

**TIMARU DISTRICT**  
**SIGNIFICANT NATURAL AREAS**  
**SURVEY**

**GLENBURN YOUTH CAMP**



**Report prepared for Timaru District Council by Mike Harding**  
**July 2010**

# TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

## PROPERTY REPORT

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### PROPERTY DETAILS:

**Owner:** ..... Trustees Glenburn Youth Lodge  
**Valuation References:** .... 24660/015.01  
**Address:** ..... Yates Road, Tripp Settlement  
**Location:** ..... Alongside McLeod Stream, adjacent to Orari Gorge Scenic Reserve  
**Ecological District:** ..... Geraldine Ecological District.  
**TDC Land Type:** ..... Soft Rock Hills and Downs.  
**Land Environment:** ..... N3 (eastern South Island undulating plains and hills).

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### ECOLOGICAL CONTEXT:

The property covers relatively gentle slopes alongside McLeod Stream at the inland edge of Geraldine Ecological District. The original vegetation of this area would have been predominantly podocarp-hardwood forest, with localized areas of mountain beech forest. Denser podocarp-hardwood (matai-totara-kahikatea-lowland ribbonwood) forest would have occupied older terraces and flats, and tall kanuka-kowhai forest would have been present on recently disturbed surfaces. Minor areas of matagouri-*Coprosma-Olearia* shrubland and small wetlands were likely to have been present on valley-floors, probably with associated areas of short tussockland. 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 comprises remnants of podocarp-hardwood forest, mature kanuka forest, podocarp-hardwood treeland on river terraces and a small terrace wetland. These areas of indigenous vegetation lie close to other indigenous vegetation on nearby properties, including that protected within Orari Gorge Scenic Reserve. The property lies within the known distribution of the South Canterbury population of long-tailed bat (a nationally endangered species).

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### SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas during May 2010. Most parts of the property were visited and assessed. Four small areas, totalling approximately 2.5 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
626d	Glenburn podocarp forest	J37: 643-892	0.16	Podocarp-hardwood forest
626e	Glenburn streamside forest	J37: 644-894	1.97	Podocarp-hardwood forest
622a	Glenburn kanuka forest	J37: 644-892	0.24	Kanuka forest
622b	Glenburn wetland	J37: 646-893	0.2	Sedgeland and rushland

These SNAs are illustrated on the attached aerial photograph and described in greater detail on the SNA Survey 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.

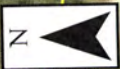
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**OTHER AREAS INSPECTED ON THE PROPERTY:**

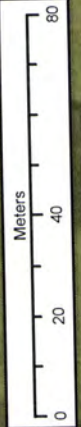
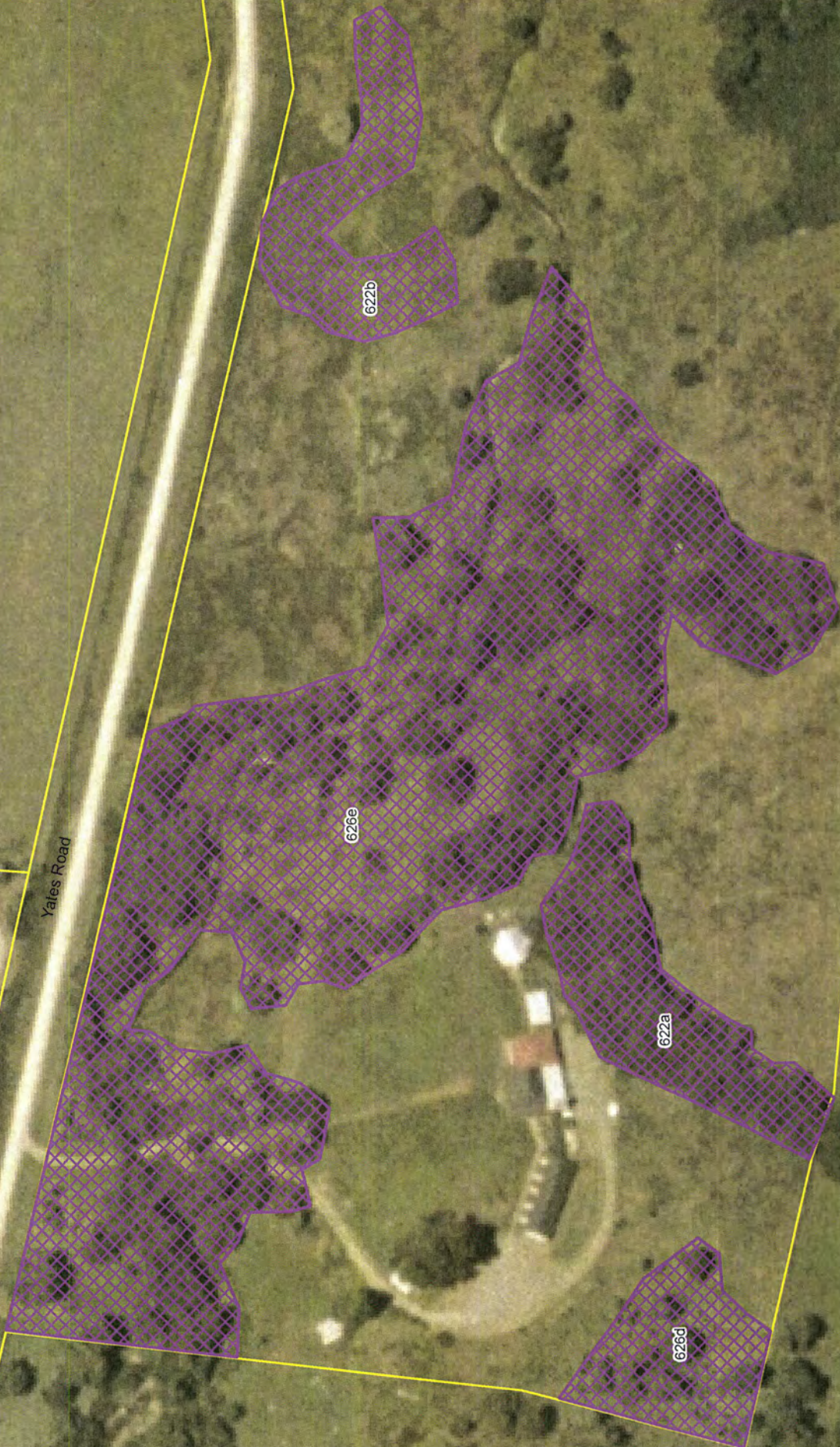
Other areas on the property were inspected but are not considered significant when assessed against the District Plan criteria. An area worth noting is the small patch of regenerating indigenous forest on steep slopes beside McLeod Stream at the southeast corner of the property. This forest is too young, too small and lacks any rare species (except for the locally uncommon *Haloragis erecta*). This does not mean that the forest is unimportant; it simply means that it does not presently meet the District Plan criteria.

Glenburn Youth Camp  
24660/015.01

1:1,500



Yates Road



# TIMARU DISTRICT SNA SURVEY

SNA 622a

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<b>Area Name:</b> Glenburn Kanuka Forest	<b>Property:</b> Glenburn Youth Camp
<b>Location (central map reference):</b> J37: 644-892	<b>Nearest Locality:</b> Tripp Settlement
<b>Ecological District:</b> Geraldine	<b>Area Size (ha):</b> 0.24 <b>Altitude (m):</b> 280
<b>Surveyors:</b> Mike Harding and Julie Brown	<b>Survey Time:</b> 1 hour <b>Survey Date:</b> 10-05-10

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## General Description:

This SNA lies in a small gully just behind the Youth Camp buildings. The gully carries an intermittent stream which was mostly dry at the time of survey. Kanuka forest extends upstream beyond the property boundary.

## Plant Communities:

The main plant community present is kanuka forest, described below. Naturalized (exotic) species are indicated with an asterisk\*.

The forest canopy is dominated by kanuka. Trunk diameters (at breast height) of the larger kanuka trees are between 30 and 45cm. Other canopy species are matipo, pohuehue and native jasmine.

The forest understorey is dominated by *Coprosma rotundifolia*, *Coprosma rhamnoides*, shrubby mahoe and mapou. Other understorey species are elderberry\*, kowhai, mahoe, lancewood, wineberry, lemonwood, lawyer, matipo, *Coprosma rigida*, cabbage tree, pate, pokaka, kowhai, mahoeXshrubby mahoe (hybrids), poroporo, bittersweet\*, plum\*, black nightshade\* and blackberry\*.

Ground-cover species are necklace fern, *Asplenium hookerianum*, *Asplenium richardii*, hen and chickens fern, prickly shield fern, *Pellaea rotundifolia*, hound's tongue fern, *Blechnum fluviatile*, *Blechnum penna-marina*, male fern\*, foxglove\*, moss and seedlings of mapou, mahoe, pokaka, horopito, broadleaf, narrow-leaved lacebark, five-finger, lemonwood, kahikatea, totara, native jasmine, barberry\* and *Coprosma* species.

Species commonly present on the forest margin are *Coprosma rotundifolia*, *Coprosma rigida*, barberry\*, *Hypolepis ambigua*, bush lawyer, Chilean flame creeper\* and Himalayan honeysuckle\*.

## Birds/Fauna Observed:

Native birds observed during this brief survey were grey warbler, bellbird and fantail. Several leaf-veined 'slugs' (*Athoracophorus* sp.) were observed on the underside of a sheet of old corrugated iron.

## Notable Flora, Fauna and Habitats:

Important features of this area are the stature of the canopy kanuka trees, diversity of understorey species, presence of podocarp seedlings (and abundance of totara seedlings), the habitat the area provides for forest birds (including rifleman; an at-risk species) and the role the forest plays in buffering the small stream.

## Notable Plant and Animal Pests:

Barberry is the most important plant pest present, though it is mostly confined to the forest margins. Elderberry, plum and Chilean flame creeper are also present though do not pose a significant threat to the forest. Animal pests were not surveyed.

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

This area of forest is long and relatively narrow, though is well buffered by its location in a small incised gully. The forest is securely fenced and is not grazed. It lies close to other areas of indigenous forest, including the locally-important Orari Gorge Scenic Reserve.

## Condition and Management Issues:

The forest is in very good condition for kanuka forest. It is affected by barberry at its margin and has denser patches of blackberry at its downstream end. Plant and animal pest control (and continued exclusion of stock) are important management priorities. Barberry is presently being removed as part of a Council-funded control programme.

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**ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:**

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<b>Primary Criteria</b>	<b>Rank</b>	<b>Notes</b>
Representativeness	M/H	A good example of mature kanuka forest, typical of seral forest communities in the area and supporting abundant podocarp (especially totara) regeneration.
Rarity	L/M	Provides some habitat for an 'at-risk' bird species (rifleman).
Diversity and pattern	M	A diverse range of species for kanuka forest, though species diversity is probably reduced from that originally present.
Distinctiveness/special features	M	The advanced state of forest regeneration, exhibited by the abundance of totara seedlings, is a special feature.
<b>Other Criteria</b>		
Size/shape	M	A small area but very well buffered.
Connectivity	M	Adjoins other kanuka forest upstream and lies close to other areas of indigenous vegetation.
Long-term Sustainability	M/H	Some plant and animal pest control will probably be necessary to maintain the ecological values 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 owners. It has clearly been fenced and protected from grazing for many years. The incised character of the site gives it very limited potential for farm development.

**Discussion:**

This area meets the District Plan criteria for a Significant Natural Area. Important features of the area are the stature of the canopy kanuka trees, diversity of understorey species, presence of podocarp seedlings (and abundance of totara seedlings), the habitat the area provides for forest birds (including rifleman; an at-risk species) and the role the forest plays in buffering the small stream.

# TIMARU DISTRICT SNA SURVEY

SNA 622b

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<b>Area Name:</b> Glenburn Wetland	<b>Property:</b> Glenburn Youth Camp
<b>Location (central map reference):</b> J37: 646-893	<b>Nearest Locality:</b> Tripp Settlement
<b>Ecological District:</b> Geraldine	<b>Area Size (ha):</b> 0.2 <b>Altitude (m):</b> 260
<b>Surveyors:</b> Mike Harding and Julie Brown	<b>Survey Time:</b> 1 hour <b>Survey Date:</b> 10-05-10

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## General Description:

This SNA lies on a low terrace of McLeod Stream, downstream from the Youth Camp buildings, adjacent to Yates Road at the northeast corner of the property. It comprises a palustrine swamp (wetland) occupying an abandoned stream channel and associated low-lying land.

## Plant Communities:

Two main plant communities are present: sedgeland and rushland. These plant communities are described below. Naturalized (exotic) species are indicated with an asterisk\*.

This wetland community supports a mosaic of rushland and sedgeland communities varying in wetness (water depth). The wetland is variously dominated by *Juncus gregiflorus*, slender spike sedge (*Eleocharis gracilis*), soft rush\*, rautahi (*Carex coriacea*), jointed rush\*, bog rush, pukio (*Carex secta*), toetoe and moss. Other important species are lotus\*, *Ranunculus* sp.\*, Yorkshire fog\*, *Prunella vulgaris*\* and pasture grasses.

## Notable Flora, Fauna and Habitats:

Important features of this area are the presence of wetland plant communities (a nationally-rare ecosystem), the intactness of the wetland (despite grazing) and the presence of toetoe (a locally-uncommon species).

## Notable Plant and Animal Pests:

Jointed rush and pasture grasses are the most important plant pests present. Animal pests were not surveyed, though the wetland is readily accessible to domestic stock and other animals.

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

The wetland lies within a larger paddock. It adjoins grassland communities, though lies close to areas of kanuka forest and podocarp-hardwood forest (including locally-important forest in Orari Gorge Scenic Reserve).

## Condition and Management Issues:

The wetland is in reasonable condition. Indigenous species are present and in places dominant. It is subject to grazing and had been recently grazed at the time of inspection (hindering the identification of some plant species). Ideally, stock should be excluded from the wetland.

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## ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

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Primary Criteria	Rank	Notes
Representativeness	M	A modified example of wetland vegetation typical of the ecological district.
Rarity	M/H	Wetlands are nationally-rare ecosystems. Toetoe is a locally-uncommon plant species.
Diversity and pattern	M	A relatively diverse range of rushland and sedgeland plant communities is present.
Distinctiveness/special features	M	The location of the wetland in an oxbow-shaped depression is an interesting feature.
<b>Other Criteria</b>		
Size/shape	M	Moderate-sized for a wetland community in this part of the District.
Connectivity	M	Lies close to the stream and close to other areas of indigenous vegetation.
Long-term Sustainability	L/M	The wetland is vulnerable to desiccation, drainage, weed invasion and grazing.

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

Indigenous wetland plant communities have persisted at this site probably because the area has not been intensively grazed. Though only comprising a small part of the paddock it is nevertheless a moderate-sized wetland. Such wetlands are uncommon in the Geraldine Ecological District and are regarded as nationally-rare ecosystem. It has potential for conversion to pasture, though would provide little additional grazing.

**Discussion:**

This area meets the District Plan criteria for a Significant Natural Area. Important features of the area are the presence of wetland plant communities (a nationally-rare ecosystem), the intactness of the wetland (despite grazing) and the presence of toetoe (a locally-uncommon species).





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<b>Area Name:</b> Glenburn podocarp forest	<b>Property:</b> Glenburn Youth Camp
<b>Location (central map reference):</b> J37: 643-892	<b>Nearest Locality:</b> Tripp Settlement
<b>Ecological District:</b> Geraldine	<b>Area Size (ha):</b> 0.16 <b>Altitude (m):</b> 280
<b>Surveyors:</b> Mike Harding and Julie Brown	<b>Survey Time:</b> 1 hour <b>Survey Date:</b> 10-05-10

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**General Description:**

This SNA lies on a gentle north-facing slope at the southwest corner of the property, behind (above) the Youth Camp buildings. It adjoins and is part of a larger area of indigenous forest on the neighbouring property (SNA 626a). The area of forest is only a short distance from other areas of indigenous forest, including the locally-important Orari Gorge Scenic Reserve.

**Plant Communities:**

Two main plant communities are present: podocarp-hardwood forest and rushland-grassland. These plant communities are described separately below. Naturalized (exotic) species are indicated with an asterisk\*.

**Podocarp-hardwood forest:**

The forest canopy is dominated by kahikatea, narrow-leaved lacebark, pokaka and pohuehue. Trunk diameters (cm at breast height) of the larger trees are: kahikatea, 50 and 51; narrow-leaved lacebark, 44; and pokaka, 92 and 51. Other canopy species are lancewood, lawyer, bush lawyer and native jasmine.

The forest understorey is dominated by *Coprosma rotundifolia* and poataniwha. Other understorey species are pokaka, white climbing rata and mistletoe (on *Coprosma rotundifolia*).

Ground-cover species are hen and chickens fern, prickly shield fern, *Blechnum penna-marina*, pennywort, foxglove\*, and rarely white climbing rata, and seedlings of mapou, native jasmine, barberry\* and *Coprosma* species.

Species commonly present on the forest margin are *Coprosma rigida*, *Coprosma tayloriae*, *Coprosma propinqua*, shrubby mahoe, poataniwha, barberry\*, blackberry\*, prickly shield fern, sedge (*Carex* sp.), pohuehue and native jasmine.

**Rushland-grassland:**

This community is present within and adjacent to the main patches of forest. It is dominated by patches of rushes (*Juncus gregiflorus* and soft rush\*) and blackberry\*, with rank pasture grass and scattered young narrow-leaved lacebark trees.

**Birds/Fauna Observed:**

Native birds observed during this brief survey were fantail, bellbird and kereru.

**Notable Flora, Fauna and Habitats:**

Important features of this area are the presence of podocarp (kahikatea) trees, the size of the pokaka trees, the presence of wetland vegetation, the presence of habitat suitable for long-tailed bat, the contribution the area makes to fauna habitat in the wider area and its proximity to Orari Gorge Scenic Reserve.

**Notable Plant and Animal Pests:**

Barberry is the most important plant pest present. Blackberry is present but largely confined to areas of pasture. The native climbing pohuehue (*Muehlenbeckia australis*) is smothering some trees. Animal pests were not surveyed.

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

The west and south boundaries of the area adjoin similar vegetation on the neighbouring property. The other boundaries are not fenced but the area is not grazed. It is separated from the Youth Camp buildings by an area of rank pasture.

**Condition and Management Issues:**

The area is in good condition, except for the presence of barberry. Barberry is presently being removed from this and other properties in the area as part of a Council-funded weed control programme.

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**ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:**

<b>Primary Criteria</b>	<b>Rank</b>	<b>Notes</b>
Representativeness	<b>M/H</b>	A good example of podocarp (kahikatea)-hardwood forest on a poorly-drained site, representative of the vegetation originally present in the ecological district.
Rarity	<b>M</b>	Provides important habitat for kereru and other forest birds, including an 'at-risk' species (rifleman). May provide habitat for a nationally-endangered species (long-tailed bat). White climbing rata is locally uncommon.
Diversity and pattern	<b>M</b>	The area supports two plant communities, though species diversity is probably reduced from that originally present.
Distinctiveness/special features	<b>M</b>	The size of the pokaka trees and the presence of wetland vegetation are special features.
<b>Other Criteria</b>		
Size/shape	<b>M</b>	A small area but well buffered.
Connectivity	<b>M/H</b>	Adjoins other indigenous forest and lies close to more extensive areas of forest, including Orari Gorge Scenic Reserve.
Long-term Sustainability	<b>M</b>	Control of woody weeds (especially barberry) and continued control of animal pests (notably possums) will probably be required to maintain the ecological values 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 owners. It is a part of the Youth Camp property that is not grazed. It has limited potential for farm development.

**Discussion:**

This area meets the District Plan criteria for a Significant Natural Area. Important features of the area are the presence of podocarp (kahikatea) trees, the size of the pokaka trees, the presence of wetland vegetation, the presence of habitat suitable for long-tailed bat, the contribution the area makes to fauna habitat in the wider area and its proximity to Orari Gorge Scenic Reserve.

# TIMARU DISTRICT SNA SURVEY

SNA 626e

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<b>Area Name:</b> Glenburn Streamside Forest	<b>Property:</b> Glenburn Youth Camp
<b>Location (central map reference):</b> J37: 644-894	<b>Nearest Locality:</b> Tripp Settlement
<b>Ecological District:</b> Geraldine	<b>Area Size (ha):</b> 1.97 <b>Altitude (m):</b> 270
<b>Surveyors:</b> Mike Harding and Julie Brown	<b>Survey Time:</b> 2 hours <b>Survey Date:</b> 10-05-10

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## General Description:

This SNA lies on the low terraces and banks of McLeod Stream, through the northern and central part of the property. It adjoins similar indigenous forest (SNA 626b) at its upstream boundary and lies close to other areas of indigenous vegetation on the property and on nearby properties, including the locally important Orari Gorge Scenic Reserve.

## Plant Communities:

Two main plant communities are present: podocarp-hardwood forest and treeland (scattered trees). These plant communities are described separately below. Naturalized (exotic) species are indicated with an asterisk\*.

### Podocarp-hardwood forest:

The forest canopy is dominated by kanuka, kowhai and kahikatea. Trunk diameters (cm at breast height) of the larger trees are: kahikatea, 47; and kowhai, 42. Other canopy species are totara, matai, matipo, broadleaf, wineberry, lowland ribbonwood, five-finger, lancewood, lemonwood, cabbage tree, pohuehue, clematis and native jasmine.

The forest understorey is dominated by *Coprosma rotundifolia* and poataniwha. Other understorey species are *Coprosma crassifolia*, *Coprosma rhamnoides*, mahoe, pokaka, mountain ribbonwood, matipo, pohuehue, bittersweet\* and saplings of totara and narrow-leaved lacebark.

Ground-cover species are necklace fern, hen and chickens fern, *Asplenium hookerianum*, prickly shield fern, *Blechnum fluviatile*, *Blechnum penna-marina*, *Hypolepis ambigua*, male fern\*, pennywort, hairy pennywort, *Schizeilema trifoliolatum*, *Australina pusilla*, nettle (*Urtica* sp.), buttercup (*Ranunculus* sp.), sedge (*Carex* sp.), bidibid and seedlings of kowhai, native jasmine, broadleaf, kahikatea, mahoe, narrow-leaved mahoe and *Coprosma* species.

Species present along the stream are fuchsia, pate, marbleleaf, Himalayan honeysuckle\*, tutsan\*, *Blechnum chambersii* and bush lily.

Species commonly present on the forest margin are *Coprosma rotundifolia*, *Coprosma propinqua*, thousand-leaved fern, barberry\*, elderberry\*, blackberry\* and Chilean flame creeper\*.

### Treeland:

Areas of pasture on the terraces adjacent to the stream-side forest support scattered large trees of narrow-leaved lacebark, totara, pokaka, broadleaf, kanuka, kowhai and kahikatea. Also present are horopito, marbleleaf, poataniwha, pukio (*Carex secta*), *Juncus gregiflorus* and soft rush\*.

## Birds/Fauna Observed:

Native birds observed during this brief survey were bellbird, fantail, rifleman, grey warbler and harrier. Several specimens of terrestrial mollusc (snail) (*Thalassohelix* sp. and *Cavellia* sp.) were observed beneath rocks on a forested terrace.

## Notable Flora, Fauna and Habitats:

Important features of this area are the presence of podocarp trees, an at-risk (declining) bird species (rifleman), the habitat the area provides for forest birds and possibly long-tailed bat, locally-uncommon plant species (*Australina pusilla* and *Schizeilema trifoliolatum*), the buffering the forest provides to the stream, the contribution the forest makes to fauna habitat in the wider area and its proximity to Orari Gorge Scenic Reserve.

**Notable Plant and Animal Pests:**

Barberry is the most important plant pest present. Other plant pests are Chilean flame creeper, elderberry, male fern, blackberry and the native climbing pohuehue (*Muehlenbeckia australis*), though these species do pose a significant threat to the forest. Animal pests were not surveyed.

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

The upstream part of the area is fenced from grazing and adjoins similar forest at its upstream boundary. The downstream part, including the treeland, is lightly grazed and is less well buffered. These areas of forest and treeland lie close to other areas of indigenous forest on this and neighbouring properties, including Orari Gorge Scenic Reserve.

**Condition and Management Issues:**

The forest is in relatively good condition, especially at its upstream end. The main threat to the forest is invasion by barberry, though barberry is presently being removed as part of a Council-funded weed control programme.

**Property Owner Comment:**

Barry Goodsir commented, on behalf of the trustees, that this area appears more extensive than necessary for the protection of indigenous vegetation and habitat. The extent of the area should be reconsidered if any further protection is proposed for this area through the District Plan.

**ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:**

Primary Criteria	Rank	Notes
Representativeness	M/H	A good example of terrace forest, representative of the vegetation originally present at the site.
Rarity	M	Provides important habitat for forest birds, including an 'at-risk' species (rifleman). May provide habitat for a nationally-endangered species (long-tailed bat). Supports a small population of locally-uncommon plant species ( <i>Australina pusilla</i> and <i>Schizeilema trifoliolatum</i> ).
Diversity and pattern	M	Supports riparian and terrace vegetation, including wetland species. Species diversity is probably reduced from that formerly present.
Distinctiveness/special features	M	The proximity of the forest, and the contribution it makes, to Orari Gorge Scenic Reserve is an important attribute.
<b>Other Criteria</b>		
Size/shape	M/H	A moderate-sized area that is well buffered by its location along the stream.
Connectivity	M/H	Adjoins other similar forest upstream and lies close to other areas of forest, including Orari Gorge Scenic Reserve.
Long-term Sustainability	M/H	Some plant and animal pest control will be required to maintain the ecological values 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 owners. Part of the area is fenced from grazing; the remaining part appears to be only lightly grazed. It has very limited potential for farm development.

**Discussion:**

This area meets the District Plan criteria for a Significant Natural Area. Important features of the area are the presence of podocarp trees, an at-risk (declining) bird species (rifleman), the habitat the area provides for forest birds and possibly long-tailed bat, locally-uncommon plant species (*Australina pusilla* and *Schizeilema trifoliolatum*), the buffering the forest provides to the stream, the contribution the forest makes to fauna habitat in the wider area and its proximity to Orari Gorge Scenic Reserve.

## 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</i> sp.
bittersweet* .....	<i>Solanum dulcamara</i>
blackberry* .....	<i>Rubus fruticosus</i>
black nightshade* .....	<i>Solanum nigrum</i>
bog rush .....	<i>Schoenus pauciflorus</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>
Chilean flame creeper* .....	<i>Tropaeolum speciosum</i>
clematis .....	<i>Clematis</i> sp.
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>
hen and chickens fern .....	<i>Asplenium bulbiferum</i>
Himalayan honeysuckle* .....	<i>Leycesteria formosa</i>
horopito/pepperwood .....	<i>Pseudowintera colorata</i>
hound's tongue fern .....	<i>Microsorium pustulatum</i>
jointed rush* .....	<i>Juncus articulatus</i>
kahikatea/white pine .....	<i>Dacrycarpus dacrydioides</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>
lotus* .....	<i>Lotus pedunculatus</i>
lowland ribbonwood .....	<i>Plagianthus regius</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>
mountain ribbonwood .....	<i>Hoheria lyallii</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>
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>
poroporo .....	<i>Solanum laciniatum</i>
prickly shield fern .....	<i>Polystichum vestitum</i>
pukio .....	<i>Carex secta</i>
rautahi .....	<i>Carex coriacea</i>
shrubby mahoe .....	<i>Melicytus micranthus</i>

soft rush*	<i>Juncus effusus</i>
thousand-leaved fern	<i>Hypolepis millefolium</i>
toetoe	<i>Cortaderia richardii</i>
totara	<i>Podocarpus totara</i>
tutsan*	<i>Hypericum androsaemum</i>
white climbing rata	<i>Metrosideros diffusa</i>
wineberry	<i>Aristotelia serrata</i>
Yorkshire fog*	<i>Holcus lanatus</i>