



**Significant Natural Area Assessment**

Project No: 11001/008	Property Name: <i>Mt. Creighton</i>	Ecologist: <i>N. Simpson.</i>
	Site Name: <i>Manuka Shrublands SNA C</i>	Date: 14/04/11

Survey Undertaken By: <i>N. Simpson and G. Davis.</i>	<u>Waypoint No (mid-point of survey area):</u> <i>See plan attached.</i>
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LENZ Unit: <i>Q1.1c and Q1.2a</i> Ecological District: <i>Shotover and Richardson</i>	Photo No.(s): <i>See photos attached.</i>
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Topography: <i>Steep mountain faces.</i>	Slope: <i>20 – 60 %</i>	Altitude: <i>600 – 900 m</i>	Aspect: <i>Various.</i>
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Threatened Environment Status: <i>Underprotected (Q1.1c) and Comparatively safe from clearance (Q1.2a)</i>	Natural Area Size (ha): <i>3829.94</i>
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Representativeness:  
Extensive shrublands of manuka providing a nursery for a return to the original mixed beech forest with manuka shrubland on outcrops.

Are there threatened species expected in the survey area? If so, list species and threat status.

Threatened Species	Threat Status
<i>Falco novaeseelandiae</i> "eastern" (eastern NZ falcon)	At Risk - Recovering

Provide onsite description of vegetation:  
Please note a ground survey of the sites was not possible given the steepness of the terrain and the large areas of shrubland involved. All information provided herein is based on an assessment from a helicopter and the ecologists understanding of the vegetation communities. This assessment relates to the following areas of shrubland – Butchers, Gills, Deadhorse, Montgomerys, Moonlight Creek, and Lake Luna East Catchments.

Vegetation type: Beech Forest, Manuka woodland.

Structural Class: Forest, Shrubland.

Manuka woodland on generally steep to very steep mountain slopes and adjoining large areas of mountain beech forest which is expected to gradually expand to replace much of the shrubland in time.

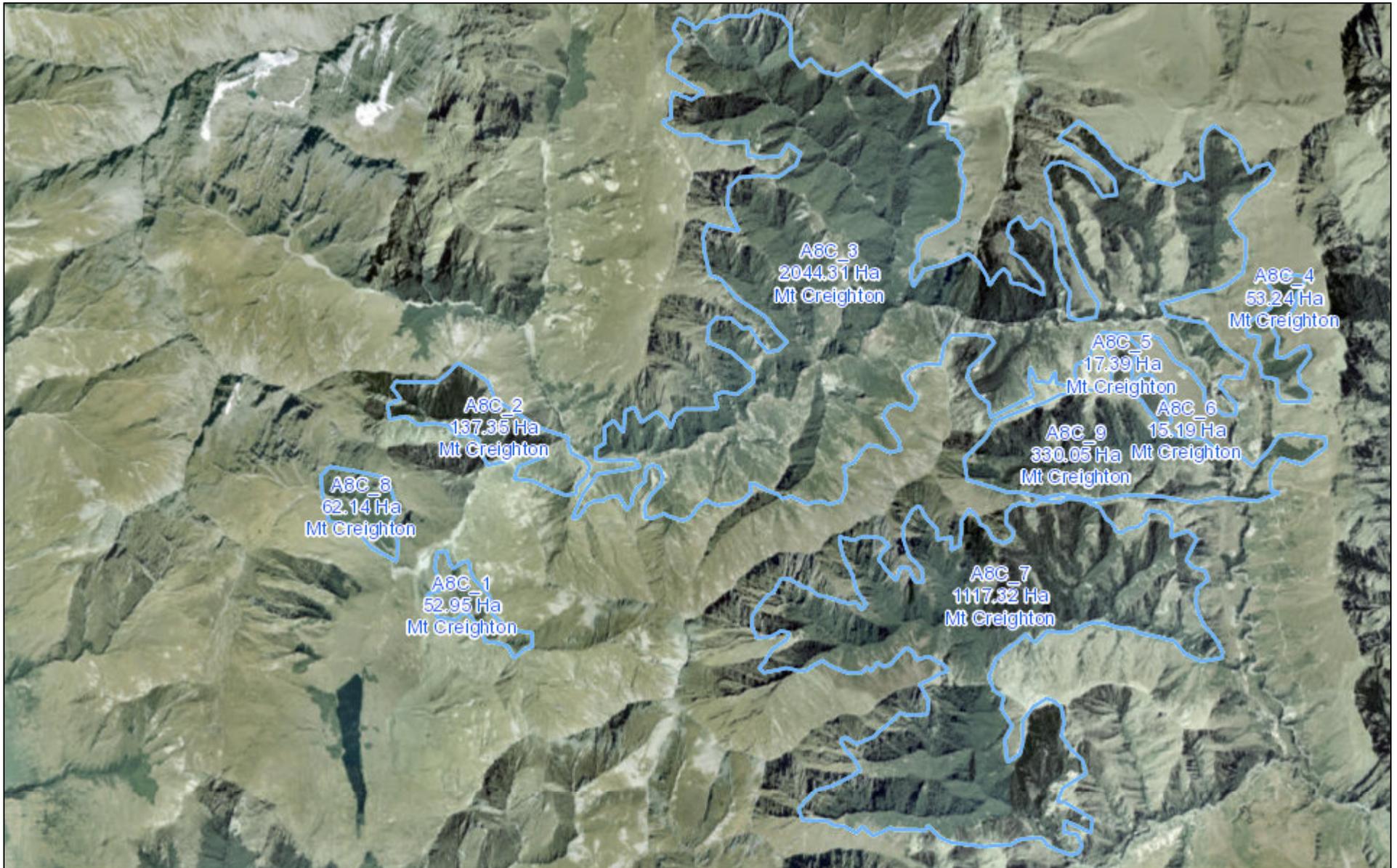
Degree of Modification: Thought to be modified from the original beech forest by fires, however there are large areas where the soil depth is skeletal and it is possible that the manuka woodland may be a dominant (climax) community on these sites.

Degree of Recruitment: High.

Overall Health: Closed canopy forest - appears to be in very good health and all ecological processes expected to be functioning.

<p>Provide onsite description fauna habitat – species recorded or expected to be present: Fauna typical of beech forest and shrubland.</p>
<p>Threats to vegetation and flora/fauna species? (Weeds, predators, current management practices): Fire is the obvious threat to the vegetation. Wilding pines are also a potential threat.</p>
<p>Rarity: Not rare, but the most extensive area of this vegetation community in the Ecological District. The remaining indigenous vegetation cover in the associated LENZ units exceed 90% of its original extent.</p>
<p>Area Shape and Area/Edge Ratio: Large areas, generally surrounded by beech forest and tall tussock grassland at higher elevations.</p>
<p>Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?): Not particularly diverse but good habitat for insects and birds.</p>
<p>Distinctiveness/special ecological characteristics (unusual veg. &amp; landform features, distribution limits?): Present on some very steep, rugged mountain land. Skeletal soils supporting manuka woodlands are a distinctive feature of this area.</p>
<p>Connectivity (how is the site connected to surrounding communities/areas?): Well connected to other indigenous communities.</p>
<p>Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?): Sustainable as a largely seral plant community that will eventually give way to mountain beech forest.</p>
<p>Recommendations (Accept/Decline): We consider this area should be designated as a Significant Indigenous Vegetation and Fauna Habitat in view of the following ecological attributes:</p> <ul style="list-style-type: none"> <li>• The manuka woodland covers extensive continuous areas and is considered a healthy functioning ecosystem.</li> <li>• Expected to support strong populations of invertebrates, passerines and falcon.</li> <li>• Closed canopy woodland, all ecological processes functioning such as regeneration recruitment and provision of habitat for invertebrates, lizards and birds.</li> <li>• Very distinctive community often situated on thin skeletal soils.</li> <li>• Integral component of valley floor to alpine environment natural vegetation sequence.</li> </ul>

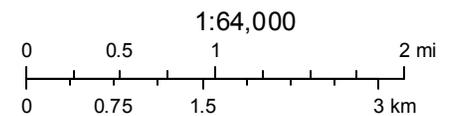
Figure 1: The area of potential significance - Manuka Shrublands SNA C - A8C\_1-9



September 29, 2014

Proposed Significant Natural Area

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



**Figure 2:** Moonlight Creek Catchment (looking west).



**Figure 3:** Representative photograph of manuka woodland (Dead Horse Creek Catchment).