Title Coolah Tops National Park Vegetation 2019. VIS_ID 5105

Alternative title(s)

CoolahTopsVeg2019_VIS5101

Abstract

Eco Logical Australia was commissioned by the National Park and Wildlife Service (NPWS) to undertake vegetation survey and mapping of Coolah Tops National Park in 2019. The reserve includes the former Bundella and Warung State Forests and was gazetted as National Park in 1996. The reserve forms part of the Liverpool Range which makes up the largest lava field province in NSW, dated between 32 and 40 million years covering an area of over 6,000km2 with up to 400m thickness of basalt.

The project sought to review existing data and mapping and align vegetation communities with the current state-wide Plant Community Type classification through the collection of strategic data on floristic and structural diversity. Existing vegetation surveys and mapping were reviewed and supplemented with over 340 rapid data points. Plant Community Type mapping was undertaken at a scale of between 1:2,500 and 1:10,000 using a range of datasets. Development of linework and attribution of Plant Community Types was undertaken in three dimensions using high resolution stereo ADS40 imagery. The final mapped product is considered accurate at a 1:5,000 scale. A total of 464 species from 82 plant families were recorded, of which 13% were exotic (four being priority weeds). A total of 24 unique Plant Community Types (totalling 16,264 hectares) were mapped. In addition, more than 160 separate subtypes were mapped due to significant variability with each Plant Community Type based on the dominant species in each patch. The vast majority of vegetation mapped falls within the Grassy Woodlands Formation, followed by Dry and Wet Sclerophyll Forests respectively. A range of management considerations are discussed including: management of old growth forests dominated by Eucalyptus pauciflora (Snow Gum), E. nobilis (Mountain Ribbon Gum) and E. laevopinea (Silvertop Stringybark); inappropriate fire regimes; biosecurity including feral animal and weed management; and track maintenance. Based on the results of this project, the following recommendations have been developed: • Conduct detailed research into the likely fire ecology of each PCT including recent and likely historic fire regimes as well as sensitive species to better inform fire management requirements. • Review and update relevant fire management plans taking into consideration the minimum fire intervals, mosaic burning practises, the adequacy of existing trail networks, management of fire in long unburnt forests and consideration of impacts to conservation significant species. • Establish a biodiversity monitoring program to determine changes and help manage the effects of climate change over time. As an isolated basalt plateau, many of the species and communities that occur in the reserve are restricted and are unlikely to be able to adapt in a changing climate. • Control priority and environmental weeds. Early detection and eradication of any Scotch Broom or Gorse is recommended. • Control feral animals including goats, pigs and deer. • Should additional funding become available, additional targeted vegetation survey across a range of PCTs, particularly in the south east where access is limited, would help to further define and understand the floristic and structural diversity of the reserve. • Spring surveys for rare and threatened species including orchids are recommended in wetland areas, high altitude forests and in steep gullies and rock outcrops. • Investigate the significance of rare and regionally significant PCTs with the intent of nominating communities for listing under the BC Act and/or EPBC Act. Specifically, a review of PCT 497 Teatree shrubland / sedgeland / forbland swamp wetland should be undertaken for consideration of amendment to the listing of the BC Act Endangered Ecological Community Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion. It is understood that EES is currently undertaking a review of the state-wide PCT classification including a complete reanalysis with the intent of refining each PCT and developing positive diagnostic species. This review may help to redefine some of the PCTs mapped as part of this project, and some new PCTs may be created and old PCTs retired. A review of the mapping undertaken as part of this project is recommended once the review has been completed.

Resource locator

Data Quality Statement Name: Data Quality Statement

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Data quality statement for Coolah Tops Vegetation Mapping 2019 VIS_ID 5101

Function: download

Floristics and vegetation

Name: Floristics and vegetation patterns of Coolah Tops, New South Wales

patterns of Protocol: WWW:DOWNLOAD-1.0-http--download Coolah Tops, Function: download **New South** Wales Name: Coolah Tops vegetation mapping Coolah Tops vegetation Protocol: WWW:DOWNLOAD-1.0-http--download mapping Function: download Name: species matrix for Coolah Tops species matrix for Coolah Protocol: WWW:DOWNLOAD-1.0-http--download Tops Function: download Name: Download Package **Download Package** Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data (Shapefile and Geodatabase) Function: download Unique resource identifier Code d57ea9d4-aa93-423a-bc30-9f4b70fce542 Presentation Map digital form Edition 20/12/2019 Dataset **English** language Metadata standard ISO 19115 Name Edition 2016 Dataset URI https://datasets.seed.nsw.gov.au/dataset/d57ea9d4-aa93-423a-bc30-9f4b70fce542 Purpose Park and fire management Completed **Status** Spatial representation Type vector

Geometric Object Type

surface

Geometric Object Count

1832

Spatial reference system

Code identifying the spatial

4283

reference system

Spatial 10 m resolution	
Topic category	
Keyword set	
keyword value	VEGETATION
	FLORA
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	149.97579
East bounding longitude	150.27243
North bounding latitude	-31.86431
South bounding latitude	-31.66719
NSW Place Name	North of Cassilis
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	2019-12-20
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	Unknown
Contact info	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	data.broker@environment.nsw.gov.au
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
Responsible party role	pointOfContact

The dataset is polygonacious in it's linearity.

Limitations on public access

Responsible party

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Metadata date 2024-02-26T13:46:46.400581

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