

# TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

## PROPERTY REPORT

### PROPERTY DETAILS:

**Owners:** ..... Rhys E Taylor and D Anne Griffiths  
**Valuation Reference:** ..... 24660/317.02  
**Address:** ..... 161 Downs Road, Geraldine  
**Location:** ..... On a southwest-facing slope of a small valley on the rolling hills 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 at the eastern edge of the Geraldine Ecological District, on the 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 regenerating podocarp-hardwood forest is present on the property. The canopy of this forest remnant is presently dominated by hawthorn, though it contains a relatively diverse range of indigenous species including one threatened plant species (*Brachyglottis sciadophila*) and two locally uncommon species. This area of forest is part of a more extensive collection of scattered patches of forest and treeland on the Geraldine Downs that provide important habitat for birds and possibly for long-tailed bat (a 'nationally endangered' species). Bats have been recorded in Talbot Forest and in the Te Moana valley.

### SIGNIFICANT AREAS ON THE PROPERTY:

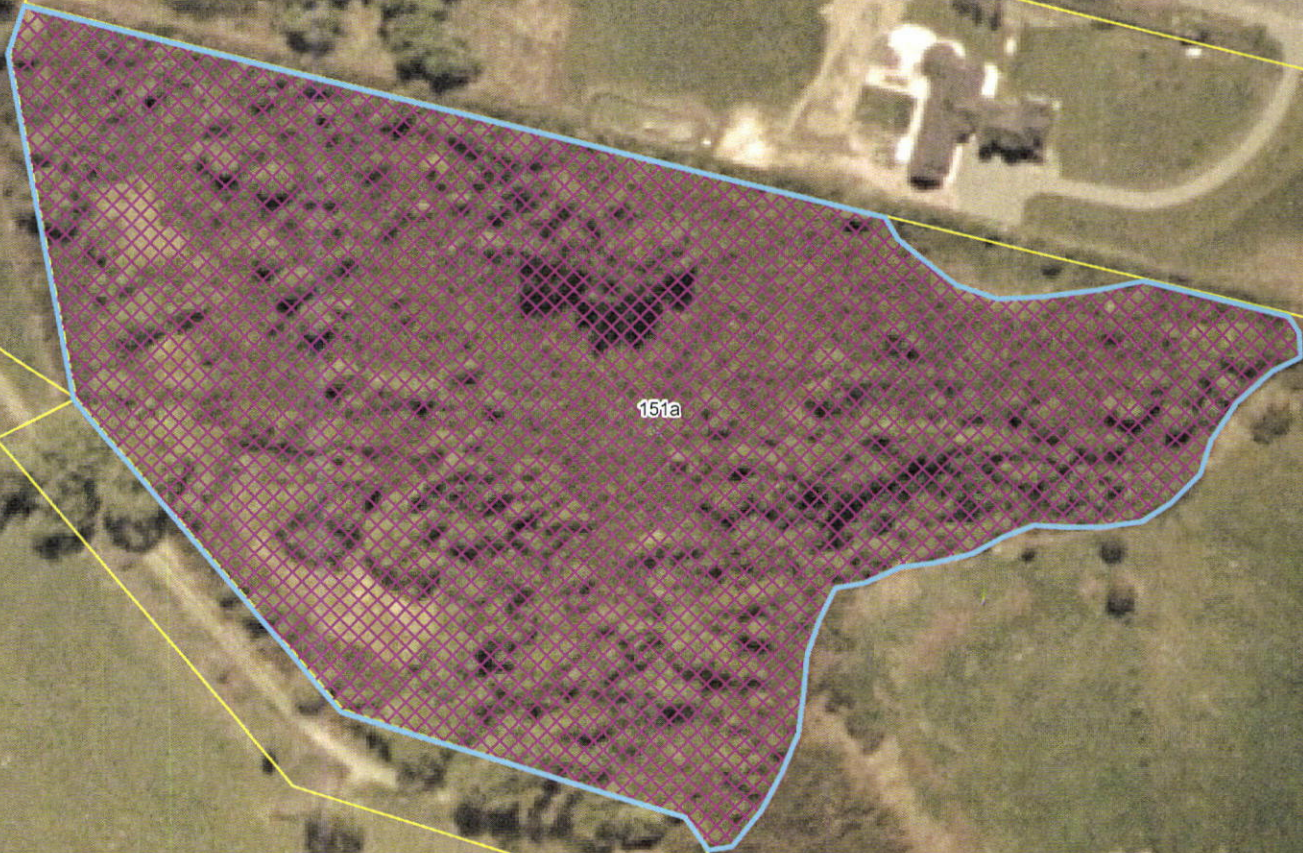
The property was surveyed as part of the District-wide survey of Significant Natural Areas during September 2007. One area of regenerating forest on the property is regarded as a Significant Natural Area (SNA) when assessed against the District Plan criteria.

Area No.	Area Name	Central grid reference	Aprox. size (ha)	Vegetation/habitat type
151a	Taylor/Griffiths regenerating forest	J38: 673-789	3.03	Regenerating podocarp-hardwood forest

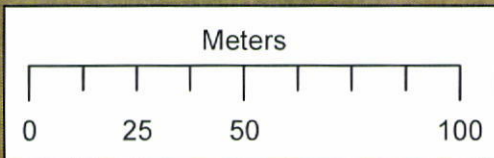
This SNA is illustrated on the attached aerial photograph and described in greater detail in this document. Note that the boundaries of the SNA are indicative, rather than precise. This SNA meets the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) and is considered to be 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 include 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.

Taylor-Griffiths  
24660/317.02



151a



1:1,750

# TIMARU DISTRICT SNA SURVEY

AREA 151a

**Area Name:** Taylor/Griffiths Regenerating Forest  
**Location (central map reference):** J38: 673-789  
**Ecological District:** Geraldine  
**Surveyors:** Mike Harding, Rhys Taylor, Anne Griffiths

**Property:** Rhys Taylor and Anne Griffiths  
**Nearest Locality:** Geraldine  
**Area Size (ha):** 3.03      **Altitude (m):** 175-210  
**Survey Time:** 2 hours      **Survey Date:** 15-09-07

## General Description:

This area of regenerating vegetation lies on a moderately steep southwest-facing slope of a small valley on the rolling hills of the Geraldine Downs.

## Plant Communities:

The site supports low forest and scrub dominated by exotic species, but with advanced regeneration of indigenous woody species, including podocarp (totara and kahikatea) seedlings in the understorey. Crack willow trees dominate the canopy along the stream. These plant communities are described separately below. Naturalized (exotic) species are indicated with an asterisk\*.

### Slope forest:

The canopy of this low-stature forest is dominated by hawthorn\* and the climbers pohuehue and native jasmine. Occasionally present in or emergent above this canopy are fuchsia, five-finger, wineberry and mahoe.

Lower-stature forest and scrub on the forest margins is dominated by gorse\* and blackberry\*.

Important understorey species are mahoe and lemonwood. Other species present in the understorey are fuchsia, matipo, pate, *Coprosma rotundifolia*, *C. crassifolia*, *C. areolata*, *C. parviflora* (sp. 't'), *C. rubra*, *C. robusta*, five-finger, shrubby mahoe, cabbage tree, marbleleaf, *Lophomyrtus obcordata*, lancewood, broadleaf, Darwin's barberry\*, cherry plum\*, elderberry\*, spindle tree\*, broom\*, bush lawyer, native jasmine and *Clematis marata*.

Groundcover species present are prickly shield fern, *Blechnum fluviatile*, *B. penna-marina*, hound's tongue fern, *Asplenium appendiculatum*, *A. hookerianum*, *A. richardii*, necklace fern, male fern\*, stinking iris\*, violet\*, bidibid, pennywort, *Cardamine* sp. and seedlings of totara and, nearer the valley bottom, kahikatea. Additional species present on or near the forest margin are *Coprosma propinqua*, *C. propinqua* x *C. robusta*, koromiko and poroporo. A large number of locally-sourced native tree seedlings have been planted by the property owners on the forest margins and in adjacent gorse scrub.

Several individual and one patch of pine\* trees are emergent in the northern part of the forest/scrub.

### Valley forest:

The lower part of the site along the small stream is dominated by large crack willow\* trees. Blackberry\* is dominant in the understorey and on the forest margin. Other species present in this part of the forest are elderberry\*, bracken, hawthorn\*, apple\*, pate, *Coprosma propinqua*, *C. propinqua* x *C. robusta*, matipo, lemonwood, cabbage tree, Himalayan honeysuckle\*, black nightshade\*, foxglove\*, prickly shield fern, *Blechnum minus*, male fern\*, creeping buttercup\*, pennywort and seedlings of totara and kahikatea.

Additional indigenous species recorded at the site by Colin Meurk in 2003 are *Clematis foetida*, *Hypolepis ambigua*, kaikomako, lawyer, *Brachyglottis sciadophila* (previously *Senecio sciadophilus*) and *Uncinia* spp.

## Birds/Fauna Observed:

Native birds observed during this brief inspection were bellbird and fantail. A number of other native birds have been observed on the property.

## Notable Flora, Fauna and Habitats:

Notable features of this Area are the presence of the threatened scrambling daisy *Brachyglottis sciadophila* (threat status: gradual decline), the presence of podocarp (totara and kahikatea) seedlings, the size of the area of vegetation and its location near to important indigenous forest remnants on the Geraldine Downs. The presence of *Blechnum minus* and *Coprosma rubra* (relatively uncommon species in the Geraldine Ecological District), the willow trees (which provide habitat for birds such as kereru and possibly provide roost sites for bats), and the presence of a stream and potential wetland habitat are also notable.

### Notable Plant and Animal Pests:

Hawthorn, crack willow, gorse and blackberry are the most dominant plant pests present. However, at this site hawthorn and crack willow are providing a favourable canopy for an understorey of predominantly indigenous species. Gorse is providing an environment that is suitable for the establishment of seedlings of indigenous plants. The property owners are hastening the establishment of indigenous vegetation by planting seedlings of indigenous species within the gorse scrub. Of the other plant pests present, Darwin's barberry, spindle tree, cherry plum, stinking iris, elderberry and violet pose the greatest threat. Animal pests were not surveyed, though possums are likely to be at least occasionally present.

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

The site is fenced and not grazed by domestic stock. The core area, where the understorey of native species is most diverse, is buffered on most margins by dense gorse and blackberry and on the lower margin by the stream and willow trees. Most of the site is buffered to some extent by its location on a damper southwest-facing slope. The site is only approximately 200 m from an important indigenous forest remnant on an adjoining property and is one of a number of areas of vegetation on the Geraldine Downs that collectively provide important forest bird habitat.

### Condition and Management Issues:

This area of vegetation does not strictly meet the definition of indigenous vegetation that has been adopted for this project. However, the dominance of exotic species in the canopy belies the dominance of indigenous species in the understorey. The understorey has a diverse range of indigenous species, including a number of species that are representative of the forest canopy that was originally present, including totara and kahikatea. While presently dominant, the exotic canopy species could be managed to retain and enhance the indigenous species understorey. The eventual removal of hawthorn, crack willow and other easily-spread exotic plants is desirable. Continued planting of indigenous species in and adjacent to the existing vegetation is also very worthwhile.

### Property Owner Comment:

The property owners value the area of vegetation, are committed to its protection and have put considerable effort into managing the area to encourage the eventual restoration of indigenous forest. They have arranged botanical surveys of the area, prepared a management statement, fenced boundaries and planted hundreds of locally-sourced seedlings of indigenous species.

### ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M	An example of early-stage regenerating indigenous forest, still dominated by exotics but with a healthy understorey of indigenous species, including podocarp seedlings.
Rarity	M	Supports <i>Brachyglottis sciadophila</i> (threat status: gradual decline) and two locally uncommon species ( <i>Blechnum minus</i> and <i>Coprosma rubra</i> ).
Diversity and pattern	L/M	Species diversity is substantially reduced from that originally present, though there is a relatively diverse understorey and two main habitats are present (hill-slope and valley floor).
Distinctiveness/special features	L/M	Provides habitat for kereru and other forest birds.
Other Criteria		
Size/shape	M/H	A moderate-sized area with a good shape and buffering, though only a small part of the area is presently dominated by indigenous species.
Connectivity	M	Part of a network of fauna habitat on the Geraldine Downs.
Long-term Sustainability	M	Conservation management (primarily plant pest control) will be required to maintain and improve the existing ecological values of the site.

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

This area of vegetation has been informally protected by the landowners. It adds amenity value to the property. The site has limited potential for farm or residential development. While the presence and dominance of exotic species is an important consideration, the property owners are committed to the restoration of indigenous vegetation to the site.

**Discussion:**

This Area does not strictly meet the definition of indigenous vegetation adopted for this project. However, it contains a good range of indigenous species, makes a useful contribution to fauna habitat in the area and has good potential. It therefore meets the District Plan criteria for a Significant Natural Area. Its main attributes are the presence of the threatened scrambling daisy *Brachyglottis sciadophila* (threat status: gradual decline), the presence of podocarp (totara and kahikatea) seedlings, the size of the area of vegetation and its location near to important indigenous forest remnants on the Geraldine Downs.

## Scientific names of species cited by common name

Common Name .....	Scientific name
(* = naturalised species)	
apple*	<i>Malus domestica</i>
bidibid	<i>Acaena</i> sp.
blackberry*	<i>Rubus fruticosus</i>
black nightshade*	<i>Solanum nigrum</i>
bracken	<i>Pteridium esculentum</i>
broadleaf	<i>Griselinia littoralis</i>
broom*	<i>Cytisus scoparius</i>
bush lawyer	<i>Rubus cissoides</i>
cabbage tree/ti rakau	<i>Cordyline australis</i>
cherry plum*	<i>Prunus cerasifera</i>
crack willow*	<i>Salix fragilis</i>
creeping buttercup*	<i>Ranunculus repens</i>
Darwin's barberry*	<i>Berberis darwinii</i>
elderberry*	<i>Sambucus nigra</i>
five-finger	<i>Pseudopanax arboreus</i>
foxglove*	<i>Digitalis purpurea</i>
fuchsia	<i>Fuchsia excorticata</i>
gorse*	<i>Ulex europaeus</i>
hawthorn*	<i>Crataegus monogyna</i>
Himalayan honeysuckle*	<i>Leycesteria formosa</i>
hound's tongue fern	<i>Microsorium pustulatum</i>
kahikatea/white pine	<i>Dacrycarpus dacrydioides</i>
kaikomako	<i>Pennantia corymbosa</i>
koromiko	<i>Hebe salicifolia</i>
kowhai	<i>Sophora microphylla</i>
lancewood	<i>Pseudopanax crassifolius</i>
lawyer	<i>Rubus schmidelioides</i>
lemonwood	<i>Pittosporum eugenioides</i>
mahoe/whiteywood	<i>Melicytus ramiflorus</i>
male fern*	<i>Dryopteris filix-mas</i>
marbleleaf/putaputaweta	<i>Carpodetus serratus</i>
matai/black pine	<i>Prumnopitys taxifolia</i>
matipo/kohuhu	<i>Pittosporum tenuifolium</i>
narrow-leaved lacebark	<i>Hoheria angustifolia</i>
native jasmine	<i>Parsonsia</i> sp.
necklace fern	<i>Asplenium flabellifolium</i>
pate	<i>Schefflera digitata</i>
pennywort	<i>Hydrocotyle</i> sp.
pohuehue	<i>Muehlenbeckia australis</i>
pokaka	<i>Elaeocarpus hookerianus</i>
poroporo	<i>Solanum laciniatum</i>
prickly shield fern	<i>Polystichum vestitum</i>
shrubby mahoe	<i>Melicytus micranthus</i>
spindle tree*	<i>Euonymus europaeus</i>
stinking iris*	<i>Iris foetidissima</i>
totara	<i>Podocarpus totara</i>
violet*	<i>Viola odorata</i>
wineberry	<i>Aristotelia serrata</i>