



<b>Significant Natural Area Assessment</b>			
Project No: <i>11001/001</i>	Property Name: <i>Loche Linnhe</i> Site Name: <i>Loche Linnhe SNA C</i>	Ecologist: <i>Glenn Davis and Neill Simpson</i> Date: <i>7 September 2010</i>	
Survey Undertaken By: <i>Glenn Davis, Neill Simpson and Ralph Henderson</i>		Waypoint No (mid-point of survey area): <i>E: 217 7713</i> <i>N: 554 3778</i>	
LENZ Unit: <i>Q2.2a</i> Ecological District: <i>Lakes Ecological District</i>		Photo No.(s): <i>See below.</i>	
Topography: <i>Riparian and hillslope.</i>	Slope: <i>Variable.</i>	Altitude: <i>300 - 860</i>	Aspect: <i>Range of aspects.</i>
Threatened Environment Status: <i>Critically underprotected</i>		Area Size (ha): <i>93.21</i>	
Representativeness: <i>Beech Forest</i> – beech forest is highly representative of the environment and would have covered much of the lower slopes of the lake faces of the Remarkables prior to human settlement.			
Are there threatened species expected/identified in the survey area? If so, list species and threat status.			
Threatened Species		Threat Status	
<i>Alepis flavida</i>		<i>At Risk - Declining</i>	
Provide onsite description of vegetation:  Vegetation type: <i>Beech forest.</i>  Canopy: <i>Beech forest</i> – dominated by mountain beech ( <i>Nothofagus solandri. cliffortoides</i> ) with occasional mature red beech ( <i>Nothofagus fusca</i> ), located above the highway. Where beech is absent broadleaved forest/shrubland of kohuhu ( <i>Pittosporum tenuifolium</i> ), kowhai ( <i>Sophora microphylla</i> ), cabbage tree ( <i>Cordyline australis</i> ), <i>Coprosma crassifolia</i> , <i>Olearia avicenniaefolia</i> , <i>Corokia cotoneaster</i> , <i>Helichrysum lanceolatum</i> and koromiko ( <i>Hebe salicifolia</i> ) is present.  Degree of Modification: The extent of the beech forest has been modified and the forest margins are now dominated by shrubland communities. The understorey is understood to be sparse suggesting the forest floor has historically been effected by grazing.			
Provide onsite description fauna habitat – species recorded or expected to be present: Species expected to be present are passerine bird species (exotic and native) and invertebrates.			

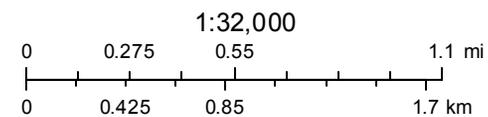
<p>Threats to vegetation and flora/fauna species? (Weeds, predators, current management practices):</p> <p>The threats to the beech forest is considered low, however there is ongoing threats to the vegetation and fauna present from possums and other introduced herbivores such as deer, stoats and ferrets.</p>
<p>Rarity: The threatened environment classification identifies the Q2.2a environment to have 39.92% indigenous vegetation cover remaining with 5.07% protected. The remaining cover is considered sufficient to maintain the biodiversity of the indigenous vegetation and habitats. Notwithstanding the above, viewed in a local context, beech forest distribution on the western Remarkables is restricted considerably from its previous extent and the Staircase Creek stand is a good example of the vegetation that covered the area prior to human settlement.</p>
<p>Area Shape and Area/Edge Ratio:</p> <p>The forest is a considerable size and will continue to expand into adjacent shrublands if left undisturbed.</p>
<p>Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?):</p> <p>The beech forest is critical to the preservation of an indigenous vegetation cover sequence from the lake to the alpine environment.</p>
<p>Distinctiveness/special ecological characteristics (unusual veg. &amp; landform features, distribution limits?):</p> <p>Whilst the composition of the beech forest is similar in nature to larger areas of beech further to the west of the ecological region, the forest is very distinctive to the Remarkables range.</p>
<p>Connectivity (how is the site connected to surrounding communities/areas?):</p> <p>The beech forest is directly connected to lakeside vegetation, shrubland vegetation on its margins and tall tussock grassland at its altitudinal limit.</p>
<p>Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?):</p> <p>The beech stand is an appropriate size to ensure ecological processes such as recruitment and regeneration are maintained into the future.</p>
<p>Recommendation (Accept/Decline)</p> <p>The beech forest is a good example of vegetation that is understood to have dominated the lower slopes of the Remarkables. Indigenous vegetation cover in these environments is severely reduced from its original extent and less than 6% has any formal protection. Given the high level of representativeness and rarity of beech forest on the Remarkables Range we recommend the area should be considered for designation as a SNA.</p>

Figure 1: The area of potential significance - Loche Linnhe SNA C - D1C



September 24, 2014

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



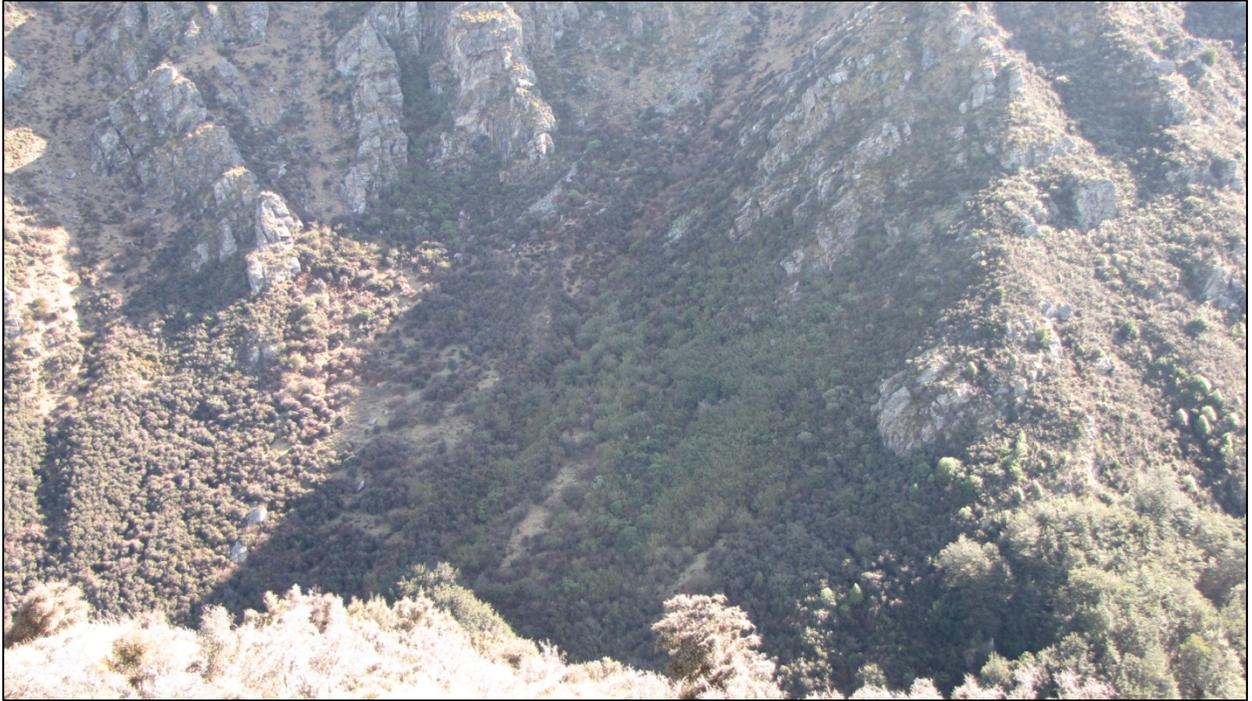
Please note the area shown is indicative and only for discussion purposes.



**Figure 2:** Beech forest in valley floor and lower slopes, looking toward the top of the Remarkables, and under consideration for the proposed 'LL SNA C' area.



**Figure 3:** Lower reach of Staircase Creek adjacent to Lake Wakatipu, and under consideration for the proposed 'LL SNA C' area.



**Figure 4:** Shrubland regeneration on true right of Staircase Creek adjacent to beech forest, and under consideration for the proposed 'LL SNA C' area.