

Christchurch District Plan Site of Ecological Significance

Site Significance Statement

Site name: Templeton Golf Course & Ruapuna Speedway

Site number: SES/LP/15

Physical address of site: 273 Pound Road & 79 Hasketts Road
Templeton
RD 6
Christchurch 7676

Summary of Significance:

The Templeton Golf Course SES is significant because it contains vegetation representative of the Low Plains Ecological District including threatened and/or locally uncommon plant and invertebrate species.

Site Map



Additional Site Information

Central point NZTM: N5179505, E1558785

Area of SES (ha): 61.41 ha

Site Description

Remnant dryland grassland communities exist on the Templeton Golf Course together with sparse woodland of both kowhai (*Sophora microphylla*) and prostrate kowhai (*S. prostrata*). Due to the management techniques of the golf course the existing indigenous communities are small and isolated. It is nevertheless a site with high biodiversity values and is valuable for the assemblages of plants on original soils and landforms (community/ecosystem values) (Biodiversity Offsetting Stakeholder Group 2013).

Extent of Site of Ecological Significance

The Templeton Golf Course and Ruapuna Speedway SES covers the entire legal property parcel of the 270 Pound Road site, but excludes those areas occupied by driveways, car parks, buildings, fairways and associated facilities (refer location map). The SES also extends to include the dry grasslands area in the south east corner of Ruapuna Speedway containing large and healthy specimens of South Island kowhai and the creeping subshrub *Muehlenbeckia axillaris*. As with the adjacent golf course, the SES excludes those areas occupied by driveways, car parks, buildings, car remote-controlled racing tracks, associated facilities and Hasketts Road.

Assessment Summary

The Templeton Golf Course and Ruapuna Speedway Site has been evaluated against the criteria for determining significant indigenous vegetation and significant habitat of indigenous fauna listed in Appendix 3 of the Canterbury Regional Policy Statement (Environment Canterbury, 2013a) (see below) referring also to the Wildland Consultants (2013) Guidelines and advice from the relevant Specialist Ecologist Groups. Under these criteria the site is ecologically significant because it meets the representativeness (criterion 1 & 2), and rarity/distinctiveness criteria (criteria 3 & 4).

Assessment against Significance Criteria

Representativeness

- 1. Indigenous vegetation or habitat of indigenous fauna that is representative, typical or characteristic of the natural diversity of the relevant ecological district. This can include degraded examples where they are some of the best remaining examples of their type, or represent all that remains of indigenous biodiversity in some areas.***

The site is significant under this criterion.

Although the site is fragmented and modified, it is nonetheless valuable for the assemblages of plants on original soils and landforms (community/ecosystem values) (Biodiversity Offsetting Stakeholder Group 2013). Despite being ecologically degraded, the site contains vegetation that is representative of the natural diversity of the Low Plains Ecological District, and combined with landforms comprises an area that is most similar in composition and structure to those communities that existed in 1840.

Sixteen vascular plant species are recorded at the site by Boffa Miskell (2013) and Patrick (2014) including the following:

- *Carex breviculmis*
- *Carex resectans*
- *Carmichaelia corrugata*
- *Cheilanthes sieberi*
- *Dichondra repens*
- *Hypoxis hookeri*
- *Geranium retrosum*
- *Leucopogon fraseri*
- *Microtis unifolia*
- *Muehlenbeckia axillaris*
- *Muehlenbeckia axillaris x ephedroides*
- *Ophioglossum coriaceum*
- *Rytidosperma exiguum*
- *Sophora microphylla*
- *Sophora prostrata*
- *Zoysia minima*

Habitat suggests that indigenous fungi, mycorrhizae, and cryptograms (mosses & lichens) also occur within this site, and some moss species are described by Patrick (2014) as dominating small areas.

Indigenous insects, in line with the sparse nature of the semi-natural communities, are not numerous or species rich in comparison to other sites west of Christchurch (Patrick 2014). However, although degraded the assemblage of insects at this site remains one of the best examples in the Low Plains Ecological District. Indigenous insect species noted by Patrick (2012) and Patrick (2014) were:

- *Kiwaia thyraula* (gelechiid moth)
- *Orocrambus corruptus* (day-flying grassmoth)
- *Eudonia leptalea*, (sod webworm moth)
- *Pterophorus innotatalis* (plume moth)
- *Monomorium antarcticum* (native ant)
- *Nysius huttoni* (ground bugs)
- *Wiseana copularis* (dryland porina species)
- *Tingena ombrodoca* (small grey moth)
- *Aciptilia innotatalis* (small plume moth)
- *Capua semifera* (common leaf roller)
- *Eudonia sabulosella* (sod webworm species)
- *Eudonia philerga*
- *Orocrambus corruptus* (day-flying moth species)
- *Orocrambus ramosellus* (grass moth)
- *Orocrambus vittellus*
- *Scoparia exilis*
- *Udea flavidalis* (small orange moth)
- *Epyaxa rosearia* (widespread geometrid moth)
- *Helastia corcularia*
- *Homodotis megaspilata*
- *Pseudocoremia suavis*
- *Pseudocoremia leucelaea*
- *Graphania mutans*
- *Graphania plena*
- *Aletia moderata*
- *Leioproctus* spp. (indigenous bee)

The un-described boulder copper butterfly (Canterbury boulder copper of Patrick & Patrick, 2012) is also present in small numbers at the site (Patrick 2012; Patrick 2014).

The kowhai (*Sophora microphylla*) and prostrate kowhai (*S. prostrata*) trees/shrubs scattered across the golf course (Patrick 2012b) support a range of insects including the typical moths that depend solely on these hosts. Moths occur at the Templeton Golf Club in much larger population numbers commensurate with the sheltered site and many more kowhai trees compared to the Christchurch Gun Club site on Chattertons Road (Patrick 2012; Patrick 2014), and include:

- *Stathmopoda aposema*
- *Meterana decorata*
- *Pseudocoremia ochrea*
- *Uresiphita maorialis* (kowhai moth)
- *Stigmella sophorae*
- *Tingena melinella*
- *Catamacta gavisana*

2. Indigenous vegetation or habitat of indigenous fauna that is a relatively large example of its type within the relevant ecological district.

The site is significant under this criterion.

Indigenous dryland vegetation on the Canterbury Plains comprises only fragments of what was previously present, and although there are other tiny dryland fragments nearby to the site, none still contain native plants (Partridge 2007). Although degraded, at 61.41 hectares this site is considered to comprise a relatively large example of this type of vegetation in the Low Plains Ecological District.

Rarity/Distinctiveness

3. Indigenous vegetation or habitat of indigenous fauna that has been reduced to less than 20% of its former extent in the Region, or relevant land environment, ecological district, or freshwater environment.

The site is significant under this criterion.

This site contains vegetation that has been reduced to less than 20% of its former area in the Low Plains Ecological District. The Threatened Environment Classification reports that less than 10% of indigenous cover remains in the Low Plains Ecological District (See Walker *et al.* 2007; Lloyd *et al.* 2013).

4. Indigenous vegetation or habitat of indigenous fauna that supports an indigenous species that is threatened, at risk, or uncommon, nationally or within the relevant ecological district.

The site is significant under this criterion.

The site contains 13 indigenous plant species that are threatened, considered locally rare or of limited distribution or occurrence in the ecological region (Boffa Miskell 2013), including:

- *Carmichaelia corrugata* At Risk/Declining
- *Geranium retrorsum* Threatened/Nationally Vulnerable

Boffa Miskell (2013) note that in winter and spring 2013 the turnip-rooted geranium *Geranium retrorsum* was observed (often in patches) scattered in many parts of the golf course.

Furthermore, populations of *Zoysia minima*, *Carex breviculmis*, *C. resectans*, *Rytidosperma exiguum*, within this site also significant under this criterion as they are considered locally rare, with very few populations remaining in the savannah grasslands (Patrick 2014; Environment Canterbury 2013b).

The tiny moth *Kiwaia thyraula* which also occurs at the site is considered locally uncommon in the Low Plains Ecological District (Patrick 2014).

5. The site contains indigenous vegetation or an indigenous species at its distribution limit within Canterbury Region or nationally.

Site not assessed under this criterion

6. Indigenous vegetation or an association of indigenous species that is distinctive, of restricted occurrence, occurs within an originally rare ecosystem, or has developed as a result of an unusual environmental factor or combinations of factors.

Site not assessed under this criterion

Diversity and Pattern

7. Indigenous vegetation or habitat of indigenous fauna that contains a high diversity of indigenous ecosystem or habitat types, indigenous taxa, or has changes in species composition reflecting the existence of diverse natural features or ecological gradients.

Does not meet criterion

Ecological Context

- 8. *Vegetation or habitat of indigenous fauna that provides or contributes to an important ecological linkage or network, or provides an important buffering function.***

Does not meet criterion

- 9. *A wetland which plays an important hydrological, biological or ecological role in the natural functioning of a river or coastal system.***

Does not meet criterion

- 10. *Indigenous vegetation or habitat of indigenous fauna that provides important habitat (including refuges from predation, or key habitat for feeding, breeding, or resting) for indigenous species, either seasonally or permanently.***

Site not assessed under this criterion

Site Management

Existing Protection Status

In public ownership

Threats and risks	Management recommendations	Support package options
<ul style="list-style-type: none">• Pest plant incursion	<ul style="list-style-type: none">• Monitor pest plant infestations and implement weed control as required.• Assess new pest plant incursions and implement control as required	<ul style="list-style-type: none">•
<ul style="list-style-type: none">• Further species loss	<ul style="list-style-type: none">• Identify and mark existing native plant populations• Re-introduce recently locally extinct species	<ul style="list-style-type: none">•
<ul style="list-style-type: none">• Changes to soil structure & fertility as a result of changes in land management that threaten existing ecosystem.	<ul style="list-style-type: none">• Develop and implement a management plan to inform and direct future land management within this unusual land use context• Assess any attempts to change the irrigation or fertiliser application regime as part of the land management change process.	<ul style="list-style-type: none">•
<ul style="list-style-type: none">• Inappropriate planting	<ul style="list-style-type: none">• Ensure any planting (e.g. amenity, restoration plantings) do not compromise existing ecological values.	<ul style="list-style-type: none">•
<ul style="list-style-type: none">• Inappropriate impacts of land use by land managers	<ul style="list-style-type: none">• Consult with land managers on a regular basis to ensure that they understand the ecological values and significance of plant and animal communities on the site.	<ul style="list-style-type: none">•

References

- Biodiversity Offsetting Stakeholder Group (2013) *Notes from biodiversity offsetting stakeholder group meeting 1. Fulton Hogan: Pound Road quarry/Templeton Golf Course (TGC) proposal*. Unpublished minutes of meeting held at Miners Road Quarry office, 18th June 2013. (TRIM 14/1441293).
- Boffa Miskell (2013) *Draft field methodology for vegetation at Fulton Hogan Templeton Golf Course and potential offset sites*. Internal memorandum, Boffa Miskel Ltd, Christchurch, New Zealand (TRIM 14/1441478).
- De Lange, P. J., Rolfe, J. R., Champion, P. D., Courtney, S. P., Heenan, P. B., Barkla, J. W., Cameron, E. K., Norton, D. A., and Hitchmough, R. A. (2013) *Conservation status of New Zealand indigenous vascular plants, 2012*. Department of Conservation, Wellington, New Zealand.
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- Environment Canterbury (2013b) *Ecological inspection of conservation areas on the West Melton Reserves, March – September 2012*. Unpublished Report. Environment Canterbury (TRIM 14/1404370).
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- Patrick, B. H. & Patrick, H. J. H. (2012) *Butterflies of the South Pacific*. University of Otago Press. 250 pages.
- Walker, S., Cieraad, E., Grove, P., Lloyd, K., Myers, S., and Porteous, T. (2007) *Guide to users of the threatened environment classification*. Landcare Research, Lincoln, New Zealand.

Assessment completed by: Dr Antony Shadbolt
Date: 1st January 2015

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Date: XXX

PLEASE NOTE THIS STATEMENT IS BASED ON INFORMATION AVAILABLE AT THE TIME OF WRITING. DUE TO THE DYNAMIC NATURE OF ECOSYSTEMS, FUTURE REASSESSMENT OF THE SITE MAY BE NECESSARY TO REFLECT ANY CHANGES IN KNOWLEDGE OF ITS ECOLOGICAL SIGNIFICANCE.