

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Mark and Ginny Bolderston
Valuation Reference: 24660/221.01
Address: Waitui Drive, Geraldine
Location: On the northeast side of the Geraldine Downs, between Kalaugher Road and Waitui Drive
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 at the eastern edge of the Geraldine Ecological District, on low rolling hills on the northeast side 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.

Six areas of scattered indigenous trees (treeland) are present on the property. These areas of treeland are highly modified remnants of the original forest and comprise scattered trees of totara, kahikatea, narrow-leaved lacebark, *Lophomyrtus obcordata*, *Streblus heterophyllus* and cabbage tree. They are part of a more extensive area of scattered patches of forest and treeland on the Geraldine Downs. The most important of these is Talbot Forest Scenic Reserve, which lies only ½ km south of the property.

Collectively the areas of forest and treeland on the Geraldine Downs provide habitat for birds including kereru (threat status: gradual decline) and are likely to provide important (though maybe only occasionally used) roost sites for bats (nationally endangered).

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas during August 2007. All parts of the property were visited, though most parts were only viewed briefly. Six areas of scattered trees (treeland) are regarded as significant when assessed against the District Plan criteria. These six areas are listed in the table below.

Area No.	Area Name	Central grid reference	Aprox. size(ha)	Vegetation/habitat type
724a	Waitui Downs Treeland	J38: 691-795	1.59	Hardwood treeland
724b		J38: 690-796	0.15	Hardwood treeland
724c		J38: 688-797	2.28	Podocarp-hardwood treeland
724d		J38: 686-798	0.51	Podocarp-hardwood treeland
724e		J38: 691-798	0.17	Podocarp treeland
724f		J38: 690-800	0.12	Podocarp treeland

These Significant Natural Areas (SNAs) are illustrated on the attached aerial photograph and described in greater detail in this document. 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), but will require active management to maintain their ecological values in the long-term. SNAs are subject to confirmation by Council after regarding the matters listed under Final Considerations (pages B19-B20).

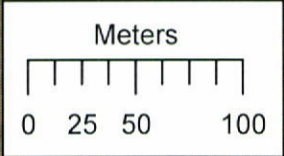
The implication of an area being listed as an SNA is that consent is required from Council for clearance by any means (including burning and spraying with herbicides) or over-planting. This does not normally prevent clearance to prevent shading of buildings, the maintenance of tracks and fences, or grazing. 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.

OTHER AREAS INSPECTED ON THE PROPERTY:

Other depleted areas of indigenous vegetation on the property were inspected but are not regarded as significant when assessed against the criteria on pages B18-B20 of the Timaru District Plan. Three small gullies on the western part of the property support dense stands of hawthorn. One small kahikatea tree and one totara tree are present in one gully. Two totara trees are present in another gully. Two of the gullies have considerable areas of exposed rock, though typical indigenous woody rockland plants are absent. An additional area of rockland is present on the northern scarp of the Downs, at the northwest corner of the property. Indigenous species present here are small mahoe bushes and (within the rocks) three species of fern: *Polystichum richardii*, *Asplenium hookerianum* and necklace fern. Barberry and gorse are also present. All these areas have some potential for restoration.

Failure of an area to meet the significance criteria does not necessarily mean that it is not important for nature conservation or the protection of indigenous biodiversity; it simply means that the area (as assessed at this time) does not meet the criteria in the Timaru District Plan. Such areas may have considerable potential value and, if protected and managed, may eventually become significant.

Bolderston Property
Waitui Downs
24660/221.01



1:3,500

TIMARU DISTRICT SNA SURVEY AREAS 724a, b, c, d, e and f

Area Name: Waitui Downs Treeland	Property: Bolderston property	
Ecological District: Geraldine	Nearest Locality: Geraldine	
AREA 724a: Location (central map ref.): J38: 691-795	Area Size (ha): 1.59	Altitude (m): 160
AREA 724b: Location (central map ref.): J38: 690-796	Area Size (ha): 0.15	Altitude (m): 160
AREA 724c: Location (central map ref.): J38: 688-797	Area Size (ha): 2.28	Altitude (m): 160
AREA 724d: Location (central map ref.): J38: 686-798	Area Size (ha): 0.51	Altitude (m): 160
AREA 724e: Location (central map ref.): J38: 691-798	Area Size (ha): 0.17	Altitude (m): 140
AREA 724f: Location (central map ref.): J37: 690-800	Area Size (ha): 0.12	Altitude (m): 140
Surveyors: Mike Harding and Mark Bolderston	Survey Time: 1 hour	Survey Date: 14-08-07

General Description:

These Areas of scattered trees are located on gently rolling hill country on the northeast side of the Geraldine Downs, between Kalaugher Road and Waitui Drive. They comprise remnant indigenous trees (treeland) in pasture.

Plant Communities:

All six areas are patches of scattered remnant trees (treeland) in pasture. These trees were inspected only briefly, mostly by viewing from a quad bike. Each area of treeland is described below.

Area 724a:

This Area consists of a relatively extensive treeland of mature trees of narrow-leaved lacebark and *Lophomyrtus obcordata*. Also present are *Streblus heterophyllus*, *Coprosma crassifolia*, lawyer and pohuehue. Mistletoe is present on *Lophomyrtus obcordata* trees.

Area 724b:

This small Area consists of several mature trees of narrow-leaved lacebark and *Lophomyrtus obcordata*.

Area 724c:

This large Area consists of an extensive treeland of scattered mature trees of totara and narrow-leaved lacebark. A single mature cabbage tree is also present.

Area 724d:

This Area consists of a relatively dense treeland of mature totara and narrow-leaved lacebark trees. Large clumps of mistletoe are present on the trees.

Area 724e:

This Area consists of a small patch of totara trees, comprising 6-8 trees.

Area 724f:

This small Area contains three large old kahikatea trees and one large old totara tree. These trees appear very old and senescent.

Notable Flora, Fauna and Habitats:

Important features of this area are the number and size of the remnant indigenous trees, the presence of cavities in the trunks of the older trees (that may provide favourable roost sites for long-tailed bat) and the location of the areas of treeland close to larger indigenous forest remnants (including Talbot Forest Scenic Reserve).

Notable Plant and Animal Pests:

Hawthorn is the most important plant pest present. Scattered hawthorn trees are present in some of the areas of treeland and denser stands of hawthorn are present in small gullies elsewhere on the property. The native smothering climber, pohuehue, is present but uncommon.

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

The boundaries of these Areas have been selected to include the main remnant indigenous trees. Though scattered, the trees in these areas collectively form a relatively large area of indigenous treeland. This treeland is part of a network of fauna habitat on the Geraldine Downs.

Condition and Management Issues:

Most trees within these areas are relatively healthy. Some older trees are mature and nearing senescence, notably those in Area 724f. Some tree trunks appear to be affected by the deer that are presently grazed on the property. In the long-term these areas of treeland will disappear as the trees progressively senesce and die, unless replacement trees become established.

Property Owner Comment:

The owners have only recently purchased the property. They value the remnant indigenous trees and are considering options for their better protection.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M	These areas of treeland are depleted/modified examples of the indigenous vegetation originally present in the ecological district.
Rarity	M	These areas provide some habitat for birds (e.g. kereru) and contain trees with cavities that may provide suitable roost sites for long-tailed bat (a nationally endangered species).
Diversity and pattern	L/M	Substantially depleted indigenous plant communities with much-reduced species diversity.
Distinctiveness/special features	M	The trees in these areas may form part of a regionally-important habitat for long-tailed bat.
Other Criteria		
Size/shape	M	These areas are mostly small, though collectively they comprise a relatively large area.
Connectivity	M/H	These areas are part of a network of fauna habitat on the Geraldine Downs and close to other areas of indigenous vegetation, providing ecologically-viable stepping stones of habitat for long-tailed bat and kereru.
Long-term Sustainability	L/M	Active management will be required to maintain the ecological values of these areas in the long-term.

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

Trees in these areas of treeland have been retained and informally protected by the landowners. The presence of the trees enhances the existing land use (grazing) by providing shelter and shade, though may limit the potential for farm development.

Discussion:

These six areas of treeland meet the District Plan criteria for Significant Natural Areas, primarily because they collectively provide important habitat for native birds and they have potential roost sites (trunk cavities) for long-tailed bat. Long-tailed bat have been recorded nearby in Talbot Forest Scenic Reserve and adjoining areas of habitat on the Geraldine Downs. Long-tailed bat is a nationally endangered species and the South Canterbury population is nationally significant.

Scientific names of species cited by common name

Common Name Scientific name

(* = naturalised species)

barberry*	<i>Berberis glaucocarpa</i>
broadleaf	<i>Griselinia littoralis</i>
cabbage tree/ti rakau	<i>Cordyline australis</i>
five-finger	<i>Pseudopanax arboreus</i>
gorse*	<i>Ulex europaeus</i>
hawthorn*	<i>Crataegus monogyna</i>
kahikatea/white pine	<i>Dacrycarpus dacrydioides</i>
kowhai	<i>Sophora microphylla</i>
lawyer	<i>Rubus schmidelioides</i>
lemonwood	<i>Pittosporum eugenioides</i>
mahoe/whiteywood	<i>Melicytus ramiflorus</i>
matai/black pine	<i>Prumnopitys taxifolia</i>
mistletoe	<i>Ileostylis micranthus</i>
narrow-leaved lacebark	<i>Hoheria angustifolia</i>
necklace fern	<i>Asplenium flabellifolium</i>
pohuehue	<i>Muehlenbeckia australis</i>
pokaka	<i>Elaeocarpus hookerianus</i>
totara	<i>Podocarpus totara</i>