

TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

LITTLE PROPERTY



Report prepared for Timaru District Council by Mike Harding
July 2014

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner:D&S Little
Valuation References: ..24810/035.01
Address:31 Foley Road, Timaru 7975
Location:.....On the east slopes of the Brothers Range.
Ecological District:.....Fairlie.
TDC Land Type:.....Hard Rock Hills and Downs.
Land Environment:Q2.1c.

ECOLOGICAL CONTEXT:

The property lies on the eastern slopes of the Brothers Range at the eastern edge of Fairlie Ecological District. The original vegetation of this area would have been predominantly podocarp-hardwood forest, with localized areas of kowhai-kanuka forest on rocky slopes and at disturbed sites. The indigenous fauna would probably have been significantly more numerous and diverse, with a greater range of birds, lizards and invertebrates than is presently found in the area.

Indigenous vegetation on the property is confined to a steep-sided valley at the lower-altitude (eastern) side of the property. Vegetation comprises hardwood forest with areas of shrubland. This site adjoins a much larger area of forest on an adjacent property and makes a useful contribution to forest bird habitat in the wider area.

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas during May 2014. One area of native forest, totalling approximately nine hectares, is regarded as a Significant Natural Area (SNA) when assessed against the District Plan criteria.

This SNA is illustrated on the attached aerial photograph and described in greater detail on the SNA Survey Form in this report. Note that the boundaries of the SNA are indicative, rather than precise. This area meets the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) and is considered to be sustainable with appropriate management (criterion vii, page B19). SNAs are subject to confirmation by Council after regarding the matters listed in the District Plan (pages B19-B20). It is expected that SNAs will eventually be listed in the District Plan by way of a notified plan change.

At present, consent is required from Council for clearance of areas of indigenous vegetation or habitat which meet the Interim Definitions in the District Plan. Clearance includes burning, spraying with herbicides and over-planting. SNAs encompass most, but not necessarily all, areas of vegetation and habitat which meet the Interim Definitions.

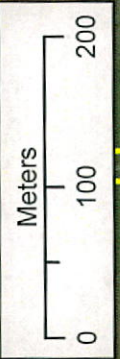
To assist with the protection and management of any SNA, landowners can apply to Council for financial assistance. Any questions regarding the protection, management and use of SNAs should be directed to the District Planner.



Ferns, *Blechnum vulcanicum* (centre) and *Blechnum fluviatile*, at SNA 10i



Little
24810/035.01



Area Name: Little Property Forest
Map reference (NZTM): 1433875E-5099290N
Ecological District: Fairlie
Surveyors: Mike Harding

Property: Little
Nearest Locality: Totara Valley
Area Size (ha): 9.04 **Altitude (m):**
Survey Time: 2 hours **Survey Date:** 23-05-14

General Description:

This SNA lies on the steep slopes of a valley at the lower-altitude (eastern) side of the property. This SNA is part of a larger area of forest that extends down-valley onto adjoining properties.

Plant Communities:

The main plant community present is scattered to dense hardwood forest, as described below. Naturalized (exotic) species are indicated with an asterisk*.

The forest canopy is dominated by broadleaf, matipo and wineberry. Other canopy species are kowhai, five-finger, mapou, lancewood, mahoe, marbleleaf, cabbage tree, narrow-leaved lacebark (uncommon), yellowwood, fuchsia, pate, bush lawyer and pohuehue.



The forest understorey is, in most places, relatively open. Plant species present are *Coprosma rhamnoides*, *Coprosma crassifolia*,

Coprosma dumosa, mahoe, kowhai, lancewood, elderberry*, fuchsia, pate, *Clematis foetida* and bush lawyer.

Ground-cover species are prickly shield fern, common shield fern, hen and chickens fern, *Asplenium richardii*, *Asplenium appendiculatum*, *Asplenium bookerianum*, necklace fern, hanging spleenwort, button fern, hound's tongue fern, mountain kiokio, *Blechnum procerum*, *Blechnum fluviatile*, *Blechnum penna-marina*, male fern*, hookgrass, pennywort, bidibid, toatoa, *Dichondra repens*, spider orchid, selfheal* and seedlings of clematis, pohuehue, mahoe, mapou, matipo, broadleaf, five-finger, wineberry, marbleleaf and *Coprosma* species.

Additional species present near the stream are swamp kiokio, *Blechnum chambersii*, *Blechnum vulcanicum* bush lily and mountain tree fern (uncommon).

Species present at the forest margin and in forest openings are bush lawyer, scrub pohuehue, mingimingi, *Coprosma crassifolia*, *Coprosma dumosa*, native broom, *Helichrysum lanceolatum*, koromiko, gorse*, Himalayan honeysuckle*, flax, prickly shield fern, bracken, *Hypolepis ambigua*, thousand-leaved fern, water fern, foxglove*, Californian thistle* and velvety nightshade*.

Birds/Fauna Observed:

Native birds observed during this brief survey were bellbird, rifleman, fantail, harrier, silvereye, kereru and grey warbler.

Notable Flora, Fauna and Habitats:

Important features of this area are the presence of young indigenous hardwood forest with relatively high species diversity, the habitat it provides for forest birds including an 'at risk' (declining) species (rifleman), the presence of a locally-uncommon plant species (mountain tree fern; *Cyathodes colensoi*), and that it is part of a larger area of indigenous forest.

Notable Plant and Animal Pests:

Gorse and Himalayan honeysuckle are the main plant pests, though these species do not pose a significant threat to indigenous forest at the site. A large patch of sycamore is present just up-valley from the site, though sycamore was not observed at the site, possibly because the site is closely grazed. Animal pests were not surveyed, though possum sign was observed and wallabies are present in the area. One red deer was seen.

Boundaries (buffering, fencing, adjoining plant communities and habitats):

This area of forest is fenced along the eastern property boundary, though is grazed as part of a larger paddock. It is buffered to some extent by its position on steep slopes in a sheltered gully. It is part of a larger area of forest that extends down-valley onto adjacent properties.

Condition and Management Issues:

The most important management issues are continued wild animal control, containment of domestic stock to protect understorey regeneration, and prevention of the establishment of sycamore from the large infestation north of the site.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M	A good example of indigenous forest typical of that remaining in this part of the ecological district.
Rarity	M	Provides useful habitat for an 'at risk' (declining) bird species (rifleman); supports a small population of a locally-uncommon plant species (mountain tree fern).
Diversity and pattern	M/H	Relatively high indigenous plant species diversity (c.56 species).
Distinctiveness/special features	M	The presence of narrow-leaved lacebark is an interesting feature.
Other Criteria		
Size/shape	M/H	A moderate-sized site that is well buffered by its location.
Connectivity	M/H	Is part of a much larger area of forest that extends onto adjacent properties.
Long-term Sustainability	M	Protection of the forest understorey from browsing/grazing and protection from the invasion of sycamore will be necessary to protect ecological values in the long term.

Final Consideration (of other matters: Section D, page B-19 of Timaru District Plan):

The steep incised gully occupied by this SNA has very limited potential for farm development.

Discussion:

This area meets the District Plan criteria for a Significant Natural Area. Important features of the area are the relatively high plant species diversity, the habitat it provides for forest birds including an 'at risk' species (rifleman), the presence of a locally-uncommon plant species (mountain tree fern), and that it is part of a larger area of indigenous forest.

Scientific names of species cited by common name in this report

(Note: this is not a complete species list; it is a list only of species cited by common name in this report)

Common Name	Scientific name
(* = naturalised species)	
bidibid.....	<i>Acaena anseriniifolia</i>
bracken.....	<i>Pteridium esculentum</i>
broadleaf.....	<i>Griselinia littoralis</i>
bush lawyer.....	<i>Rubus cissoides</i>
bush lily.....	<i>Astelia fragrans</i>
button fern.....	<i>Pellaea rotundifolia</i>
cabbage tree/ti rakau.....	<i>Cordyline australis</i>
Californian thistle*.....	<i>Cirsium arvense</i>
clematis.....	<i>Clematis paniculata</i>
common shield fern.....	<i>Polystichum richardii</i>
elderberry*.....	<i>Sambucus nigra</i>
five-finger.....	<i>Pseudopanax arboreus</i>
flax.....	<i>Phormium</i> sp.
foxglove*.....	<i>Digitalis purpurea</i>
fuchsia.....	<i>Fuchsia excorticata</i>
gorse*.....	<i>Ulex europaeus</i>
hanging spleenwort.....	<i>Asplenium flaccidum</i>
hen and chickens fern.....	<i>Asplenium gracillimum</i>
Himalayan honeysuckle*.....	<i>Leycesteria formosa</i>
hookgrass.....	<i>Uncinia</i> sp.
hound's tongue fern.....	<i>Microsorium pustulatum</i>
kanuka.....	<i>Kunzea ericoides</i>
koromiko.....	<i>Hebe salicifolia</i>
kowhai.....	<i>Sophora microphylla</i>
lancewood.....	<i>Pseudopanax crassifolius</i>
mahoe/whiteywood.....	<i>Meliclytus ramiflorus</i>
male fern*.....	<i>Dryopteris filix-mas</i>
mapou.....	<i>Myrsine australis</i>
marbleleaf/putaputaweta.....	<i>Carpodetus serratus</i>
matipo/kohuhu.....	<i>Pittosporum tenuifolium</i>
mingimingi.....	<i>Coprosma propinqua</i>
mountain kiokio.....	<i>Blechnum montanum</i>
mountain tree fern.....	<i>Cyathodes colensoi</i>
narrow-leaved lacebark.....	<i>Hoheria angustifolia</i>
native broom.....	<i>Carmichaelia australis</i>
necklace fern.....	<i>Asplenium flabellifolium</i>
pate.....	<i>Schefflera digitata</i>
pennywort.....	<i>Hydrocotyle</i> sp.
pohuehue.....	<i>Muehlenbeckia australis</i>
prickly shield fern.....	<i>Polystichum vestitum</i>
scrub pohuehue.....	<i>Muehlenbeckia complexa</i>
selfheal*.....	<i>Prunella vulgaris</i>
spider orchid.....	<i>Nematoceras</i> sp.
swamp kiokio.....	<i>Blechnum minus</i>
sycamore*.....	<i>Acer pseudoplatanus</i>
thousand-leaved fern.....	<i>Hypolepis millefolium</i>
toatoa.....	<i>Haloragis erecta</i>
velvety nightshade*.....	<i>Solanum chenopodioides</i>
water fern.....	<i>Histiopteris incisa</i>
wineberry.....	<i>Aristotelia serrata</i>
yellowwood.....	<i>Coprosma linariifolia</i>