

<b>Significant Natural Area Assessment</b>			
Project No: 11001/040	Property Name: <i>Gibbston Valley Station</i>	Ecologists: <i>Glenn Davis &amp; Rebecca Lawrence</i>	
	Site Name: <i>Gibbston Valley SNA A</i>	Date: <i>12<sup>th</sup> October 2012</i>	
Survey Undertaken By: <i>Glenn Davis, Ralph Henderson &amp; Rebecca Lawrence.</i>		Waypoint No (mid-point of survey area): <i>See attached plan for location.</i>	
LENZ Unit: <i>N4.1d and N5.1c</i>		Photo No.(s): <i>See attached.</i>	
Ecological District: <i>Remarkables</i>			
Topography: <i>Gully slope and valley bottom.</i>	Slope: <i>Steep</i>	Altitude: <i>380 masl</i>	Aspect: <i>South</i>
Threatened Environment Status: <i>Chronically Threatened &amp; Acutely Threatened</i>		Area Size (ha): <i>4.71</i>	
Representativeness: LENZ unit N4.1d is understood to have originally supported shrubland communities and unit N5.1c is thought to have originally supported grassland. The indigenous plant assemblage found on the site is representative of the original environment albeit the area does have a woody weed component including briar.			
Are there threatened species expected/identified in the survey area? If so, list species and threat status.			
Threatened Species		Threat Status	
<i>Falco novaezealandiae</i> "eastern" (eastern NZ Falcon)		At Risk - Recovering	
Provide onsite description of vegetation Vegetation type: the grey shrubland is largely dominated by matagouri ( <i>Discaria toumatou</i> ) and <i>Coprosma propinqua</i> , but also includes populations of <i>Olearia</i> spp. and <i>Muehlenbeckia complexa</i> . Briar ( <i>Rosa rubiginosa</i> ) is also present to a varying degree within the shrubland community.			
Degree of Modification: The area is modified given the population of briar and some individual wilding pine specimens, but the native cover particularly of matagouri and <i>Coprosma propinqua</i> is just as significant and the dominant cover.			
Provide onsite description of fauna habitat: The shrubland will provide significant habitat for a variety of passerines, which support the eastern falcon. The shrubland is also expected to support common species of lizards (e.g. McCann's skink and Common skink), as well as possibly the Cromwell gecko, Otago/Southland large gecko (Western Otago form) and the Southern mini gecko. The shrubland will also attract a range of indigenous invertebrates given the presence of <i>Olearia</i> spp.			

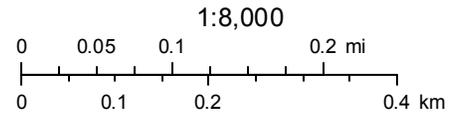
<p>Threats to vegetation and flora/fauna species? (Weeds, predators, current management practices):</p> <p>The greatest risk to this vegetation and habitat are inadvertent fires and the invasion of exotic weeds, in particular, briar and wilding pines.</p>
<p>Rarity:</p> <p>The threatened environment classification identifies the N4.1d and N5.1c environments to have, respectively, 18.6 % and 2.7 % indigenous vegetation cover remaining, and 2.3 % and 0.8 % formally protected.</p>
<p>Area Size and Shape (degree to which the area may be or is becoming self-sustaining):</p> <p>The area is self-sustaining but could be assisted by the control of briar and wilding pines.</p>
<p>Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?):</p> <p>The shrubland will contain a diverse range of grey shrubland species including plant and invertebrate species.</p>
<p>Distinctiveness/special ecological characteristics (unusual veg. &amp; landform features, distribution limits?):</p> <p>The vegetation is a good example of indigenous shrubland communities situated adjacent to the Kawarau River. Much of the vegetation on the lower slopes of the Kawarau Gorge is now dominated by briar or thyme, therefore indigenous cover within this area is locally distinctive.</p>
<p>Connectivity (how is the site connected to surrounding communities/areas?):</p> <p>This SNA A area is connected to shrubland and grassland further up the slope towards Coal Pit Saddle, Mt Rosa and Mt Edward, and tussock grassland at higher elevations.</p>
<p>Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?):</p> <p>Under the current management the shrubland is expected to be self-sustaining, although weed control, especially for briar, would be greatly beneficial to this SNA area.</p>
<p>Recommendation (Accept/Decline):</p> <p>While the grey shrubland lacks the diversity of the original vegetation cover along the Kawarau River, given the size and number of plant species surviving, despite the presence of exotic weeds, the area provides a sustainable area of indigenous vegetation that is chronically threatened.</p> <p>Based on the above considerations we recommend this area for inclusion as an area of Significant Indigenous Vegetation and Fauna Habitat.</p>

Figure 1: The area of potential significance - Gibbston Valley SNA A - F40A



October 6, 2014

- Proposed Significant Natural Area
- Parcels
- Proposed Significant Natural Area



Please note the area shown is indicative and only for discussion purposes.



**Figure 2:** A photographic representation of the potential area of significance, i.e. *Gibbston Valley SNA A*, on the Gibbston Valley Station property.