

Title	Climate informed modelling of landscape managed threatened species
Abstract	Modelling of landscape capacity for 76 landscape-managed NSW threatened species. Landscape capacity is a measure of how usable habitat is for supporting populations based on the quality of habitat and how easily species can move across the landscape to access sufficient resources to support a population. This project maps climate-informed landscape capacity. This mapping shows how well NSW landscapes can support fauna populations into future climate. The location of climate refugia are identified. These are areas that support species populations through time, from pre-industrial times and into the future. Two page species forecasts summarise results for each species. Each species model is projected into NARClIM (v1.0) climate futures. The dataset comprises: individual models for 1750, 2000, 2030 and 2070 epochs; 'consensus' maps across 12 climate models for 2070; and multi-species refugia and landscape capacity across time maps (for the 76 threatened species, and also including site-managed species here). The individual species geotiff files are grouped into zip files which are large and may take considerable time to download. These resources are outputs of the Persistence in the Landscape Project (PLP). The methods and descriptions of outputs are provided in the DRAFT project report, also provided here.
Resource locator	Data Quality Statement Name: Data Quality Statement Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for Persistence in the landscape (PLP) modelling Function: download DRAFT Persistence in the landscape (PLP) report Name: DRAFT Persistence in the landscape (PLP) report Protocol: WWW:DOWNLOAD-1.0-http--download Description: Description of methods and results for the PLP project Function: download PLP Species forecasts (17MB) Name: PLP Species forecasts (17MB) Protocol: WWW:DOWNLOAD-1.0-http--download Description: A two page summary for each species including general climate-informed outlook, forecasted trends in landscape capacity, and two maps: landscape capacity over time, and a climate model consensus map showing where there is agreement across climate models that landscape capacity will exist in 2070. Use the links from the index at the end of the document to navigate to species of interest. Function: download COMBINED SPECIES MODELS v2 (including site-managed species) Name: COMBINED SPECIES MODELS v2 (including site-managed species) Protocol: WWW:DOWNLOAD-1.0-http--download Description: COMBINED WEIGHTED LANDSCAPE CAPACITY This layer incorporates same landscape managed species models as original version, with site-managed species added. For all species, weights for degree of threat are changed to reflect IUCN recommendations:

- Not listed (x0)
- Vulnerable (x0.1)
- Endangered (x0.7)
- Critically Endangered (x0.95)

As landscape capacity is not calculated for site-managed species, an average across the landscape-managed species (top quartile) is applied for site-managed species (calculated as 0.717)

Function: download

COMBINED SPECIES MODELS (2.1GB)

Name: COMBINED SPECIES MODELS (2.1GB)

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

Description:

This item contains a zip file of landscape capacity rasters for combined species models, based on NARClIM 1.0 projections:

- **Combined Climate Refugia Index (CCRI)** DHS_v3-1bprj_LZW.tif
- **Landscape Capacity Over Time (LCOT)** SUM1750__v31bbc_CompositeBan11_LZW.tif

Function: download

BATS (5.5GB)

Name: BATS (5.5GB)

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

Description:

This item contains landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Chalinolobus picatus*, **Little Pied Bat**
- *Miniopterus australis*, **Little Bent-winged Bat**
- *Nyctophilus corbeni*, **Corben's Long-eared Bat**
- *Phoniscus papuensis*, **Golden-tipped Bat**
- *Saccolaimus flaviventris*, **Yellow-bellied Sheath-tail-bat**
- *Scoteanax rueppellii*, **Greater Broad-nosed Bat**
- *Vespadelus baverstocki*, **Inland Forest Bat****

Function: download

BIRDS A-B (4.9GB)

Name: BIRDS A-B (4.9GB)

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

Description:

This item contains landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Anseranas semipalmata*, **Magpie Goose**
- *Artamus cyanopterus cyanopterus*, **Dusky Woodswallow**
- *Atrichornis rufescens*, **Rufous Scrub-bird**
- *Botaurus poiciloptilus*, **Australasian Bittern**
- *Burhinus grallarius*, **Bush Stone-curlew**

Function: download

BIRDS C (8.7GB)

Name: BIRDS C (8.7GB)

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

Description:

This item contains landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Callocephalon fimbriatum*, **Gang-gang Cockatoo**
- *Calyptorhynchus banksii samueli*, **Red-tailed Black-Cockatoo** (inland subspecies)
- *Calyptorhynchus lathami*, **Glossy Black-Cockatoo**
- *Certhionyx variegatus*, **Pied Honeyeater**
- *Chthonicola sagittata*, **Speckled Warbler**
- *Cinclosoma castanotum*, **Chestnut Quail-thrush**
- *Circus assimilis*, **Spotted Harrier**
- *Climacteris picumnus victoriae*, **Brown Treecreeper** (eastern subspecies)

- *Coracina lineata*, **Barred Cuckoo-shrike**
- *Cyclopsitta diophthalma coxeni*, **Coxen's Fig-Parrot**

Function: download

BIRDS D-K (8.8GB)

Name: BIRDS D-K (8.8GB)

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

Description:

This item contains landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Daphoenositta chrysoptera*, **Varied Sittella**
- *Dasyornis brachypterus*, **Eastern Bristlebird**
- *Glossopsitta pusilla*, **Little Lorikeet**
- *Grantiella picta*, **Painted Honeyeater**
- *Hieraaetus morphnoides*, **Little Eagle**
- *Ixobrychus flavicollis*, **Black Bittern**

Function: download

BIRDS L-M (4.8GB)

Name: BIRDS L-M (4.8GB)

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

Description:

This item contains a zip file of landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Lathamus discolor*, **Swift Parrot**
- *Lophochroa leadbeateri*, **Major Mitchell's Cockatoo**
- *Lophoictinia isura*, **Square-tailed Kite**
- *Melanodryas cucullata cucullata*, **Hooded Robin (south-eastern form)**
- *Melithreptus gularis gularis*, **Black-chinned Honeyeater (eastern subspecies)**
- *Menura alberti*, **Albert's Lyrebird**

Function: download

BIRDS N-O (5.8GB)

Name: BIRDS N-O (5.8GB)

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

Description:

This item contains a zip file of landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Neophema pulchella*, **Turquoise Parrot**
- *Ninox connivens*, **Barking Owl**
- *Ninox strenua*, **Powerful Owl**
- *Oxyura australis*, **Blue-billed Duck**

Function: download

BIRDS P (6.2GB)

Name: BIRDS P (6.2GB)

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

Description:

This item contains a zip file of landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Pachycephala inornata*, **Gilbert's Whistler**
- *Pachycephala olivacea*, **Olive Whistler**
- *Pandion cristatus*, **Eastern Osprey**
- *Petroica boodang*, **Scarlet Robin**
- *Petroica phoenicea*, **Flame Robin**
- *Podargus ocellatus*, **Marbled Frogmouth**
- *Polytelis swainsonii*, **Superb Parrot Breeding**
- *Ptilinopus magnificus*, **Wompoo Fruit-Dove**
- *Ptilinopus regina*, **Rose-crowned Fruit-Dove**

Function: download

BIRDS Q-Z

Name: BIRDS Q-Z (4.1GB)

(4.1GB)

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

Description:

This item contains a zip file of landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Stagonopleura guttata*, **Diamond Firetail**
- *Stictonetta naevosa*, **Freckled Duck**
- *Tyto tenebricosa*, **Sooty Owl**

Function: download

FROGS (3.6GB)

Name: FROGS (3.6GB)

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

Description:

This item contains a zip file of landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Assa Darlingtoni*, **Pouched Frog**
- *Heleioporus australiacus*, **Giant Burrowing Frog**
- *Litoria littlejohni*, **Littlejohn's Tree Frog**
- *Mixophyes balbus*, **Stuttering Frog**
- *Mixophyes iteratus*, **Giant Barred Frog**
- *Philoria loveridgei*, **Loveridge's Frog**

Function: download

MAMMALS, other (8.4GB)

Name: MAMMALS, other (8.4GB)

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

Description:

This item contains a zip file of landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Aepyprymnus rufescens*, **Rufous Bettong**
- *Cercartetus nanus*, **Eastern Pygmy-possum**
- *Dasyurus maculatus*, **Spotted-tailed Quoll**
- *Macropus dorsalis*, **Black-striped Wallaby**
- *Macropus parma*, **Parma Wallaby**
- *Ningui yvonneae*, **Ningui**
- *Petauroides volans*, **Greater glider**
- *Petaurus norfolcensis*, **Squirrel Glider**
- *Phascogale tapoatafa*, **Brush-tailed Phascogale**
- *Pseudomys oralis*, **Hastings River Mouse**
- *Pteropus poliocephalus*, **Grey-headed Flying-fox**
- *Thylogale stigmatica*, **Red-legged Pademelon**

Function: download

REPTILES (2.6GB)

Name: REPTILES (2.6GB)

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

Description:

This item contains a zip file of landscape capacity rasters for the following species, for pre-industrial (1750), 2000, 2030 and 2070, based on NARClIM 1.0 projections:

- *Aprasia parapulchella*, **Pink-tailed Legless Lizard**
- *Coeranoscincus reticulatus*, **Three-toed Snake-tooth Skink**
- *Delma impar*, **Striped Legless Lizard**
- *Eulamprus leuraensis*, **Blue Mountains Water Skink**
- *Harrisoniascincus zia*, **Rainforest Cool-skink**
- *Hoplocephalus bitorquatus*, **Pale-headed Snake**
- *Hoplocephalus stephensii*, **Stephens' Banded Snake**
- *Karma tryoni*, **Tryon's skink**
- *Simoselaps fasciolatus*, **Narrow-banded Snake**
- *Varanus rosenbergi*, **Rosenberg's Goanna**

Function: download

Unique resource identifier

Code	212d40e0-e763-48ac-8c6e-4fe2b1540a9b
Presentation form	Map digital
Edition	V3.1
Dataset language	English
Metadata standard	
Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/212d40e0-e763-48ac-8c6e-4fe2b1540a9b
Purpose	Saving our species prioritisation
Status	Completed
Spatial representation type	grid
Spatial reference system	
Code identifying the spatial reference system	4283
Spatial resolution	90 m
Topic category	

Keyword set	
keyword value	CLIMATE-AND-WEATHER-Climate-change ECOLOGY-Landscape FAUNA
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	141.210934
East bounding longitude	153.867184
North bounding latitude	-36.315125
South bounding latitude	-28.613459
NSW Place Name	NSW
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	2000-01-01
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	As needed
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	Data inputs from various sources as explained in the PLP project report (in prep. at 070722). It can be requested from Michael Drielsma. NARClIM 1.0 was the source of climatic data (ANUCLIM variables derived).		
Limitations on public access			
Responsible party			
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Responsible party role	pointOfContact		
Metadata point of contact			
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Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew		
Responsible party role	pointOfContact		
Metadata date	2024-02-26T13:45:43.894725		
Metadata language			