

Title

Bird, Ground Dwelling Vertebrate and Invertebrate Data

Abstract

These data were collected as part of the [NSW Grazing Study](#). Surveys were conducted at a subset (108 sites) of the 451 NSW Grazing Study sites to determine the abundance and diversity of fauna.

The following methods were employed;

Small mammals and reptiles were surveyed using dry pit-fall traps, funnel traps, Elliott traps and timed searches. Vertebrate trap lines consisted of two 20 L buckets (150 mm deep), two 150 mm diameter PVC pipes (500-600 mm deep), and four double-ended funnel traps placed under or along a 20 m drift-fence. Pit-fall traps were placed flush with the ground under the drift fence. Captured specimens were provided with sarking sheets, shade cloth sheets, PVC tubes, Styrofoam blocks, litter and some soil in each trap to prevent over-heating or drowning in the event of rain. Ant rid powder and sprays were used at sites where ants were abundant. Funnel traps were located at either side of the drift fence, between the end pairs of pit-fall traps. A sarking or 90% shade-cloth cover was placed over the top of the funnel traps to buffer temperatures inside the traps. Captured specimens were provided with a cardboard roll and/or a sheet of sarking for shelter. All fauna surveys were conducted with approval from the Animal Ethics Committee (approval number: 140602/02).

Four Elliot traps were also positioned near each trap line in appropriate habitat patches such as under shrubs, or near logs or rocks to enhance capture rates. Each trap was baited with a mixture of rolled oats and peanut butter. Traps were covered with shade cloth or sarking cover to buffer temperature extremes for captured specimens. All trap-lines were checked and cleared early each morning and late each afternoon over a 4 day period (8 times). The species name of each specimen captured was recorded and the specimen marked to obtain an assessment of the number of recaptures.

Two 30 minute habitat searches were undertaken at each 100 m x 200m site on different afternoons. Searches were targeted towards potential reptile habitat (e.g. open patches, leaf litter, logs, rocks, bark) by experienced personnel. Species were generally identified without the need for capture, although some species did need to be captured with a noose or by hand for identification.

Bird surveys were conducted during two springs to early summers over two consecutive years. Each year, all sites were sampled twice for 20 minutes, on different days at different times, by a single observer. Surveys commenced from dawn and concluded by 12 noon or if the ambient temperature reached 30 degrees C or if it became excessively windy (>39 km/hr). In addition, we collected data on the cover and density of trees, shrubs, groundcover, bare soil, litter and coarse woody debris along a 200 m belt transect that formed the central line of the 2 ha bird sampling plot. For each sampling site we derived a habitat complexity score. Six habitat attributes were rated on a scale of 0 to 3 and the scores for all six attributes totalled to give an overall score for a site. Thus sites with a larger score have greater habitat complexity.

Ground dwelling invertebrates were sampled using both wet and dry pitfall traps. Wet pitfall traps were 250 ml plastic screw-top containers half filled with ethylene glycol, installed at each corner of a 5 m x 5 m plot, plus one trap located centrally within the plot. Each pitfall trap was placed flush with the ground with a cover to prevent damage or loss of material due to rainfall. Traps were left open for five consecutive nights at each site. Incidental captures of large invertebrates (i.e. scorpions, spiders, centipedes, beetles, etc. > 1 cm, but not ants) were also collected from the vertebrate fauna pitfall traps each morning.

Resource locator

[Data Quality Statement](#)

Name: Data Quality Statement

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

Description:

Data quality statement for Plant Species Cover and Abundance

Function: download

[The NSW Grazing Study Assessment of the Impact of Grazing on](#)

Name: The NSW Grazing Study Assessment of the Impact of Grazing on Vertebrates and Invertebrates

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

Vertebrates and Invertebrates

Description:
A spreadsheet of surveys conducted at a subset (108 sites) of the 451 NSW Grazing Study sites to determine the abundance and diversity of fauna.

Function: download

The NSW Grazing Study Assessment of the Impact of Grazing on Vertebrates and Invertebrates_Bionet

Name: The NSW Grazing Study Assessment of the Impact of Grazing on Vertebrates and Invertebrates_Bionet

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

Description:

Link to resource through Bionet.

Function: download

Unique resource identifier

Code 3e3b1dbd-b154-45cc-a06c-ef2103f26f54

Presentation form Table digital

Edition Original (raw data)

Dataset language English

Metadata standard

Name ISO 19115

Edition 2016

Dataset URI <https://datasets.seed.nsw.gov.au/dataset/3e3b1dbd-b154-45cc-a06c-ef2103f26f54>

Purpose Decision support

Status Completed

Spatial representation type None

Spatial reference system

Code identifying the spatial reference system 4283

Topic category

Keyword set	
keyword value	ECOLOGY FAUNA
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	141.064453
East bounding longitude	148.139648
North bounding latitude	-35.995785
South bounding latitude	-31.802893
NSW Place Name	Central West, Riverina and Western 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	2013-07-01
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
Limitations on public access	

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Metadata language