TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

HUTCHINS PROPERTY



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



TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner:Suzanne Hutchins Valuation Reference:24660/251.00

Location:.....On the northern 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 eastern edge of the Geraldine Ecological District, 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 patches of podocarp-hardwood forest and a few scattered indigenous trees are present on the property. The forests contain remnant and regenerating indigenous vegetation, including large kowhai and broadleaf trees, moderate-sized totara trees and smaller kahikatea/white pine and matai/black pine trees. Forest remnants on the property 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 approximately 2 km to the southeast. The smaller of the two forest remnants on the property is part of a larger remnant that lies mostly on an adjoining property.

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 forest on the property is also likely to provide habitat for kereru/NZ pigeon (threat status: gradual decline). Notable plant species present on the property are *Brachyglottis sciadophila* (gradual decline), the locally-uncommon small trees *Streblus heterophyllus* and *Coprosma areolata* and the remnant podocarp trees (totara, matai and kahikatea).

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas during May 2007. All parts of the property were visited. Two forest remnants on the property are regarded as significant when assessed against the District Plan criteria.

Area No.	Area Name	Central grid reference	Aprox. size(ha)	Vegetation/habitat type
207ь		J38: 673-799	0.13	Podocarp-hardwood forest
209		J37: 671-802	0.88	Podocarp-hardwood forest

These areas of indigenous vegetation and habitat that are identified as Significant Natural Areas (SNAs) are illustrated on the attached aerial photograph and described in greater detail on the Area Inspection Forms that are part of 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). The 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, or grazing. 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.

OTHER AREAS INSPECTED ON THE PROPERTY:

No other substantial areas of indigenous vegetation or habitat were observed on the property. However, two individual indigenous trees are noteworthy and deserve protection. A large cabbage tree adjacent to the pine plantation, in the gully just north of Area 207b, has a trunk diameter of 85 cm and has cavities that may provide suitable roost sites for bats. A large kowhai tree (viewed from a distance) is present on the edge of the scarp near the northern boundary of the property. These trees are likely to provide useful habitat for birds and maybe bats, and provide sources of seed for further indigenous forest regeneration.

AREA 207b

TIMARU DISTRICT SNA SURVEY

Area Name:

Location (central map reference): J38: 673-799

Ecological District: Geraldine **Surveyors:** Mike Harding

Property: Hutchins

Nearest Locality: Geraldine

Area Size (ha): 0.13 Survey Time: ½ hour Altitude (m): 210-220 Survey Date: 22-05-07

General Description:

The Area is located at the head of a small gully on a moderately-steep south-facing slope near the northern edge of the Geraldine Downs, on the north side of Downs Road just west of the junction of Sherratt Road.

Plant Communities:

The Area is part of a larger remnant of podocarp-hardwood forest that extends down the gully on an adjoining property. The part of the forest remnant on this property is described below. Naturalized (exotic) species are indicated with an asterisk*.

The forest is an open remnant comprising scattered canopy trees and an open understorey over pasture. The dominant canopy tree is totara. Other taller trees present are narrow-leaved lacebark, a single matai tree and a single matipo tree. The native climber, pohuehue, is prominent throughout.

Smaller understorey trees present are *Lophomyrtus obcordata*, mapou, shrubby mahoe, *Melicope simplex*, *Coprosma rotundifolia*, *C. crassifolia*, *Hypolepis ambigua* and elderberry*. Pohuehue and bush lawyer are present in the understorey.

Important ground-cover species present are pasture grasses, *Pellaea rotundifolia*, necklace fern, pennywort and foxglove*. Additional species present on the forest margin and/or around the small pond are soft rush*, Californian thistle* and dead gorse*.

Birds/Fauna Observed:

Indigenous birds observed during this brief visit were bellbird and fantail.

Notable Flora, Fauna and Habitats:

Important features of this area are the presence of remnant podocarps (totara and matai), the habitat the area provides for kereru (gradual decline) and possibly long-tailed bat (nationally endangered) and that the Area is part of a larger indigenous forest remnant. The presence of the small (man-made) pond adjacent to the forest is an interesting feature.

Notable Plant and Animal Pests:

Elderberry is the most important plant pest present, though the small elderberry bushes are well-browsed by stock. The native climber, pohuehue, also poses a threat. Other weeds, such as soft rush and thistles, are present but do not pose a significant threat to the indigenous forest. Animal pests were not surveyed, though possums are likely to be present.

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

This indigenous forest remnant is within a larger paddock that (at the time of the inspection) is grazed by sheep. The forest is unfenced, though is protected to some extent by its location on a damper south-facing slope. The forest remnant extends down the gully onto an adjoining property. This forest remnant is approximately 2 km from a relatively large area of remnant indigenous forest in Talbot Forest Scenic Reserve and less than one kilometre from an area of indigenous forest protected by a QEII Covenant. Other patches of indigenous forest and treeland are present nearby.

Condition and Management Issues:

The forest remnant is in relatively poor condition. The forest is open with few understorey species. 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, though effective control may be difficult to achieve.

Property Owner Comment:

This area provides useful shelter for stock. The area also serves as a domestic sewerage disposal zone.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes	
Representativeness M		A depleted example of the indigenous forest that was originally present in the ecological district.	
Rarity	M	The forest probably provides 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	Some larger trees have cavities that provide suitable roost sites for long-tailed bat (present nearby in Talbot Forest). The forest is part of a network of fauna habitat on the Geraldine Downs.	
Other Criteria			
Size/shape	M	The area of forest (including Area 207a on the adjoining property) is small, though could easily be buffered or protected.	
Connectivity	M/H	This area is part of a larger forest remnant and is relatively close to other areas of indigenous vegetation. This larger remnant provides an ecologically-viable stepping stone of habitat for long-tailed bat and kereru.	
Long-term Sustainability	L/M	Control of plant and animal pests, and encouragement of understorey regeneration, will be required for the maintenance of ecological values 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 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. It is also part of an attractive patch of forest that is clearly visible from nearby houses and distantly visible from Downs Road. Some 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 matai), the habitat the forest provides for fauna (kereru and possibly long-tailed bat) and that it is part of a larger area of indigenous forest that easily meets the District Plan criteria.

TIMARU DISTRICT SNA SURVEY

Area Name:

Location (central map reference): J37: 671-802

Ecological District: Geraldine

Surveyors: Mike Harding

Property: Hutchins

Nearest Locality: Geraldine

Area Size (ha): 0.88 Survey Time: 1½ hours Altitude (m): 190-220

Survey Date: 22-05-07

General Description:

The Area is located in and adjacent to a small gully on a moderately-steep south-facing slope near the northern edge of the Geraldine Downs, north of Downs Road just west of its junction with Sherratt Road.

Plant Communities:

The Area is a remnant of podocarp-hardwood forest within a plantation of pine trees. This plant community is described below. Naturalized (exotic) species are indicated with an asterisk*.

The forest canopy is dominated by kowhai, broadleaf and pohuehue. Other canopy species present are matai, totara, narrow-leaved lacebark, lancewood, cabbage tree and a single young kahikatea tree (with a trunk diameter of 37 cm). The part of the Area in the gully bottom is dominated by lower vegetation and climbers. Dominant species here are pohuehue, fuchsia and Coprosma rotundifolia.

The forest understorey is dominated by mahoe, shrubby mahoe, Melicope simplex, Coprosma rotundifolia, C. crassifolia, Lophomyrtus obcordata and Streblus heterophyllus. Other understorey species present are fuchsia, bush lawyer, mapou, Coprosma areolata and elderberry*. Present but rare are marbleleaf, white climbing rata, Brachyglottis sciadophila and mahoe-shrubby mahoe hybrids.

Important ground-cover species present are Asplenium hookerianum, Pellaea rotundifolia, pennywort, Polystichum richardii, necklace fern, bidibid and mahoe seedlings.

Other species present on the forest margin are Coprosma propinqua, C. rigida, Clematis spp., Calystegia tuguriorum, bindweed*, native jasmine, lawyer, mistletoe (on Coprosma crassifolia), soft rush*, black nightshade*, Blechnum fluviatile, B. penna-marina, Hypolepis ambigua, foxglove*, blackberry* and thistles*.

A smaller patch of forest is present within the pine plantation just south of the main area of forest. The forest here is similar to that in the main area, except that the native climbing pohuehue is much more dominant.

Birds/Fauna Observed:

Indigenous birds observed during this brief visit were bellbird, grey warbler and fantail.

Notable Flora, Fauna and Habitats:

Important features of this Area are the presence of remnant and regenerating podocarps (totara, matai and kahikatea), the presence of large kowhai trees, the presence of the scrambling daisy Brachyglottis sciadophila (threat status: gradual decline), the habitat the area provides for kereru (gradual decline) and possibly long-tailed bat (nationally endangered) (larger indigenous trees with cavities provide favourable roost sites for bats) and the presence of the locally-uncommon small trees Streblus heterophyllus and Coprosma areolata. The presence of a small outcrop of basalt boulders within the forest is an interesting feature.

Notable Plant and Animal Pests:

Bindweed and elderberry are the most important naturalized plant pests present. The native climber, pohuehue, also poses a significant threat as it can smother taller vegetation. Other weeds, such as black nightshade, blackberry, soft rush and thistles, are present on the forest margin but do not pose a significant threat to the indigenous forest. Animal pests were not surveyed, though possum droppings were observed.

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

This indigenous forest remnant is within a plantation of tall pine trees. The forest is fenced, though does appear to be grazed at least occasionally by cattle. It is protected by its location on a damper south-facing slope and sheltered by the surrounding pine forest. This forest remnant is approximately 2 km from a relatively large area of remnant indigenous forest in Talbot Forest Scenic Reserve and just over one kilometre from an area of indigenous forest protected by a QEII Covenant. Other patches of indigenous forest and treeland are present nearby.

Condition and Management Issues:

The forest remnant is in relatively good condition. The forest understorey is fairly open in places, though there is reasonably good regeneration of some of the small-leaved shrub and tree species. Fencing and removal of stock would assist regeneration of understorey and canopy species, though removal of grazing should be followed by weed control to help prevent the establishment of invasive weeds that are present in the area such as hawthorn, elderberry, sycamore and barberry. Control and management of the invasive native climber pohuehue may be beneficial, though effective control may be difficult to achieve.

Property Owner Comment:

This area provides useful shelter for stock. Reluctant to de-stock and fence areas of forest as the ungrazed sward of grass and weeds would create a fire risk.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes	
Representativeness	M/H	A good example of the indigenous forest that was originally present in the ecological district.	
Rarity	M/H	The forest supports a chronically threatened species, <i>Brachyglottis</i> sciadophila (gradual decline) and probably provides habitat for kereru (gradual decline).	
Diversity and pattern	M	Species diversity is reduced from that originally present at the site.	
Distinctiveness/special	M/H	The larger trees in the forest have cavities that provide suitable roost	
features		sites for long-tailed bat (present nearby in Talbot Forest). The forest is part of a network of fauna habitat on the Geraldine Downs.	
Other Criteria			
Size/shape	M	The area of forest is small, though it has a good shape and is well buffered by its location within a pine plantation.	
Connectivity	M/H	This area is relatively close to other areas of indigenous vegetation and provides an ecologically-viable stepping stone of habitat for long-tailed bat and kereru.	
Long-term Sustainability	M	Control of plant and animal pests, and encouragement of understorey regeneration, will probably be required for the maintenance of ecological values 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 landowners. It provides shelter and shade, though limits the potential for forestry and farm development. Some management will be required to maintain the ecological values of this area in the long-term.

Discussion:

This forest remnant easily meets the District Plan criteria for a Significant Natural Area. Important attributes are the presence of remnant and regenerating podocarp trees (totara, matai and kahikatea), the habitat the forest provides for fauna (kereru and possibly long-tailed bat) and the presence of the threatened plant *Brachyglottis sciadophila* and locally uncommon species.

Common Name	
(* = naturalised species)	
barberry* Rerberis alaucocarna	ļ
barherry* Rerheris glaucocarna	
i various summer management summer su	ļ
bidibid	i
bindweed*	
blackberry*Rubus fruticosus	
black nightshade*Solanum nigrum	
broadleaf Griselinia littoralis	
bush lawyer	
cabbage tree/ti rakau	
Californian thistle*	
elderberry*Sambucus nigra	- 1
five-fingerPseudopanax arboreus	
foxglove* Digitalis purpurea	
fuchsiaFuchsia excorticata	į
gorse*	
hawthorn*	
kahikatea/white pine	
kowhaiSophora microphylla	
lancewood	
lawyerRubus schmidelioides	
lemonwood	
mahoe/whiteywoodMelicytus ramiflorus	
mapouMyrsine australis	
marbleleaf/putaputaweta	
matai/black pine	
matipo/kohuhu	- {
mistletoe	
narrow-leaved lacebark	
native jasmine	İ
necklace fern	
pennywortHydrocotyle novae-zeelandiae	- 1
pohuehue	
pokakaElaeocarpus hookerianus	
shrubby mahoe	
soft rush*Juncus effusus	
sycamore*]
thistle*	ĺ
totaraPodocarpus totara	
white climbing rata Metrosideros diffusa	
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