

TIMARU DISTRICT

SIGNIFICANT NATURAL AREAS SURVEY

COULTER PROPERTY



**Report prepared for Timaru District Council by Mike Harding
March 2012**

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Gavin Coulter

Valuation References: 24660/029.00

Address: Condon Road, Woodbury.

Location: South side of Waihi River between Poole Road and Waihi Bush.

Ecological District:..... Geraldine Ecological District.

TDC Land Type:..... ‘Plains’

Land Environment: N2 (well drained plains).

ECOLOGICAL CONTEXT:

This property occupies gently sloping terraces of the Waihi River, northwest of Woodbury. These free-draining terraces lie between 220 and 240m above sea level. The property lies in Geraldine Ecological District, though has characteristics of High Plains Ecological District.

The original vegetation of this area would have been predominantly podocarp-hardwood forest, dominated by totara. Other important canopy species at free-draining (drought-prone) sites were probably matai, narrow-leaved lacebark, lemonwood, kowhai and five-finger. Damper sites would have supported kahikatea and lowland ribbonwood. Tall kanuka-kowhai forest would probably have been present on disturbed surfaces, such as recent river flats and terrace scarps. Minor areas of matagouri-*Coprosma-Olearia* shrubland, small wetlands and associated areas of short tussockland may have been present on recent river flats. 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 predominantly strongly regenerating podocarp forest dominated by totara, most of which has probably grown since the original forests were logged in the 1850s. However, some of larger indigenous trees appear to pre-date logging and are therefore representative of the original vegetation. 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.

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas during September 2011. Six areas, comprising approximately eleven hectares, are regarded as Significant Natural Areas (SNAs) when assessed against the District Plan criteria. These SNAs are listed in the table below.

Area No.	Area Name	Central grid reference	Aprox. size (ha)	Vegetation/habitat type
615a	Coulter Top Terrace	J37: 650-863	0.72	Podocarp-hardwood forest
615b		J37: 648-864	1.86	Podocarp-hardwood forest
615c		J37: 656-861	0.82	Podocarp-hardwood treeland
616a	Coulter Lower Terrace	J37: 648-866	3.7	Podocarp-hardwood forest
616b		J37: 651-865	3.88	Podocarp-hardwood forest
617	Coulter Terrace Scarp	J37: 650-869	0.64	Hardwood forest

These SNAs are illustrated on the attached aerial photograph and described in greater detail on the SNA Forms in this report. Note that the boundaries of the SNAs are indicative, rather than precise. These areas meet the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) and are considered to be sustainable in the long term, or 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.



Kowhai trees at the northeast edge of SNA 616b

1:7,500

Coulter Property
24660/029.00



TIMARU DISTRICT SNA SURVEY

SNAs 615a, b and c

Area Name: Coulter Top Terrace

Ecological District: Geraldine

SNA 615a: Location (central map ref.): J37: 650-863

SNA 615b: Location (central map ref.): J37: 648-864

SNA 615c: Location (central map ref.): J37: 656-861

Surveyors: Mike Harding

Property: Gavin Coulter

Nearest Locality: Woodbury

Area Size (ha): 0.72 **Altitude (m):** 230

Area Size (ha): 1.86 **Altitude (m):** 240

Area Size (ha): 0.82 **Altitude (m):** 230

Survey Time: 1½ hours **Survey Date:** 16-09-11

General Description:

These three SNAs lie on terraces of Waihi River between Poole Road and Condon Road, northwest of the township of Woodbury. They cover an area of uncultivated soils with indigenous forest and treeland, which is now a rare feature in lowland Canterbury. These SNAs appear to comprise trees that have either survived or regenerated since logging of forests in this area approximately 150 years ago. The SNAs are described together here because they all occupy a higher terrace on the property and support similar vegetation. They lie close to other areas of indigenous forest on the property (SNA 616) and on adjacent properties (SNAs 605 and 581), together forming a series of forest patches which connect the large indigenous forest remnant at Waihi Bush with indigenous forest in the foothills.

Plant Communities:

The main plant communities present are podocarp-hardwood forest and podocarp-hardwood treeland. These plant communities are described separately for each SNA below. Naturalized (exotic) species are indicated with an asterisk*.

Central patch; SNA 615a:

This area of forest is dominated by totara. Other canopy or sub-canopy species present are narrow-leaved lacebark, lemonwood, kaikomako, mistletoe, pohuehue, lawyer, native jasmine and clematis. The forest understorey is open. Species occasionally present, mostly at the forest margin, are *Coprosma crassifolia*, *Coprosma rigida*, poataniwha and weeping mapou. The forest floor is relatively bare and dominated by grasses where the canopy is open. Plant species present, mostly at stony sites, are hound's tongue fern, foxglove*, *Leptinella squarrosus*, *Dichondra repens*, *Cardamine debilis* and seedlings of poataniwha and *Coprosma* species.

Western patch; SNA 615b:

This area of forest is also dominated by totara. Other canopy species are matai, narrow-leaved lacebark, mapou, mistletoe, lawyer and pohuehue. The forest here is more open with no indigenous understorey species. A few browsed plants of porcupine shrub are present on stone piles. One dead standing matai tree that appears to have been ring-barked by animals is present at the northwest corner of the area. Trees at the eastern edge of this area have been topped below electricity lines.

Eastern (airstrip) patch; SNA 615c:

This area comprises a narrow strip of scattered trees (treeland) along a terrace edge adjacent to the airstrip. It is dominated by totara, with three isolated kahikatea trees at the northwest edge, several narrow-leaved lacebark trees and one elderberry* tree. Other indigenous species present are mistletoe, *Coprosma crassifolia* and native jasmine. Some of the narrow-leaved lacebark trees appear to have been ring-barked by animals and are dead or dying.

Birds/Fauna Observed:

Native birds observed during this brief survey were grey warbler, kereru (NZ pigeon), harrier and bellbird. No lizards were observed, though it is likely that areas of stony ground provide suitable habitat for lizards.

Notable Flora, Fauna and Habitats:

The most important feature of these areas is that they are relatively large examples of indigenous forest and treeland on an uncultivated lowland alluvial surface. Such areas are nationally rare and almost completely lost from lowland Canterbury. The areas form part of a broken corridor of forest between the foothills and Waihi Bush and provide important habitat for forest birds. They lie within a threatened Land Environment.

Notable Plant and Animal Pests:

The only woody weed observed in these areas was one elderberry tree. However, the floor of these open-canopied forest patches is dominated by pasture grasses. The areas lie within grazed paddocks and the trunks of some trees (notably narrow-leaved lacebark) appear to have been affected by cattle or deer.



SNA 615b

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

The boundaries of these three areas have been drawn to encompass the main extent of the trees. Some isolated indigenous trees lie outside these areas. The SNAs lie within large paddocks and adjoin denser areas of indigenous forest on the adjacent terrace (SNA 616).

Condition and Management Issues:

The forest canopy over parts of these areas is in relatively good condition though in other parts (notably SNA 615c) it is depleted, to the extent that the community is treeland (woodland) rather than forest. Understorey and forest floor vegetation is substantially depleted and, in SNA 615c, absent. The main management issue is the protection and restoration of understorey vegetation to increase plant species diversity, enhance forest bird habitat and to encourage regeneration of canopy species.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M/H	Modified remnants of high plains matai-totara forest, typical of remnants in Geraldine Ecological District and dominated by canopy trees (especially totara) that are representative of the original vegetation.
Rarity	H	Forest and treeland at lowland alluvial surfaces in Canterbury are now very rare. The area lies within a threatened Land Environment.
Diversity and pattern	L	Plant species diversity is low and substantially depleted.
Distinctiveness/special features	L/M	Stony parts of these areas may provide habitat for lizards.
Other Criteria		
Size/shape	M/H	Moderate to large areas for this part of Geraldine Ecological District, though not well buffered.
Connectivity	M/H	These areas adjoin or lie close to other areas of indigenous forest and treeland and form an important part of a sequence of forest patches between the foothills and Waihi Bush.
Long-term Sustainability	L/M	Regeneration of canopy species will be necessary to maintain the ecological values of these areas in the long term.

Property Owner Comment:

Mr Coulter values these areas of forest and has expended considerable effort controlling the indigenous climber pohuehue (*Muehlenbeckia australis*) where it has been smothering totara trees. He is interested to fence some areas of forest from stock.

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

These SNAs lie on stony ground that presents limitations for further farm development. The trees provide shelter and shade for stock and have considerable amenity value. Continued topping of trees beneath the power lines may be necessary.

Discussion:

These areas meet the District Plan criteria for Significant Natural Areas. Important features of the areas are that they are relatively large examples of indigenous forest and treeland on an uncultivated lowland alluvial surface. Such areas are nationally rare and substantially depleted in lowland Canterbury. The areas form part of a broken corridor of forest between the foothills and Waihi Bush and provide important habitat for forest birds. They lie within a threatened Land Environment.

TIMARU DISTRICT SNA SURVEY

SNA 616a and b

Area Name: Coulter Lower Terrace

Ecological District: Geraldine

SNA 616a: Location (central map ref.): J37: 648-866

SNA 616b: Location (central map ref.): J37: 651-865

Surveyors: Mike Harding

Property: Gavin Coulter

Nearest Locality: Woodbury

Area Size (ha): 3.7 **Altitude (m):** 240

Area Size (ha): 3.88 **Altitude (m):** 230

Survey Time: 2½ hours **Survey Date:** 16-09-11

General Description:

These two SNAs lie on a low terrace of Waihi River between Poole Road and Condon Road, northwest of the township of Woodbury. They cover an area of uncultivated soils with indigenous forest, which is now a rare feature in lowland Canterbury. These SNAs appear to comprise trees that have either survived or regenerated since logging of forests in this area approximately 150 years ago. The SNAs are described together here because they all occupy a lower terrace on the property and support similar vegetation. They lie close to other areas of indigenous forest on the property (SNA 615) and on an adjacent properties (SNA 605), together forming a series of forest patches which connect the large indigenous forest remnant at Waihi Bush with indigenous forest in the foothills.

Plant Communities:

The main plant community present is podocarp-hardwood forest. This forest is described separately for each SNA below. Naturalized (exotic) species are indicated with an asterisk*.

Western patch; SNA 616a:

The forest canopy of this SNA is dominated by totara. Other canopy or sub-canopy species are matai, kahikatea, narrow-leaved lacebark, kaikomako, lancewood, poataniwha, mistletoe and the climbers native jasmine, pohuehue, clematis and lawyer. Occasionally present are five-finger, mapou, mahoe, matipo, kowhai, lemonwood and pokaka (one tree). One sycamore* tree is present at the northwest corner of area. Trunk diameters (cm at breast height) of the larger trees are: totara, 50-70; matai, 30-55; kahikatea, 20-55; lancewood, 25-35; kowhai, 50; and pokaka, 35.

The forest understorey is relatively open at most parts of the forest. Important understorey species are poataniwha, *Coprosma rigida*, *Coprosma crassifolia* and saplings of totara and, in places, kahikatea. Occasionally present are shrubby mahoe, weeping mapou and *Coprosma rotundifolia*.

Forest floor vegetation is dominated by grasses at forest margins and is relatively open within the forest. Plant species present, mostly at stony sites, are bidibid, hairy pennywort, buttercup, *Cardamine debilis*, *Dichondra repens*, *Lagenifera petiolata*, selfheal*, daisy*, foxglove*, wall lettuce*, common shield fern, prickly shield fern (uncommon), *Blechnum penna-marina*, button fern, necklace fern, blackberry* (rare) and seedlings of native jasmine, kaikomako, totara, kahikatea, *Melicytus* "Waihi", shrubby mahoe, mahoe and *Coprosma* species.

Species present at the forest margins are *Coprosma rigida*, *Coprosma propinqua*, *Coprosma crassifolia*, weeping mapou, poataniwha, *Melicytus* "Waihi", kaikomako, gorse* (mostly dead/sprayed) and occasionally plum*, barberry*, sweet brier*, *Clematis marata* and wire moss.

Eastern patch; SNA 616b:

The canopy of this forest is also dominated by totara. Other canopy or sub-canopy species are matai, kahikatea, narrow-leaved lacebark, lancewood, kowhai, kaikomako, yellowwood, barberry* (uncommon), weeping mapou, mistletoe, pohuehue, native jasmine, clematis and lawyer. Occasionally present are lemonwood, matipo and fuchsia. A scattered patch of several large kowhai trees is present at the northeast corner of this area.

Understorey species present are poataniwha, *Coprosma crassifolia*, bush lawyer and saplings of totara. Forest floor species are *Cardamine debilis*, pennywort, hairy pennywort, bidibid, *Lagenifera petiolata*, foxglove*, necklace fern and seedlings of mahoe, native jasmine and *Coprosma* species.

Species present at the forest margins are *Coprosma crassifolia*, *Coprosma rigida*, weeping mapou, kowhai, *Melicytus* "Waihi", gorse* (mostly dead/sprayed), bush lawyer, lawyer, foxglove* and woolly mullein*.

Birds/Fauna Observed:

Native birds observed during this brief survey were grey warbler, kereru (NZ pigeon), fantail, harrier and bellbird. No lizards were observed, though it is likely that areas of stony ground provide suitable habitat for lizards.



SNA 616a

Notable Flora, Fauna and Habitats:

The most important feature of these areas is that they are relatively large examples of indigenous forest on an uncultivated lowland alluvial surface. Such areas are nationally rare and almost completely lost from lowland Canterbury. The areas form part of a broken corridor of forest between the foothills and Waihi Bush and provide important habitat for forest birds. They lie within a threatened Land Environment.

Notable Plant and Animal Pests:

Woody weeds present are barberry, plum, gorse, sweet brier and sycamore. However, all except gorse are uncommon at the site. Animal pests were not surveyed. The areas lie within grazed paddocks though grazing pressure does not appear to be high, especially within the denser stands of trees.

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

The boundaries of these two areas have been drawn to encompass the main extent of the forest. Some isolated indigenous trees lie outside these areas. The SNAs lie within large paddocks and adjoin other areas of indigenous forest and treeland on the adjacent terrace (SNA 615).

Condition and Management Issues:

The forest canopy over parts of these areas is in relatively good condition. Understorey and forest floor vegetation is depleted though totara and occasionally kahikatea saplings are common. The main management issue is the protection and restoration of understorey vegetation to increase plant species diversity, enhance forest bird habitat and to encourage regeneration of canopy species. Removal of the few woody plant pests would be beneficial, especially if grazing pressure is reduced.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	H	A remnant of high plains matai-totara forest, typical of remnants in Geraldine Ecological District and dominated by canopy trees (especially totara) that are representative of the original vegetation.
Rarity	H	Forest at lowland alluvial surfaces in Canterbury is now very rare. The area lies within a threatened Land Environment.
Diversity and pattern	M	Plant species diversity is moderate, though reduced from that originally present.
Distinctiveness/special features	M	The presence and in places dominance of kahikatea is an important feature. Stony parts of these areas may provide habitat for lizards.
Other Criteria		
Size/shape	H	Moderate to large areas for this part of Geraldine Ecological District, with a good shape and relatively well buffered.
Connectivity	M/H	These areas adjoin or lie close to other areas of indigenous forest and treeland and form an important part of a sequence of forest patches between the foothills and Waihi Bush.
Long-term Sustainability	M	Some plant and animal pest control, and a reduction in grazing pressure will be necessary to maintain the ecological values of these areas in the long term.

Property Owner Comment:

Mr Coulter values these areas of forest and has expended considerable effort controlling the indigenous climbing pohuehue (*Muehlenbeckia australis*) where it has been smothering totara trees. He is interested to fence some areas of forest from stock. This part of the property is not grazed by deer.

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

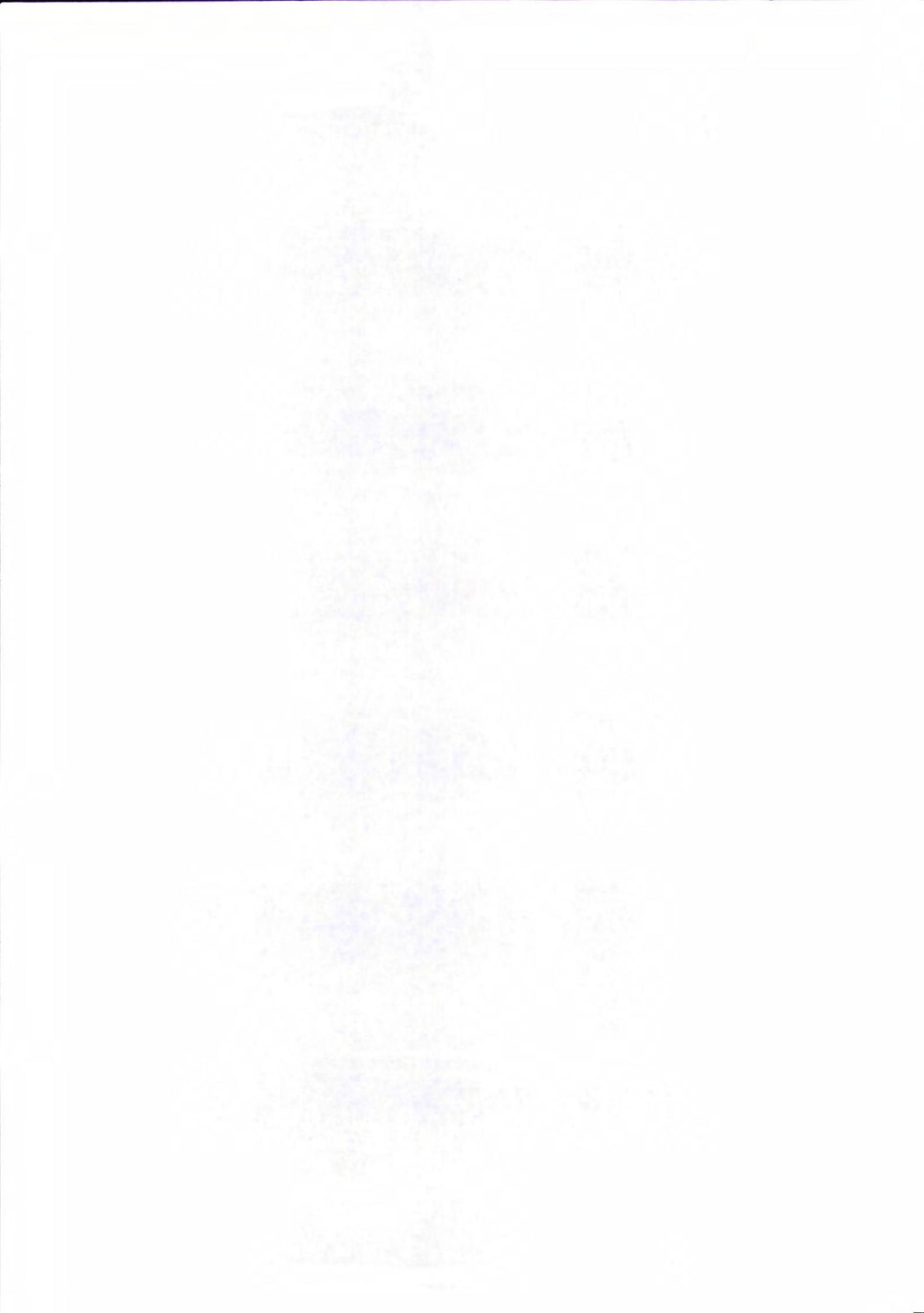
These SNAs lie on stony ground that presents limitations for further farm development. The trees provide shelter and shade for stock and have considerable amenity value.

Discussion:

These areas easily meet the District Plan criteria for Significant Natural Areas. The most important feature of these areas is that they are relatively large examples of indigenous forest on an uncultivated lowland alluvial surface. Such areas are nationally rare and almost completely lost from lowland Canterbury. The areas form part of a broken corridor of forest between the foothills and Waihi Bush and provide important habitat for forest birds. They lie within a threatened Land Environment.



The fern, Blechnum penna-marina at SNA 616a



TIMARU DISTRICT SNA SURVEY

SNA 617

Area Name: Coulter Terrace Scarp

Ecological District: Geraldine

SNA 617: Location (central map ref.): J37: 650-869

Surveyors: Mike Harding

Property: Gavin Coulter

Nearest Locality: Woodbury

Area Size (ha): 0.64 **Altitude (m):** 240

Survey Time: ½ hour

Survey Date: 16-09-11

General Description:

This SNA lies on a steep terrace scarp on the northern side of Waihi River across from SNA 616, northwest of the township of Woodbury. This long narrow area adjoins a pine shelterbelt at its upper margin and pasture on a low-lying terrace at its lower margin.

Plant Communities:

The plant community present is low-stature hardwood forest, described below. Naturalized (exotic) species are indicated with an asterisk*.

The canopy of this forest is dominated by mahoe, wineberry, pohuehue and, at the lower margin, elderberry*. Other canopy species are mapou, matipo, fuchsia, narrow-leaved lacebark, pate, Himalayan honeysuckle*, native convolvulus, clematis and Chilean flame creeper*.

The forest understorey is relatively open. Species present in the understorey and at the forest margin are *Coprosma crassifolia*, *Cardamine debilis*, velvety nightshade*, foxglove*, cleavers*, blackberry*, *Blechnum fluitatile*, hen and chickens fern, hound's tongue fern, prickly shield fern, *Hypolepis ambigua* and seedlings of mahoe.

Four large old totara trees are present in the paddock adjacent to this area and other indigenous trees are present upstream of the area on the adjacent property.



SNA 617

Birds/Fauna Observed:

Native birds observed during this brief survey were grey warbler, fantail and harrier.

Notable Flora, Fauna and Habitats:

The most important feature of this area is that it is vegetation dominated by indigenous species, at a lowland site. Indigenous vegetation and especially that adjacent to rivers is substantially depleted in lowland Canterbury. The area is part of a corridor of mostly exotic vegetation along the scarp on the northern side of Waihi River, providing a useful corridor of habitat for forest birds. The area lies within a threatened Land Environment.

Notable Plant and Animal Pests:

The most important plant pests present are elderberry, Himalayan honeysuckle and Chilean flame creeper. The native climber, pohuehue (*Muehlenbeckia australis*) is dominant and in places smothering the forest canopy. Animal pests were not surveyed.

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

This area is well buffered by its location on steep slopes. It is fenced at its upper margin and adjoins other vegetation on the terrace scarp to the west. It lies reasonably close to other areas of indigenous vegetation (SNAs 605, 615 and 616)

Condition and Management Issues:

This area of hardwood forest is in relatively poor condition, though is dominated by indigenous species. The main management issue is containment and control of plant pests and of pohuehue. Reduction in grazing pressure may encourage regeneration of canopy species such as totara.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	L/M	An area of regenerating indigenous forest, typical of remnants elsewhere in Geraldine Ecological District.
Rarity	M/H	Indigenous forest at lowland alluvial sites in Canterbury is now very rare. The area lies within a threatened Land Environment.
Diversity and pattern	L/M	Plant species diversity is low and reduced from that originally present.
Distinctiveness/special features	M	The presence of indigenous vegetation on a riverside terrace scarp is notable.
Other Criteria		
Size/shape	M	A small to moderate sized area for this part of Geraldine Ecological District; well buffered.
Connectivity	M	Adjoins other vegetation upstream and lies close to other areas of indigenous forest and treeland. Part of a corridor of forest bird habitat along the Waihi River.
Long-term Sustainability	M	Some plant and animal pest control, and a reduction in grazing pressure would assist in maintaining ecological values in the long term.

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

This SNA lies on a steep scarp that has very little potential for farm development.

Discussion:

This area just meets the District Plan criteria for a Significant Natural Area. The most important feature of this area is that it supports vegetation dominated by indigenous species at a lowland site. Indigenous vegetation and especially that adjacent to rivers is substantially depleted in lowland Canterbury. The area is part of a corridor of mostly exotic vegetation along the scarp on the northern side of Waihi River, providing a useful corridor of habitat for forest birds. The area lies within a threatened Land Environment.

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)

barberry*	<i>Berberis glaucocarpa</i>
bidibid.....	<i>Acaena anserinifolia</i>
blackberry*	<i>Rubus fruticosus</i>
bush lawyer	<i>Rubus cissoides</i>
buttercup	<i>Ranunculus</i> sp.
button fern	<i>Pellaea rotundifolia</i>
Chilean flame creeper*	<i>Tropaeolum speciosum</i>
cleavers*	<i>Galium aparine</i>
clematis	<i>Clematis foetida</i>
common shield fern	<i>Polystichum richardii</i>
daisy*	<i>Bellis perennis</i>
elderberry*	<i>Sambucus nigra</i>
five-finger	<i>Pseudopanax arboreus</i>
foxglove*	<i>Digitalis purpurea</i>
fuchsia.....	<i>Fuchsia excorticata</i>
gorse*	<i>Ulex europaeus</i>
hairy pennywort	<i>Hydrocotyle moschata</i>
hen and chickens fern	<i>Asplenium gracillimum</i>
Himalayan honeysuckle*	<i>Leycesteria formosa</i>
hound's tongue fern	<i>Microsorum pustulatum</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>
lemonwood	<i>Pittosporum eugenioides</i>
lowland ribbonwood	<i>Plagianthus regius</i>
mahoe	<i>Melicytus ramiflorus</i>
mapou	<i>Myrsine australis</i>
matagouri	<i>Discaria toumatou</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 convolvulus	<i>Calystegia tuguriorum</i>
native jasmine	<i>Parsonsia heterophylla</i>
necklace fern	<i>Asplenium flabellifolium</i>
pate	<i>Schefflera digitata</i>
pennywort	<i>Hydrocotyle</i> sp.
plum*	<i>Prunus</i> sp.
poataniwha	<i>Melicope simplex</i>
pohuehue	<i>Muehlenbeckia australis</i>
pokaka.....	<i>Elaeocarpus hookerianus</i>
porcupine shrub.....	<i>Melicytus alpinus</i>
prickly shield fern	<i>Polystichum vestitum</i>
selfheal*	<i>Prunella vulgaris</i>
shrubby mahoe	<i>Melicytus micranthus</i>
sweet brier*	<i>Rosa rubiginosa</i>
sycamore*	<i>Acer pseudoplatanus</i>
totara	<i>Podocarpus totara</i>
velvety nightshade*	<i>Solanum chenopodioides</i>
wall lettuce*	<i>Mycelis muralis</i>