

The Atlas of Living Australia www.ala.org.au

CSIRO Scientists in Schools Canberra, 16 November 2011



The Atlas is funded by the Australian Government under the National Collaborative Research Infrastructure Strategy and further supported by the Super Science Initiative of the Education Investment Fund

ATLAS OF LIVING AUSTRALIA

The Atlas of Living Australia Offers

- A huge array of information on Australian species, freely accessible through a single website.
- All species, all data, online. Work in progress.
- Tools to set up online observation and survey forms, with the ability to upload photos.
- Mission
 - To develop an authoritative, freely accessible, distributed and federated biodiversity data management system.

ATLAS OF LIVING AUSTRALIA

Data, Information and Tools

- 170,000 species pages
- Species biology, ecology, status
- 25 million+ distribution records
- Mapping tools
- Photos and images
- Names and classification
- Identification tools
- Heritage literature
- Data on biological collections
- Citizen science and education add sightings & data
- Volunteer involvement.

Atlas Site Homepage





The Atlas is a work in progress. This website is a window into what we are doing. We are busy integrating many more data sets and solving issues around combining data from different sources. We welcome your contributions. Learn more.

Get Started

with examples, forums, videos and frequently asked questions



information on species, maps, collections and regions



sightings, photos and information



New & Noteworthy



Natural History



Explore Your









GBIF



Wattes

Atlas updates

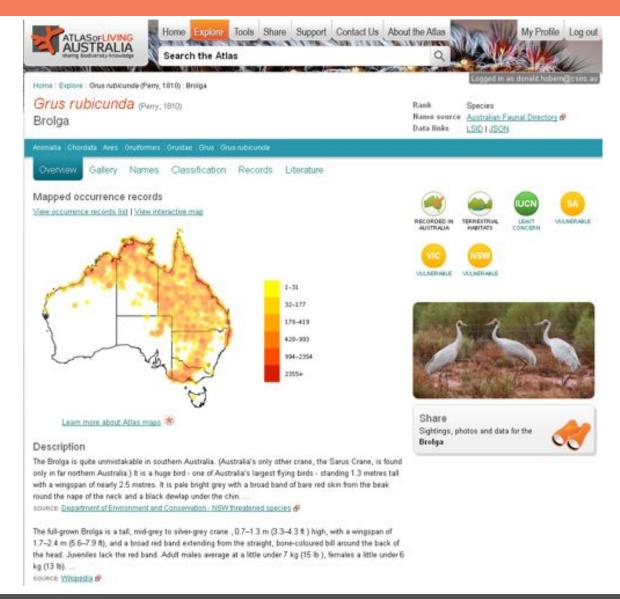
More updates

27 SEPTEMBER, 2011 BioLink Moves to Version 3.0

23 SEPTEMBER, 2011 Fish Barcoding

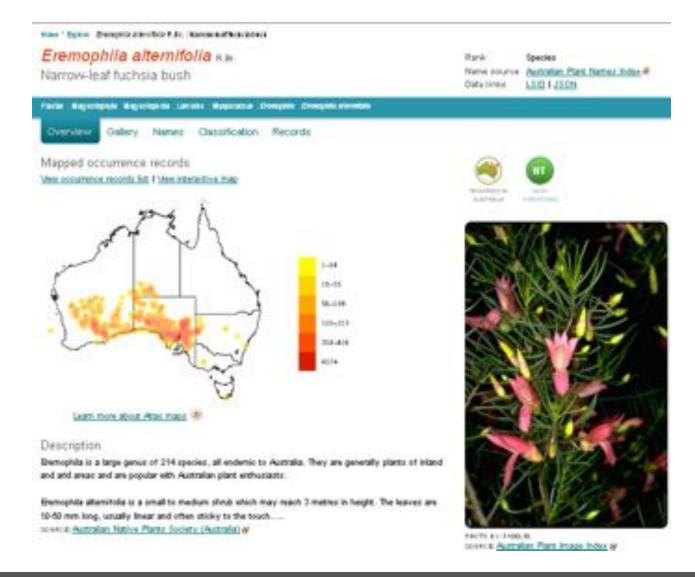


170,000+ Species Pages





170,000+ Species Pages





25 Million+ Occurrence Records

Home: Explore: Callocephalon fimbriatum (Gang-gang Cockatos) Callocephalon fimbriatum (J. Grant, 1803) Rank Species: Name source Australian Faural Directory # Gang-gang Cockatoo Data links LSID LJSON Animialia Chordata Ares Psittaciformes Cacatuidae Callocephalon Callocephalon fimbriatum Overview Gallery Names Classification Literature. Occurrence Records Share Sightings, photos and data for the View list of all 10,565 occurrence records for this taxon Gang-gang Cockatoo By Dataset Birdata: 5.842 records Map of Occurrence Records DECCW Atlas of NSW Wildlife: 3.553 records Eremaea: 1.074 records Museum Victoria provider for OZCAM: 112 records Australian National Wildlife Collection provider for OZCAM: 60 records South Australia Fauna Observations: 11 records Australian Museum provider for OZCAM: 4 records Tasmanian Museum and Art Gallery provider for OZCAM: 4 records Barcode of Life: 2 records . EOL Flickr Group: 1_records Individual Sightings: 1 records ■ Western Australia Museum provider for OZCAM: 1 records Interactive version of this map Birdata ■ DECCW Atlas of NSW Wildlife Erempea Museum Victoria provider for OZCA Australian National Wildlife Collect E Other



25 Million+ Occurrence Records

Home : Explore : Occurrence Records Occurrence Records View as Map Download Refine results 10,665 results returned for species: Callocephalon fimbriatum: Gang-gang Cockatoo Record Type Sort order normal Results per page 20 M Sort by best match Observation (18,481) Record: 180739974 — Species: Callocephalon fimbriatum | Gang-gang Cockatoo Specimen (183) Dataset Western Australia Museum Provider For OZCAM Record Type: Specimen, State, NSW Unknown (1) Record: 182031675 — Species: Callocephalon fimbriatum | Gang-gang Cockatoo Specimen Type Dataset Eremaea Record Type Observation Record Date 1997-01-26 State VIC. Not A Type (59) Not Applicable (1) Record: 182031676 — Species: Callocephalon fimbriatum | Gang-gang Cockatoo Dataset Eremana Record Type: Observation. Record Date: 2001-04-29. Dataset Birdata (5,842) Record: 182031677 — Species: Callocephalon fimbriatum | Gang-gang Ceckatee DECCW Atlas Of NSW Wildlife Dataset Eremaea Record Type Observation Record Date 2004-01-13 State NSW (3.553)Eremaea (1,074) Record: 182031678 — Species: Callocophalon fimbriatum | Gang-gang Cockatoo Museum Victoria Provider For Dataset Eremaea Record Type: Observation. Record Date: 2003-09-22. State: VIC. OZCAM (112): + Show More Record: \$82031679 — Species: Callocephalon fimbriatum | Gang-gang Cockatoo Dataset Eremana Record Type Observation Record Date 1997-04-15 State ACT State Territory New South Wales (5,260): Record: 182031680 - Species: Callocephalon fimbriatum | Gang-gang Cockatoo Victoria (4,853) Dataset Eremaea Record Type: Observation. Record Date: 2002-01-05. State: VIC. Australian Capital Territory (341) South Australia (13) Record: 182031681 — Species: Callocephalon fimbriatum | Gang-gang Cockateo + Show More Dataset Eremaea Record Type: Observation. Record Date: 2001-12-27. State: VIC-Biogeographic Region Record: \$2031682 — Species: Callocephalon fimbriatum | Gang-gang Ceckatee South Eastern Highlands (3,057) Dataset Eremaea Record Type: Observation. Record Date: 2002-10-31. State: VIC. Sedney Basin (2,714) South East Corner (1,254) Record: 182931683 — Species: Callocephalon fimbriatum | Gang-gang Ceckatee South East Coastal Flain (1,116) Dataset Eremana Record Type: Observation: Record Date: 1997-03-16. State: VIC + Show More

A Single Occurrence Record



Home: Explore: Occurrence Record - 180739974

Logged in as Donald Hoberts 2 coiro a

Occurrence Record Details: 180739974

| Dataset | S Amotate Dataset |
|------------------|--|
| Data Provider | OZCAM (Online Zoological Collections of Australian Museums) Provider |
| Data Set | Western Australia Museum provider for OZCAM |
| Institution | Western Australian Museum. Institution Code: "WAM" |
| Collection | Western Australian Museum Bird Collection Collection Code: "AVIF" |
| Catalogue Number | 172 |
| Basis of Record | specimen Supplied as "preservedSpecimen" |
| Comments | [0 comments] |
| Taxonomy | S Annotate Taxonomy |
| Scientific Name | Callocephalon fimbrishum |
| Taxon Rank | Species |
| Common Name | Gang-gang Cockatoo |
| Kingdom. | Animaka |
| Phylum | Chordata |
| Class | Areas |
| Order | Pottaciformes |
| Family | Cacatuidae. Supplied as "PS/TTACID4E" |
| Genus | Callocephalon |



Possible Issues

Data validation tools identified the following possible issues:

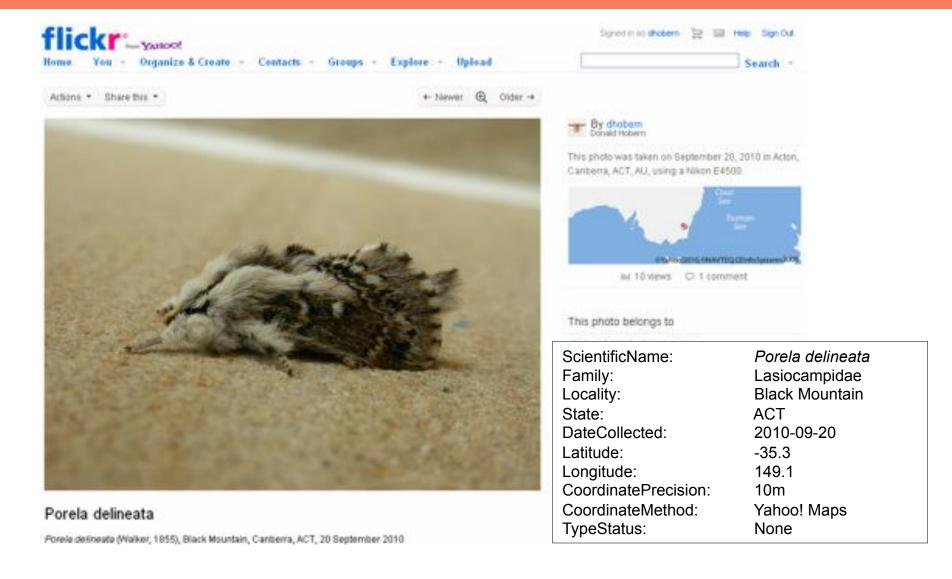
Miscellaneous issues: country inferred from coordinates

Location of record





Records from Field Observations











ScientificName: Derwentia derwentiana

Family: Scrophulariaceae

Locality: 0.4 km E of Coryah Gap...

State: NSW

DateCollected: 1998-12-12

Latitude: -30.3 Longitude: 150.1 CoordinatePrecision: 200m

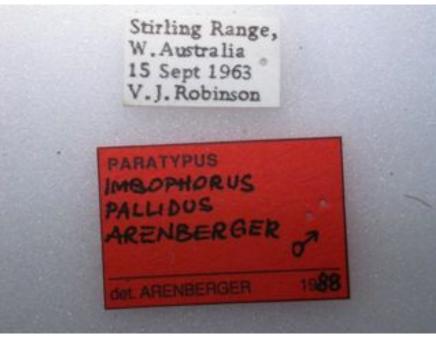
CoordinateMethod: Paper map

TypeStatus: None









ScientificName: Imbophorus pallidus

Family: Pterophoridae Locality: Stirling Range

State: WA

DateCollected: 1963-09-15

Latitude: -34.3 Longitude: 118.0 CoordinatePrecision: 10000

CoordinateMethod: Google Earth TypeStatus: Paratypus

Powerful Mapping Tools



 300+ layers for mapping and analysis.

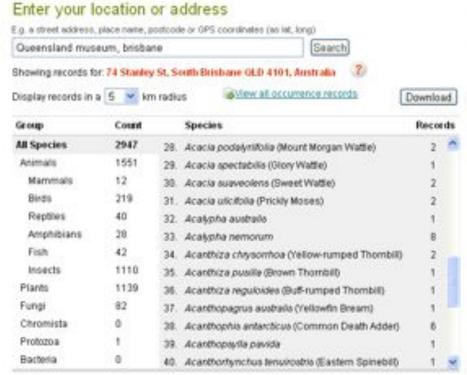
Suite of powerful mapping tools.



Species in Your Local Area



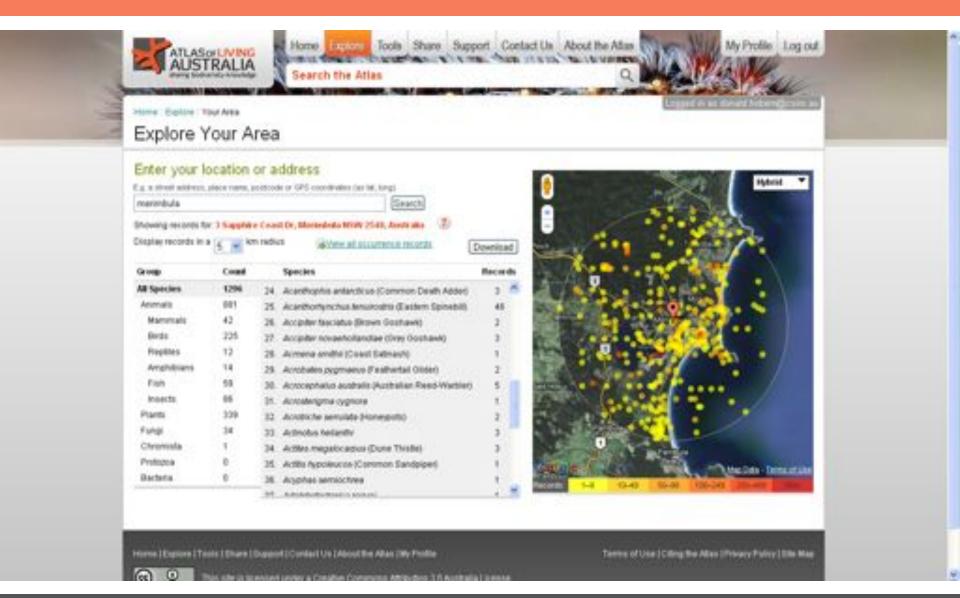
Explore Your Area





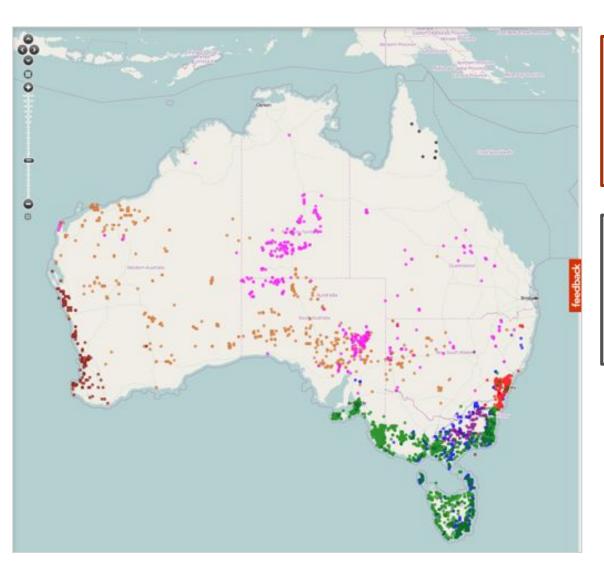
Species in Your Local Area





Where is Each Species Found?







manglesii Mangles' Kangaroo Paw



Gossypium sturtianum Sturt's Desert Rose



Sturt Pea



Vappodes phalaenopsis Cooktown Orchid



Telopea speciosissima Waratah



gloriosa Royal Bluebell

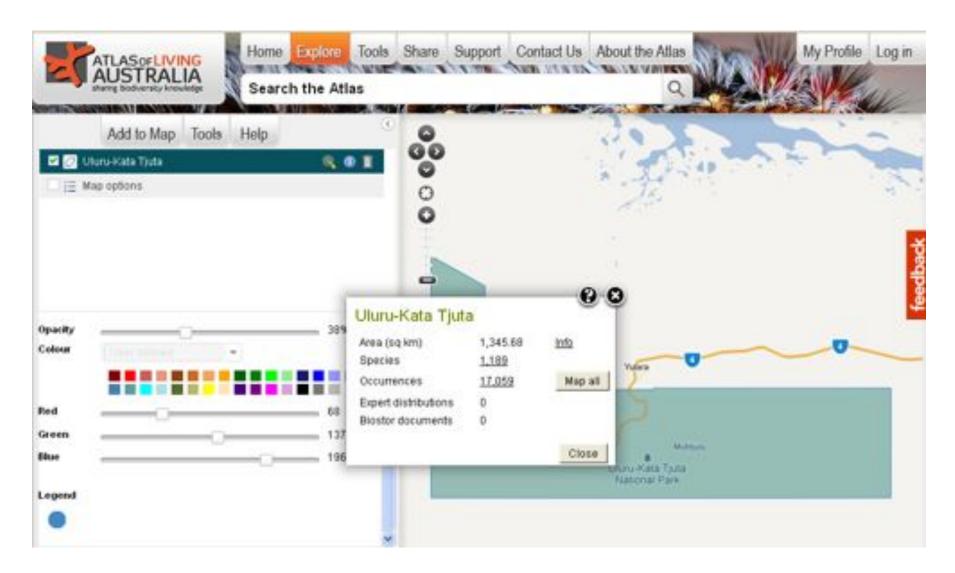






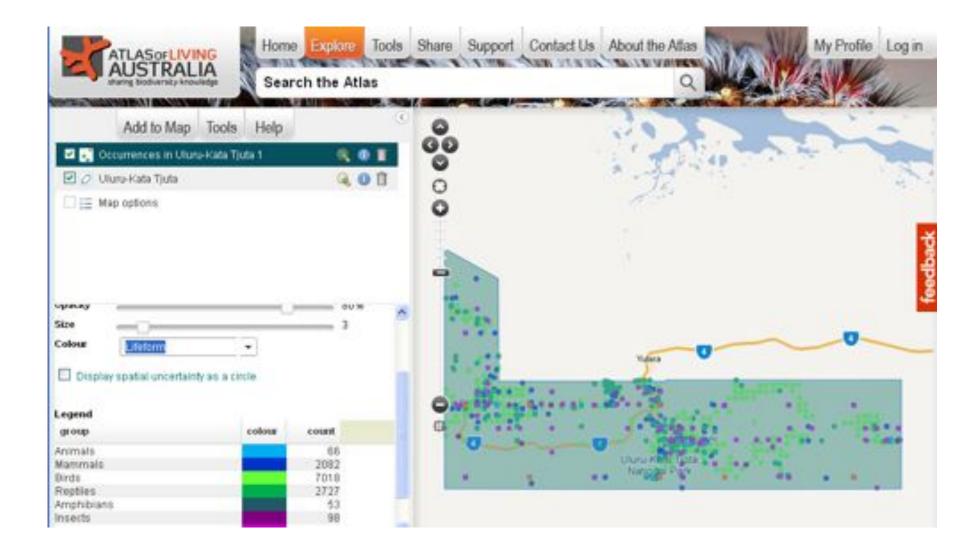


Map Species – Define Area



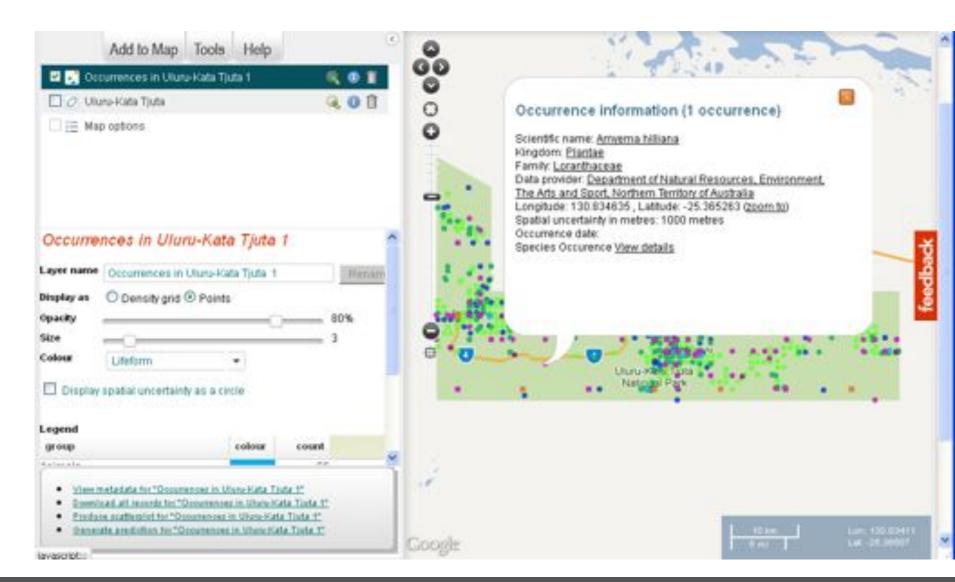


Map Species – All Species



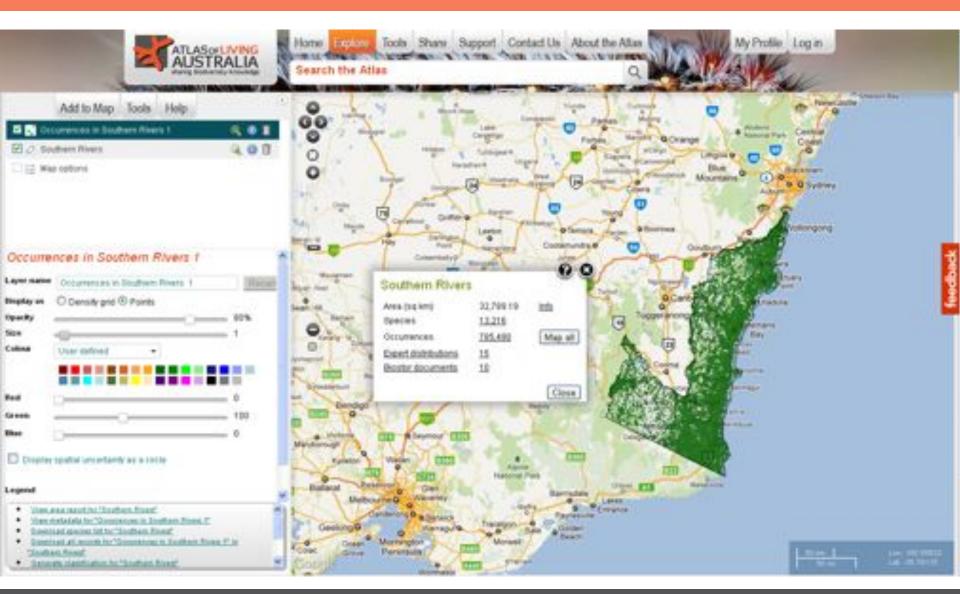


Click to See Occurrence Details



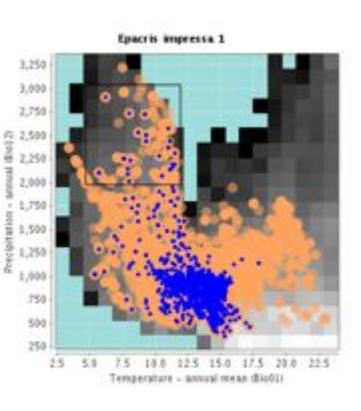


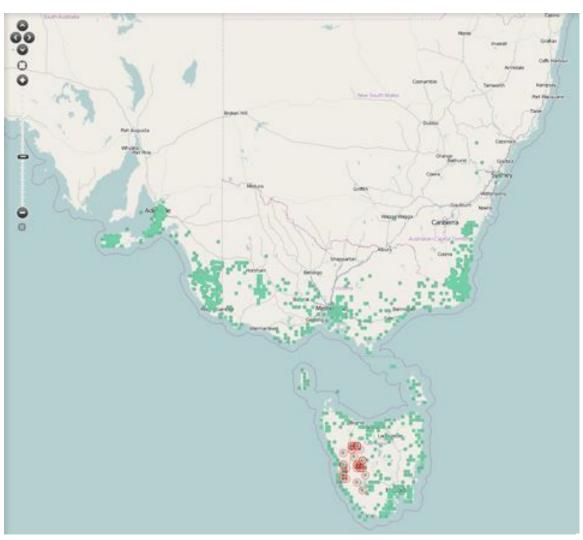
Map Regional Information





Environmental Mapping - Layers





Niche modelling



Maxent model for Epacris impressa

This Macent v3.3.3a predictive model for Epacris impresse was created Fri Jul 29.13.27.52 EST 2011. Links at the bottom of this page to the raw data may be used for further analysis.

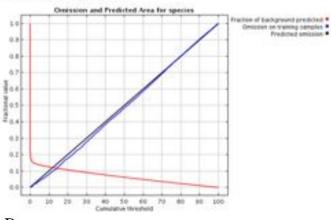
Model reference murber: 1311909973484 Specier: Epacric impressa (species)

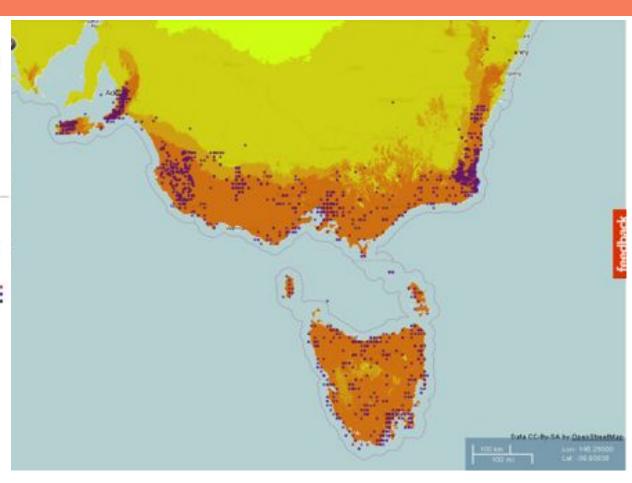
Зреция: Ераско імрення (греция Lapum

- · Precipitation sensal (Bio12) (bioclim_bio12)
- · Precipitation susual reasonality (resinf)
- Temperature annual mean (BioU1) (bioclim_bio1)
- . Temperature annual range (Bio07) (bioclim_bio7)
- · Aspect (aspect)
- · Elevation (slevation)

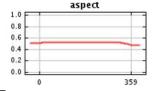
Analysis of omission/commission

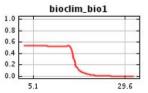
The following picture shows the consistent and predicted area as a function of the cumulative threshold. The consistent set is calculated both on the training presence records, and (if test data are used) on the test records. The consistent sate should be close to the predicted omission, because of the definition of the cumulative threshold.

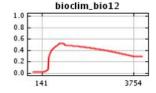


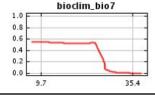


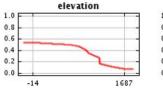
Response curves

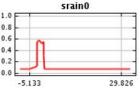














Species photos and images









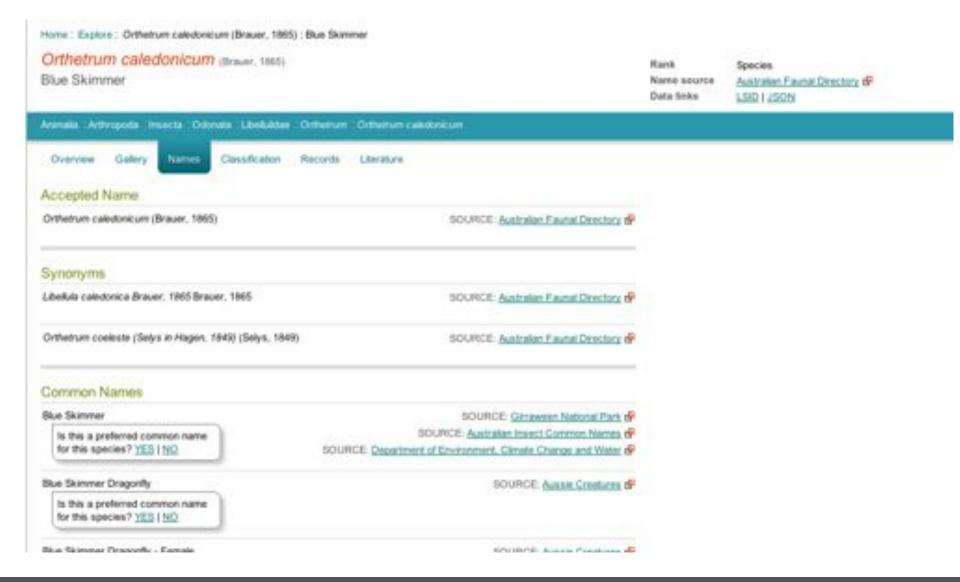
Diagnostic photos







Species Names







Home: Explore: Emerophile attemitalis R.Dr.: Narrow-leaf tuchola bush Eremophila alternifolia Rank: Species Name source Australian Plant Names Index & Narrow-leaf fuchsia bush Dota links LSID LISON Plantas: Magneticatyla: Magneticosida: Lamiatet: Myoporacese: "Exerophila: "Exerophila attentibila Overview Gallery Names Classification Records Scientific Classification kingdom Plantae phyllum: Magnoliophyla class: Magnoliopsida order: Lamiales family: Myoporaceae. genus: Exempobile → species: Eremophila alternifolia: Narrow-leaf fuclisia bush variety: Exempotola alternifolia var. alternifolia IIII. variety: Exemophila attenutoria var. latifolia IIII.

ATLAS OF LIVING AUSTRALIA

Rich Data: Identification Tools





Sharing biodiversity knowledge to shape our future



Rich Data: Identification Tools





Data on Biological Collections

Australia's natural history collections

Learn about the institution, the collections they hold and view records of specimens that have been databased. Currently only the collections of ALA partners are shown. Over time this list will expand to include all natural history collections in Australia.

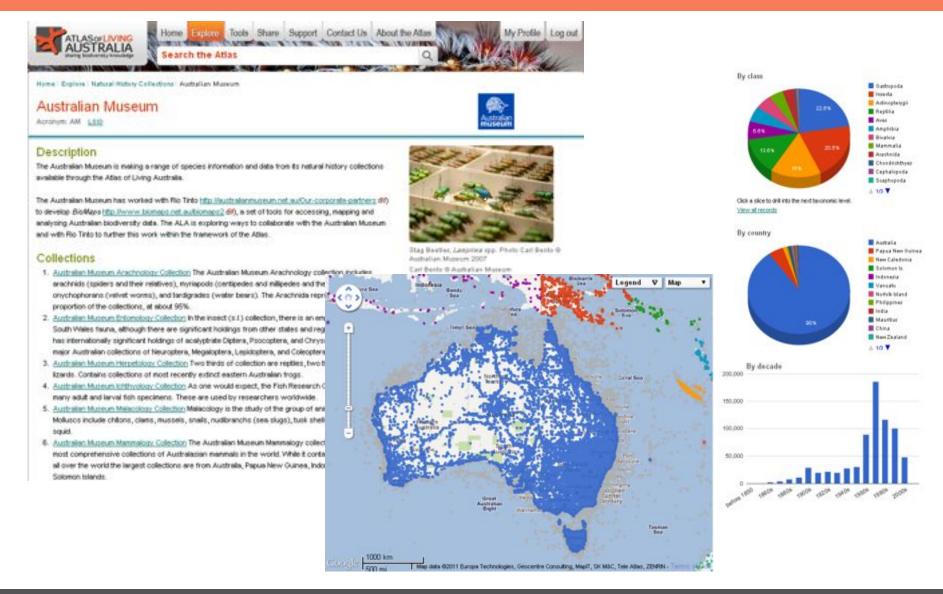


Click on a map pin to see the collections at that location. Use the map controls to zoom into an area of interest. Or drag your mouse while holding the shift key to zoom to an area.





Data on Biological Collections



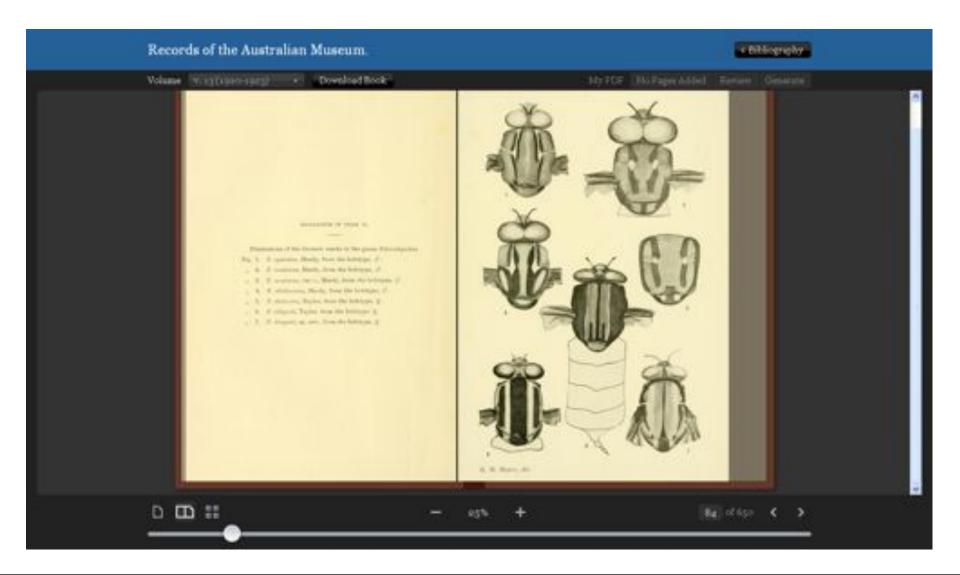
Heritage Literature





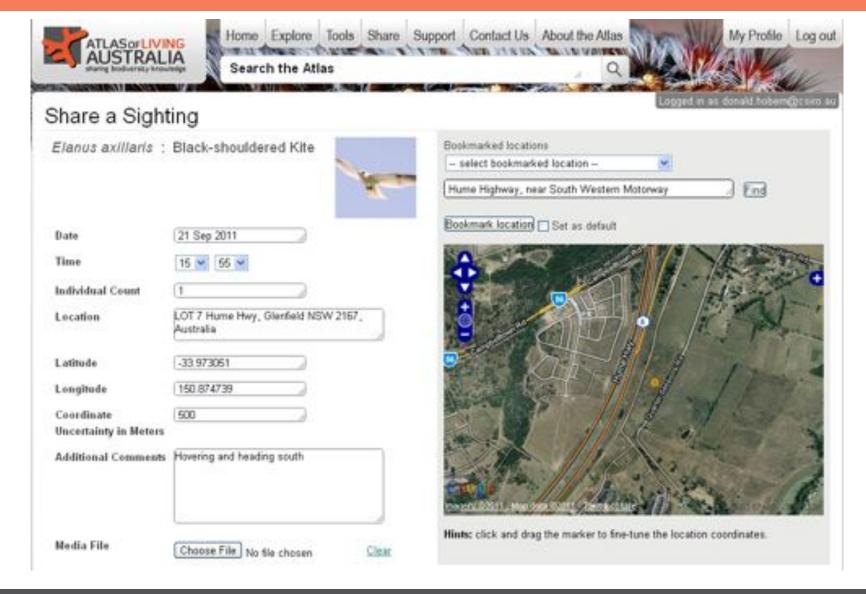


Heritage Literature





Citizen Science - Add a Sighting



ATLAS OF LIVING AUSTRALIA

Examples Using ALA Software

- Biodiversity Snapshots Museum Victoria and Vic Dep Education and Early Childhood Development.
- Wild Backyards Queensland Museum.
- Birds Australia Carnaby's Black Cockatoo Recovery,
 Bird Atlas, Shorebirds 2020. Mention EAGLECAM.
- ClimateWatch
- Great Eastern Ranges 12 projects eg. squirrel glider
- Atlas of Life in the Coastal Wilderness Merimbula.

Biodiversity Snapshots







It's easy to participate... Register your school

Enter class details and create logins for students.

Plan a field trip. Decide where you will took for animals, and which animals you want to observe. Generals your mobile survey.



Look around. Be patient. Walk and talk quelly. Look up this the trees and down eto the leaf litter to find manneals. Iccards, beds, bullerfiles, spiders and bugs.

Use the Field Guide and Help Me ID tool to standily the animals you see.

Record your observations

Upload your data back to the Slodiversity Singarhots main dautscoard.

Analysis your results and share them back.

Our Education Program

provides many resources for use before, during and after your Biodiversity Snapshots field trip.

Latest Statistics

Total number of records 853. Number of species recorded 179 Number at species in field guide 650 Last Record

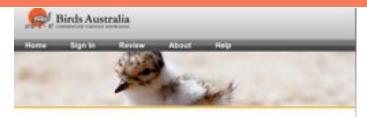
Was created or 08 Nov 2011 by Ecoline and was a Caddelly (Leptocareles) in the group Freetinger Invertebrates.



Citizen Science – Birds Australia







Welcome to Birds Australia's Citizen Science Portal

Sign In

Register Now

Regularization in their and its available to anyone. If you would like to help our research into the variety of projects we are working on. then please register and become one of our 'ctipen. scientists today.

This site is the Otizon Science Portal for Birds Acetralia, where you cancontribute your observations of native birds to a number of the Birds Australia projects that are using this site.

initially this site was developed to support the Birds Australia Carnaby's Black-Cocketoo Tracker project, and the people who were recording on the old site. can still record their information here, where the data will help inform the broader Birds Australia

Since the project began, the team behind this site - from the Allies of Living Australia --have been working with Birds Australia to add additional functionally and projects to this site. The various projects involved in the site will include nesting, roosting and general sighting forms that will enable community members to directly enter information intothis online database and see their records build over time.

through this portal goes to the Birds Australia projects, and is also transmitted to the Atlas of Living Australia for broad dissemination across a wide nange of interested. researchers.

Dur Projects

Click on an image of a project you are interested in to sign in and start recording observations today! Or register with the site have.



Carnaby's Cockatoe Tracker

Research that aims to determine the daily movement patterns of Western Australia's iconic Camaby's Black-Cockatoo within the south-west of Western

Latent Statistics

Number of users 1415 Total number of 5209 records Number of species recorded. The last sighting was a Carnalty's Cockatoo. Calyptorflynchus latirosesis in the group Birds.

Supported By

AUSTRALIA

Streto Australia is the Australian partner of All the data being calected

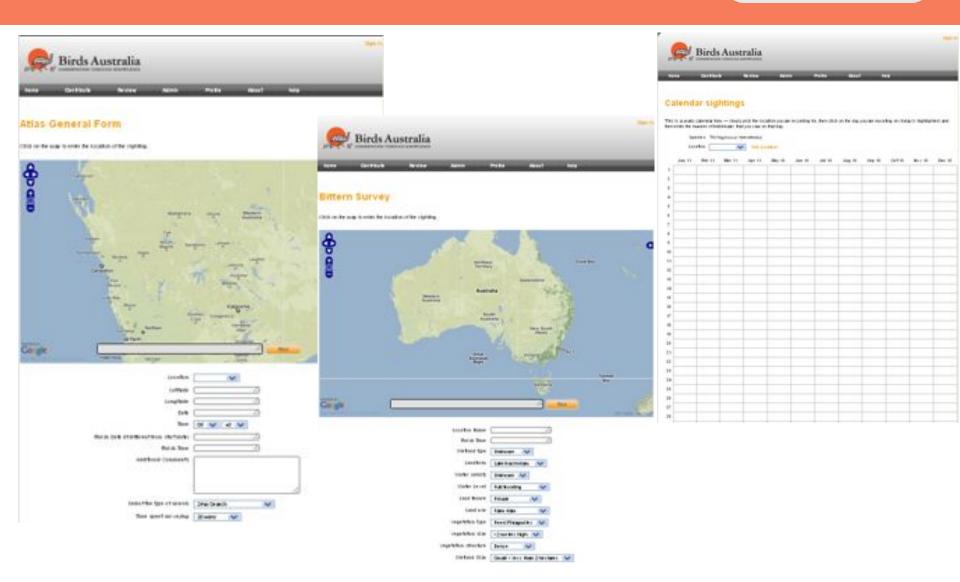
If you have sightings of other birds, you have several notions.







Citizen Science – Birds Australia



Citizen Science – Wild Backyards





fome Explore Wild Backyards Plan a study Collect Insects Display Insects Identify Insects Summarise Data



Explore Wild Backyards. Watch and listen to three digital stories in which experts explain what they did to attract wildlife to their backyards in Brisbane, Roma and Innistral.

'Flash Player necessary.



Plan a study. Use the **Backgard Explorer** resources which include dozens of activities about **biodiversity assessments**, insect collection and identification, digital story making and ways to observe width close to home.



Collect Insects. View explanatory videos that show how to set up and use Malaise traps and Pitfall traps and use Beating and Netting techniques.



Display Insects. Entomologist Noel Starick talks about the correct techniques for pinning insects such as butterfiles, grasshoppers and beetles.



Identify Insects. Use an interactive key to indentify insects and invertebrates. A video on Hints on Identifying Insects will help you.



Summarise Data. Examine data collation tools, spreadsheets and an explanatory video that make this task easy.

Find out more about Answer of Queensland on the Queensland Museum website.

Curriculum areas: Mid-Upper Primary, Middle School Science, Technology, ICTs and English (Essential Learnings Year 7, 8 & 9; Science Life and Living, English and Technology), Australian Science Curriculum, (Biological Sciences Year 4, 5, 6, 7 & 9), Senior Biology (Key Concepts 3-5; Key Ideas 4, 7, 9, 11-16, 20, 21, 26).

The Wild Backyards Project Room on Education Queenstand's Learning Place supports schools who wish to conduct biodiversity studies using the Backyard Explorer learning resource. Contact us if your school wishes to join this project.



Home Explore Wild Backyards Plan a study Collect Insects Display Insects Identify Insects |
Summarine Data

Plan a Study

Biodiversity Assessments Video



Allan Morrison talks about the steps involved in assessing the bic-health and biodiversity of an area by doing comparative surveys. (3.53 min)

Download the Biodiversity Assessments Video transcript (PDF, 48 KB)

Backyard Explorer Leader's Guide (POF, 1.9 MB)

This guide provides teachers with an outline on how to construct blookversity assessments of sites in the school area. A case study example is used to help guide the process. There are also detailed guides on constructing pitfall traps as well as handy tips for identification of insects to order level.

Backvard Explorer User's Guide (PDF, 2 MB)

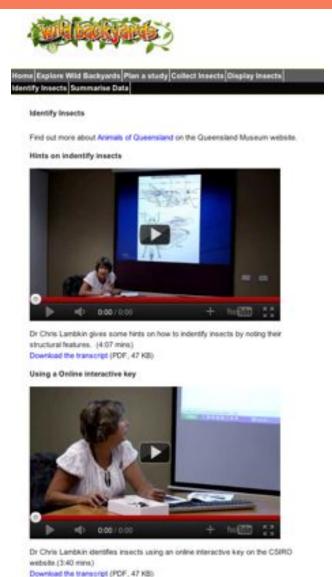
In this ecological study, you will find out what native animals and habitats are found in your schoolyand, and make a digital story about them. Associated resources can be found on the Learning Place as the virtual field trip room Wild Backyands.

Data Collation User Manual (POF, 2.08 MS) This manual guides the user to setup and enter data on the data collation tool spreadsheet. The manual includes screen shots and explanatory notes on how each data sheet is used. There is a troubleshooting guide for each sheet.

Data Collation Sheet (XLS, 1,1 MB) This data spreadsheet tool can be used to collate data from a collection event. You can enter and record location data, abotic conditions and population counts of invertebrate orders. Data Collation Sheet (Sample) (XLS, 1,7 MB) This data spreadsheet tool can be used to collate data from a collection event. This a sheet with some sample data entered to a give an overview of how it can be used.



Citizen Science – Wild Backyards



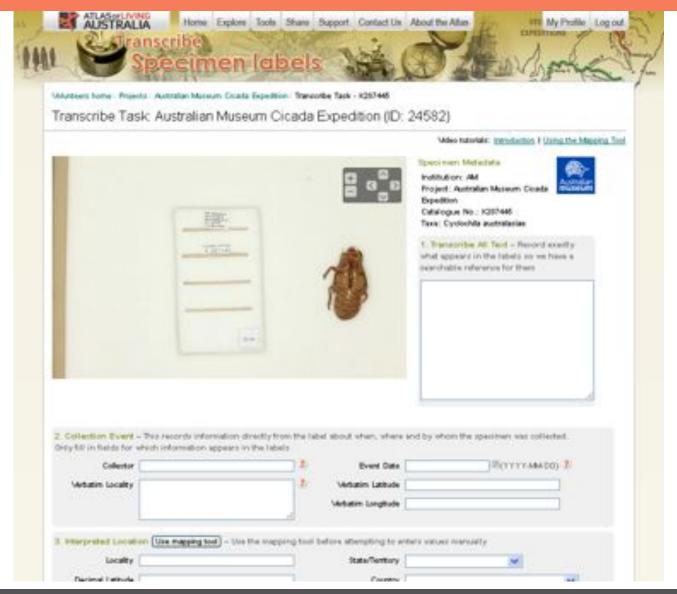
Volunteer Involvement





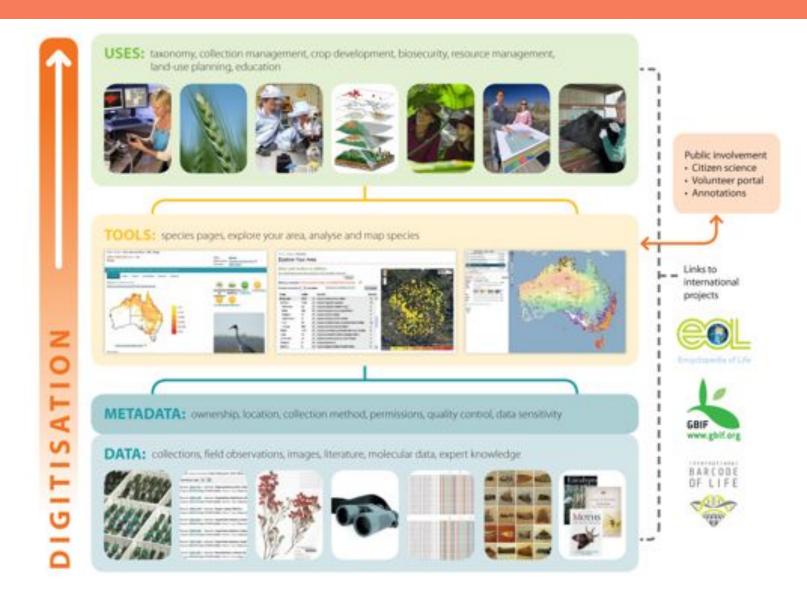


Volunteer Activity









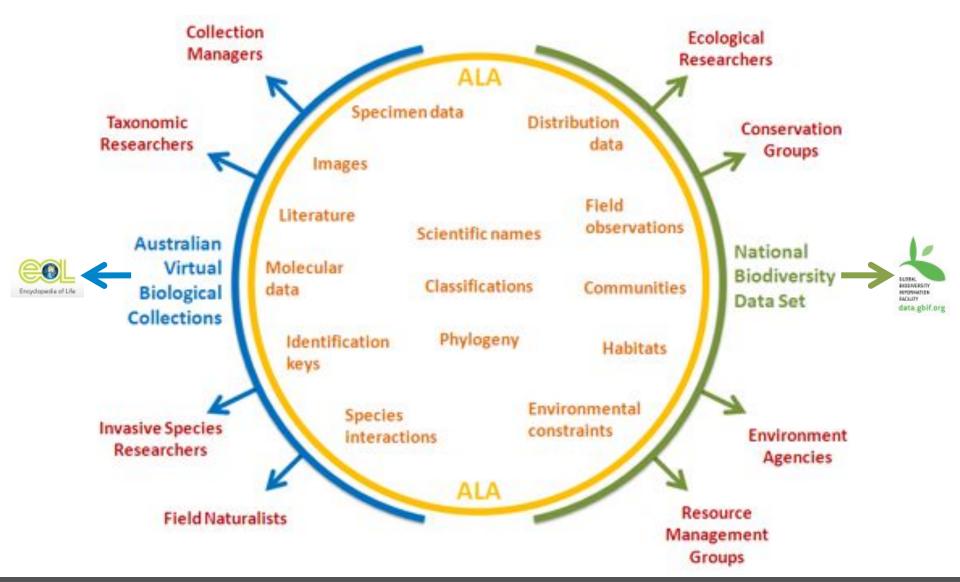
ALA November 2011



- Has delivered its core infrastructure and a range of powerful new tools.
- New software has been developed for recording and managing biodiversity data and photos in the field.
- ALA is being used in:
 - research projects
 - urban biodiversity surveys
 - museum outreach activities
 - science education
 - biosecurity monitoring
 - and natural resource management and reporting.



ALA and user communities





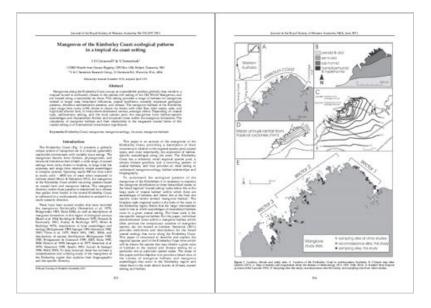
Adoption of ALA by users



ALA tools and services adopted for Great Eastern Ranges restoration corridor activities



ALA mentoring activity with Indian Biodiversity Information Facility



Mangroves of the Kimberley Coast: ecological patterns in a tropical coast setting - paper referencing data accessed through ALA



Web visits per week July 2010 to September 2011



The Atlas of Living Australia Team – or some of it...

www.ala.org.au



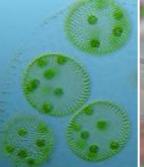




An Australian Government Initiative

National Collaborative Research Infrastructure Strategy











The Atlas of Living Australia Participants

www.ala.org.au















Australian Government Department of the Environment,















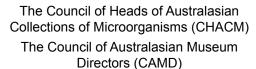








The Council of Heads of Australian Faunal Collections (CHAFC) The Council of Heads of Australian Entomological Collections (CHAEC)





An Australian Government Initiative

National Collaborative Research Infrastructure Strategy



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