TIMARU DISTRICT

SIGNIFICANT NATURAL AREAS SURVEY

PATRICK PROPERTY



Report prepared for the Timaru District Council by Mike Harding May 2009

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: NDW Patrick **Valuation Reference:** 24670/156.00

Address: Gapes Valley, 21 RD, Geraldine

country between Slacks Valley and Pleasant Valley.

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 in the Geraldine Ecological District, on the rolling hill country east of Waitohi Hill (and just east of the Orari Ecological District). 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 large and several smaller areas of kanuka forest are present on the property. These areas of forest are part of a network of scattered patches of indigenous forest on the east side Waitohi Hill. Collectively these areas provide important habitat for birds and possibly for long-tailed bat (a 'nationally endangered' species). Bats have been recorded nearby 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 May 2009. The larger area of kanuka 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 |
|-------------|-----------------------|---------------------------|------------------------|-------------------------|
| 217 | Patrick kanuka forest | J38: 628-774 | 1.2 | kanuka 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 appears 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, weed control or removal of non-indigenous species such as sycamore. 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. It is expected that SNAs will eventually be listed in the District Plan by way of a notified plan change.

OTHER AREAS INSPECTED ON THE PROPERTY:

Other smaller areas of kanuka forest and wetland on the property were inspected. These areas have some value as indigenous vegetation and as habitat for birds, but are too small and modified to meet the significance criteria in the Timaru District Plan. Failure of these areas to meet the significance criteria does not mean that they are not important for nature conservation or the protection of indigenous biodiversity; it simply means that the areas (as assessed at this time) do not meet the criteria in the Timaru District Plan.

| Scientific names of species cite | es of species cited by common name in this report | | | | | |
|---|---|--|--|--|--|--|
| (Note: this is not a complete species lis | s is not a complete species list; it is a list only of species cited by common name in this report) | | | | | |
| Common Name | | | | | | |
| bidibid | | | | | | |
| black nightshade* | | | | | | |
| broadleaf | | | | | | |
| bush lawyer | | | | | | |
| cabbage tree/ti rakau | | | | | | |
| elderberry* | Sambucus nigra | | | | | |
| five-finger | Pseudopanax arboreus | | | | | |
| foxgiove* | Digitalis purpurea | | | | | |
| fuchsia | Fuchsia excorticata | | | | | |
| hawthorn* | Crataegus monogyna | | | | | |
| hen and chickens ferm | Asplenium bulbiferum | | | | | |
| Himalayan honeysuckle* | | | | | | |
| kahikatea/white pine | | | | | | |
| kanuka | | | | | | |
| kowhai | Sophora microphylla | | | | | |
| lemonwood | Pittosporum eugenioides | | | | | |
| mahoe/whiteywood | Melicytus ramiflorus | | | | | |
| mapou | | | | | | |
| matai/black pine | Prumnopitys taxifolia | | | | | |
| matipo/kohuhu | Pittosporum tenuifolium | | | | | |
| narrow-leaved lacebark | Hoheria angustifolia | | | | | |
| native jasmine | Parsonsia sp. | | | | | |
| | Asplenium flabellifolium | | | | | |
| | Muehlenbeckia australis | | | | | |
| | Elaeocarpus hookerianus | | | | | |
| rowan* | | | | | | |
| sycamore* | | | | | | |
| totara | | | | | | |



TIMARU DISTRICT SNA SURVEY

AREA 217

Area Name: Patrick Kanuka Forest

Location (central map reference): J38: 628-774

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

Property: Nigel Patrick

Nearest Locality: Gapes Valley

Area Size (ha): 1.2 Survey Time: 1 hour Altitude (m): 160-200 Survey Date: 01-05-09

General Description:

This SNA lies on a moderately steep southwest-facing slope in a gully on the rolling hill country between Slacks Valley and Pleasant Valley.

Plant Communities:

Kanuka forest is the main plant community present. This plant community is described below. Naturalized (exotic) species are indicated with an asterisk*.

The forest canopy is dominated by tall kanuka. Trunk diameters (at breast height) of the larger kanuka trees range between 30 and 40 cm. Other canopy or sub-canopy species are pohuehue, fuchsia and mahoe.

The forest understorey is dominated by mahoe. Other understorey species present are *Coprosma propinqua*, *Coprosma tayloriae*, *Coprosma rhamnoides*, matipo, mapou and occasional saplings of sycamore*, elderberry*, rowan* and hawthorn*.

The ground-cover is sparse. Species commonly present are hen and chickens fern and seedlings of mahoe. Other species present are *Blechnum penna-marina*, *Blechnum fluviatile*, *Polystichum richardii*, necklace fern, bidibid, foxglove*, black nightshade* and seedlings of pohuehue and native jasmine.

Additional species present at the forest margin are cabbage tree, bush lawyer, Himalayan honeysuckle* and the fern *Hypolepis ambigua*.

Birds/Fauna Observed:

Native birds observed during this brief survey were bellbird, fantail and silvereye.

Notable Flora, Fauna and Habitats:

Important features of this area are the habitat it provides for forest birds, the density of the forest understorey and its location near other areas of indigenous forest.

Notable Plant and Animal Pests:

Sycamore, rowan and hawthorn are the most important plant pests present. Other naturalised plants at the site do not pose a significant threat to the forest. Animal pests were not surveyed.

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

This area of kanuka forest is fenced from grazing animals. It is buffered on two sides by plantation pine forest and lies near to two other smaller patches of kanuka forest.

Condition and Management Issues:

This regenerating forest is in good condition. The forest canopy is intact and the understorey supports dense regenerating mahoe. The presence of invasive woody weeds (sycamore, rowan and hawthorn), though relatively minor, is the main management issue.

Property Owner Comment:

Mr Patrick has fenced the forest from grazing and supports its protection. He intends to harvest the adjacent pine plantations and to re-route the farm track closer to the spur crest. These actions will not affect the ecological integrity of the SNA.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

| Primary Criteria Rank Representativeness M Rarity L/M | | Notes A good example of regenerating indigenous forest, typical of the ecological district. Provides potential habitat for an 'at risk' bird species that is present in the area: rifleman (declining). | | | | | |
|---|---|---|--|--|----------------------------------|---|--|
| | | | | | Diversity and pattern | M | More diverse than most other areas of kanuka forest in the vicinity. |
| | | | | | Distinctiveness/special features | L | , |
| Other Criteria | | | | | | | |
| Size/shape | M | A small area, but with a good shape and well buffered and protected. | | | | | |
| Connectivity | M | Part of a network of forest bird habitat in the area. | | | | | |
| Long-term Sustainability | M | Some weed and pest control will probably be required to sustain 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 SNA has been informally protected by the landowner, through fencing and removal of grazing. It is in relatively good condition compared with most other stands of kanuka in the area. Seed sources of original canopy species (such as totara, broadleaf, lemonwood, five-finger etc.) are present nearby and the values of the forest will continue to improve under the existing management.

Discussion:

This area just meets the District Plan criteria for a Significant Natural Area. Important features of the area are the habitat it provides for forest birds, the density of the forest understorey and its location near other areas of indigenous forest.