

TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

MORRISON PROPERTY

DRAFT

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

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner:Peter Morrison
Valuation Reference:24660/226.00
Address:64 Tripp Street, 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)

DRAFT

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.

One area of indigenous treeland and one small area of depleted forest are present on the property. These 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 approximately 100 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 have been recorded nearby in Talbot Forest. The indigenous trees on the property are also likely to provide habitat for kereru/NZ pigeon (threat status: gradual decline).

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas in August 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
720g	Morrison Treeland	J38: 690-791	?	Podocarp-hardwood treeland
723c	Morrison Gully Remnant	J38: 692-792	?	Podocarp-hardwood forest

These SNAs are illustrated on the attached aerial photograph and described in greater detail on the Area Inspection Forms 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). Both SNAs will require some 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).

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.

Scientific names of species cited by common name

Common Name	Scientific name
(* = naturalised species)	
(* = planted species)	
blackberry*	<i>Rubus fruticosus</i>
broadleaf	<i>Griselinia littoralis</i>
five-finger	<i>Pseudopanax arboreus</i>
fuchsia	<i>Fuchsia excorticata</i>
gorse*	<i>Ulex europaeus</i>
kahikatea/white pine	<i>Dacrycarpus dacrydioides</i>
kowhai.....	<i>Sophora microphylla</i>
lawyer.....	<i>Rubus schmidelioides</i>
lemonwood.....	<i>Pittosporum eugeniioides</i>
mahoe/whiteywood	<i>Meliccytus ramiflorus</i>
male fern*	<i>Dryopteris filix-mas</i>
matai/black pine	<i>Prumnopitys taxifolia</i>
matipo/kohuhu	<i>Pittosporum tenuifolium</i>
mistletoe.....	<i>Ileostylis micranthus</i>
mountain beech*	<i>Nothofagus solandri</i>
narrow-leaved lacebark	<i>Hoheria angustifolia</i>
native jasmine	<i>Parsonsia heterophylla</i>
pohuehue.....	<i>Muehlenbeckia australis</i>
pokaka.....	<i>Elaeocarpus hookerianus</i>
prickly shield fern	<i>Polystichum vestitum</i>
silver birch*	<i>Betula pendula</i>
totara	<i>Podocarpus totara</i>

Morrison Property
24660 / 226.00

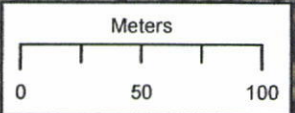
WAITUI DRIVE

720g

723c

TRIPP STREET

BRIDGE STREET



1:3,000

TIMARU DISTRICT SNA SURVEY

AREA 720g

Area Name: Morrison Treeland	Property: Peter Morrison
Location (central map reference): J38: 690-791	Nearest Locality: Geraldine
Ecological District: Geraldine	Area Size (ha): ? Altitude (m): 150
Surveyors: Mike Harding	Survey Time: 1 hour Survey Date: 07-08-07

General Description:

The Area lies in a small gully and adjacent slopes on the eastern side of the rolling hills of the Geraldine Downs.

Plant Communities:

This Area covers a number of scattered and clumped native trees (treeland) in pasture. This plant community is described below. Naturalized (exotic) species are indicated with an asterisk*. Species that appear to have been introduced (planted) are indicated with a hatch#.

This treeland is dominated by moderate-sized trees of totara and narrow-leaved lacebark. Trunk diameters (at breast height) of the totara trees mostly range from 40 to 70 cm. Trunk diameters of the narrow-leaved lacebark trees mostly range from 45 to 75 cm. Larger trees have trunk cavities that provide suitable roosts for birds and possibly bats.

Other trees present are two broadleaf trees, one pokaka tree (trunk diameter: 76 cm), one kahikatea (38 cm), two silver birch# and one mountain beech tree#.

Other species present are *Coprosma crassifolia*, *C. rotundifolia*, pohuehue, native jasmine, lawyer and mistletoe (on totara and narrow-leaved lacebark trees). Additional species present in the understorey of a small fenced area are lemonwood and seedlings of totara. Rushes (*Juncus* sp.*) and *Carex secta* are present along the small stream. Scattered small plants of gorse* are present in the pasture.

Birds/Fauna Observed:

Birds observed during this brief inspection were pukeko, paradise shelduck, mallard, spur-winged plover, little owl (in a cavity in the pokaka tree) and bellbird.

Notable Flora, Fauna and Habitats:

Notable features of this small remnant are the presence of podocarps (totara and kahikatea), the presence of a large pokaka tree, the habitat the area provides for birds and possibly bats (long-tailed bats have been recorded nearby in Talbot Forest) and its proximity to other indigenous forest remnants in the area which collectively provide important forest bird habitat.

Notable Plant and Animal Pests:

No significant plant or animal pests were observed during this brief inspection. The native climber pohuehue could smother individual trees if it became better established. Possums are likely to be present.

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

This treeland is unfenced (except for a very small patch) and is grazed as part of the surrounding paddock. The remnant trees adjoin scattered trees and patches of forest on adjoining properties. Importantly, the treeland is only one hundred metres or so from a relatively large area of remnant indigenous forest in Talbot Forest Scenic Reserve.

Condition and Management Issues:

The individual trees within this treeland are in relatively good condition. However, the understorey is mostly open, with only occasional shrubs present (e.g. *Coprosma crassifolia*). Eventually, the remnant trees will mature, senesce and die. The long-term future of the remnant will require the establishment of replacement trees. Fencing and removal of stock may allow some regeneration of understorey and canopy species, though removal of grazing would need to be followed by weed control, and regeneration of indigenous species would be hampered by the sward of pasture grasses. Control and management of the invasive native climber pohuehue may be beneficial.

Property Owner Comment:

Mr Morrison values the remnant trees and intends to retain them. He plans to control the scattered gorse.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M	A depleted example of indigenous forest that was originally present in the ecological district.
Rarity	M	The trees probably provide habitat for kereru (gradual decline).
Diversity and pattern	L/M	Species diversity is substantially reduced from that originally present at the site.
Distinctiveness/special features	M	The larger trees have trunk cavities that provide suitable roost sites for long-tailed bat (recorded nearby in Talbot Forest).
Other Criteria		
Size/shape	M	The area of treeland is relatively small, though it is compact and could be easily buffered or protected.
Connectivity	M/H	This area of treeland adjoins or lies close to several other indigenous forest remnants, including Talbot Forest Scenic Reserve. It is an important part of a network of fauna habitat on the Geraldine Downs, and provides a link between other remnants.
Long-term Sustainability	L/M	Some management will be required to maintain the ecological values of the Area in the long term.

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

This area of forest has been retained and informally protected by the landowner. The presence of the trees enhances the existing land use (grazing) by providing shelter and shade, though may limit the potential for farm development. It is partly visible from nearby houses and from Tripp Street. Active management will be required to maintain the ecological values of this area in the long-term.

Discussion:

This forest remnant meets the District Plan criteria for a Significant Natural Area. Important attributes are the presence of remnant podocarp trees (totara and kahikatea), the presence of a relatively large pokaka tree, the habitat the forest provides for fauna (kereru and possibly long-tailed bat) and the important role it plays as part of a network of fauna habitat on the Geraldine Downs.

TIMARU DISTRICT SNA SURVEY

AREA 723c

Area Name: Morrison Gully Remnant	Property: Peter Morrison
Location (central map reference): J38: 692-792	Nearest Locality: Geraldine
Ecological District: Geraldine	Area Size (ha): ? Altitude (m): 140
Surveyors: Mike Harding	Survey Time: ¼ hour Survey Date: 07-08-07

General Description:

The Area lies in a small gully on the eastern side of the rolling hills of the Geraldine Downs.

Plant Communities:

This very small area comprises one moderate-sized kahikatea tree emergent over an understorey of blackberry* and fuchsia, on a steep south-facing slope above the stream. It adjoins an area of indigenous vegetation on the adjacent property (Area 723b). Other species present in the understorey and alongside the stream are *Coprosma rotundifolia*, prickly shield fern and male fern*. Also present scrambling over the vegetation are the climbers pohuehue and native jasmine. Three tall narrow-leaved lacebark trees are present across the stream on the southern edge of the Area, on the edge of the pasture. (Naturalized (exotic) species are indicated with an asterisk*).

Notable Flora, Fauna and Habitats:

The kahikatea tree is notable.

Notable Plant and Animal Pests:

Blackberry is the most prominent plant pest present. A number of other exotic species are present elsewhere on this steep shady slope, mostly on the adjoining property.

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

This Area is connected to similar vegetation on the adjoining property. It is buffered by its location on a steep south-facing slope and by the stream at the base of the slope. It is unfenced, but not grazed.

Condition and Management Issues:

The kahikatea and narrow-leaved lacebark trees within this remnant are in relatively good condition. The understorey vegetation is in poorer condition, but does serve to buffer and protect the kahikatea tree. The indigenous vegetation will probably gradually improve (regenerate) if the Area is protected from intensive grazing. Control of some weeds, notably blackberry, would enhance natural regeneration.

Property Owner Comment:

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M	A depleted example of indigenous forest that was originally present in the ecological district.
Rarity	M	The trees probably provide habitat for kereru (gradual decline).
Diversity and pattern	L/M	Species diversity is substantially reduced from that originally present at the site.
Distinctiveness/special features	M	The trees may provide suitable roost sites for long-tailed bat (recorded nearby in Talbot Forest).
Other Criteria		
Size/shape	M	The area of treeland is relatively small, though it is compact, well buffered and protected.
Connectivity	M	This area of treeland adjoins another area of indigenous vegetation and is close to other remnants, including Talbot Forest Scenic Reserve. It is part of a network of fauna habitat on the Geraldine Downs.
Long-term Sustainability	M	The ecological values of this area are likely to persist in the long term with little active management.

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

This area of vegetation has been retained and informally protected by the landowner. It is located on a steep shady slope that is probably of little use for grazing or other farm development. Some management may be required to maintain the ecological values of this Area in the long-term.

Discussion:

This forest remnant meets the District Plan criteria for a Significant Natural Area. Important attributes are the presence of a kahikatea tree, the habitat the forest provides for fauna (kereru and possibly long-tailed bat) and the role it plays as part of a network of fauna habitat on the Geraldine Downs.