

TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

STOCKER PROPERTY



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

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Albert and Denise Stocker
Valuation Reference: 24660/186.03
Address: Woodbury Road, Woodbury, RD 21, Geraldine
Location: Northeast of Woodbury Road between Poole and Rae roads,
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. The property provides suitable habitat for two threatened bird species: kereru and rifleman (both 'gradual decline') and one newly-discovered plant species: *Melicytus* "Waihi". 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:

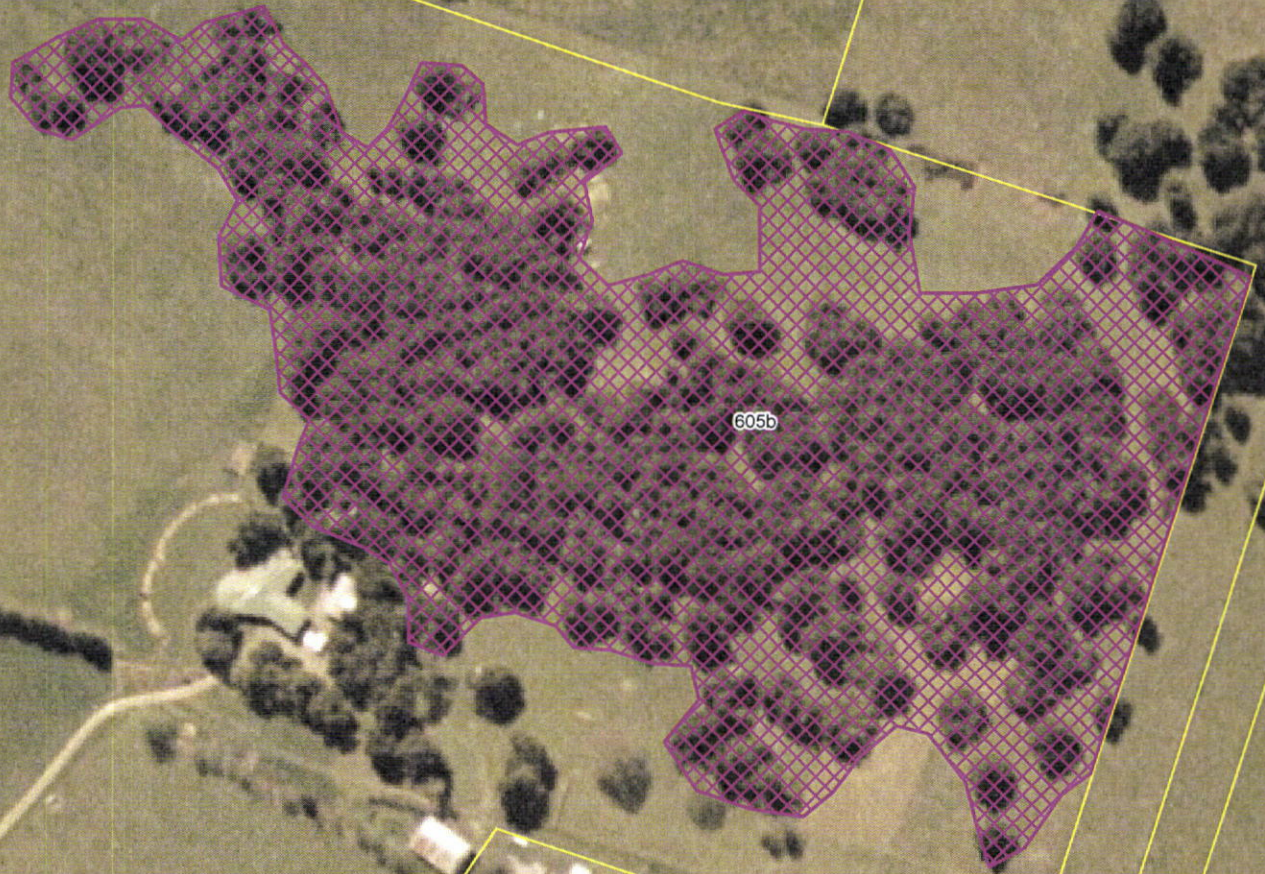
The property was surveyed as part of the District-wide survey of Significant Natural Areas during February 2008. The main area of indigenous forest on the property is regarded as a Significant Natural Area (SNA) when assessed against the District Plan criteria.

This SNA (Area 605b) 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), with some management. SNAs are subject to confirmation by Council after regarding the matters listed under Final Considerations (pages B19-B20).

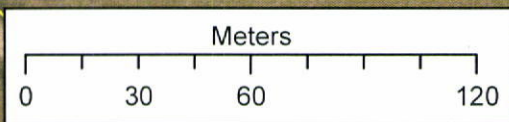
The implication of an area being listed as a SNA is that consent is required from Council for clearance by any means (including burning and spraying with herbicides) or over-planting. This does not normally prevent clearance to prevent shading of buildings, weed control, grazing or the maintenance of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



Stocker
24660/186.03



605b



1:2,000

TIMARU DISTRICT SNA SURVEY

AREA 605b

Area Name: Stocker Forest

Location (central map reference): J37: 645-864

Ecological District: Geraldine

Surveyors: Mike Harding and Albert Stocker

Property: Albert and Denise Stocker

Nearest Locality: Woodbury

Area Size (ha): 3.5

Altitude (m): 250m

Survey Time: 1½ hours

Survey Date: 29-02-08

General Description:

This Significant Natural Area (SNA) is a relatively dense stand of podocarp (totara-matai) forest on an alluvial surface just south of the Waihi River. It lies close to other similar areas of forest and is part of a more extensive collection of native forest patches between Waihi Bush at Woodbury and the foothills at Waihi Gorge.

Plant Communities:

Totara-matai forest is the only indigenous plant community present. This plant community is described below. Naturalized (exotic) species are indicated with an asterisk*.

The forest canopy is dominated by totara, with scattered matai, narrow-leaved lacebark, lemonwood, matipo and pohuehue. Also present in the canopy are occasional lancewood trees and a single kaikomako tree. A small group of approximately six young kahikatea, with trunk diameters less than 20cm, is present, though the trees all appear dead. Mistletoe is present on totara.

The forest understorey is relatively open, as it is regularly grazed by sheep. Understorey species present are poataniwha, *Coprosma rigida*, *Coprosma rhamnoides*, *Coprosma propinqua*, yellowwood, weeping mapou, narrow-leaved lacebark, totara saplings, barberry* (one bush), one small ash* tree, one plum* tree, lawyer, *Clematis marata*, *Clematis foetida* and leather-leaf fern.

Forest floor species present are pennywort, hairy pennywort, bidibid, foxglove*, black nightshade*, necklace fern, *Asplenium appendiculatum*, and seedlings of mahoe, mapou, fuchsia, elderberry*, and a single small seedling of the newly-discovered *Melicytus* "Waihi".

Birds/Fauna Observed:

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

Notable Flora, Fauna and Habitats:

Notable features of this SNA are the presence and dominance of podocarps (totara and matai), the habitat the forest provides for birds including threatened species (kereru and rifleman), the presence of a seedling of the newly-discovered *Melicytus* "Waihi" and the contribution the forest makes to the network of fauna habitat in the Woodbury-Waihi area. One narrow-leaved lacebark tree near the house has a trunk diameter of 74cm; which is large for this species.

Notable Plant and Animal Pests:

The forest is relatively free of invasive plant pests, presumably because of regular grazing. Single bushes or trees of ash, barberry and plum were observed. The aggressive native climber, pohuehue (*Muehlenbeckia australis*) is present, but not dominant. The landowner advises that extensive control of this climber was undertaken in the past.

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

The SNA is a discrete patch of forest, though it lies close to, and is virtually connected to, other areas of totara-matai forest on the adjoining property (Area 605a). The forest is not fenced from grazing.

Condition and Management Issues:

The forest canopy is in relatively good condition, though has suffered the effects of recent heavy snowfalls, opening the canopy and perhaps causing the forest floor to dry out more than usual. A good range of understorey species is present considering that the forest is grazed regularly, though palatable understorey

species (such as mahoe, fuchsia, broadleaf, five-finger and *Melicytus* "Waihi") are absent except for this year's seedlings.

Property Owner Comment:

The area has been previously surveyed for the purposes of protection. The owners value the forest and have encouraged the regeneration of native species in areas near the house that are fenced from grazing. Only sheep, not cattle, are grazed in the forest area.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M/H	A good example of indigenous forest typical of the ecological district.
Rarity	M	Provides habitat for kereru and rifleman (threat status: gradual decline) and potential habitat for <i>Melicytus</i> "Waihi".
Diversity and pattern	L/M	Species diversity is substantially less than typical for this forest type.
Distinctiveness/special features	M	A relatively dense stand of trees, with good potential for further restoration.
Other Criteria		
Size/shape	M	A relatively small area, but with a good shape.
Connectivity	M/H	Makes an important contribution to the network of forest habitat in the area.
Long-term Sustainability	M	Some management will be necessary for the long-term ecological viability of the area, notably the regeneration of canopy species.

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

This area of forest has been retained and protected voluntarily by the landowners. They value the forest and are interested in its long-term protection.

Discussion:

The area meets the District Plan criteria for a Significant Natural Area. Important features are the presence and dominance of podocarps (totara and matai), the habitat the forest provides for birds including threatened species (kereru and rifleman), the presence of a seedling of the newly-discovered *Melicytus* "Waihi" and the contribution the forest makes to the network of fauna habitat in the Woodbury-Waihi 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>
bidibid	<i>Acaena</i> sp.
black nightshade*	<i>Solanum nigrum</i>
elderberry*	<i>Sambucus nigra</i>
five-finger	<i>Pseudopanax arboreus</i>
foxglove*	<i>Digitalis purpurea</i>
fuchsia	<i>Fuchsia excorticata</i>
hairy pennywort	<i>Hydrocotyle moschata</i>
kahikatea/white pine	<i>Dacrycarpus dacrydioides</i>
kaikomako	<i>Pennantia corymbosa</i>
lancewood	<i>Pseudopanax crassifolius</i>
lawyer	<i>Rubus schmidelioides</i>
leather-leaf fern	<i>Pyrosia eleagnifolia</i>
lemonwood	<i>Pittosporum eugenioides</i>
lowland ribbonwood	<i>Plagianthus regius</i>
mahoe/whiteywood	<i>Melicytus 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>
necklace fern	<i>Asplenium flabellifolium</i>
pennywort	<i>Hydrocotyle</i> sp.
plum*	<i>Prunus</i> sp.
poataniwha	<i>Melicope simplex</i>
pohuehue	<i>Muehlenbeckia australis</i>
weeping mapou	<i>Myrsine divaricata</i>
yellowwood	<i>Coprosma linariifolia</i>