida (broadleaf)	(u)
Hedycarya arborea (pigeonwood)	(u)
Laurelia novae-zelandiae (pukatea)	(o)
Macropiper excelsum (kawakawa)	(o)
Melicytus ramiflorus (mahoe)	(o)
Myrsine australis (mapou)	(c)
Pseudopanax crassifolius (lancewood)	(u)
Rhopalostylis sapida (nikau)	(c)
*Sambucus nigra (elderberry)	(u)
Solanum laciniatum (poroporo)	(u)
*S. pseudocapsicum (Jerusalem cherry)	(a)

Lianes

Calystegia sp. [C. sepium agg.] (convolvulus)	(o)
Freycinetia baueriana ssp. banksii (kiekie)	(u)
Fuchsia perscandens (climbing fuchsia)	(u)
*Lonicera japonica (Japanese honeysuckle)	(o)
Muehlenbeckia australis (pohuehue)	(o)
M. complexa (small-leaved pohuehue)	(u)
Parsonsia heterophylla (NZ jasmine)	(u)

**Passiflora mollissima* (banana passionfruit) (o)
Ripogonum scandens (supplejack) (o)
Rubus cissoides x *R. sp.* (bushlawyer) (u)

Angiosperm (flowering plant) herbs

**Cardamine hirsuta* (bittercress) (u)
Carex dissita (o)
**Conium maculatum* (hemlock) (o)
**Cyperus eragrostis* (o)
Echinopogon ovatus (hedgehog grass) (o)
Gastrodia sesamoides (orchid) (u)
Hydrocotyle heteromeria (pennywort) (u)
H. novae-zeelandiae (swamp pennywort) (u)
Microlaena stipoides (meadow ricegrass) (u)
**Physalis peruviana* (Cape gooseberry) (u)
**Phytolacca octandra* (inkweed) (o)
**Solanum nigrum* (black nightshade)
**S. sublobatum* (velvety nightshade)
**Tradescantia fluminensis* (wandering Jew) (c)
Urtica incisa (NZ nettle) (u)

Ferns

Asplenium flaccidum (hanging spleenwort) (u)
A. polyodon (u)
Blechnum filiforme (climbing blechnum) (u)
B. minus (swamp kiokio) (u)
Hypolepis ambigua (c)
Phymatosorus scandens (u)
Pteris tremula (o)
Pyrrosia eleagnifolia (u)