

TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

ELLERY PROPERTY



Report prepared for the Timaru District Council by Mike Harding
September 2007

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Jack Ellery
Valuation Reference: 24660/225.00
Address: Waitui Drive, Geraldine
Location: On the east side of the Geraldine Downs
Ecological District: Geraldine Ecological District
TDC Land Type: Soft Rock Hills and Downs
Land Environment: N3 (downlands of South Canterbury and coastal Otago)

ECOLOGICAL CONTEXT:

The property lies on the low rolling hills of the Geraldine Downs. The original vegetation of this area would have been predominantly podocarp-hardwood forest, dominated by totara, matai and kahikatea emergent over a hardwood canopy. Important canopy hardwood species would probably have been narrow-leaved lacebark, pokaka, kowhai, lemonwood, five-finger, broadleaf and mahoe. 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.

Two areas of remnant podocarp-hardwood forest are present on the property. These are part of a more extensive collection of scattered patches of forest and treeland on the Geraldine Downs. The most important of these is Talbot Forest Scenic Reserve, which lies only approximately 300 m to the south. Other indigenous forest and treeland remnants are present nearby.

These areas of forest and treeland may provide roost sites (though maybe only occasionally used) for long-tailed bat (a 'nationally endangered' species). Long-tailed bat are present nearby in Talbot Forest. The indigenous trees on the property are also likely to provide habitat for kereru/NZ pigeon (threat status: gradual decline). Notable plant species on the property are the totara and kahikatea trees, a number of relatively large narrow-leaved lacebark and *Lophomyrtus obcordata* trees and the locally-uncommon leafless lawyer (*Rubus squarrosus*) and *Coprosma rubra*.

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas in July 2007. The forest and treeland remnants on the property are regarded as Significant Natural Areas (SNAs) when assessed against the District Plan criteria.

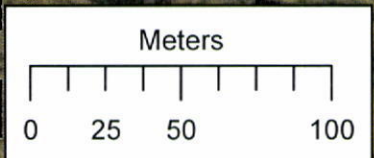
Area No.	Area Name	Central grid reference	Aprox. size(ha)	Vegetation/habitat type
723a	Ellery Forest Remnant	J38: 690-793	0.45	Podocarp-hardwood forest
723b	Ellery Forest Remnant	J38: 692-792	0.39	Podocarp-hardwood forest

These SNAs are illustrated on the attached aerial photograph and described in greater detail on the Area Inspection Form in this report. Note that the boundaries of the SNAs are indicative, rather than precise. These SNAs 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 (criterion vii, page B19). SNAs are subject to confirmation by Council after regarding the matters listed under *Final Considerations* (pages B19-B20).

The implication of an area being listed as an SNA is that consent is required from Council for clearance of indigenous vegetation by any means (including burning and spraying with herbicides) or over-planting. This does not normally prevent clearance to prevent shading of buildings, the maintenance of tracks and fences, restoration plantings or grazing. To assist with the protection and management of any SNA, landowners can apply to Council for financial assistance. SNAs will eventually be listed in the District Plan. Any questions regarding the protection, management and use of SNAs should be directed to the District Planner.

Ellery Property
24660/225.00



1:2,500

TIMARU DISTRICT SNA SURVEY

AREAS 723a and 723b

Area Name: Ellery Forest Remnants

Ecological District: Geraldine

AREA 723a: Location (central map ref.): J38: 690-793

AREA 723b: Location (central map ref.): J38: 692-792

Surveyors: Mike Harding and Jack Ellery

Property: Jack Ellery

Nearest Locality: Geraldine

Area Size (ha): 0.45

Altitude (m): 160

Area Size (ha): 0.39

Altitude (m): 150

Survey Time: 2 hours

Survey Date: 17-07-07

General Description:

The forest remnants that form these SNAs are on south-facing slopes in a small gully on the east side of the Geraldine Downs.

Plant Communities:

The SNAs comprise remnants of podocarp-hardwood forest, separated by areas recently planted with native species and areas of plantation forest. There are associated patches of forest and scattered indigenous trees on adjoining properties. Forest remnants on the property are described below. Naturalized (self-introduced) species are indicated with an asterisk*.

Area 723a:

This forest remnant lies at the head of a small gully and is surrounded on three sides by plantation forest. The native forest canopy is dominated by tall narrow-leaved lacebark trees. Trunk diameters (at breast height) of these trees range from 45 to 58 cm. Other canopy species are totara, lancewood, broadleaf, pokaka, *Streblus heterophyllus*, fuchsia, kaikomako and bindweed*.

Understorey species present are *Melicope simplex*, *Coprosma crassifolia*, *C. rotundifolia*, *C. propinqua*, matipo, mahoe, spindle tree* and lawyer.

Low-growing species present along the gully are hen and chicken's fern, male fern* and *Schizeilema* sp. Additional species present on the forest margins are *Lophomyrtus obcordata*, *Coprosma rubra*, leafless lawyer, *Hypolepis ambigua*, a single Khasia berry* bush, a single small kahikatea tree and mistletoe (on *Coprosma crassifolia*). A clump of old man's beard* and a vine of banana passionfruit* are also present. Several narrow-leaved lacebark and *Lophomyrtus obcordata* trees are present within the adjoining pine plantation.

Native species planted adjacent to the forest remnant include kahikatea, lowland ribbonwood, matipo, lemonwood, wineberry and cabbage tree.

Area 723b:

This Area comprises smaller clumps of indigenous forest separated by an open slope that has been recently planted with native species.

Canopy species in these forest patches are totara, narrow-leaved lacebark, lancewood, lemonwood, matipo and native jasmine. One narrow-leaved lacebark tree has a trunk diameter of 62 cm.

Understorey species present are mahoe, matipo, lemonwood, five-finger, mapou, *Coprosma areolata*, *C. crassifolia*, *C. propinqua*, shrubby mahoe, black nightshade*, stinking iris*, necklace fern, *Asplenium hookerianum*, male fern* and ivy*.

Additional species present on the forest margins are prickly shield fern, poroporo, mistletoe (on *Coprosma propinqua*), holly*, gorse*, broom*, banana passionfruit* and blackberry*.

Native species planted on adjoining slopes include lemonwood, cabbage tree, matipo, lowland ribbonwood, lancewood, *Olearia lineata*, kanuka, narrow-leaved lacebark, flax and sedges.

The plantation of Douglas fir and wattle between the two Areas has a good cover of native species in its understorey. Native species present include narrow-leaved lacebark, mahoe, five-finger, lancewood, matipo, lemonwood, cabbage tree, mapou, shrubby mahoe, horopito, *Lophomyrtus obcordata*, *Coprosma crassifolia*, *C. areolata*, *C. rotundifolia* and native jasmine.

Birds Observed:

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

Notable Flora, Fauna and Habitats:

Notable features of these forest remnants are the presence of totara and kahikatea, the size and abundance of the narrow-leaved lacebark and *Lophomyrtus obcordata* trees, the presence of the locally uncommon leafless lawyer and *Coprosma rubra*, the habitat the area provides for birds and possibly bats (long-tailed bats are present nearby in Talbot Forest) and its proximity to other indigenous forest and treeland remnants in the area which collectively provide important forest bird habitat.

Notable Plant and Animal Pests:

Significant plant pests observed during this inspection were old man's beard, banana passionfruit, Khasia berry, ivy and bindweed. Other significant weeds present near the forest remnants are wandering willie and ground ivy, both of which can smother forest floors. Hawthorn is also present, though has been controlled by the landowner. The native climber pohuehue is surprisingly uncommon, though its habitat is occupied in places by the introduced and smothering bindweed (*Calystegia* sp.). No animal pests were observed, though possums are likely to be present.

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

These forest remnants are fenced from grazing and buffered by their location on a south-facing slope. The remnants are small but are enhanced by extensive native plantings on adjoining slopes. The forest remnants are only approximately 300 m from a relatively large area of remnant indigenous forest in Talbot Forest Scenic Reserve and close to other significant areas of indigenous forest on the Geraldine Downs.

Condition and Management Issues:

The canopies of these forest remnants are in relatively good condition. The landowner has put considerable effort towards the protection and restoration of the remnants, including extensive weed control and the establishment of native plants. Three weed species pose a significant threat to the forest remnants: one clump of old man's beard, two clumps of banana passionfruit and one Khasia berry bush. Removal of these infestations is desirable, as their presence threatens this and other forest remnants on the Geraldine Downs.

Property Owner Comment:

The property owners are committed to the protection of the forest remnants and would value assistance with management, especially weed control.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M/H	Good examples of indigenous forest typical of the ecological district.
Rarity	M	The forest provides habitat for kereru (gradual decline).
Diversity and pattern	M	Species diversity is reduced from that originally present at the site.
Distinctiveness/special features	M	Some larger trees have cavities that provide suitable roost sites for long-tailed bat (present nearby in Talbot Forest).
Other Criteria		
Size/shape	M	The remnants cover a relatively small area, but are well buffered and protected.
Connectivity	M	These remnants are close to other indigenous forest remnants and are an important part of a network of fauna habitat on the Geraldine Downs.
Long-term Sustainability	M	Some management (notably weed control) will be required to maintain ecological values in the long term.

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

These areas of forest have been retained and informally protected by the landowners. The landowners have put considerable effort towards the protection and improvement of the forest remnants. Protection of the remnants adds character and amenity value to the property, though may limit the potential for farm development. Some management will be required to maintain the ecological values of these remnants in the long-term.

Discussion:

These forest remnants easily meet the District Plan criteria for Significant Natural Areas. Important attributes are the presence of podocarps (totara and kahikatea), the size and abundance of the narrow-leaved lacebark and *Lophomyrtus obcordata* trees, the presence of the locally uncommon leafless lawyer and *Coprosma rubra*, the habitat the area provides for birds and possibly bats and their proximity to other indigenous forest remnants in the area which collectively provide important forest bird habitat.

Scientific names of species cited by common name

Common Name	Scientific name
(* = naturalised species)	
banana passionfruit*	<i>Passiflora mollissima</i>
bindweed*	<i>Calystegia</i> sp
blackberry*	<i>Rubus fruticosus</i>
black nightshade*	<i>Solanum nigrum</i>
broadleaf	<i>Griselinia littoralis</i>
broom*	<i>Cytisus scoparius</i>
cabbage tree/ti rakau	<i>Cordyline australis</i>
Douglas fir*	<i>Pseudotsuga menziesii</i>
five-finger.....	<i>Pseudopanax arboreus</i>
flax	<i>Phormium tenax</i>
fuchsia	<i>Fuchsia excorticata</i>
gorse*	<i>Ulex europaeus</i>
ground ivy*	<i>Glechoma hederacea</i>
hawthorn*.....	<i>Crataegus monogyna</i>
hen and chickens fern.....	<i>Asplenium bulbiferum</i>
holly*	<i>Ilex aquifolium</i>
horopito/pepperwood	<i>Pseudowintera colorata</i>
ivy*	<i>Hedera helix</i>
kahikatea/white pine.....	<i>Dacrycarpus dacrydioides</i>
kaikomako	<i>Pennantia corymbosa</i>
kanuka	<i>Kunzea ericoides</i>
Khasia berry*	<i>Cotoneaster simonsii</i>
kowhai	<i>Sophora microphylla</i>
lancewood	<i>Pseudopanax crassifolius</i>
lawyer.....	<i>Rubus schmidelioides</i>
leafless lawyer	<i>Rubus squarrosus</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>
manuka	<i>Leptospermum scoparium</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 jasmine	<i>Parsonsia</i> sp.
necklace fern	<i>Asplenium flabellifolium</i>
old man's beard*	<i>Clematis vitalba</i>
pohuehue	<i>Muehlenbeckia australis</i>
pokaka	<i>Elaeocarpus hookerianus</i>
poroporo	<i>Solanum laciniatum</i>
prickly shield fern	<i>Polystichum vestitum</i>
sedge	<i>Carex</i> sp.
shrubby mahoe	<i>Melicytus micranthus</i>
spindle tree*	<i>Euonymus europaeus</i>
stinking iris*	<i>Iris foetidissima</i>
totara	<i>Podocarpus totara</i>
wandering willie*	<i>Tradescantia fluminensis</i>
wattle*	<i>Acacia</i> sp.
wineberry	<i>Aristotelia serrata</i>