TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

AVERIS PROPERTY



Report prepared for Timaru District Council by Mike Harding December 2012

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Alan and Pat Averis

Valuation References: 24640/037.01

Address: Evans Flat, Blandswood

Location: On hill slopes above Evans Flat, Blandswood.

Ecological District: Orari Ecological District.

TDC Land Type: Hard Rock Hills and Downs.

Land Environment: Q2.1a (Southeastern Hill Country).

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 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 comprises indigenous hardwood forest and regenerating forest dominated by kanuka. This vegetation lies near to other indigenous forest 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).

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas during September 2012. Two connected areas, totalling approximately 1.7 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
687c	Averis gully forest	J37: 677-988	1.2	Hardwood forest
687d	Averis kanuka forest	J37: 678-988	0.5	Kanuka 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.



Totara seedling within SNA 687d.



Area Name: Averis gully forest

Location (central map reference): J37: 677-988

Ecological District: Orari Surveyor: Mike Harding Property: Alan and Pat Averis Nearest Locality: Blandswood

Area Size (ha): 1.2 Altitude (m): 380-420 Survey Time: 1½ hours Survey Date: 06-09-12

General Description:

This SNA lies on moderately steep south-facing slopes along the property boundary. It adjoins SNA 687d at its lower (eastern) end and lies close to other areas of indigenous forest.

Plant Communities:

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

The canopy of this forest is dominated by mahoe, broadleaf, five-finger, fuchsia and wineberry. Other canopy species are kanuka, mapou, pohuehue, bush lawyer, native jasmine and, occasionally, cabbage tree. Trunk diameters (at breast height) of the larger kanuka trees are between 30 and 40cm.

The forest understorey is in most places dominated by mahoe. Other understorey species are mapou, matipo, five-finger, *Coprosma rhamnoides*, *Coprosma rotundifolia*, pate, lemonwood, elderberry*, pohuehue, bush lawyer and native jasmine. Less commonly present are lancewood, marbleleaf, horopito, *Clematis marata*, soft tree fern (two plants) and, on tree trunks, hound's tongue fern and leather-leaf fern.

The forest floor is relatively open. Important ground-cover species are prickly shield fern, hen and chickens fern and *Blechnum chambersii*. Other species are hound's tongue fern, mountain kiokio (uncommon), *Asplenium richardii*, *Asplenium hookerianum*, hanging spleenwort, *Blechnum fluviatile*, *Blechnum pennamarina* (uncommon), bush lily and seedlings of mahoe, five-finger, lemonwood, broadleaf, cabbage tree, native jasmine and *Coprosma* species.

Species present on the forest margin or in forest openings are kanuka, gorse*, matipo, Himalayan honeysuckle*, bracken, prickly shield fern, pohuehue, Chilean flame creeper* and foxglove*.



The forest interior of SNA 687c

Birds/Fauna Observed:

Native birds observed during this brief survey were bellbird, grey warbler, rifleman and silvereye.

Notable Flora, Fauna and Habitats:

Important features of this area are the well-established forest with a number of representative canopy species, the presence of two locally uncommon plant species (soft tree fern and *Clematis marata*), the habitat the area provides for forest birds including an at-risk (declining) species (rifleman), its proximity to the regionally-important Peel Forest Park Scenic Reserve, and its location within a critically under-protected Land Environment (Q2.1a).

Notable Plant and Animal Pests:

Elderberry, gorse, Himalayan honeysuckle and Chilean flame creeper are present, though none of these species poses a significant threat to the area. Sycamore is present nearby (in SNA 687d) and does pose a threat to the area. Animal pests were not surveyed.

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

This area is well buffered by its location on a steep south-facing slope. It is fenced along its northern boundary (along the spur) and adjoins other tall or regenerating vegetation along its other boundaries (the property boundaries).

Condition and Management Issues:

This area of forest appears to be in good condition. The sparsely-vegetated forest floor is probably due to the steep stony substrate. Understorey and canopy vegetation is healthy, with a good number of palatable species present. The most important management issues are preventing the establishment of invasive plant pests, such as sycamore, and continued animal pest (especially possum) control.

Property Owner Comment:

Alan and Pat Averis are proud of this forest remnant and intend to provide it with better protection, possibly a QEII covenant.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria Rank		Notes	
Representativeness M		A good example of indigenous forest typical of forest in this part of the ecological district.	
Rarity M		Provides habitat for an at-risk bird species (rifleman) and two locally uncommon plant species (soft tree fern and <i>Clematis marata</i>).	
Diversity and pattern	M	Plant species diversity is moderate and probably reduced from its original condition.	
Distinctiveness/special features	L/M	The presence of very large old broadleaf trees is a special feature.	
Other Criteria			
Size/shape M		Small to moderate-sized for this ecological district, but with a good shape and well buffered.	
Connectivity M		Adjoins SNA 687d and lies close to other areas of indigenous vegetation.	
Long-term Sustainability M/H		Some ongoing plant and animal pest control is likely to 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. The steep slopes within this area have very little potential for farm development. The owners intend to provide better protection for this area.

Discussion:

This area meets the District Plan criteria for a Significant Natural Area. Important features of the area are the well-established forest with a number of representative canopy species, the presence of two locally uncommon plant species (soft tree fern and *Clematis marata*), the habitat the area provides for forest birds including an at-risk (declining) species (rifleman), its proximity to the regionally-important Peel Forest Park Scenic Reserve, and its location within a critically under-protected Land Environment (Q2.1a).

Area Name: Averis kanuka forest

Location (central map reference): J37: 678-988

Ecological District: Orari Surveyors: Mike Harding

Property: Alan and Pat Averis Nearest Locality: Blandswood

Area Size (ha): 0.5 Altitude (m): 380-400 Survey Time: 1 hour Survey Date: 06-09-12

General Description:

This SNA lies on a gently-sloping east-facing hillside, just south of the house. It adjoins SNA 687c at its southern boundary and lies close to other areas of indigenous forest.

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 kanuka trees are between 10 and 15cm. Other canopy species are wineberry, five-finger, fuchsia, mahoe and native jasmine.

The forest understorey is dominated by mahoe. Other understorey species are pate, wineberry, five-finger, matipo, *Coprosma rhamnoides*, *Coprosma rotundifolia*, lancewood, lemonwood, Himalayan honeysuckle*, elderberry*, gorse* (mostly dead), native jasmine and bush lawyer. Less commonly present are marbleleaf, narrow-leaved mahoe, horopito, poroporo, kaikomako and sycamore*.

Ground-cover species are prickly shield fern, *Hypolepis ambigua*, blackberry*, foxglove*, *Blechnum fluviatile*, *Blechnum penna-marina*, *Blechnum chambersii* (uncommon), *Asplenium hookerianum*, hound's tongue fern, hairy pennywort and seedlings of mahoe, matipo, lemonwood, broadleaf, mapou, lancewood, wineberry, five-finger, totara, pohuehue, elderberry*, native jasmine and *Coprosma* species.

Dense low vegetation dominated by bracken is present at the southeast end of the forest. Other species present here and elsewhere on the forest margin are gorse*, blackberry*, Himalayan honeysuckle*, sycamore*, narrow-leaved mahoe, velvety nightshade*, foxglove*, *Hypolepis ambigua*, water fern and a single young soft tree fern.



Forest interior, SNA 687d

Birds/Fauna Observed:

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

Notable Flora, Fauna and Habitats:

Important features of this area are the advanced state of forest regeneration, the presence of a locally uncommon plant species (soft tree fern), the habitat the area provides for forest birds including an at-risk (declining) species (rifleman), its proximity to the regionally-important Peel Forest Park Scenic Reserve, and its location within a critically under-protected Land Environment (Q2.1a).

Notable Plant and Animal Pests:

Sycamore is the most important plant pest present. Several large trees are present at the lower forest boundary and there are a number of saplings within the forest. Other naturalised plant species, such as gorse, Himalayan honeysuckle and blackberry do not pose a significant threat to the forest. Animal pests were not surveyed.

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

This area is fenced from stock and also well-buffered by dense low vegetation. It adjoins SNA 687c and lies close to other areas of indigenous vegetation.

Condition and Management Issues:

This area is in very good condition for regenerating forest. Alan and Pat Averis advise that it has been fenced from grazing animals for more than 20 years. This is evident from the very healthy understorey vegetation, and the presence of podocarp (totara) seedlings. The presence of palatable understorey species reflects the pest control undertaken by the landowners.

Property Owner Comment:

Alan and Pat Averis are impressed with the healthy regeneration of the forest and are committed to its protection.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria Rank		Notes	
Representativeness	M	A very good example of regenerating forest, with a good range of representative species including young podocarp (totara) seedlings.	
Rarity M		Provides habitat for an at-risk bird species (rifleman) and one locally uncommon plant species (soft tree fern).	
Diversity and pattern M		Relatively diverse for regenerating forest.	
Distinctiveness/special			
features			
Other Criteria			
Size/shape	M	A small area, though with a good shape and well buffered.	
Connectivity	M	Adjoins SNA 687c and lies close to other areas of indigenous vegetation.	
Long-term Sustainability	M/H	Control of sycamore and ongoing animal pest control are likely to 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. The owners intend to continue to maintain and protect this area.

Discussion:

This area meets the District Plan criteria for a Significant Natural Area. Important features of the area are the advanced state of forest regeneration, the presence of a locally uncommon plant species (soft tree fern), the habitat the area provides for forest birds including an at-risk (declining) species (rifleman), its proximity to the regionally-important Peel Forest Park Scenic Reserve, and its location within a critically under-protected Land Environment (Q2.1a).

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)

blackberry*	
bracken	
broadleaf	
bush lawyer	
bush lily	Astelia fragrans
cabbage tree/ti rakau	Cordyline australis
Chilean flame creeper*	
elderberry*	Sambucus nigra
five-finger	
foxglove*	
fuchsia	Fuchsia excorticata
gorse*	Ulex europaeus
hairy pennywort	Hydrocotyle moschata
hanging spleenwort	Asplenium flaccidum
hen and chickens fern	Asplenium gracillimum
Himalayan honeysuckle*	Leycesteria formosa
horopito/pepperwood	Pseudowintera colorata
hound's tongue fern	Microsorum pustulatum
kaikomako	Pennantia corymbosa
kanuka	
kowhai	Sophora microphylla
lancewood	
leather-leaf fern	Pyrrosia eleagnifolia
lemonwood	Pittosporum eugenioides
mahoe/whiteywood	Melicytus ramiflorus
mapou	
marbleleaf/putaputaweta	
matipo/kohuhu	
mountain kiokio	
narrow-leaved mahoe	
native jasmine	
pate	
pohuehue	Muehlenbeckia australis
poroporo	
prickly shield fern	
soft tree fern	
sycamore*	
totara	
velvety nightshade*	Solanum chenopodioides
water fern	
wineberry	