

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

**NOLAN PROPERTY**



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

# TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

## PROPERTY REPORT

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### PROPERTY DETAILS:

**Owner:** ..... Des and Pam Nolan  
**Valuation References:** .... 24640/058.00  
**Address:** ..... Blair Road, Peel Forest  
**Location:**..... On hill slopes between the Kowhai and Scotsburn streams.  
**Ecological District:**..... Orari Ecological District.  
**TDC Land Type:**..... Hard Rock Hills and Downs.  
**Land Environment:** ..... Q2 (Southeastern Hill Country).

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### ECOLOGICAL CONTEXT:

The property lies on moderately-steep slopes on the foothills between Kowhai and Scotsburn streams near Peel Forest Park Scenic Reserve at Blandswood. It lies in the Orari Ecological District, though is close to the Geraldine and High Plains ecological districts. The original vegetation of this area would have been predominantly podocarp-hardwood forest, with localized areas of kowhai-kanuka forest and shrubland alongside active stream channels. 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 hardwood forest and treeland with remnant and regenerating podocarps (kahikatea and totara). This vegetation lies near to other indigenous vegetation on adjacent properties and that protected within the regionally-important Peel Forest Park 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 August 2010. Four areas, totalling approximately seven hectares, are regarded as a 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
657a		J37: 679-979	0.76	Podocarp-hardwood forest
657b		J37: 678-977	2.52	Podocarp-hardwood forest
657c		J37: 678-975	1.6	Podocarp-hardwood treeland
657d		J37: 677-975	2.47	Podocarp-hardwood forest

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 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.

Nolan Property  
24640/058.00

1:5,000

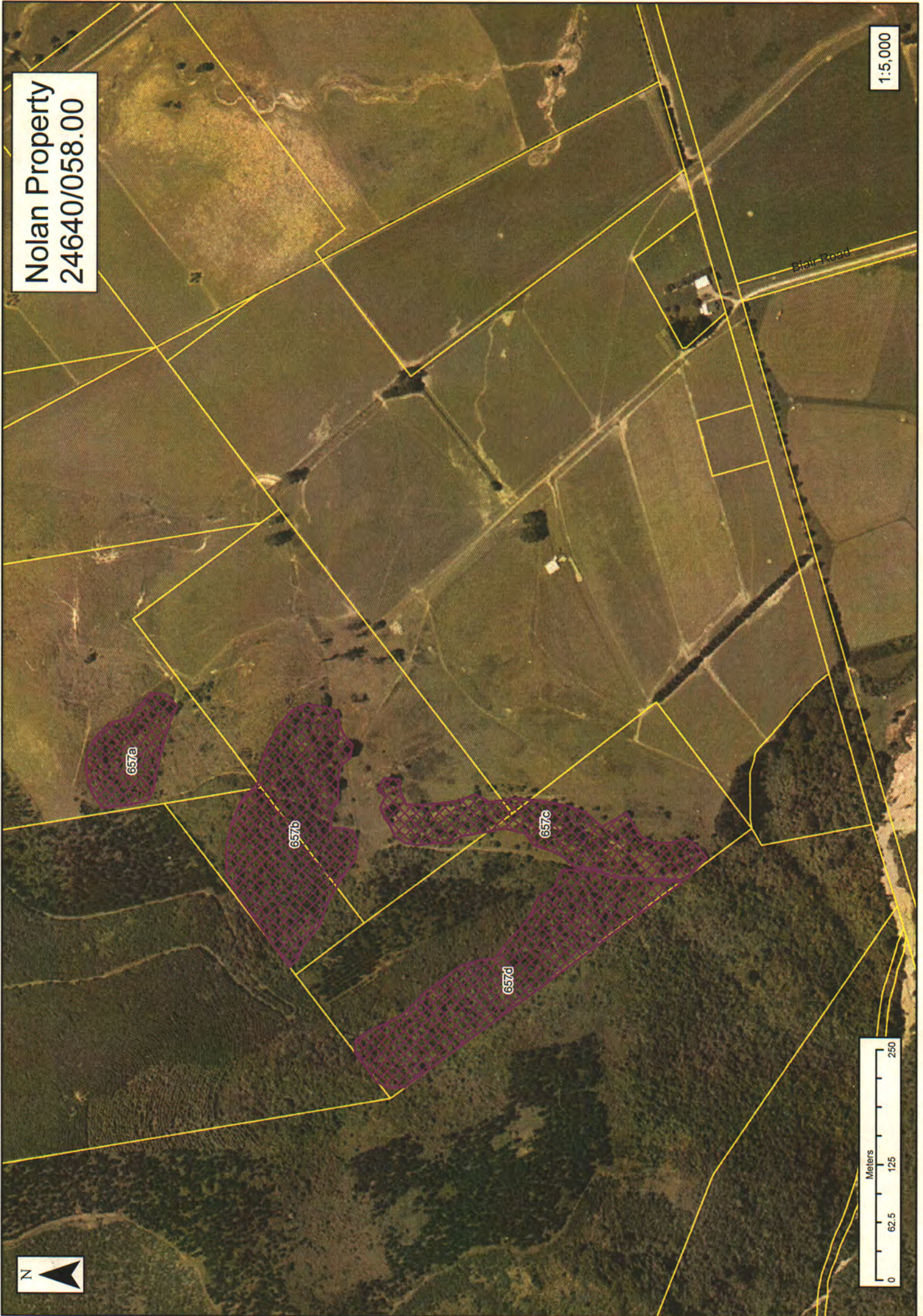
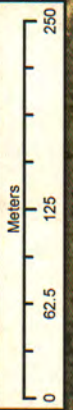
Blair Road

657a

657b

657c

657d



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<b>Area Name:</b>	<b>Property:</b> Nolan
<b>Location (central map reference):</b> J37: 679-979	<b>Nearest Locality:</b> Blandswood
<b>Ecological District:</b> Orari	<b>Area Size (ha):</b> 0.76 <b>Altitude (m):</b> 340-370
<b>Surveyors:</b> Mike Harding	<b>Survey Time:</b> ½ hour <b>Survey Date:</b> 17-08-10

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**General Description:**

This SNA lies in a small gully at the base of the foothills between Kowhai and Scotsburn streams, near Blandswood and Evans Flat.

**Plant Communities:**

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

The forest canopy is dominated by mahoe. Other canopy species are marbleleaf, broadleaf, fuchsia, totara, narrow-leaved lacebark, wineberry, native jasmine, pohuehue and one large emergent kahikatea tree at the lower forest margin. Trunk diameters (at breast height) of the large trees are: totara, 105cm; and kahikatea, 85cm.

The forest understorey is dominated by *Coprosma rotundifolia*. Other understorey species are mahoe, lemonwood, marbleleaf, lancewood, horopito, mapou, wineberry, totara, native jasmine, elderberry\*, pohuehue and, on tree trunks, hound's tongue fern. Holly\* is present in the upper part of the forest. Vines of old man's beard\* were observed at one location; these were cut and treated with herbicide.

Prickly shield fern is the dominant species on the forest floor. Other ground-cover species are *Blechnum fluviatile*, *Blechnum chambersii*, hen and chickens fern, *Asplenium richardii*, *Asplenium hookerianum*, *Pellaea rotundifolia*, male fern\*, black nightshade\*, *Schizeilema trifoliolatum* and seedlings of mahoe, horopito, cabbage tree, native jasmine and *Coprosma rotundifolia*.

Species present on the forest margin or in forest openings are *Coprosma propinqua*, *Coprosma rotundifolia*, white climbing rata, bush lawyer, gorse\*, foxglove\*, *Hypolepis ambigua*, *Leptolepis hymenophylloides*, pohuehue, native convolvulus and *Lycopodium scariosum*.

Additional species by the stream at the forest margin are swamp kiokio, sedge (*Carex* sp.) and small sycamore\* trees. Two large turepo (*Streblus heterophyllus*) trees are present beside the stream just below the fenced forest.

**Birds/Fauna Observed:**

Native birds observed during this brief survey were grey warbler, bellbird, fantail and kereru (NZ pigeon).

**Notable Flora, Fauna and Habitats:**

Important features of this area are the presence of large old podocarp trees, the habitat the area provides for forest birds, the presence of two locally-uncommon plant species (*Lycopodium scariosum* and *Schizeilema trifoliolatum*) and the contribution the area makes to forest bird habitat in the wider area.

**Notable Plant and Animal Pests:**

Old man's beard, holly and sycamore were the only significant plant pests observed in the forest. The one clump of old man's beard observed was cut and treated with herbicide. These three plant pest infestations are minor at present though pose a significant threat to the forest. Animal pests were not surveyed.

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

The forest is buffered by its location in a steep gully and further protected by a secure fence. It does not adjoin other areas of indigenous forest though lies close to other areas on the property and nearby at Blandswood.

**Condition and Management Issues:**

The forest is in relatively good condition. The most important management issue is control of invasive plant pests (old man's beard, holly and sycamore) and ongoing animal pest control, notably possums.

**ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:**

Primary Criteria	Rank	Notes
Representativeness	M/H	A good example of forest typical of the ecological district and containing trees that are representative of the original vegetation (kahikatea and totara).
Rarity	L/M	May provide habitat for an 'at-risk' bird species present in the wider area (rifleman); supports two locally-uncommon plant species.
Diversity and pattern	L/M	Diversity is below average for forest in this area.
Distinctiveness/special features	M	The large old kahikatea tree is a notable feature.
<b>Other Criteria</b>		
Size/shape	M	A relatively small area, though it has a good shape and is well buffered.
Connectivity	M	Part of a network of fauna habitat in the area.
Long-term Sustainability	M	Control of invasive plant pests and continued animal pest control will probably be required to maintain ecological values in the long term.

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

This area has been fenced and informally protected by the landowners. 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 large old podocarp trees, the habitat the area provides for forest birds, the presence of two locally-uncommon plant species and the contribution the area makes to forest bird habitat in the wider area.



<b>Area Name:</b>	<b>Property:</b> Nolan
<b>Location (central map reference):</b> J37: 678-977	<b>Nearest Locality:</b> Blandswood/Evans Flat
<b>Ecological District:</b> Orari	<b>Area Size (ha):</b> 2.52 <b>Altitude (m):</b> 340-420
<b>Surveyors:</b> Mike Harding	<b>Survey Time:</b> 1½ hours <b>Survey Date:</b> 17-08-10

**General Description:**

This SNA lies on moderately steep slopes on the foothills north of Scotsburn Stream, between the grassed flats and the western property boundary.

**Plant Communities:**

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

Podocarp-hardwood forest:

The forest canopy on the lower slopes comprises mahoe, broadleaf, lemonwood, fuchsia, marbleleaf, kowhai, mapou, lancewood, lowland ribbonwood, matai, native jasmine and pohuehue, with occasional cabbage tree and emergent kahikatea and totara. One very large totara tree is present at the forest margin. This tree has a trunk diameter (at breast height) of 227cm.

The forest understorey is dominated by mahoe and white climbing rata (on tree trunks). Other understorey species are *Coprosma rotundifolia*, *Coprosma rigida*, *Coprosma rhamnoides*, marbleleaf, horopito, mapou, poataniwha, turepo, rohutu, wheki-ponga, supplejack, bush lawyer, saplings of kahikatea and totara and, on tree trunks, hanging spleenwort and leather-leaf fern.

The forest floor is dominated in most places by hen and chickens fern. Other ground-cover species are prickly shield fern, common shield fern, *Blechnum fluviatile*, mountain kiokio, *Pellaea rotundifolia*, hound's tongue fern, necklace fern, *Asplenium hookerianum*, *Carex forsteri* and seedlings of *Coprosma rotundifolia*, cabbage tree, lancewood, mahoe, five-finger, lemonwood, horopito, mapou, kahikatea, totara, kowhai and native jasmine.

Species present on the forest margin or in forest openings are horopito, wineberry, pate, *Coprosma rotundifolia*, *Coprosma propinqua*, *Coprosma rigida*, wheki-ponga, *Neomyrtus pedunculata*, white climbing rata, poroporo, pohuehue, native convolvulus, tutsan\*, Himalayan honeysuckle\*, broom\*, gorse\*, black nightshade\*, *Hypolepis ambigua*, *Hypolepis rufobarbata* and *Lastreopsis glabella*. Additional species at damper sites are swamp kiokio, *Blechnum chambersii*, water fern and soft rush\*.

Hardwood (podocarp) forest:

The forest canopy on the upper slopes (above the vehicle track) is dominated by mahoe. Other canopy species are marbleleaf, lemonwood, broadleaf, pate, fuchsia, wineberry, pohuehue, and a single emergent kahikatea tree with a trunk diameter (at breast height) of 100cm.

The forest understorey is dominated by *Coprosma rotundifolia*. Other understorey species are mahoe, mapou, wineberry, horopito, supplejack, totara, *Clematis marata* and, on tree trunks, white climbing rata.

The forest floor is dominated by prickly shield fern and hen and chickens fern. Other ground-cover species are *Pellaea rotundifolia*, *Asplenium richardii*, *Asplenium hookerianum*, hound's tongue fern, *Blechnum chambersii*, common shield fern, male fern\* and seedlings of cabbage tree, lemonwood, broadleaf, lancewood, supplejack and *Coprosma* species.

Species present on the forest margin or in forest openings are native convolvulus, *Coprosma rotundifolia*, cabbage tree, bracken, broom\* and Himalayan honeysuckle\*.

### **Birds/Fauna Observed:**

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

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

Important features of this area are the presence of large old podocarp (kahikatea and totara) trees and saplings, the habitat the area provides for forest birds including an 'at-risk' species (rifleman), the presence of three locally-uncommon plant species (rohutu, *Hypolepis rufobarbata* and *Lastreopsis glabella*), the above-average diversity of plant species and the contribution it makes to the network of fauna habitat in the wider area.

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

No significant plant pests were observed, though old man's beard and sycamore are present nearby. Animal pests were not surveyed but possum and feral pig sign were observed.

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

The area is well buffered by its location on steeper slopes and around a small damp gully. It has been securely fenced and appears not to have been grazed for many years. A small part of the forest extends at its upper edge onto the adjacent property (SNA 657e). It is close to other areas of indigenous vegetation on the property (SNAs 657a and 657c) and near to regionally-important areas of indigenous forest protected within Dennistoun Bush and Peel Forest Park Scenic Reserve.

### **Condition and Management Issues:**

The forest is in good condition. The diversity of the forest understorey, especially on the lower slopes, indicates an absence of grazing or browsing pressure. The most important management issues are continued control of animal pests (notably possums and feral pigs) and monitoring for any infestations of invasive plant pests (notably old man's beard and sycamore).

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### **ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:**

<b>Primary Criteria</b>	<b>Rank</b>	<b>Notes</b>
Representativeness	M/H	A good example of indigenous forest typical of the ecological district and containing species representative of the original forest such as kahikatea and totara.
Rarity	M	Provides habitat for an 'at-risk' bird species (rifleman) and supports three locally-uncommon plant species.
Diversity and pattern	M	A relatively diverse range of plant species is present.
Distinctiveness/special features	M	The very large totara tree at the edge of the area is notable.
<b>Other Criteria</b>		
Size/shape	M	A small area but with a good shape and well buffered.
Connectivity	M	Lies close to other areas of indigenous forest and is an important part of a network of fauna habitat in the area.
Long-term Sustainability	M/H	Some ongoing animal pest control will be necessary to maintain 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 landowners. It is securely fenced from stock. The steepness of the slope means that 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 large old podocarp (kahikatea and totara) trees and saplings, the habitat the area provides for forest birds including an 'at-risk' species (rifleman), the presence of three locally-uncommon plant species, the above-average diversity of plant species and the contribution it makes to the network fauna habitat in the wider area.



**Area Name:**

Location (central map reference): J37: 678-975

Ecological District: Orari

Surveyors: Mike Harding

Property: Nolan

Nearest Locality: Blandswood/Evans Flat

Area Size (ha): 1.6

Altitude (m): 320-360

Survey Time: ½ hour

Survey Date: 17-08-10

**General Description:**

This SNA lies on gentle to moderately-steep toe-slopes of the hills between Kowhai and Scotsburn streams. It lies between two other areas of indigenous vegetation on the property: SNAs 657b and 657d.

**Plant Communities:**

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

This treeland community comprises scattered trees and patches of trees with grazed pasture beneath. It is a remnant of indigenous forest which now has no understorey. Dominant canopy trees are mahoe, broadleaf and kowhai. Other canopy species are totara, fuchsia, cabbage tree, mapou, ash\*, barberry\*, hawthorn\*, bush lawyer, native jasmine, pohuehue and one large holly\* tree. Two large kahikatea trees are present at the northern end of this area. These trees have trunk diameters (at breast height) of approximately 90cm.

Understorey and ground cover species present are *Coprosma rotundifolia*, leather-leaf fern, *Hypolepis ambigua*, foxglove\*, pennywort, pohuehue and pasture grasses.

Sycamore\* and hawthorn\* are present adjacent to the area in the fenced plantation forest and in SNA 657d.

**Birds/Fauna Observed:**

Native birds observed during this brief survey were kereru (NZ pigeon), fantail, bellbird, grey warbler and rifleman.

**Notable Flora, Fauna and Habitats:**

Important features of this area are the presence of large podocarps (notably kahikatea), the presence of other mature indigenous trees, the habitat the area provides for forest birds including an 'at-risk' bird species (rifleman) and the contribution the area makes to fauna habitat in the wider area, including the link it provides between SNAs 657b and 657d.

**Notable Plant and Animal Pests:**

Several naturalized species are present, though grazing pressure will help contain any spread within the SNA. However, hawthorn, barberry and holly pose a significant threat to adjacent areas as their fleshy fruits are attractive to birds and easily dispersed. Ash and nearby sycamore trees also pose a significant threat as their wind-dispersed seeds can travel some distance.

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

This relatively narrow area is buffered at its upper margin by plantation forest with some regenerating indigenous species. The area links two areas of indigenous forest. It is not fenced and is grazed as part of a larger paddock.

**Condition and Management Issues:**

The canopy trees are in reasonable condition and still provide suitable habitat for birds and possibly long-tailed bat (recorded nearby at Peel Forest). The forest understorey is substantially depleted. Important management issues are the encouragement of regeneration to enable replacement of canopy trees and removal of invasive naturalized species, notably holly, barberry and hawthorn.

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**ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:**

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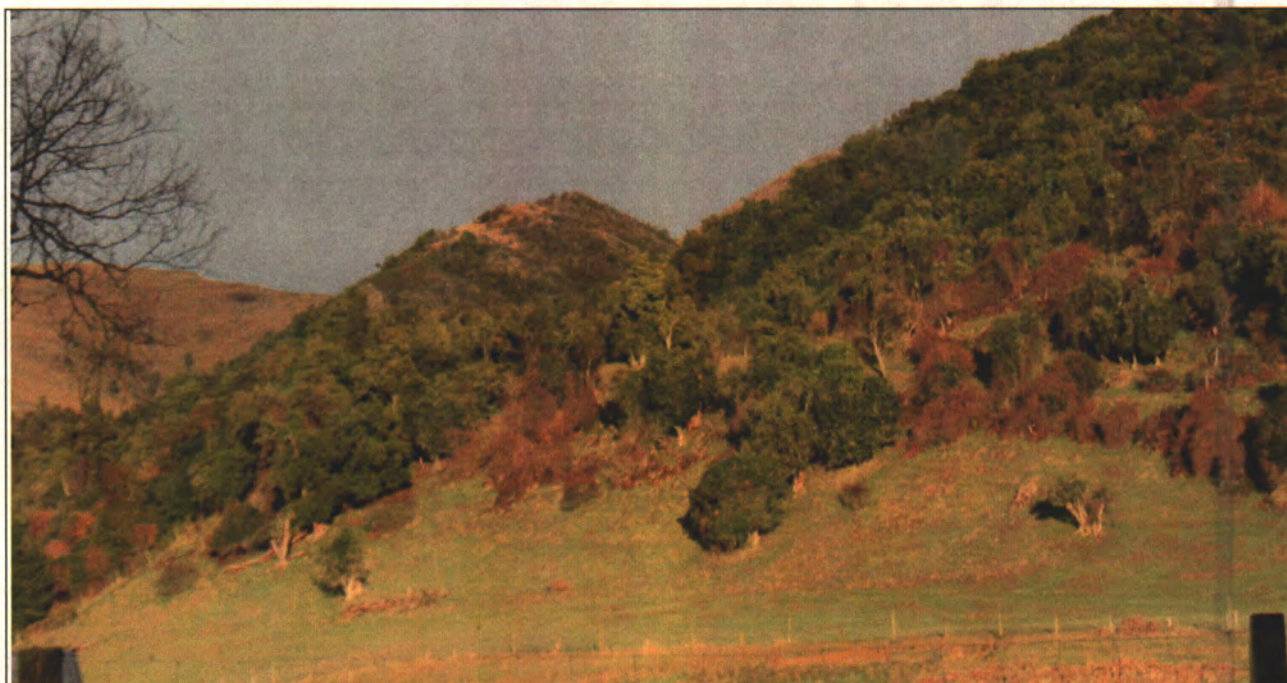
<b>Primary Criteria</b>	<b>Rank</b>	<b>Notes</b>
Representativeness	<b>M</b>	A depleted example of indigenous forest, though still containing old canopy trees including podocarps (kahikatea and totara).
Rarity	<b>L/M</b>	Provides habitat for an 'at-risk' bird species (rifleman).
Diversity and pattern	<b>L</b>	Species diversity is substantially reduced.
Distinctiveness/special features	<b>M</b>	The large old kahikatea trees and dominance of large kowhai trees are special features.
<b>Other Criteria</b>		
Size/shape	<b>M</b>	A small area with a reasonable shape and some buffering.
Connectivity	<b>M</b>	Links two areas of indigenous forest.
Long-term Sustainability	<b>L</b>	Regeneration of canopy species and removal of invasive plant pests will be necessary to maintain (and improve) ecological values.

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

This area of treeland has been retained by the property owners, though is grazed by stock. It has some potential for farm development but also has considerable potential for forest restoration.

**Discussion:**

This area only just meets the District Plan criteria for a Significant Natural Area. Important features of the area are the presence of large podocarps (notably kahikatea), the presence of other mature indigenous trees, the habitat the area provides for forest birds including an 'at-risk' bird species (rifleman) and the contribution the area makes to fauna habitat in the wider area, including the link it provides between SNAs 657b and 657d.



**Area Name:**

Location (central map reference): J37: 677-975

Ecological District: Orari

Surveyors: Mike Harding

**Property:** Nolan

Nearest Locality: Blandswood/Evans Flat

Area Size (ha): 2.47

Altitude (m): 340-420

Survey Time: 1½ hours

Survey Date: 17-08-10

**General Description:**

This SNA lies in a gully at the southwest corner of the property. It covers areas of remnant and regenerating forest that extend onto adjoining properties.

**Plant Communities:**

The main plant community present is podocarp-hardwood forest, grading up-valley to regenerating hardwood forest. These plant communities are described separately below. Naturalized (exotic) species are indicated with an asterisk\*.

The forest canopy in the lower part of the gully is comprised of kowhai, marbleleaf, lemonwood, lancewood, broadleaf, five-finger, kanuka, mapou, wineberry, cabbage tree, bush lawyer, native jasmine and pohuehue, with emergent trees of totara, narrow-leaved lacebark and sycamore\*. Crack willow\* trees are present beside the stream at the lower end of the area.

The forest understorey is dominated by mahoe and, in places, *Coprosma rotundifolia*. Other understorey species are turepo, horopito, mapou, narrow-leaved lacebark, *Coprosma rhamnoides*, kahikatea, hawthorn\* and, on tree trunks, hound's tongue fern.

The dominant forest-floor species is prickly shield fern. Other ground-cover species are *Blechnum penna-marina*, hen and chickens fern, *Asplenium hookerianum*, *Asplenium richardii*, necklace fern, hanging spleenwort, *Schizeilema trifoliolatum* and seedlings of kowhai, *Coprosma rotundifolia*, lancewood, mapou, lemonwood, broadleaf, totara and native jasmine.

Species present on the forest margin or in forest openings are fuchsia, pate, *Coprosma rotundifolia*, *Coprosma rigida*, *Coprosma propinqua*, native convolvulus, *Hypolepis ambigua*, Himalayan honeysuckle\*, hawthorn\*, broom\*, gorse\*, blackberry\*, black nightshade\* and male fern\*. Additional species present beside the stream are *Blechnum fluviatile* and *Blechnum chambersii*.

This forest community grades, up-valley, to low-stature regenerating vegetation dominated by fuchsia, Himalayan honeysuckle\*, broom\*, bracken and pohuehue, with emergent cabbage tree, lemonwood, hawthorn\* and wineberry.

**Birds/Fauna Observed:**

Native birds observed during this brief survey were kereru (NZ pigeon), fantail, grey warbler, rifleman and bellbird.

**Notable Flora, Fauna and Habitats:**

Important features of this area are the presence of podocarp trees (kahikatea and totara) in the lower part of the site, the habitat the area provides for forest birds including an 'at-risk' species (rifleman), the presence of a locally-uncommon plant species (the forest-floor herb, *Schizeilema trifoliolatum*) and the contribution the area makes to the network of fauna habitat in the wider area.

**Notable Plant and Animal Pests:**

Sycamore and hawthorn are the most important plant pests present. Sycamore, in particular, has the potential to overwhelm and dominate indigenous vegetation at the site. Animal pests were not surveyed, though possum and feral pig sign were observed.

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

This area is well buffered by its location in a gully. It is fenced along its lower boundary and adjoins other areas of remnant or regenerating indigenous vegetation along its other boundaries.

**Condition and Management Issues:**

The forest in the lower part of this area is in reasonable condition, though affected in places by hawthorn and sycamore. Regenerating vegetation in the upper valley is young and has a high proportion of exotic species though has good potential to become taller indigenous forest. The main management issue is the removal of sycamore and hawthorn from the lower forest.

**ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:**

<b>Primary Criteria</b>	<b>Rank</b>	<b>Notes</b>
Representativeness	M/H	A good example of indigenous forest typical of the ecological district in the lower part of the site, grading to younger regenerating vegetation in the upper gully.
Rarity	M	Provides good habitat for an 'at-risk' bird species (rifleman) and supports one locally-uncommon plant species.
Diversity and pattern	L/M	Moderate species diversity, with much-reduced species diversity in the upper gully.
Distinctiveness/special features	L/M	Large kowhai trees are common at the lower part of the area.
<b>Other Criteria</b>		
Size/shape	M	A small area with a good shape and very well buffered.
Connectivity	M	Adjoins and links other areas of indigenous vegetation.
Long-term Sustainability	M	Some plant and animal pest control (particularly sycamore) will be required to retain 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 and fenced by the landowners. 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 (kahikatea and totara) in the lower part of the site, the habitat the area provides for forest birds including an 'at-risk' species (rifleman), the presence of a locally-uncommon plant species (the forest-floor herb, *Schizeilema trifoliolatum*) and the contribution the area makes to the network of fauna habitat in the wider 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>
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>
bush lawyer	<i>Rubus cissoides</i>
cabbage tree/ti rakau	<i>Cordyline australis</i>
common shield fern	<i>Polystichum richardii</i>
crack willow*	<i>Salix fragilis</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>
hanging spleenwort	<i>Asplenium flaccidum</i>
hawthorn*	<i>Crataegus monogyna</i>
hen and chickens fern	<i>Asplenium bulbiferum</i>
Himalayan honeysuckle*	<i>Leycesteria formosa</i>
holly*	<i>Ilex aquifolium</i>
horopito/pepperwood	<i>Pseudowintera colorata</i>
hound's tongue fern	<i>Microsorium pustulatum</i>
kahikatea/white pine	<i>Dacrycarpus dacrydioides</i>
kanuka	<i>Kunzea ericoides</i>
kowhai	<i>Sophora microphylla</i>
lancewood	<i>Pseudopanax crassifolius</i>
leather-leaf fern	<i>Pyrrosia eleagnifolia</i>
lemonwood	<i>Pittosporum eugenioides</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>
mountain kiokio	<i>Blechnum montanum</i>
narrow-leaved lacebark	<i>Hoheria angustifolia</i>
native convolvulus	<i>Calystegia tuguriorum</i>
native broom	<i>Carmichaelia aff. australis</i>
native jasmine	<i>Parsonsia sp.</i>
necklace fern	<i>Asplenium flabellifolium</i>
old man's beard*	<i>Clematis vitalba</i>
pate	<i>Schefflera digitata</i>
pennywort	<i>Hydrocotyle sp.</i>
poataniwha	<i>Melicope simplex</i>
pohuehue	<i>Muehlenbeckia australis</i>
poroporo	<i>Solanum laciniatum</i>
prickly shield fern	<i>Polystichum vestitum</i>
rohutu	<i>Lophomyrtus obcordata</i>
soft rush*	<i>Juncus effusus</i>
supplejack	<i>Ripogonum scandens</i>
swamp kiokio	<i>Blechnum minus</i>
sycamore*	<i>Acer pseudoplatanus</i>

totara .....	<i>Podocarpus totara</i>
turepo .....	<i>Streblus heterophyllus</i>
tutsan* .....	<i>Hypericum androsaemum</i>
water fern .....	<i>Hystiopteris incisa</i>
wheki-ponga.....	<i>Dicksonia fibrosa</i>
wineberry .....	<i>Aristotelia serrata</i>