

**MANAGEMENT GUIDELINES FOR HALLELUJAH HILLS
A PROPERTY OF WORDS END CONSERVATION PTY
LTD**



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INTRODUCTION

Hallelujah Hills is a 414 ha property located 10 km north west of Robertstown and 20 km south of Burra in the mid-north of South Australia. This is approximately 200 km from Adelaide, in the North Eastern rangelands of South Australia (Figure 1). The land comprises Sections 29 and 31 in the Hundred of Bright Certificate of Title Vol 5878 Folio 478 at Latitude 33° 54' 18.81 E, Longitude 139° 3' 1.3 S. It is part of the last range between the grasslands and grassy woodlands of the mid-north before the land drops down to the semi-arid mallee shrublands of the Murray Mallee flats.

The land is part of the Murray Darling Basin; creeks of the Hallelujah Hills flow out into Burra Creek, which flows into the River Murray at Morgan.

The directors of the Worlds End Conservation Pty Ltd (WEC) purchased the land in October 2003. Historically, Hallelujah Hills has been part of a larger farming and grazing property. However, the land has had minimum sheep grazing as the terrain is steep and water was not available over most of the block.

These Management Guidelines (IMG) have been prepared as a condition of purchase as specified by the Natural Heritage Trust, which has contributed to the establishment of this protected area as part of the National Reserve System (NRS) program. This document outlines actions proposed to meet planning and management commitments and is intended to guide WEC management following the establishment of the protected area (Heritage Agreement in 2004). The following points provide a summary of the agreement between WEC and the Natural Heritage Trust:

- WEC agrees to prepare Management Guidelines (this document) for the property by Mid-June 2005, and prepare an appropriate management plan for the protected area in accordance with the proposed IUCN Protected Area Management Category III.
- WEC agrees to undertake management and other works as necessary to ensure the on-going protection of the natural values of the property.

IUCN CLASSIFICATION

The most suitable IUCN classification for Hallelujah Hills is IUCN category III, Natural Monument. Category III protected areas are defined as an area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

Hallelujah Hills will be managed mainly to conserve the range of ecosystems and flora and fauna species present and provide limited biological survey and monitoring opportunities.

BIODIVERSITY AND HERITAGE VALUES

Biology Values

The area comprises 414 hectares in the Hallelujah Hills area. The area is recognized as a special habitat area in the Biodiversity Plan for the Northern Agricultural District of South Australia as part of the Ridgeline Habitat for the Hallelujah Hills. The ecosystems to be protected include the nationally threatened ecological communities of *Lomandra effusa* tussock grassland [nominated] on shallow loams in low hills; *Danthonia* spp and *Stipa* spp temperate grasslands and the *Eucalyptus odorata* +/- *E. leucoxyton* grassy low woodland on loamy soils in low hills. Other tree dominated ecosystems present are *Eucalyptus porosa* +/- *Callitris gracilis* open woodland along drainage lines, *E. socialis* +/- *brachycalyx* mallee on hilltops and ridges and *E. socialis* +/- *E. gracilis* open mallee on flats and lower slopes. In addition, there is *Acacia spilleriana* shrubland on shallow well drained soils of

lower slopes and ridges and mixed Acacia shrublands with *Dodonaea*, *Senna* and *Bursaria* on the saddles.

There are a number of significant plants including the nationally vulnerable *Olearia pannosa ssp. pannosa*, Silver Daisy-bush and the state vulnerable *Acacia spilleriana*, Round-Leaf Mulga-Bush.

Conservation Values

The land is within the Flinders Lofty Block IBRA Region which has only 5.5% of the native vegetation currently conserved. The area is a high priority at a national and State level for new protected areas. It is within the Broughton subregion, which has less than 0.2% native vegetation conserved in all forms of protected area, making it a very high priority for establishing new protected areas under the National Reserve System Program.

The property occurs in both the Burra Hills and the Neales Flat Environmental Associations. There are low coverage of remnant vegetation and very low levels of protection in both of these environmental associations. The Neales Flat Environmental Association (EA) has a very high level of native vegetation clearance, with only 2.1% of the EA remaining with native vegetation cover.

The Burra Hills Environmental Association is represented in the state NPWSA Reserve System by the new Mokota Conservation Park, the proposed Hopkins Creek Conservation Park and two Heritage Agreements covering 95.34ha (0.13%).

The Neales Flat Environmental Association will be represented in the state NPWSA Reserve System by the proposed Hopkins Creek Conservation Park and one Heritage Agreement of 27.21ha (0.06%).

This property makes a significant contribution to the Comprehensive Adequate Representative (CAR) reserve system in Australia and towards the conservation of native ecosystems in the state.

Vegetation Associations and Associated Fauna

As a result of natural variation in soil types and terrain, the native vegetation is a complex mosaic of low woodlands, tall shrublands, tussock grasslands, and open shrublands.

Hallelujah Hills protects two vegetation associations threatened in South Australia and a range of threatened plant species. These vegetation communities and significant plants and animals are:

1. Communities

Lomandra effusa tussock grassland in valleys and on rocky ridgelines, *nominated as a nationally threatened ecological community*

E. odorata low open grassy woodland *is nominated as a nationally threatened ecological community.*

2. Significant Plants (located on the property and within a 10 km buffer)

The property contains important habitat for several species of threatened flora species. These include:

Acacia spilleriana, rare in Australia, unknown status for SA and region

Arthropodium minus, Small Vanilla Lily, vulnerable in the region

Craspedia glauca, Billy Buttons, rare in the region

Gahnia lanigera, Desert Sword Sedge, possibly significant for the region

Goodenia albiflora, White Goodenia, rated as uncommon for state and region

Goodenia pinnatifida, Cut leafed Goodenia, uncommon for the region and possibly significant for SA

Maireana excavata, Fissure Weed, unknown status for SA, endangered in the region *Myriocephalus rhizocephalus*, Woolly Heads, uncommon for SA, endangered in the region

Millotia tenuifolia, Soft Millotia, rare for the region

Olearia pannosa ssp. pannosa, Silver Leafed Daisy Bush, vulnerable in Australia, vulnerable for SA and region

Pimelia curvifolia, Curved Rice Flower, rare for SA, unknown status for region *Phyllanthus saxosus*, Rock Spurge, not yet assessed but possibly significant *Scleranthus pungens*, Prickly Knawel, uncommon for the region

Tricoryne elatior, Grass Lily, rare for the region

Trymalium wayae, Grey Trymalium, uncommon for SA and region

3. Significant Fauna

The property also contains an area of important habitat for several species of threatened fauna. Significant fauna (inhabiting or likely to occur on the property) include the following significant animals:

Carpet python *Morelia spilota metcalfei* - vulnerable in South Australia

Plains wanderer: *Pedionomus torquatus* - nationally vulnerable, endangered in South Australia and vulnerable in the mid North

Adelaide pygmy blue tongue lizard *Tiliqua adelaidensis* - endangered in Australia and South Australia

Brushtail possum *Trichosurus vulpecula* – likely to be listed under NPW Act as rare

Common Dunnart *Sminthopsis murina* – extension to known range

Diamond Firetails *Stagonopleura guttata* – listed as declining in the MLR

Threats to the Conservation Values

There are four perceived threats which may impact on the conservation values of Hallelujah Hills. These threats to the conservation values may be:

1. The total grazing pressure from introduced animals, including deer, and over abundant native herbivores. This may be preventing the natural regeneration of sensitive species including the Drooping Sheoak, *Allocasuarina verticillata* and native grasses in the mallee box grassy woodlands in the valleys and along the drainage lines.
2. Predation of native animals by foxes and cats.
3. The presence of pest plants including boxthorns and horehound.
4. Unauthorized access to the property for firewood collection, and for recreational use of off-road vehicles and trail bikes. This has been a problem until recently when the boundary public road was adequately fenced.

Vegetation clearance has occurred in places on the property. There has been recent damage with excessive clearing on the road reserve adjoining the property and insensitive broad-acre herbicide spraying.

PROPOSED MANAGEMENT STRATEGIES

The following management strategies reflect the management objectives for IUCN Category III protected areas as defined in the IUCN Guidelines for Protected Area Management.

These management strategies for management of the land will be eventually incorporated into a formal management plan for the reserve.

IUCN OBJECTIVE 1

To protect or preserve in perpetuity specific outstanding natural features because of their natural significance, unique or representation quality, and/or spiritual connotations.

WEC Management Strategies for Hallelujah Hills

Hallelujah Hills has been registered as a Heritage Agreement (HA), under the *Native*

Vegetation Act 1991. This Heritage Agreement is registered on the Certificate of Title in perpetuity.

A management plan will be established for the area as soon as practical to ensure the implementation of a suitable long-term management regime.

WEC will seek to extend management of the Hallelujah Hills area as an integrated part of any district or regional Integrated Natural Resource Management Board biodiversity protection and management initiative.

The Hallelujah Hills property will be adequately fenced from stock and uncontrolled vehicle access. A maintenance program for the property fences, access tracks, and other assets will be undertaken.

WEC will seek to maintain a limited network of vehicle access and maintenance tracks to allow for adequate management actions as identified in a formal management plan.

WEC will seek to maintain a small (less than 1 ha) low-key camping and picnic site for shareholders, researchers and management workers, to allow for passive recreation and adequate management actions as identified in a formal management plan.

IUCN OBJECTIVE 2

To an extent consistent with the foregoing objective, to provide opportunities for research, education, interpretation and public appreciation.

WEC Management Strategies for Hallelujah Hills

WEC will encourage the continuation of research undertaken on the property by appropriate groups and agencies.

WEC will maintain boundary signage and prepare informational material for enquiries and hold public open days as appropriate.

Public access will initially be limited to appointment or invitation only arrangements to allow for the implementation of baseline monitoring programs, the protection of sites of significance and natural attributes, and to address any risk issues that are inherent with this property.

Public access to certain sensitive areas including populations of any critically endangered flora and fauna and all monitoring sites will be restricted.

Limited access for nature-based activities such as bird watching, nature photography, and low impact bush-walking will be allowed.

IUCN OBJECTIVE 3

To eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation.

WEC Management Strategies for Hallelujah Hills:

WEC has removed all sheep from the property and neighbours will be encouraged to remove stock as quickly as possible if they enter the property.

Surveys will be undertaken to gather baseline biodiversity information on the natural resources of the property, including the location and extent of threatened plants and animals.

Surveys will be undertaken to determine threats to the integrity of the property, and enable the development of suitable management strategies that will be included in the Management Plan.

Feral animal control programs will be implemented as necessary where required and identified in any management plan for the property. This is likely to include feral deer, fox, and rabbit control.

WEC will seek to undertake feral animal control programs and kangaroo management in this area as part of any district program implemented by NPWSA and / or the Regional Natural Resource Management Board.

Pest plant control programs will be implemented as necessary where required and identified in any management plan for the property. This is likely to include horehound and boxthorn.

WEC will seek to undertake pest plant control programs in this area as part of any district program implemented by NPWSA and / or the Regional Natural Resource Management Board.

Monitoring programs will be established as outlined in the management plan.

IUCN OBJECTIVE 4

To deliver to any resident population such benefits as are consistent with the other objectives of management.

WEC Management Strategies for Hallelujah Hills

Local knowledge on the cultural attributes of the area will be compiled (where appropriate) to ensure appropriate management.

Local expertise will be used wherever practical to assist with maintenance and management of the property.

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