

TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

HARVEY PROPERTY
(THE ISLE)



Report prepared for the Timaru District Council by Mike Harding
April 2008

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Ross Harvey
Valuation Reference: 24660/031.00
Address: Woodbury Road, Woodbury, RD 21, Geraldine
Location: North of Woodbury Road and east of Totara Road on the south side of the Waihi River, northwest of Woodbury.
Ecological District: Geraldine Ecological District
TDC Land Type: Plains
Land Environment: N2 (well drained plains)

ECOLOGICAL CONTEXT:

The property lies in the northern part of the Geraldine Ecological District, on the outwash plain of the Waihi River. The original vegetation of this area would have been predominantly podocarp-hardwood forest, dominated by totara. Other important canopy species at free-draining sites were probably matai, narrow-leaved lacebark, broadleaf, lemonwood and five-finger. Damper sites would have supported kahikatea and lowland ribbonwood. 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.

Indigenous vegetation on the property is podocarp-hardwood forest dominated by totara. Forest on the property is part of a more extensive area of scattered to dense totara-dominated forest which stretches from the foothills at Waihi Gorge to Waihi Bush near Woodbury. This forest is the most extensive area of totara forest remaining on the Canterbury Plains. One notable species is present on the property: the newly-discovered *Melicytus* "Waihi". The property provides suitable habitat for two threatened bird species: kereru and rifleman (both 'gradual decline'). The property lies within the existing range of the South Canterbury population of long-tailed bat (threat status: 'nationally-endangered').

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas during February 2008. The main area of indigenous forest on the property is regarded as a Significant Natural Area (SNA 581d) when assessed against the District Plan criteria.

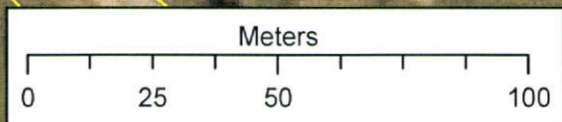
This SNA is illustrated on the attached aerial photograph and described in greater detail in this report. This area meets the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) and is considered to be sustainable in the long term (criterion vii, page B19). SNAs are subject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

The implication of an area being listed as a SNA is that consent is required from Council for clearance by any means (including burning and spraying with herbicides) or over-planting. This does not normally prevent clearance to prevent shading of buildings, weed control or the maintenance of tracks and fences. 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.



Harvey
24660/031.00

581d



1:1,500

TIMARU DISTRICT SNA SURVEY

AREA 581d

Area Name: The Isle	Property: Harvey (The Isle)
Location (central map reference): J37: 655-852	Nearest Locality: Woodbury
Ecological District: Geraldine	Area Size (ha): 1.45 Altitude (m): 220m
Surveyors: Mike Harding and Ross Harvey	Survey Time: 1½ hours Survey Date: 09-02-08

General Description:

This SNA is located on the outwash plain of the Waihi River, northwest of Woodbury and south of the large Waihi Bush forest remnant. It adjoins a larger area of similar forest on an adjoining property and is part of a more extensive collection of scattered patches of indigenous forest between Woodbury and the foothills at Waihi Gorge.

Plant Communities:

The main indigenous plant community present is totara forest. This plant community is described below. Naturalized (exotic) species are indicated with an asterisk*.

The forest canopy is dominated by relatively tall totara trees. Trunk diameters (at breast height) of the totara trees are mostly between 80 and 100cm, though there is one larger tree with a trunk diameter of 180cm. Other canopy species are narrow-leaved lacebark, matai, lemonwood, lancewood, kowhai and pohuehue. One large old broadleaf tree is present.

The forest understorey is dominated by mahoe, Khasia berry* and blackberry*. Other understorey species are poataniwha, yellowwood, matipo, mapou, narrow-leaved lacebark, *Coprosma crassifolia*, *C. rigida*, *C. rotundifolia*, saplings of matai and totara, shrubby mahoe, ash*, holly*, cherry laurel*, cherry plum*, elderberry*, spindle tree*, bittersweet*, black nightshade*, bush lawyer, *Clematis marata*, old man's beard* and Chilean flame creeper*.

Groundcover species present are *Libertia ixioides*, sedge (*Carex* sp.), hound's tongue fern, hen and chickens fern, necklace fern, *Pellaea rotundifolia*, prickly shield fern, male fern*, herb Robert*, bidibid (*Acaena* sp.) and seedlings of barberry*, bittersweet*, native jasmine, lemonwood, mapou, rohutu and kowhai.

Also present along the northern and western boundaries of the area are several small plants of the newly-discovered *Melicytus* "Waihi".

A patch of periwinkle* is present near the northern boundary and a small patch of hedge woundwort* is present at the northeast corner of the forest.

The southern edge of the forest merges into exotic trees, including large ash* trees. Additional species present here are bamboo*, bush lily, *Asplenium appendiculatum*, hanging spleenwort, an unusual form of male fern* (*Dryopteris filix-mas*), pennywort, ivy*, lesser periwinkle*, violet* and seedlings of cabbage tree.

Birds/Fauna Observed:

Native birds observed during this brief inspection were grey warbler, bellbird and fantail. Other native birds likely to utilise this area are kereru, rifleman, silvereve and shining cuckoo.

Notable Flora, Fauna and Habitats:

This area of forest is part of one of the few sizeable areas of indigenous forest on an alluvial surface in the Geraldine Ecological District. Notable features of this area are the dominance of tall totara, the presence of the newly discovered *Melicytus* "Waihi", the habitat the area is likely to provide for threatened species (kereru, rifleman and possibly long-tailed bat), and the contribution the forest makes to fauna habitat in the area.

Notable Plant and Animal Pests:

A number of significant plant pests are present. The most important of these are old man's beard, Khasia berry, Chilean flame creeper, ash, holly, cherry plum, elderberry, blackberry, ivy and periwinkle. Old man's beard, ash, holly, cherry plum and elderberry could be removed or contained. Chilean flame creeper is very difficult to control. Of the herbaceous weeds, hedge woundwort and violet pose the greatest threats.

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

This area of forest is lightly grazed. It adjoins a larger stand of totara-matai forest to the north (Area 581b). It also lies reasonably close to a relatively intact and regionally-important remnant of indigenous forest to the northeast (Waihi Bush). These areas of indigenous forest are linked to the foothills by other scattered patches of totara-matai forest, forming a regionally-important area of lowland indigenous forest.

Condition and Management Issues:

The forest canopy is in good condition. It is affected in places by the native climber, pohuehue, and at some locations by old man's beard. The forest understorey is weedy. Blackberry and Khasia berry are especially dominant in places. The most important management issue is the control or removal of the more aggressive weeds, notably old man's beard, ash, holly, elderberry and blackberry. Monitoring of the spread of herbaceous weeds, notably hedge woundwort, periwinkle, ivy and violet, is also important. The landowner has already expended considerable effort removing weeds from the forest understorey.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M/H	A good example of indigenous forest typical of this part of the ecological district.
Rarity	M/H	Supports a small population of <i>Melicytus</i> "Waihi" and provides suitable habitat for two threatened bird species: kereru and rifleman.
Diversity and pattern	M	Diversity is typical for this type of forest, though reduced from its former condition.
Distinctiveness/special features	M	The height and density of the totara trees are special features.
Other Criteria		
Size/shape	M	Relatively small, though it has a good shape and is well buffered.
Connectivity	M/H	Makes an important contribution to the network of forest habitat in the area.
Long-term Sustainability	M	Continued management (especially weed control) will be required to maintain the ecological values of the forest in the long term.

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

This area has been informally protected by the landowner. It is an attractive area of forest which adds considerable amenity value to the property, though its protection precludes development of the area for other uses. The area is threatened by plant and animal pests, as are most low-altitude forest remnants. The forest makes an important contribution to the indigenous forest and habitat in the Woodbury-Waihi area.

Discussion:

This area easily meets the District Plan criteria for a Significant Natural Area. It is part of one of the more valuable indigenous forest remnants in this part of Timaru District. Notable features of the area are the dominance of totara, the presence of the newly discovered *Melicytus* "Waihi", the habitat the area is likely to provide for threatened species (kereru, rifleman and possibly long-tailed bat), and the contribution the forest makes to fauna habitat in the area.

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)	
ash*	<i>Fraxinus excelsior</i>
barberry*	<i>Berberis glaucocarpa</i>
bittersweet*	<i>Solanum dulcamara</i>
blackberry*	<i>Rubus fruticosus</i>
black nightshade*	<i>Solanum nigrum</i>
broadleaf	<i>Griselinia littoralis</i>
bush lawyer	<i>Rubus cissoides</i>
bush lily	<i>Astelia</i> sp.
cabbage tree/ti rakau	<i>Cordyline australis</i>
cherry laurel*	<i>Prunus laurocerasus</i>
cherry plum*	<i>Prunus cerasifera</i>
Chilean flame creeper*	<i>Tropaeolum speciosum</i>
elderberry*	<i>Sambucus nigra</i>
five-finger	<i>Pseudopanax arboreus</i>
hanging spleenwort	<i>Asplenium flaccidum</i>
hedge woundwort*	<i>Stachys sylvatica</i>
hen and chickens fern	<i>Asplenium bulbiferum</i>
herb Robert*	<i>Geranium robertianum</i>
holly*	<i>Ilex aquifolium</i>
hound's tongue fern	<i>Microsorium pustulatum</i>
ivy*	<i>Hedera helix</i>
kahikatea/white pine	<i>Dacrydium dacrydioides</i>
Khasia berry*	<i>Cotoneaster simonsii</i>
kowhai	<i>Sophora microphylla</i>
lancewood	<i>Pseudopanax crassifolius</i>
lemonwood	<i>Pittosporum eugenioides</i>
lesser periwinkle*	<i>Vinca minor</i>
lowland ribbonwood	<i>Plagianthus regius</i>
mahoe/whiteywood	<i>Melicactus ramiflorus</i>
male fern*	<i>Dryopteris filix-mas</i>
mapou	<i>Myrsine australis</i>
matai/black pine	<i>Prumnopitys taxifolia</i>
matipo/kohuhu	<i>Pittosporum tenuifolium</i>
narrow-leaved lacebark	<i>Hoheria angustifolia</i>
native jasmine	<i>Parsonsia</i> sp.
necklace fern	<i>Asplenium flabellifolium</i>
old man's beard*	<i>Clematis vitalba</i>
pennywort	<i>Hydrocotyle</i> sp.
periwinkle*	<i>Vinca major</i>
poataniwha	<i>Melicope simplex</i>
pohuehue	<i>Muehlenbeckia australis</i>
prickly shield fern	<i>Polystichum vestitum</i>
rohutu	<i>Lophomyrtus obcordata</i>
shrubby mahoe	<i>Melicactus micranthus</i>
spindle tree*	<i>Euonymus europaeus</i>
totara	<i>Podocarpus totara</i>
violet*	<i>Viola odorata</i>
yellowwood	<i>Coprosma linariifolia</i>