TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owners: Ian and Sally Haugh

Valuation Reference: 24660/245.00

Location: In the head of a small gully on the crest of the Geraldine Downs,

beside Ribbonwood Road

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.

One small area of indigenous forest is present on the property. This is 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 1 km to the east. Other indigenous forest and treeland remnants are present nearby.

These areas of forest and treeland provide habitat for birds such as kereru/NZ pigeon (threat status: gradual decline) and may provide roost sites (though maybe only occasionally used) for long-tailed bat (threat status: nationally endangered). Long-tailed bat have been recorded nearby in Talbot Forest.

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas in August 2007. The area of indigenous forest on the property is regarded as a Significant Natural Area (SNA) when assessed against the District Plan criteria.

| Area No. | Area Name | Central grid | Aprox. | Vegetation/habitat type |
|----------|----------------------|--------------|----------|--------------------------|
| | | reference | size(ha) | |
| 721a | Haugh Forest Remnant | J38: 679-792 | 0.14 | Podocarp-hardwood forest |

This SNA is illustrated on the attached aerial photograph and described in greater detail in this document. Note that the boundaries of the SNA are indicative, rather than precise. This SNA meets the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19), though may require some management to be sustainable in the long term (criterion vii, page B19). The SNA is 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.



TIMARU DISTRICT SNA SURVEY

AREA 721a

Area Name: Haugh Forest Remnant

Location (central map reference): J38: 679-792

Ecological District: Geraldine

Surveyors: Mike Harding, Ian and Sally Haugh

Property: Ian and Sally Haugh

Nearest Locality: Geraldine

Area Size (ha): 0.14 Altitude (m): 200

Survey Time: 1 hour **Survey Date:** 14-08-07

General Description:

This Area lies in the head of a small gully on the crest of the rolling hills of the Geraldine Downs, on the west side of Ribbonwood Road.

Plant Communities:

This Area comprises a small patch of forest with remnant, regenerating and planted indigenous trees. This plant community is described below. Naturalized (exotic) species are indicated with an asterisk*. Introduced (planted) species are indicated with a hatch[#], although not all introduced species are listed.

The canopy of this small area of forest is dominated by narrow-leaved lacebark, lemonwood and lacebark*. Other canopy species present are pokaka, totara, matai, kowhai, mahoe, matipo, cabbage tree, mountain beech[#], lowland ribbonwood and pohuehue. Trunk diameters (at breast height) of the narrow-leaved lacebark trees range from 30 to 41 cm. The largest of the two pokaka trees has a trunk diameter of 37 cm. The matai tree has a trunk diameter of 32 cm.

The forest understorey is dominated in most places by mahoe. Other species commonly present are shrubby mahoe, Coprosma crassifolia, C. rotundifolia, C, propinqua, C. robusta, wineberry, Lophomyrtus obcordata, mistletoe, and saplings or seedlings of totara, kahikatea and matai.

Groundcover species present include hen and chickens fern, violet*, gossamer grass, bush rice grass, *Pellaea rotundifolia*, native jasmine, black nightshade* and a patch of lesser periwinkle*.

Occasionally present in the understorey are *Coprosma robusta* X *propinqua* hybrids, Darwin's barberry*, male fern*, kakabeak[#], kauri[#], horopito, lancewood, titoki[#], karaka[#], miro[#], silver fern[#], *Mahonia japonica**, bay laurel* seedlings, poroporo, prickly shield fern and hound's tongue fern.

Other species present on or near the forest margin are narrow-leaved mahoe[#], broadleaf, kanuka[#], bracken, scrub pohuehue, *Melicope simplex*, *Lophomyrtus bullata*[#], silver beech[#] and fierce lancewood[#].

Birds/Fauna Observed:

Indigenous birds observed during this brief inspection were grey warbler and bellbird. Kereru and fantail have been observed in the forest at other times.

Notable Flora, Fauna and Habitats:

Notable features of this patch of forest are the presence of podocarp trees (totara and matai), the presence of podocarp regeneration (saplings and seedlings), the diversity of species (aside from the obviously introduced species), the habitat the area provides for kereru (threat status: gradual decline), its location close to other areas of indigenous forest and treeland, and its contribution to the network of fauna habitat on the Geraldine Downs.

Notable Plant and Animal Pests:

A substantial number of naturalized and introduced species are present, most of which pose no significant threat to the ecological integrity of the forest. Species that may pose a threat are Darwin's barberry, bay laurel, lacebark and possibly *Mahonia japonica*. Of these species, lacebark is the most dominant. This appears to be *Hoheria sexstylosa* var. *ovata*, a species with a natural distribution confined to the northwest South Island. It would have been planted in the forest, or in nearby gardens, and since spread to become a dominant component of the forest, particularly in the eastern (roadside) part of the forest. Another *Hoheria*, which lacks the dense stellate hairs on the leaves and branchlets, is also present. This is possibly a hybrid between *Hoheria sexstylosa* and *Hoheria populnea* (also outside its natural distribution). Animal pests were not surveyed.

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

This area of forest is small and compact. It has a relatively good shape and is buffered to some extent by its position in a small gully head. It is bounded by the road on one boundary, a fenced paddock on one boundary and by lawns, gardens and a driveway on its other boundaries. It is relatively close to other areas of remnant indigenous vegetation and only approximately 1 km from the large and ecologically-important Talbot Forest Scenic Reserve. The surrounding area is mostly well vegetated with planted exotic and native species, which also provide useful habitat for native birds.

Condition and Management Issues:

This area of forest is in good condition. The forest canopy and understorey are largely unaffected by aggressive weeds, with the exception of lacebark which is dominant in parts of the forest canopy. This species, though native, has almost certainly been introduced to this area. It is unclear whether it will overwhelm species that are indigenous to the forest remnant and become more dominant. If so, some control of lacebark may be necessary to maintain the ecological integrity of the forest. Species that have been deliberately planted in the forest, such as mountain beech, miro and titoki, are unlikely to become dominant. Roadside trees will have to be trimmed periodically to prevent interference with overhead power lines.

Property Owner Comment:

The property owners value the forest remnant and have put considerable effort into managing it, notably ongoing weed control. They provide the following comments:

Thank you to Timaru District Council for the opportunity to have our small native forest area surveyed. As this corner was one of the reasons for buying this property six years ago, we are pleased to know that it will be regarded as an SNA. This has confirmed and renewed our interest in the future of the bush and energised our weed and pest control efforts.

<u>Birdlife</u>: Observing the birdlife around us is very important as a daily interest. Having a fantail nesting and raising three fledglings in 'our' forest was a highlight of a recent breeding season. We do feel that the forest corner needs to be looked on as part of the whole area: our own property and our neighbours. Pigeons and bellbirds in particular, but also waxeyes, fantails and grey warblers, feed on many of the other trees scattered around the rest of the garden, e.g. kowhai, tagasaste and tall cherry plum, while also using the forest to feed in, roost and nest.

We have, since the survey, removed the large box elder tree to allow better native regeneration of this corner. Many male ferns have been removed.

We would be interested to have further discussions and/or help in forming a management plan for this area of forest.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

| Primary Criteria | Rank | Notes |
|----------------------------------|------|--|
| Representativeness | М/Н | A good example of the indigenous forest that is typical of the ecological district, containing a number of species that are representative of the original forests of the district. |
| Rarity | M | Provides habitat for a threatened species: kereru (gradual decline). |
| Diversity and pattern | M | A relatively diverse remnant for it size, though the diversity of naturally-occurring species is probably reduced from that originally present. |
| Distinctiveness/special features | M | May provide some habitat (e.g. roost sites) for long-tailed bat (a 'nationally endangered' species). Bats have been recorded nearby in Talbot Forest. The presence of totara, matai and kahikatea (including young plants) is a notable feature. |
| Other Criteria | | |
| Size/shape | M | A small area of forest, though with a good shape and well buffered. |
| Connectivity M | | A useful part of the network of fauna habitat on the Geraldine Downs. |
| Long-term Sustainability | M | The ecological values of the forest will probably persist in the long term with minimal management. |

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

This patch of forest has been informally protected and carefully managed by the landowners. It adds considerable amenity value to the property, though limits the potential for land development on that part of the property.

Discussion:

This Area meets the District Plan criteria for a Significant Natural Area. Its important attributes are the presence of podocarp trees (totara and matai), the presence of podocarp regeneration (saplings and seedlings), the diversity of species (aside from the obviously introduced species), the habitat the area provides for kereru (threat status: gradual decline), its location close to other areas of indigenous forest and treeland, and its contribution to the network of fauna habitat on the Geraldine Downs.

| Scientific names of species cited by common name | | | | |
|--|---|--|--|--|
| Common Name | Scientific name | | | |
| (* = naturalised species; # = planted species) | | | | |
| bay laurel* | | | | |
| black nightshade* | | | | |
| box elder# | | | | |
| bracken | | | | |
| broadleaf | | | | |
| bush rice grass | | | | |
| cabbage tree/ti rakau | | | | |
| Darwin's barberry* | Berberis darwinii | | | |
| fierce lancewood* | | | | |
| five-finger | | | | |
| hen and chickens fern | | | | |
| horopito/pepperwood | | | | |
| hound's tongue fern | | | | |
| kahikatea/white pine | | | | |
| kakabeak [#] | | | | |
| kanuka# | | | | |
| karaka [#] | | | | |
| kauri [#] | | | | |
| kowhai | Sophora microphylla | | | |
| lacebark* | | | | |
| lancewood | | | | |
| lemonwood | Pittosporum eugenioides | | | |
| lesser periwinkle* | | | | |
| lowland ribbonwood | | | | |
| mahoe/whiteywood | Melicytus ramiflorus | | | |
| male fern* | | | | |
| matai/black pine | | | | |
| matipo/kohuhu | | | | |
| miro* | | | | |
| mistletoe | Heostylis micranthus | | | |
| mountain beech# | Nothofagus solandri var. cliffortioides | | | |
| narrow-leaved lacebark | Hoheria angustifolia | | | |
| narrow-leaved mahoe# | | | | |
| native jasmine | 1 | | | |
| pohuehue | | | | |
| pokaka | • | | | |
| poroporo | | | | |
| prickly shield fern | | | | |
| scrub pohuehue | | | | |
| shrubby mahoe | | | | |
| silver beech" | Noinojagus menziesii Cuathaa daalhata | | | |
| silver fern/ponga [#] | Cyainea aeaibaia | | | |
| titoki [#] | | | | |
| totara | | | | |
| violet* | | | | |
| wineberry | Arisiolella serrata | | | |