Title	CEEC: Monaro and Werriwa Tablelands Cool Temperate Grassy Woodlands v1.4
Alternative title(s)	Critically Endangered Ecological Community: Monaro and Werriwa Tablelands Cool Temperate Grassy Woodlands v1.4
Abstract	The Monaro and Werriwa Tablelands Cool Temperate Grassy Woodlands (respectively Monaro and Werriwa) have been nominated by the NSW Scientific Advisory Committee as Critically Endangered Ecological Communities (NSW Threatened Species Scientific Committee (2019). This data layer delineates the extent of these communities as a single presence surface. The extent is derived first by modelling of the potential extent then refined by rigorous 3-D aerial photo interpretation of high resolution ADS imagery.

Resource locator

Show on SEED Web Map	Name: Show on SEED Web Map Protocol: WWW:DOWNLOAD-1.0-http--download Description: Display dataset on SEED's map Function: download
Data Quality Statement	Name: Data Quality Statement Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for CEEC: Monaro and Werriwa Tablelands Cool Temperate Grassy Woodlands v1.4 Function: download
Metadata Summary CEEC Monaro Werriwa v1.4	Name: Metadata Summary CEEC Monaro Werriwa v1.4 Protocol: WWW:DOWNLOAD-1.0-http--download Description: Provides a written metadata summary that includes lineage and validation information Function: download
Technical Notes CEEC Werriwa and Monaro v1.4	Name: Technical Notes CEEC Werriwa and Monaro v1.4 Protocol: WWW:DOWNLOAD-1.0-http--download Description: Full technical notes on product lineage and validation Function: download
Monaro Werriwa CEEC v1.4 Data	Name: Monaro Werriwa CEEC v1.4 Data Protocol: WWW:DOWNLOAD-1.0-http--download Description: The Monaro Werriwa CEEC v1.4 map is provided as a feature class in an ArcGIS 10.4 file geodatabase. An mxd is also included for candidate symbol. Function: download

Unique resource identifier

Code	83f9f041-cbe5-4244-99c7-36396b241763
Presentation form	Map digital
Edition	1.4

Dataset language	English

Metadata standard

Name	ISO 19115
Edition	2016

Dataset URI	https://datasets.seed.nsw.gov.au/dataset/83f9f041-cbe5-4244-99c7-36396b241763
Purpose	To provide a mapped extent of the determined critically endangered ecological communities.
Status	Completed

Spatial representation

Type	vector
Geometric Object Type	composite
Geometric Object Count	1

Spatial reference system

Code identifying the spatial reference system	4283

Equivalent scale	1:None

Topic category

Keyword set

keyword value	VEGETATION-Floristic ECOLOGY-Community
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16

Geographic location

West bounding longitude	148.150635
East bounding longitude	150.05127
North bounding latitude	-37.07271
South bounding latitude	-34.966999
NSW Place Name	Monaro and Werriwa Tablelands

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	2014-01-01
End position	N/A

Dataset reference date

Resource maintenance

Maintenance and update frequency	Not planned
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

Lineage

1. Community classification determination Determination established by the NSW Threatened Species Scientific Committee under the biodiversity Conservation Act 2016. A copy of these Determinations are available here: https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Scientific-Committee/Determinations/2019/werriwa-tableland-final-determination-CEEC.pdf?la=en&hash=92C6D495486B7F36D0F15C133F93E8B5DE5141E8

Or by contacting the NSW Threatened Species Scientific Committee, PO Box 1967 Hurstville BC 1481. Tel: (02) 9585 6940 or Fax (02) 9585 6606, or in person at the Office of Environment and Heritage Information Centre, Level 14, 59-61 Goulburn Street, Sydney. Copies of the determination may also be obtained from National Parks and Wildlife Service Area Offices and Visitor Centres, subject to availability.

1. Plot Assignment Over 10 000 floristic sites were assessed for allocation to the CEEC. Each site was represented by full floristic vegetation plot that forms part of the OEH Vegetation Information System (VIS) database. All sites were assigned a Plant Community Type (PCT) as part of the new East Coast Vegetation Classification (ECVC). Monaro is represented by the RCP group R4.42E (Monaro -Central-Tablelands frost hollow grassy woodland), which is historically linked to SCIVI Vegetation Types m31/p220 and UMC types m31/u118). Conversely, the Werriwa is represented by the RCP group R4.141 (Werriwa frost-hollow grassy woodland) which is linked to the SCIVI Vegetation Type p24. As part of the development of the ECVC, the floristic data of individual sites were checked and vetted, and sites strongly influenced by disturbance removed. Additional sites that are assumed to represent the CEEC's were also added. These sites came from surveys conducted by OEH threatened species ecologists and other experts that were not included in the ECVC. They include most, but not all sites identified by the Scientific Committee as representative of the TEC .
2. CEEC presence modelling A presence-absence (PA) distribution modelling approach was used to create an initial indicative (potential) distribution map of the CEEC's. A total of 84 sites were included in the models as presence sites for Monaro and 59 for Werriwa (Fig 1). While these sets contain an adequate spread of sites over the presumed range of the TECs, the models are strongly influenced by the number of absence sites ascribed to PCTs that are not related to R4.42E and R4.141. The modelling methodology is described in detail in OEH (2016). The Random Forest (RF) technique was used to predict the potential extent of the communities in terms of their probability of occurrence across the South Eastern Highlands and South East Corner Bioregions. All models were run with 10-fold cross validation, using held-out data to calculate performance measures which are used to select optimum model parameters and final model fit. Statistics were derived from a confusion matrix, calculating overall accuracy, user and producer accuracies and standard deviations. Response curves for each predictor to determine if the effect of the variable on the response makes ecological sense reran multiple iterations of models to look at the effects of sequentially removing predictors in an attempt to generate a more parsimonious model. The models show a continuous probability of occurrence surface which varies between 0 and 1. A sensitivity = specificity threshold, which balances the risk of making commission and omission errors, was used to determine the area of the core candidate CEEC. This was subject of further investigation by API. The sensitivity = specificity threshold is 0.4 for the Combined model, 0.48 for the Monaro-only model and 0.33 for the Werriwa only model.
3. Pattern derivation The binary core modelled extent was pulled into a net of existing vegetation linework for finer scale manual interrogation and attribution. A multi-resolution segmentation algorithm was used to create image objects with low internal variation. Image objects represent patches of vegetation that can later be classified based on attributes such as crown cover, spectral response, or soil type. The segmentation parameters and scale were derived iteratively based on visual inspection. Vegetation recognised in high spatial resolution imagery (ADS40 – 50cm) were used as a reference point. This process provided the line work for subsequent PCT attribution.
4. Fine scale mapping and Aerial Photo Interpretation High resolution expert aerial photographic interpretation (API) was then used to assess CEEC spatial presence within the core extent. Some locally adjacent areas where the community was found to occur were also included. This process referenced 50cm 3-D ADS40/80 imagery. Polygon attribution utilised two software packages, ArcGIS Dektop 10.7 and DAT/EM Summit Evolution – Lite Edition (a photogrammetric package enabling 3D stereo viewing of ADS40 imagery).
5. Extension of CEEC presence to adjacent candidate native grasslands After rigorous 3-D API, the spatial extent of the CEEC was extended by default into adjacent candidate native grassland as attributed by2-D 50cm ads imagery. This extension was constrained by lot boundaries. Please the technical notes for further details on the manual stage decision logic.

Limitations on public access

Scope	dataset
DQ Completeness Commission	
Effective date	2019-06-30
Explanation	Nil.
DQ Completeness Omission	
Effective date	2019-06-30
Explanation	Nil
DQ Conceptual Consistency	
Effective date	2019-06-30
Explanation	Nil
DQ Topological Consistency	
Effective date	2019-06-30
Explanation	Nil
DQ Absolute External Positional Accuracy	
Effective date	2019-06-30
Explanation	50cm
DQ Non Quantitative Attribute Correctness	
Effective date	2019-06-30

Responsible party

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

Metadata point of contact

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Metadata date

2024-02-26T12:53:08.388998

Metadata language