

TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

ROBINSON PROPERTY



Report prepared for the Timaru District Council by Mike Harding
October 2007

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owners: Richard and Jacqui Robinson
Valuation Reference: 24660/260.00
Address: Four Peaks Road, RD21, Geraldine
Location: On a scarp on the southwest side of the Geraldine Downs, adjacent to Pleasant Valley Road.
Ecological District: Geraldine Ecological District
TDC Land Type: Soft Rock Hills and Downs
Land Environment: N3 (downlands of South Canterbury and coastal Otago)

ECOLOGICAL CONTEXT:

The property lies on the eastern edge of the Geraldine Ecological District, on the southwest scarp of the Geraldine Downs. The original vegetation of this area would have been predominantly podocarp-hardwood forest, dominated by totara, matai and kahikatea emergent over a hardwood canopy. Important canopy hardwood species would probably have been narrow-leaved lacebark, pokaka, kowhai, lemonwood, five-finger, broadleaf and mahoe. The indigenous fauna would have been significantly more numerous and diverse, with a greater range of birds, lizards and invertebrates than is presently found in the area.

One area of podocarp-hardwood forest is present on the property. This forest remnant is relatively diverse and provides habitat for three threatened species (kereru, rifleman and *Brachyglottis sciadophila*) and two locally uncommon species. This area of forest is part of a more extensive collection of scattered patches of forest and treeland on the Geraldine Downs that provide important habitat for birds and possibly for long-tailed bat (a 'nationally endangered' species). Bats have been recorded in Talbot Forest and in the Te Moana valley.

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas during October 2007. One area of forest on the property is regarded as a Significant Natural Area (SNA) when assessed against the District Plan criteria.

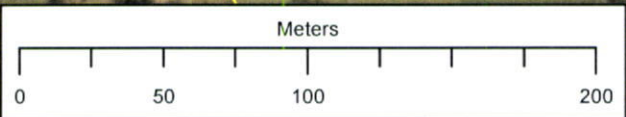
Area No.	Area Name	Central grid reference	Aprox. size (ha)	Vegetation/habitat type
34b	Robinson Scarp Forest	J38: 660-794	3.6	Podocarp-hardwood forest

This SNA is illustrated on the attached aerial photograph and described in greater detail in this document. Note that the boundaries of the SNA are indicative, rather than precise. This SNA meets the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) and is considered to be sustainable in the long term (criterion vii, page B19). SNAs are subject to confirmation by Council after regarding the matters listed under Final Considerations (pages B19-B20).

The implication of an area being listed as an SNA is that consent is required from Council for clearance of indigenous vegetation by any means (including burning and spraying with herbicides) or over-planting. This does not normally prevent clearance to prevent shading of buildings, the maintenance of tracks and fences, or grazing. To assist with the protection and management of any SNA, landowners can apply to Council for financial assistance. SNAs will eventually be listed in the District Plan. Any questions regarding the protection, management and use of SNAs should be directed to the District Planner.

Robinson Property

84b



1:2,500

TIMARU DISTRICT SNA SURVEY

AREA 34b

Area Name: Robinson Scarp Forest

Location (central map reference): J38: 660-794

Ecological District: Geraldine

Surveyors: Mike Harding and Richard Robinson

Property: Robinson

Nearest Locality: Geraldine

Area Size (ha): 3.6

Survey Time: 2 hours

Altitude (m): 160-200

Survey Date: 10-10-07

General Description:

This SNA is located on the steep southwest-facing scarp of the Geraldine Downs, on the northeast side of Pleasant Valley.

Plant Communities:

The main indigenous plant community present is podocarp-hardwood forest. Most parts of this forest are regenerating from earlier disturbance, though a number of large original podocarp (kahikatea, matai and totara) trees are present. This plant community is described below. Naturalized (exotic) species are indicated with an asterisk*.

The forest canopy is dominated by mahoe, kowhai, pohuehue and lemonwood, with emergent narrow-leaved lacebark, kahikatea, matai and totara trees, some of which probably pre-date European settlement. Other canopy species are *Lophomyrtus obcordata*, lancewood, five-finger, kanuka, cabbage tree, native jasmine, matipo and lemonwood. Several large emergent kahikatea trees are present at the northern corner of the forest. Trunk diameters (at breast height) of three of these trees are 62, 90 and 105 cm. A matai tree here has a trunk diameter of 75 cm. At least one pine tree is also present in the forest canopy.

Understorey species are *Coprosma crassifolia*, *Streblus heterophyllus*, matipo, lemonwood, *Lophomyrtus obcordata*, mapou, *Coprosma areolata*, *C. rotundifolia*, *Melicope simplex*, fuchsia, pate, lawyer, *Clematis foetida*, sycamore*, spindle tree* and one clump of supplejack (adjacent to the vehicle track).

Important ground-cover species are *Polystichum richardii*, hen and chickens fern, *Asplenium hookerianum*, *Pellaea rotundifolia*, *Hypolepis ambigua*, blackberry* and seedlings of mahoe.

Also occasionally present are *Asplenium richardii*, *A. appendiculatum*, *A. flaccidum*, necklace fern, prickly shield fern, hound's tongue fern, black nightshade*, *Brachyglottis sciadophila* (one clump adjacent to the cycle track), foxglove*, hookgrass, bidibid, pennywort and seedlings of narrow-leaved lacebark, poroporo, tutsan*, hawthorn* and sycamore*.

Open low-canopied parts of the forest are dominated by fuchsia, pohuehue, blackberry* and elderberry*.

Additional species present on the forest margin are *Coprosma propinqua*, mistletoe (on *Coprosma crassifolia*), leafless lawyer, Chilean flame creeper* and *Calystegia tuguriorum*.

Birds/Fauna Observed:

Indigenous birds observed during this brief inspection were rifleman, grey warbler, fantail, bellbird, shining cuckoo and harrier. Kereru (NZ pigeon) are also present (Richard Robinson, *pers.comm.*). A single tui was observed in forest on the adjacent property in July.

Notable Flora, Fauna and Habitats:

Notable features of this SNA are the presence of mature podocarps (kahikatea, matai and totara) especially the large trees at the northern corner, threatened species (rifleman, kereru and *Brachyglottis sciadophila*), locally uncommon species (leafless lawyer and supplejack) and the habitat the area provides for forest birds.

Notable Plant and Animal Pests:

Sycamore is the most important exotic plant present. This species can readily colonise intact forest and eventually dominate the forest canopy. The native climber, pohuehue, is present and in places dominant, smothering some canopy trees. Other important plant pests present are elderberry, spindle tree and Chilean flame creeper. Animal pests were not surveyed, though possums and feral pigs pose a threat.

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

This SNA is well buffered by its location on steeper slopes and by similar areas of forest on the scarp to the north and south. It is also buffered to some extent by a macrocarpa plantation on the lower slopes and a pine plantation on the upper slopes. The areas of forest to the north and south (on the adjoining property) are

protected by a QEII Open Space Covenant. The SNA lies close to other areas of indigenous vegetation on the Geraldine Downs.

Condition and Management Issues:

Forest over most of the SNA is in relatively good condition. Recent construction of a vehicle track has had a significant impact on parts of the forest, notably the northern corner of the forest (though larger trees were avoided during construction). Important management issues are the control of the more aggressive plant pests (sycamore and pohuehue), continued animal pest control (notably possums and feral pigs) and maintenance of the new road to avoid further effects on the surrounding forest. A foot/cycle track has been recently constructed along the upper slopes of the area.

Property Owner Comment:

The landowners are keen to protect and enhance the forest and appreciate the advice on forest management. Construction of the track avoided large trees and involved the removal of only low tangled vegetation, predominantly blackberry, at the northern corner. Feral pigs were present in the forest. Kereru are frequently observed.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M/H	A good example of indigenous vegetation typical of the ecological district.
Rarity	M/H	Supports three threatened species: rifleman, kereru and <i>Brachyglottis sciadophila</i> (all 'gradual decline') and two locally uncommon species: leafless lawyer and supplejack.
Diversity and pattern	M	Species diversity is reduced from that originally present.
Distinctiveness/special features	M/H	The presence of several large old kahikatea trees is a special feature.

Other Criteria

Size/shape	M/H	A moderate-sized area for this ecological district with a relatively good shape and mostly well buffered.
Connectivity	M/H	Adjoins and links areas of protected forest on two boundaries.
Long-term Sustainability	M/H	The ecological values of the area are likely to persist with minimal management.

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

This area of forest has been informally protected by the landowners, except where parts of the forest have been cleared for track construction. The potential for development of this area has been partly realised by construction of an access track and the establishment of plantation forest on the upper and lower slopes. Development potential of the remaining parts of the forested area is limited by the steepness of the slope. The forest enhances the amenity value of the property.

Discussion:

This area easily meets the District Plan criteria for a Significant Natural Area. Important attributes are the presence of mature podocarps (kahikatea, matai and totara) especially the large trees at the northern corner, threatened species (rifleman, kereru and *Brachyglottis sciadophila*, locally uncommon species (leafless lawyer and supplejack), the habitat the area provides for forest birds and the contribution the area makes to the network of fauna habitat on the Geraldine Downs.

Scientific names of species cited by common name

Common Name	Scientific name
(* = naturalised species)	
bidibid	<i>Acaena</i> sp.
blackberry*	<i>Rubus fruticosus</i>
black nightshade*	<i>Solanum nigrum</i>
broadleaf	<i>Griselinia littoralis</i>
cabbage tree/ti rakau	<i>Cordyline australis</i>
Canterbury tree broom	<i>Carmichaelia torulosa</i>
Chilean flame creeper*	<i>Tropaeolum speciosum</i>
elderberry*	<i>Sambucus nigra</i>
five-finger	<i>Pseudopanax arboreus</i>
foxglove*	<i>Digitalis purpurea</i>
fuchsia	<i>Fuchsia excorticata</i>
hawthorn*	<i>Crataegus monogyna</i>
hen and chickens fern	<i>Asplenium bulbiferum</i>
hookgrass	<i>Uncinia</i> sp.
hound's tongue fern	<i>Microsorium pustulatum</i>
kahikatea/white pine	<i>Dacrycarpus dacrydioides</i>
kanuka	<i>Kunzea ericoides</i>
kowhai	<i>Sophora microphylla</i>
lacebark	<i>Hoheria sexstylosa</i>
lancewood	<i>Pseudopanax crassifolius</i>
lawyer	<i>Rubus schmidelioides</i>
leafless lawyer	<i>Rubus squarrosus</i>
lemonwood	<i>Pittosporum eugenioides</i>
mahoe/whiteywood	<i>Meliccytus ramiflorus</i>
mapou	<i>Myrsine australis</i>
matai/black pine	<i>Prumnopitys taxifolia</i>
matipo/kohuhu	<i>Pittosporum tenuifolium</i>
mistletoe	<i>Ileostylis micranthus</i>
narrow-leaved lacebark	<i>Hoheria angustifolia</i>
native jasmine	<i>Parsonsia</i> sp.
necklace fern	<i>Asplenium flabellifolium</i>
pate	<i>Schefflera digitata</i>
pennywort	<i>Hydrocotyle</i> sp.
pohuehue	<i>Muehlenbeckia australis</i>
pokaka	<i>Elaeocarpus hookerianus</i>
poroporo	<i>Solanum laciniatum</i>
prickly shield fern	<i>Polystichum vestitum</i>
spindle tree*	<i>Euonymus europaeus</i>
supplejack	<i>Ripogonum scandens</i>
sycamore*	<i>Acer pseudoplatanus</i>
totara	<i>Podocarpus totara</i>
tutsan*	<i>Hypericum androsaemum</i>
wineberry	<i>Aristotelia serrata</i>
wire moss	<i>Polytrichum juniperinum</i>
woolly moss	<i>Racomitrium</i> sp.
woolly mullein*	<i>Verbascum thapsus</i>
yellowwood	<i>Coprosma linariifolia</i>
yew*	<i>Taxus baccata</i>
Yorkshire fog*	<i>Holcus lanatus</i>