

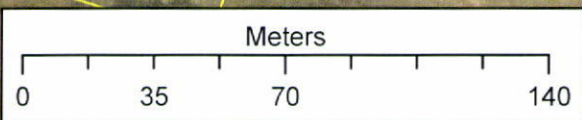
TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

STAN CONWAY TRUST

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



Conway Property
24660/188.00



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TIMARU DISTRICT SNA SURVEY

AREA 606b

Area Name: Stan Conway Forest
Location (central map reference): J37: 638-872
Ecological District: Geraldine
Surveyors: Mike Harding

Property: Stan Conway Trust
Nearest Locality: Woodbury
Area Size (ha): 2.37 **Altitude (m):** 300
Survey Time: 3 hours **Survey Date:** 14-03-08

General Description:

Several patches of podocarp-hardwood forest on low terraces of the Waihi River, just downstream (east) of Waihi Gorge.

Plant Communities:

The indigenous plant communities of this SNA comprise several patches of totara-dominated podocarp-hardwood forest separated by areas of pasture. These plant communities are described separately below. Naturalized (exotic) species are indicated with an asterisk*.

Eastern patch (606b1):

This area of forest lies between the driveway to the house and Forest and Bird's Conway Bush Reserve. It is dominated by totara. Other canopy species are kowhai, kaikomako, native jasmine and pohuehue. Species on the forest margin or in the understorey are *Coprosma crassifolia*, *Coprosma propinqua*, *Coprosma rigida*, weeping mapou, dwarf mistletoe (on *Coprosma crassifolia*), lawyer, hawthorn*, broom*, gorse*, sweet brier*, bracken and necklace fern.

Northern (Waihi River) patch (606b2):

The main area of scattered trees on the terrace is dominated by totara and kowhai. The kowhai trees are large, with trunk diameters (at breast height) between 40 and 60cm. A small clump of young kahikatea trees is present, with trunk diameters between 25 and 50cm. Other species present in this area are kaikomako, fuchsia, broadleaf, cabbage tree, matipo, poataniwha, *Coprosma crassifolia*, *Coprosma rotundifolia*, blackberry*, burdock* and foxglove*.

A denser strip of forest is present on the terrace scarp. It is dominated by totara. Other canopy species are kowhai, matai, matipo, narrow-leaved lacebark, lemonwood, lancewood, kaikomako and ash*.

Species present in the forest understorey are *Coprosma rotundifolia*, *Coprosma crassifolia*, *Coprosma propinqua*, mahoe, lawyer, leafless lawyer, mapou, poataniwha, elderberry* and young plants of *Meliccytus* "Waihi". Ground-cover species include pennywort and hairy pennywort.

Further up the river, above the first small hut, is another small stand of trees dominated by totara and kowhai. Other species present here are horopito, fuchsia, *Coprosma rotundifolia*, pohuehue, Chilean flame creeper*, *Clematis marata*, pennywort, hairy pennywort, *Blechnum penna-marina*, *Asplenium hookerianum*, necklace fern and seedlings of mahoe, kowhai, native jasmine and sycamore*.

Between these forest patches, along the river bank, are stands of exotic vegetation dominated by sycamore*, Chilean flame creeper*, gorse*, flowering currant*, Himalayan honeysuckle* and bracken.

Northwest patch (606b3):

This area of forest lies upstream (west) of the second hut. It is dominated by totara and mostly fenced from grazing. Other canopy or subcanopy species present are matai, lancewood, five-finger, lowland ribbonwood, fuchsia, marbleleaf, narrow-leaved mahoe, pohuehue and native jasmine. Planted pine and macrocarpa trees are also present.

Understorey species present are *Coprosma rigida*, *Coprosma crassifolia*, kowhai, weeping mapou, mahoe, poataniwha, totara and matai saplings, horopito, hawthorn* and flowering currant*.

Important ground cover species are prickly shield fern, necklace fern, male fern*, bidibid, black nightshade*, bittersweet*, foxglove* and seedlings of native jasmine, pohuehue, ash* and mahoe. One patch (c.10m x 10m) of ground ivy* is present near the centre of the area. A larger patch of periwinkle* is present in the southern part of the area.

Additional species present on the forest margin are kanuka, *Clematis foetida*, Chilean flame creeper*, blackberry*, broom* and gorse*.

Western (house) patch (606b4):

This patch of scattered clumps of trees is dominated by totara. Other canopy species present are matai, pohuehue and native jasmine. Flowering currant* is common in the understorey and on the forest margins. Other species present are *Coprosma rigida*, black nightshade* and blackberry*.

Central patch (606b5):

This area comprises scattered clumps of trees on and beside a small terrace scarp. It is dominated by totara. Other canopy or subcanopy species present are yellowwood, kowhai, kaikomako, *Coprosma crassifolia* and pohuehue. One large kowhai has a trunk diameter of more than 100cm. Other species present are poataniwha, *Coprosma rigida*, mistletoe (on yellowwood), flowering currant*, burdock*, hawthorn*, Chilean flame creeper*, bush lawyer, *Clematis foetida*, hairy pennywort, and seedlings of sycamore* and mahoe.

In addition to the areas of forest described above, there are two adult plants of the newly-discovered *Melicytus* "Waihi". Both plants are close to the rock wall on the boundary of Forest and Bird's Conways Bush Reserve.

Birds/Fauna Observed:

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

Notable Flora, Fauna and Habitats:

Notable features of this area are the dominance of podocarps (especially totara), the number and size of the kowhai trees, the presence of the threatened plant *Melicytus* "Waihi" (threat status is likely to be 'acutely threatened'), the habitat the area provides for threatened bird species kereru and rifleman (threat status: gradual decline) and the contribution the area makes to the network of fauna habitat in the area.

Notable Plant and Animal Pests:

Important woody plant pests present are flowering currant, hawthorn and, less commonly, sycamore and ash. These species have the potential to become dominant, especially sycamore and ash. Other important weeds present are ground ivy (the only known patch in this part of the District), periwinkle, Chilean flame creeper and elderberry. Two undesirable plant pests, old man's beard and Darwin's barberry, are present on nearby properties. Animal pests were not surveyed.

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

The forest patches are buffered to some extent by their position on low terraces. Together, they form a relatively large area of indigenous forest with a good shape. The area adjoins the Conways Bush Reserve to the southeast and lies close to other areas of indigenous forest on nearby properties.

Condition and Management Issues:

Control of flowering currant and other woody weeds, and the removal of ground ivy are the most important management issues. The existing grazing is probably helping to suppress plant pests, but will also hinder the regeneration of canopy species.

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/H	Supports two adult plants of <i>Melicytus</i> "Waihi": a species that is likely to be classified as 'acutely threatened'. Provides habitat for kereru and rifleman (chronically threatened species).
Diversity and pattern	M	Species diversity is less than typical for this forest type. The presence of kowhai and kahikatea on the low terrace adds diversity.
Distinctiveness/special features	M	Relatively dense patches of trees with good potential for restoration.
<hr/> Other Criteria <hr/>		
Size/shape	M/H	A moderate-sized area for the ecological district.
Connectivity	M	Adjoins another area of indigenous forest on one boundary and is an important part of the network of forest habitat in this area.
Long-term Sustainability	M	Active management (notably weed control) will be required to maintain the ecological values of the area.

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

This area of forest has been informally protected and managed for many years by the previous and present owners. It provides some limited grazing and adds considerable amenity value to the property.

Discussion:

This area of forest easily meets the District Plan criteria for a Significant Natural Area. Important features of the area are the dominance of podocarps (especially totara), the number and size of the kowhai trees, the presence of the threatened plant *Melicytus* "Waihi" (threat status is likely to be 'acutely threatened'), the habitat the area provides for threatened bird species kereru and rifleman (threat status: gradual decline) and the contribution the area makes to the network of 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>
bidibid	<i>Acaena</i> sp.
bittersweet*	<i>Solanum dulcamara</i>
blackberry*	<i>Rubus fruticosus</i>
black nightshade*	<i>Solanum nigrum</i>
bracken	<i>Pteridium esculentum</i>
broadleaf	<i>Griselinia littoralis</i>
broom*	<i>Cytisus scoparius</i>
burdock*	<i>Arctium minus</i>
bush lawyer	<i>Rubus cissoides</i>
cabbage tree/ti rakau	<i>Cordyline australis</i>
Canterbury tree broom	<i>Carmichaelia torulosa</i>
Chilean flame creeper*	<i>Tropaeolum speciosum</i>
Darwin's barberry*	<i>Berberis darwinii</i>
dwarf mistletoe	<i>Korthalsella lindsayi</i>
elderberry*	<i>Sambucus nigra</i>
five-finger	<i>Pseudopanax arboreus</i>
flowering currant*	<i>Ribes sanguineum</i>
foxglove*	<i>Digitalis purpurea</i>
fuchsia	<i>Fuchsia excorticata</i>
gorse*	<i>Ulex europaeus</i>
ground ivy*	<i>Glechoma hederacea</i>
hairy pennywort	<i>Hydrocotyle moschata</i>
hawthorn*	<i>Crataegus monogyna</i>
Himalayan honeysuckle*	<i>Leycesteria formosa</i>
horopito/pepperwood	<i>Pseudowintera colorata</i>
kahikatea/white pine	<i>Dacrycarpus dacrydioides</i>
kaikomako	<i>Pennantia corymbosa</i>
kanuka	<i>Kunzea ericoides</i>
kowhai	<i>Sophora microphylla</i>
lancewood	<i>Pseudopanax crassifolius</i>
lawyer	<i>Rubus schmidelioides</i>
leafless lawyer	<i>Rubus squarrosus</i>
lemonwood	<i>Pittosporum eugenioides</i>
lowland ribbonwood	<i>Plagianthus regius</i>
macrocarpa*	<i>Cupressus macrocarpa</i>
mahoe/whiteywood	<i>Melicytus ramiflorus</i>
male fern*	<i>Dryopteris filix-mas</i>
mapou	<i>Myrsine australis</i>
marbleleaf/putaputaweta	<i>Carpodetus serratus</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>
narrow-leaved mahoe	<i>Melicytus lanceolatus</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>

sweet brier*	<i>Rosa rubiginosa</i>
sycamore*	<i>Acer pseudoplatanus</i>
totara	<i>Podocarpus totara</i>
weeping mapou	<i>Myrsine divaricata</i>
yellowwood	<i>Coprosma linariifolia</i>