

Name of dataset or data source:

Habitat Models for the Northern Comprehensive Regional Assessment (CRA) 1999

Custodian of the dataset or data source:

ED Biodiversity & Conservation (E&H)

Description:

This is a collection of 171 habitat quality models for fauna species that were mapped across forest areas in the Upper North East (UNE) and the Lower North East (LNE) NSW during the Comprehensive Regional Assessment (CRA) in 1999. They are 100m grids stored in MGA Zone 56 projection. 34 models are mapped on public tenure and 137 over all tenure. The 'public land' fauna models were those that modelled fairly on public land, some using Presence-Absence modelling, and were restricted to public land because the systematic surveys were carried out there (eg. primarily NEFBS, State Forest EIS, CRA). Some all-tenure (Presence-only) models were most likely have been cut to public land if it was considered that they modelled better there. In this case there would be two versions of the same model, but only one was used in the CRA.

It was decided that the flora models would not be published due to their poor quality and their need for updating with better records in the time since.

Note that a revised edition of approximately a third of the models were produced in 2008:

<https://iar.environment.nsw.gov.au/dataset/revised-northern-cra-habitat-models-2008>

The original models were produced as part of a Comprehensive Regional Assessment (CRA) for the Regional Forest Assessment (RFA) process. The specific objective of these models was to *identify core areas of forest capable of sustaining viable populations of priority species*.

Habitat quality models were derived using known distributions of species combined with abiotic, biotic, terrain, habitat and geographic layers within a GIS. These known species-habitat relationships were then used to model predicted distributions and thus areas of significant habitat for the species of concern. Flora and fauna experts were used to validate the models and define areas of high-quality habitat for each species. The models are either mapped across All Tenure (at) or Public Tenure (pt). Each species model is named with the Catalogue of Australian Vertebrates (CAVS) code.

Fauna models were developed using logistic regression models (generalised additive models) of species presence and absence to mapped environmental features. Where statistical models were judged by the expert panel to be inadequate, qualitative or expert models were derived. Additionally, fauna experts were used to identify habitat quality. Probability levels were used where appropriate to define high (class 1), intermediate (class 2), and marginal (class 3) habitat.

Flora models were produced using a combination of GAM inference of species sightings with mapped environmental features and a boolean overlay of selected environmental features along with expert review. Expert judgement was employed to categorise flora habitat into two classes of potential habitat: Occupied habitat (class 1) that shows validated point localities or population areas with a surrounding buffer to account for local seed bank or regeneration. High quality habitat (class 2) which is the rest of the model constructed using the boolean overlay of

environmental layers.

See Table 3A (pg.33-38) in report for full a breakdown of species models, methods used and assessment of model confidence.

The report notes that models were not validated due to time constraints and that results should be viewed as a "minimum estimate of high-quality habitat for the purposes of the CRA."

The official report, *Modelling areas of habitat significance for vertebrate fauna and vascular flora in north-east NSW 1999*, expands on the methodology and outputs. The report is stored for internal access under

P:\Corporate\Products\Biodiversity\Habitat\CRA_Northern

MODELLING AREAS OF HABITAT SIGNIFICANCE FOR VERTEBRATE FAUNA AND VASCULAR FLORA IN NORTH EAST NSW A project undertaken as part of the NSW Comprehensive Regional Assessments, April 1999 Project number NA 23/EH

The fauna species modelled are as follows:

- 0021 Rose-crowned Fruit-Dove • 0023 Superb Fruit-Dove • 0035 Brush Bronzewing • 0174 Bush Stone-curlew • 0183 Black-necked Stork • 0196 Black Bittern • 0223 Red Goshawk • 0241 Osprey • 0248 Powerful Owl • 0250 Masked Owl • 0253 Sooty Owl • 0258 Musk Lorikeet • 0264 Red-tailed Black-Cockatoo • 0265 Glossy Black-Cockatoo • 0268 Gang-gang Cockatoo • 0302 Turquoise Parrot • 0324 Forest Kingfisher • 0345 Little Bronze-Cuckoo • 0350 Superb Lyrebird (edwardsii) • 0351 Albert's Lyrebird • 0355 Rufous Scrub-bird • 0376 White-eared Monarch • 0385 Hooded Robin • 0396 Pale-yellow Robin • 0413 Little Shrike-thrush • 0443 Grey-crowned Babbler • 0498 Chestnut-rumped Hylacola • 0598 Painted Honeyeater • 0603 Regent Honeyeater • 0610 Mangrove Honeyeater • 0686 Paradise Riflebird • 0868 Forest Raven • 1008 Tiger Quoll • 1017 Brush-tailed Phascogale • 1033 Dusky Antechinus • 1045 Common Planigale • 1136 Yellow-bellied Glider • 1150 Eastern Pygmy-possum • 1162 Koala • 1165 Common Wombat • 1175 Long-nosed Potoroo • 1187 Rufous Bettong • 1215 Brush-tailed Rock-wallaby • 1245 Parma Wallaby • 1259 Whiptail Wallaby • 1280 Pteropus poliocephalus • 1282 Pteropus alecto • 1290 Nyctimene robinsoni • 1294 Syconycteris australis • 1303 Rhinolophus megaphyllus • 1324 Nyctinomus australis • 1329 Mormopterus norfolkensis • 1336 Nyctophilus bifax • 1353 Chalinolobus dwyeri • 1354 Chalinolobus nigrogriseus • 1361 Scotoeanax rueppellii • 1362 Scotorepens greyii • 1364 Scotorepens balstoni • 1369 Kerivoula papuensis • 1372 Falsistrellus tasmaniensis • 1377 Vespadelus pumilus • 1401 Pale Field-rat • 1455 New Holland Mouse • 1466 Eastern Chestnut Mouse • 2124 Eulamprus tryoni • 2139 Underwoodisaurus sphyurus • 2182 Tympanocryptis diemensis • 2245 Hypsilurus spinipes • 2287 Varanus rosenbergi • 2294 Ophioscincus truncatus • 2453 Lampropholis caligula • 2467 Cautula zia • 2468 Ctenotus eurydice • 2550 Eulamprus kosciuskoi • 2559 Eulamprus tenuis • 2615 Austrelaps ramsayi • 2645 Cacophis harriettae • 2665 Drysdalia coronoides • 2675 Hoplocephalus bitorquatus • 2676 Hoplocephalus bungaroides • 2687 Saltuarius swaini • 3007 Assa darlingtoni • 3008 Mixophyes fleayi • 3039 Litoria littlejohni • 3042 Heleioporus australiacus • 3073 Mixophyes balbus • 3075 Mixophyes iteratus • 3107 Philoria kundagungan • 3109 Philoria sphagnicolus • 3117 Pseudophryne bibronii • 3166 Litoria aurea • 3168 Litoria booroolongensis • 3169 Litoria brevipalmata • 3186 Litoria subglandulosa • 3202 Litoria olongburensis • 3217 Litoria piperata • 3219 Litoria revelata • 9004 Saproscincus challengerii • 9006 Philoria pughi • 9007 Philoria richmondensis • 9029 Scotorepens sp 1 • 9058 Lampropholis elongata • 9059 Elseya georgesi • 9060 Elseya purvisi • 9061 Emydura sp 1 • 9103 Elseya sp 2 • 0017 Black-breasted Button-quail • 0025 Wompoo Fruit-Dove • 0230 Square-tailed Kite • 0234 Pacific Baza • 0246 Barking Owl •

0261 Double-eyed Fig-Parrot • 0309 Swift Parrot • 0314 Marbled Frogmouth • 0405 Olive Whistler • 0428 Barred Cuckoo-shrike • 0519 Eastern Bristlebird • 0619 Yellow-tufted Honeyeater • 1025 Vespadelus troughtoni • 1133 Greater Glider • 1137 Squirrel Glider • 1234 Red-legged Pademelon • 1260 Black-striped Wallaby • 1341 Miniopterus schreibersii • 1346 Miniopterus australis • 1357 Myotis adversus • 1438 Broad-toothed Rat • 1464 Hastings River Mouse • 1500 Grassland Melomys • 1531 Dingo • 2293 Coeranoscincus reticulatus • 2552 Eulamprus murrayi • 2640 Acanthophis antarcticus • 2677 Hoplocephalus stephensii • 2723 Tropidechis carinatus • 2764 Saproscincus galli • 2765 Saproscincus rosei • 3108 Philoria loveridgei • 3137 Crinia tinnula • 3184 Litoria freycineti • 3190 Litoria jervisiensis

Data quality rating:

- ☆ Institutional Environment - 3
- ☆ Accuracy - 1
- ☆ Coherence - 3
- ★ Interpretability - 5
- ☆ Accessibility - 3

INSTITUTIONAL ENVIRONMENT

Good



- ✓ Does the information have the potential to enhance services or service delivery?
- ✓ The following governance roles and responsibilities for this asset are clearly assigned:
 - Information Asset Owner
 - Information Asset Custodian
 - Information Steward
- ✓ The Custodial agency has no commercial interest or conflict of interest in the data

- X The data aligns with the Data Quality Framework, including:
 - Legislation
 - Policies
 - Information Asset Governance
 - Standards
 - Data Management Plans
- X Data collection is authorised by law, regulation or agreement

ACCURACY

Poor



- ✓ The data collection met the objectives of the primary user. The data correctly represents what it was designed to measure, monitor or report.
- X Data has been subject to a data assurance process (for example: Checking for errors at each stage of data collection and processing, or verifying data entry and making corrections if necessary.)
- X Data is revised and the revision is published if errors are identified
- X There are no known gaps in the data or if there are gaps (for example: non-responses, missing records, data not collected), they have been identified in caveats attached to the dataset.
- X No changes have been made or other factors identified (for example: weighting, rounding, de-identification of data, changes or flaws in data collection or verification methods) that could affect the validity of the data; or any changes/factors have been identified in caveats attached to the asset.

COHERENCE

Good



- ✓ Standard definitions, common concepts, classifications and data recording practices have been used.
- ✓ Elements within the data can be meaningfully compared.
- ✓ This data is generally consistent with similar or related data sources from the same discipline

✗ The data can be analysed over time (for example, there have not been any significant changes in the way items are defined, classified or counted over time).

✗ The data does not form part of a collection or, if it is the latest in a series of data releases, there have not been any changes in methodology or external impacts since the last data release.

INTERPRETABILITY

Excellent



- ✓ A data dictionary is available to explain the meaning of data elements, their origin, format and relationships
- ✓ Information is available about the primary data sources and methods of data collection (e.g. instruments, forms, instructions).
- ✓ Information is available to help users evaluate the accuracy of the data and any level of error
- ✓ Information is available to explain concepts, help users correctly interpret the data and understand how it can be used
- ✓ Information is available to explain ambiguous or technical terms used in the data

i Find out more about the data dictionary from the Custodian (contact details below).

i Find out more about the primary data sources and methods of data collection from the Custodian (contact details below).

i Find out more about concepts used in this dataset and how to understand or interpret the data from the Custodian (contact details below).

i Find out more about ambiguous or technical terms used in the data from the Custodian (contact details below).

ACCESSIBILITY

Good



- ✓ Data is available online with an open licence
- ✓ Data is available in machine-processable, structured form (e.g. CSV format instead of an image scan of a table)
- ✓ Data is linked to other data, to provide context (e.g. employee ID is linked to employee name or species name is linked to genus)

✗ Data is available in a non-proprietary format (e.g. CSV, XML)

✗ Data is described using open standards (e.g. RDF, SPARQL) and persistent identifiers (URIs or DOIs)

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For more information about this dataset or data source, contact:

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131555

Understanding the Data Quality Statement

The data quality statement aims to help you understand how a particular dataset could be used and whether it can be compared with other, similar datasets. It provides a description of the characteristics of the data to help you decide whether the data will be fit for your specific purpose.

The Data Quality statement is prepared by the data custodian (provider of the dataset), using a questionnaire that has been developed in accordance with the NSW Government Standard for Data Quality Reporting.

About the quality rating:

The reporting questionnaire asks five questions for each of these data quality dimensions:

- Institutional Environment
- Accuracy
- Coherence
- Interpretability
- Accessibility

For each question: “yes” = 1 point; “no” = 0 points

The number of points determines the Quality Level for each dimension (high, medium, low).

Only dimensions with four or five points receive a star.

Points	Quality Level	Star / No Star
0	Poor	No Star
1	Poor	No Star
2	Fair	No Star
3	Good	No Star
4	Very Good	Star
5	Excellent	Star

Evaluating data quality

Quality relates to the data's "fitness for purpose". Users can make different assessments about the data quality of the same data, depending on their "purpose" or the way they plan to use the data.

The following questions may help you evaluate data quality for your requirements. This list is not exhaustive. Generate your own questions to assess data quality according to your specific needs and environment.

- What was the primary purpose or aim for collecting the data?
- How well does the coverage (and exclusions) match your needs?
- How useful are these data at small levels of geography?
- Does the population presented by the data match your needs?
- To what extent does the method of data collection seem appropriate for the information being gathered?
- Have standard classifications (eg industry or occupation classifications) been used in the collection of the data? If not, why? Does this affect the ability to compare or bring together data from different sources?
- Have rates and percentages been calculated consistently throughout the data?
- Is there a time difference between your reference period, and the reference period of the data?
- What is the gap of time between the reference period (when the data were collected) and the release date of the data?
- Will there be subsequent surveys or data collection exercises for this topic?
- Are there likely to be updates or revisions to the data after official release?