

Significant Natural Area Assessment				
Project No:	Property Name: Cone Peak		Ecologist: Glenn Davis	
11001/032	Site Name: Rastus Burn SNA B		Date: 28 March 2012	
Survey Undertaken By: Glenn Davis and Ralph Henderson		Waypoint No (mid-point of survey area): See attached plan for location.		
LENZ Unit: N4.1d and Q2.2a		Photo No.(s): see attached.		
Ecological District: <i>Remarkables Ecological</i> <i>District</i>				
Topography: <i>Rastus</i> <i>Burn and adjoining hill</i> <i>slopes</i>	Slope: Steep	Altitude: approx. 480 Aspect: North to 860 m asl		Aspect: North
Threatened Environment Status: Chronically threatened and Critically underprotected		Area Size (ha): 112.33		
Representativeness: Grey shrubland is the dominant indigenous vegetation cover in the drier areas of the Remarkables Ecological District. Pre-settlement the vegetation cover is most likely to have been beech forest.				
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 – Re	ecovering	
 Provide onsite description of vegetation: Vegetation type: The vegetation was only viewed from the air, but the vegetation composition is dominated by olearia species, <i>Coprosma propinqua, Discaria toumatou, Carmichaelia petriei, Melicytus alpinus, Rubus schmidelioides,</i> and meuhlenbeckia species. The introduced woody weed sweet briar is present in addition to willow in the riparian margin of the Rastus Burn. Degree of Modification: The area has experienced historical disturbance (i.e. fire), but has not been disturbed for a long period. Overall Health: The shrubland is in good health with relatively large areas of closed canopy shrubland present. 				
Provide onsite description of fauna habitat: The shrubland provides habitat for a variety of passerines that are prey for the eastern falcon that is known to be present in the Rastus Burn. The shrubland provides significant cover and food supply for skinks and geckos and the mature Olearia is expected to support a unique,				
diverse and abundant invertebrate fauna.				

Threats to vegetation and flora/fauna species? (Weeds, predators, current management practices): Changes to land management and/or accidental fire are the greatest threats to the shrubland in the Rastus Burn.

Rarity:

The threatened environment classification identifies the N4.1d environment to have 18.6% indigenous vegetation cover remaining and only 2.3% protected. The threatened environment classification identifies the Q2.2a environment to have 39.92% indigenous vegetation cover remaining, with 5.07% protected. The better grey shrubland communities in the district that were historically abundant at lower elevations now tend to be found at slightly higher elevations in environments that supported beech forest.

Area Size and Shape (degree to which the area may be or is becoming self-sustaining): The area contains relatively large areas of closed canopy shrubland. It is likely that the vegetation has been expanding its distribution due to a lack of clearing practices associated with the land management. The shrubland is self-sustaining and will continue to develop.

Diversity and Pattern (is there a notable range of species and habitats, aspects, sequences?): The shrubland will contain a diverse range of grey shrubland species and includes both riparian and drier hillside communities.

Distinctiveness/special ecological characteristics (unusual veg. & landform features, distribution limits?): The shrubland is distinctive within the ecological district given the size of the shrubland and the population of olearia. Many similar shrublands in the district are much smaller in size and often dominated by matagouri and briar.

Connectivity (how is the site connected to surrounding communities/areas?): The shrubland is part of a relatively uninterrupted sequence of indigenous communities from the valley floor through to the tall tussock and alpine communities situated at higher elevations in the neighbouring DOC administered Rastus Burn Recreation Area and Remarkables Conservation Area.

Sustainability (does the site possess the resilience to maintain its ecological integrity and processes?):

It is likely that the shrubland has been expanding its distribution in recent years as a result of the current land management regime i.e. limited vegetation clearing activities. Under current management practices the shrubland is sustainable and expected to continue development.

Recommendation (Accept/Decline):

The shrubland is an excellent example of vegetation that is representative of this environment and has become rare, particularly within the drier areas of the lakes district. It is also important as habitat for a diverse and abundant invertebrate fauna and passerines that are critical for the maintenance of the eastern falcon population. Given the high level of representativeness and rarity of quality grey shrubland in these LENZ environments we consider the area should be considered for designation as a Significant Indigenous Vegetation and Fauna Habitat.

We note that there are areas within the Rastus Burn SNA that are dominated by pasture grass

and/or have a limited cover of shrubland species. In isolation these areas would not be considered significant however it is difficult to identify and exclude these areas from the designated area given the aerial photography available.

Figure 1: The area of potential significance - Rastus Burn SNA B - F32B.





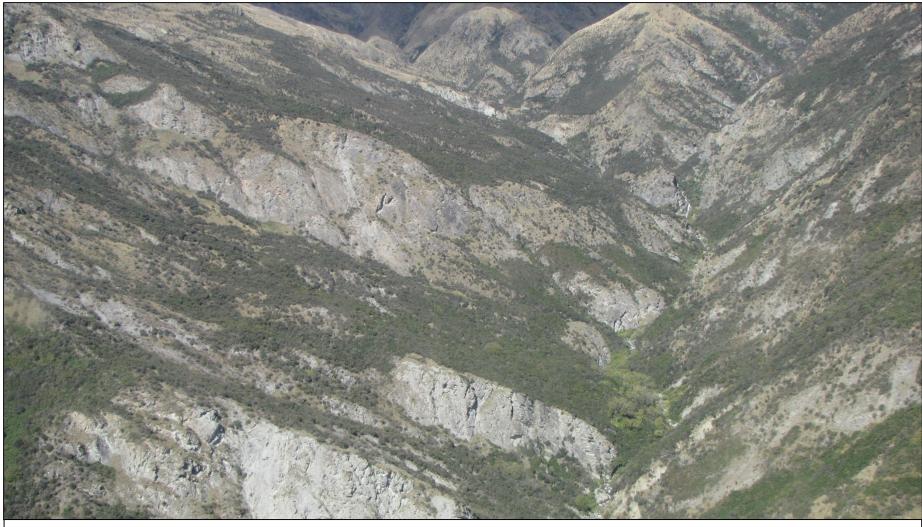


Figure 2: Vegetation within the Rastus Burn area.



Figure 3: Vegetation within the Rastus Burn area.