

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

**AILSANDER FARMING**  
**(HORNE)**



**Report prepared for the Timaru District Council by Mike Harding**  
**October 2009**

# TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

## PROPERTY REPORT

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### PROPERTY DETAILS:

**Owner:** ..... Ailsander Farming Co. (Phil Horne)  
**Valuation Reference:** ..... 24660/100.00  
**Address:** ..... Burdon Road, Woodbury, RD 21, Geraldine  
**Location:** ..... East of Burdon Road on the northeast side of the Waihi River,  
northeast of Woodbury.  
**Ecological District:** ..... Geraldine Ecological District  
**TDC Land Type:** ..... Plains  
**Land Environment:** ..... N2 (well drained plains)

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### 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 and/or kahikatea. Other important canopy species would have been matai, narrow-leaved lacebark, lowland ribbonwood, lemonwood, broadleaf and five-finger. Tall kanuka-kowhai forest and areas of matagouri-*Coprosma-Olearia* shrubland would probably have been present on disturbed surfaces, such as recent river flats and terrace scarps.

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. The property lies close to the known range of the South Canterbury population of long-tailed bat (recorded previously at Waihi Bush). This species is regarded as nationally-endangered.

The main area of indigenous vegetation on the property is a kanuka-kowhai treeland, parts of which are protected by a QEII Open Space covenant. Also present is a small grove of large old kowhai trees. The property lies close to Waihi Bush, a relatively large remnant of indigenous forest with original old podocarps (totara, kahikatea and matai).

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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 September 2008. Two areas of indigenous treeland and shrubland on the property are regarded as Significant Natural Areas (SNAs) when assessed against the District Plan criteria.

Area No.	Area Name	Central grid reference	Aprox. size(ha)	Vegetation/habitat type
613	Burdon Road Treeland	J37: 675-857	12.11	kanuka-kowhai treeland.
646	Ailsander Kowhai	J37: 671-855	0.33	kowhai trees

These SNAs are illustrated on the attached aerial photograph and described in greater detail in this report. These areas meet the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) though will require active management 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).

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.

**Scientific names of species cited by common name in this report**

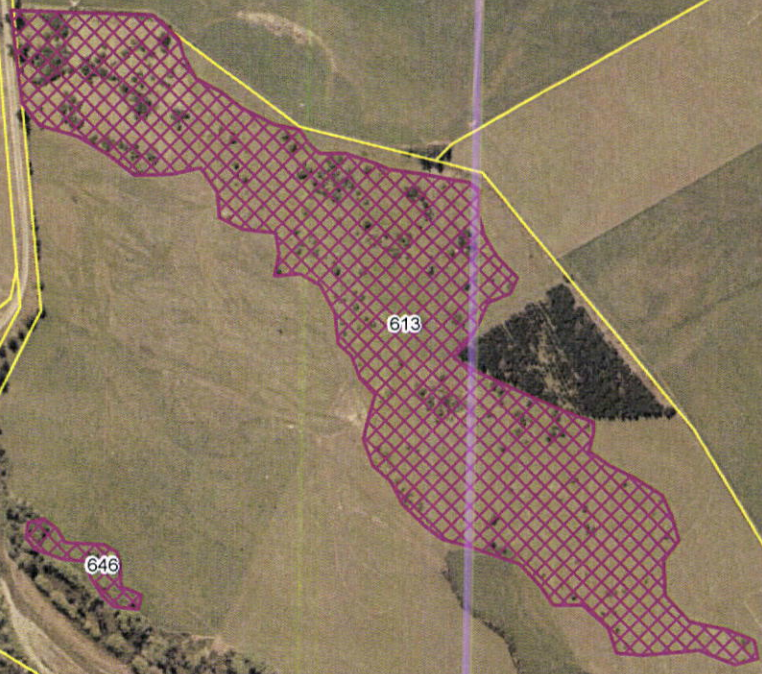
*(Note: this is not a complete species list: it is a list only of species cited by common name in this report)*

Common Name .....	Scientific name
(* = naturalised species)	
black nightshade*	<i>Solanum nigrum</i>
broadleaf .....	<i>Griselinia littoralis</i>
broom*	<i>Cytisus scoparius</i>
cabbage tree/ti rakau .....	<i>Cordyline australis</i>
crack willow*	<i>Salix fragilis</i>
creeping pohuehue .....	<i>Muehlenbeckia axillaris</i>
elderberry*	<i>Sambucus nigra</i>
five-finger.....	<i>Pseudopanax arboreus</i>
gorse*	<i>Ulex europaeus</i>
horehound*.....	<i>Marrubium vulgare</i>
kahikatea/white pine.....	<i>Dacrycarpus dacrydioides</i>
kanuka .....	<i>Kunzea ericoides</i>
korokio .....	<i>Corokia cotoneaster</i>
kowhai.....	<i>Sophora microphylla</i>
lawyer.....	<i>Rubus schmidelioides</i>
lemonwood.....	<i>Pittosporum eugenioides</i>
lowland ribbonwood.....	<i>Plagianthus regius</i>
matagouri .....	<i>Discaria toumatou</i>
matai/black pine .....	<i>Prumnopitys taxifolia</i>
matipo/kohuhu .....	<i>Pittosporum tenuifolium</i>
narrow-leaved lacebark .....	<i>Hoheria angustifolia</i>
necklace fern .....	<i>Asplenium flabellifolium</i>
nettle*	<i>Urtica</i> sp.
patotara .....	<i>Leucopogon fraseri</i>
pohuehue .....	<i>Muehlenbeckia australis</i>
porcupine shrub .....	<i>Melicytus</i> aff. <i>alpinus</i>
scrub pohuehue .....	<i>Muehlenbeckia complexa</i>
sweet brier*	<i>Rosa rubiginosa</i>
totara .....	<i>Podocarpus totara</i>
woolly mullein* .....	<i>Verbascum thapsus</i>



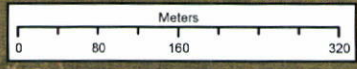
Ailsander Farming  
24660/100.00

Burton Road



613

646



1:7,500

# TIMARU DISTRICT SNA SURVEY

# AREA 613

**Area Name:** Burdon Road treeland  
**Location (central map reference):** J37: 675-857  
**Ecological District:** Geraldine  
**Surveyors:** Mike Harding

**Property:** Ailsander Farming Co. (Horne)  
**Nearest Locality:** Woodbury  
**Area Size (ha):** 12.11      **Altitude (m):** 190-200  
**Survey Time:** 2 hours      **Survey Date:** 10-09-08

## **General Description:**

This SNA lies on a low terrace of the Waihi River, on the northeast side of the river between Burdon Road and Flatman Road, near Woodbury. Parts of the area are protected by a QEII Open Space covenant.

## **Plant Communities:**

Two main plant communities are present: matagouri shrubland and kanuka-kowhai treeland. These plant communities are described separately below. Naturalized (exotic) species are indicated with an asterisk\*.

### Shrubland:

This plant community borders and grades into the treeland community described below. It supports widely scattered plants of matagouri in pasture on a boulder-strewn and presumably uncultivated surface. Patches or individual plants of gorse\* and broom\* are present in some areas.

Other species present are occasional plants and clumps of porcupine shrub, shrubs of *Coprosma propinqua*, korokio and (rarely) *Coprosma rigida*.

Other species occasionally present are creeping pohuehue and patotara.

### Treeland:

This plant community is dominated by scattered patches and individual trees of kanuka and kowhai. Trunk diameters (cm at breast height) of the larger trees are: kanuka, 25 to 40; kowhai, 40 to 75.

Other trees present are two matipo trees, two old cabbage trees, one old battered broadleaf tree and one large old lowland ribbonwood tree (trunk diameter 57 cm).

Understorey or treeland margin shrubs present are *Coprosma propinqua*, korokio, matagouri, elderberry\*, gorse\*, broom\* and rarely *Coprosma rigida* and *Coprosma crassifolia*. Other species present are pohuehue, scrub pohuehue, lawyer, nettle\*, horehound\*, porcupine shrub and necklace fern.

A small part of this plant community, at the centre of the area, is fenced from grazing. It is dominated by kanuka, kowhai, *Coprosma propinqua*, korokio and pohuehue over rank mossy pasture. Other species present are matagouri, gorse\*, sweet brier\*, woolly mullein\* and black nightshade\*.

## **Birds/Fauna Observed:**

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

## **Notable Flora, Fauna and Habitats:**

This plant community is now very rare in Canterbury. It is probably representative of the original treeland/shrubland communities present on recent terraces or disturbed alluvial sites throughout the Canterbury Plains. Important features of this area are the presence and dominance of kanuka and kowhai, the presence of locally-uncommon species (porcupine shrub, patotara, creeping pohuehue and korokio), the habitat the area provides for species such as kereru and bellbird, and the contribution the area makes to the network of fauna habitat in the area.

## **Notable Plant and Animal Pests:**

Gorse, broom and elderberry are the most obvious plant pests present. These species do not pose a significant threat to the indigenous plant community. The smothering native climber, pohuehue, may pose a threat if it becomes more established. Animal pests were not surveyed.

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

Two parts of area (the covenanted blocks?) are fenced and the smaller of those appears to be retired from grazing. Otherwise the area is grazed as part of a larger paddock. It lies close to other SNAs (SNA 2 and SNA 646) and makes a valuable contribution to the network of fauna habitat in the Woodbury-Waihi area.

### Condition and Management Issues:

While the existing treeland and shrubland form an attractive area of indigenous vegetation in a pastoral setting, the lack of regeneration of canopy species (especially kanuka and kowhai) places the long term future of the plant community in doubt. The smaller fenced area (that appears ungrazed) supports young kanuka and kowhai trees and supports much larger and healthier shrubs of *Coprosma propinqua* and korokio. However, it also supports a much greater density of the smothering pohuehue and a denser sward of rank pasture grasses. Some control of gorse and broom would be beneficial.

### Property Owner Comment:

The property owner may wish to improve pasture within the SNA. Improvement of pasture will not compromise the SNA so long as it does not involve clearance of indigenous woody species.

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### ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M	A good example of indigenous vegetation typical of the ecological district and probably representative of the original vegetation.
Rarity	H	This plant community is nationally rare and substantially depleted from lowland Canterbury. It supports several locally-uncommon plant species and probably provides habitat for kereru and other native bird species. The area may provide habitat for long-tailed bat.
Diversity and pattern	L/M	Supports a moderately diverse range of species for this type of community but species diversity is substantially reduced from that originally present.
Distinctiveness/special features	M	The size of the trees and the (apparently) uncultivated substrate are special features.
<b>Other Criteria</b>		
Size/shape	H	A relatively large area for this ecological district and with a good shape.
Connectivity	M	Lies close to other SNAs and is part of a network of fauna habitat in the Woodbury-Waihi area.
Long-term Sustainability	L/M	Encouragement of regeneration of canopy species will be required to maintain the ecological values of this area in the long term.

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

Parts of this area have been formally protected (by way of a QEII covenant) and other parts have been informally protected. The area does have potential for further development, though the presence of river boulders may hinder cultivation.

### Discussion:

This area easily meets the District Plan criteria for a Significant Natural Area. Important features of the area are the presence and dominance of kanuka and kowhai, the presence of locally-uncommon species (porcupine shrub, patotara, creeping pohuehue and korokio), the habitat the area provides for species such as kereru and bellbird, and the contribution the area makes to the network of fauna habitat in the area. This plant community is now very rare in Canterbury and is probably representative of the treeland/shrubland communities originally present on recent terraces or disturbed alluvial sites.

# TIMARU DISTRICT SNA SURVEY

AREA 646

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<b>Area Name:</b> Ailsander kowhai	<b>Property:</b> Ailsander Farming Co. (Horne)
<b>Location (central map reference):</b> J37: 671-855	<b>Nearest Locality:</b> Woodbury
<b>Ecological District:</b> Geraldine	<b>Area Size (ha):</b> 0.33 <b>Altitude (m):</b> 200
<b>Surveyors:</b> Mike Harding	<b>Survey Time:</b> ½ hour <b>Survey Date:</b> 10-09-08

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## General Description:

This SNA lies on a low terrace, on the true left (northeast) side of the Waihi River just downstream from Burdon Road near Woodbury.

## Plant Communities:

This SNA comprises a grove of six large old kowhai trees. The trees lie in or at the edge of a grazed paddock, adjacent to a forest of crack willow and other exotic trees alongside the Waihi River. Trunk diameters (at breast height) of the trees range from 32 to 86 cm.

## Notable Flora, Fauna and Habitats:

Important features of this area are the size of the kowhai trees and the habitat they provide for fauna, including species such as kereru/NZ pigeon.

## Notable Plant and Animal Pests:

The trees lie in pasture. Several large old elderberry trees are present at the edge of the area. The adjacent riverbed is dominated by weedy exotic species.

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

The trees are within a grazed (and cultivated) paddock, though lie close to exotic forest along the Waihi River and are only approximately 300m from kanuka-kowhai treeland in SNA 613.

## Condition and Management Issues:

The kowhai trees are large and healthy. Long term survival of kowhai here will require the establishment of new kowhai trees to replace the larger trees when they senesce and die.

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## ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

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Primary Criteria	Rank	Notes
Representativeness	M	These trees are representative of the original vegetation and may well pre-date European settlement of the area.
Rarity	M	The trees provide useful habitat for kereru and other native species.
Diversity and pattern	L	A much depleted remnant of the original plant community.
Distinctiveness/special features	M	The kowhai trees are among the largest recorded in the ecological district.
<b>Other Criteria</b>		
Size/shape	M	A small area but could easily be well buffered.
Connectivity	M	An important part of the network of fauna habitat in the area.
Long-term Sustainability	L/M	Long term protection of the ecological values will require establishment of young kowhai trees.

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

These trees have been informally protected by the landowner. They restrict productive use of this part of the property but also provide shelter and shade for stock. They add considerable amenity value to the property.

## Discussion:

This area only just meets the District Plan criteria for a Significant Natural Area. Important features of the area are the size of the kowhai trees and the habitat they provide for fauna, including species such as kereru/NZ pigeon.