

## The Atlas of Living Australia

Infrastructure for biodiversity research

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### ALA - current investment



- Australian Government funding to June 2012
  - NCRIS 2006-2012: \$8.2M
  - EIF Super Science 2009-2012: \$30.0M
  - ALA partner in-kind contributions: \$26.5M

### Mission

 To develop an authoritative, freely accessible, distributed and federated biodiversity data management system

### Partners

#### • Representative bodies:

- Council of Heads of Australasian Herbaria
- Council of Heads of Australian Faunal Collections
- Council of Heads of Australian Entomological Collections
- Council of Heads of Australian Collections of Microorganisms
- Council of Australasian Museum Directors

#### State museums:

- Australian Museum
- Museum and Art Gallery of the Northern Territory
- Museum Victoria
- Queensland Museum
- South Australian Museum
- Tasmanian Museum and Art Gallery
- Western Australian Museum

#### Government:

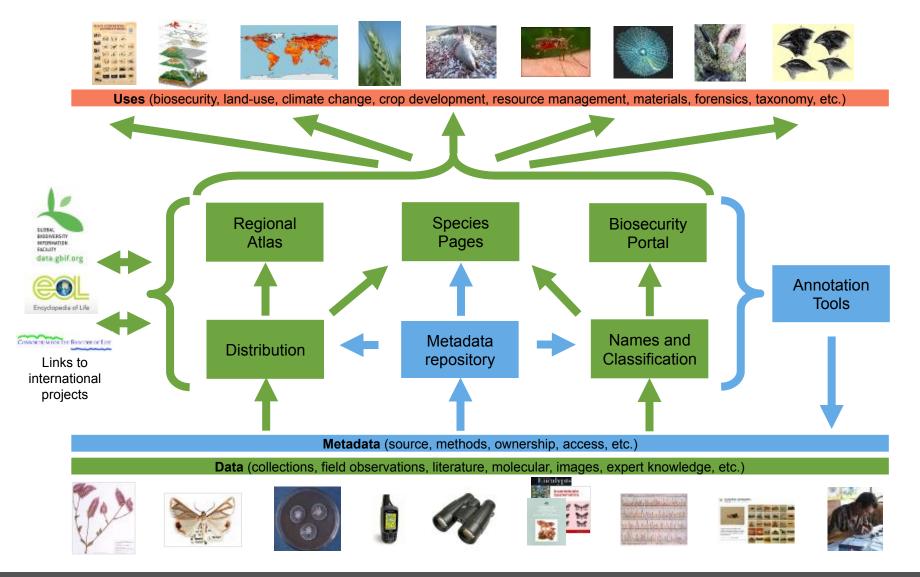
- CSIRO lead agent
- Department of the Environment,
   Water, Heritage and the Arts
- Department of Agriculture, Fisheries and Forestry

#### • Universities:

- Southern Cross University
- University of Adelaide

## Basic concept







## Building on the work of others











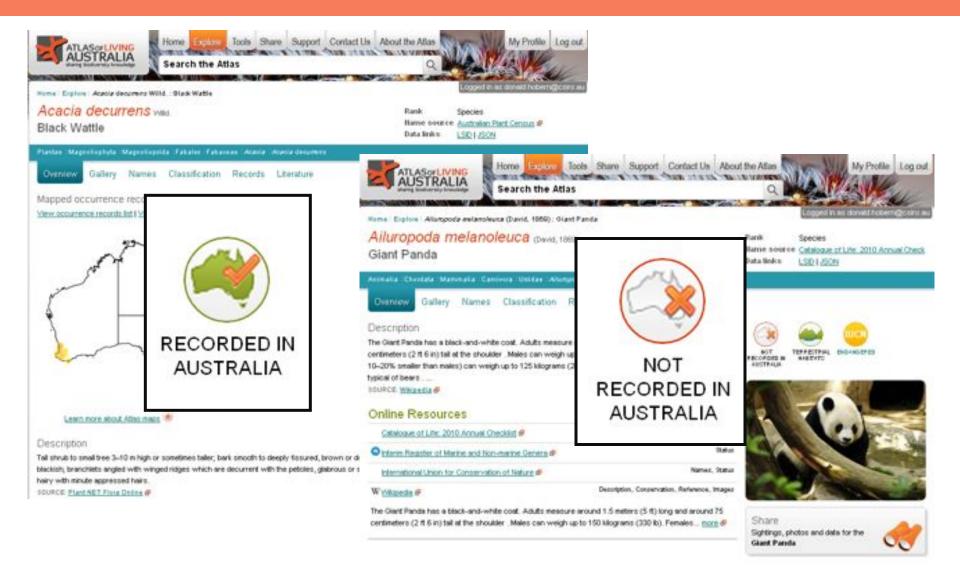




# Names & classifications



## What species occur in Australia?





## National species lists



Nymphoides	s Seg. [CHAH 2006] 🥖	
URI	http://biodiversity.org.au/apni.taxon/309365	
LSID	um Isid biodiversity.org.au.apni.taxon:309365	
Modified	2009-10-15	
Name	Nymphoides Seg. 4	
Taxonomic tree	according to apc #	
Rank	Genus (gen)	
According to	CHAH (2006)	
Publication	CHAH, (2006) Australian Plant Census.	
includes (taxonomic	() Limmarthemam S.G.Gmel #	
includes (taxonomic	A CONTRACTOR OF THE CONTRACTOR	
is child taxon of (cla	sessification) Menyanthaceae Dumort. [CHAH 2008] 💞 🤌	APC (2009)
is parent taxon of (c	classification) Nymphoider aurambaca (Dalzell) Kuntze [CHAH 2006] #	
is parent taxon of (classification) Nymphoides surantiaca (Dalzell) Kuntze sensu Aston, H.I. (2009) 💞 🊜		APC (2010)
is parent taxon of (c	classification) Nymphoides beaglensis Aston 🌠 🤌	APC (2007)
is parent taxon of (c	classification) Nymphoidez crenata (F.Muell.) Kuntze [CHAH 2006] 💞 🤌	APC (2007)
is parent taxon of (c	clausification) Nymphoides crenata (F.Muell.) Kuntze [CHAH 2006] 💞 🚜	
is parent taxon of (c	tianselection) Nymphosdes deperma Aston 💞 🖋	APC (2007)
is parent taxon of (c	classification) Nymphoides elliptica Aston [CHAH 2006] 🂞 🤌	APC (2007)
	classification) Nymphoides elliptica Aston [CHAH 2006] 🍼 🤌	
	classification) Nymphoides exigua (F Muell.) Kuntze [CHAH 2006] 💞 🥒	APC (2007)
is parent texon of (c	classification) Nymphoides exigna (F Muell.) Kuntre [CHAH 2006] 💞 🏕	
	classification) Nymphoides emifiora (F. Misell.) Kuntze [CHAH 2006] #	
	ciassification) Nymphoides emiflora (F. Muell.) Kuntze [CHAH 2010] 💞 🥒	APC (2010)
	classification) Nymphoides furculifolia Specht [CHAH 2006] 🌄 🍎	APC (2007)
	classification) Nymphoides fürculifolia Specht [CHAH 2006] V #	377577703
	classification) Nymphoides geminata (B. Br.) Eustre [CHAH 2006] #	
	classification) Nymphoides geminata (R. Br.) Kuntze [CHAH 2010] 🗸 🖋	APC (2010)
and the same of th		777.0 471.0 4

Rye, B.L. in Wheeler, J.R., Rye, B.E., Koch, B.L., Wilson, A.J.G. (Ed) (1992), Flora of the Kimberley



# Specimens & observations

## Specimens







ScientificName: Derwentia derwentiana

Family: Scrophulariaceae

Locality: 0.4 km E of Coryah Gap...

State: NSW

DateCollected: 1998-12-12

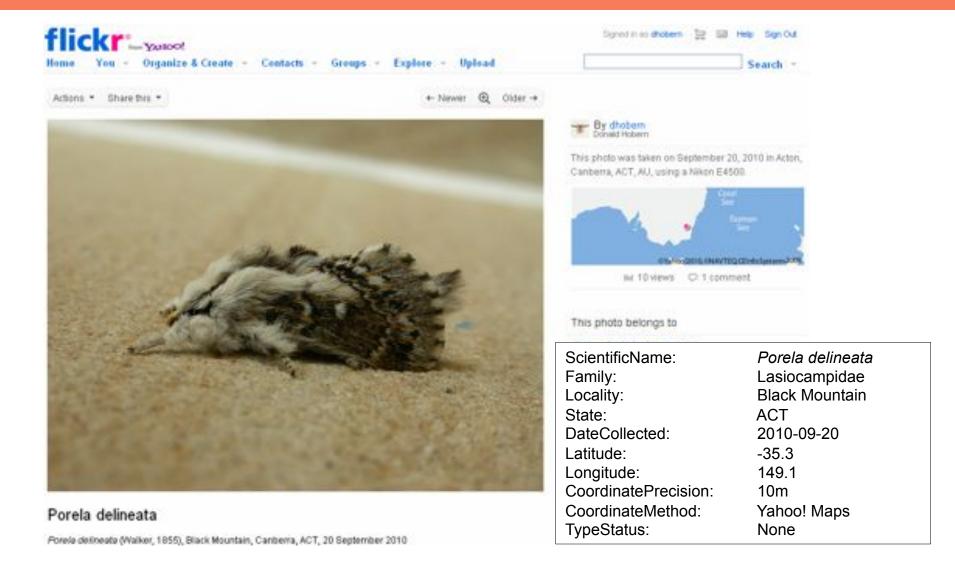
Latitude: -30.3 Longitude: 150.1 CoordinatePrecision: 200m

CoordinateMethod: Paper map

TypeStatus: None







### Standardised data



Home: Explore: Occurrence Record - 180739974

Logged in as Lionald Hobern(2)core au

#### Occurrence Record Details: 180739974

Dataset	Acceptate 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 fimbrishim
Taxon Rank	Species
Common Name	Gang-gang Cockatoo
Kingdom	Animaka
Phylum	Chordata
Class	Ares
Order	Pattacformes
Family	Cacatuidae. Supplied as: "PS/TTACIDAE"
Genus	Callscephalon





#### Possible Issues

Data validation tools identified the following possible

· Miscellaneous issues: country inferred from coordinates:

#### Location of record

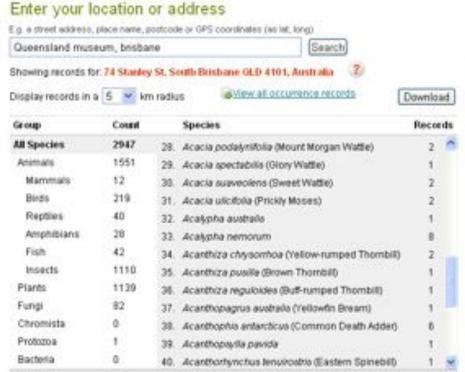


### Local information





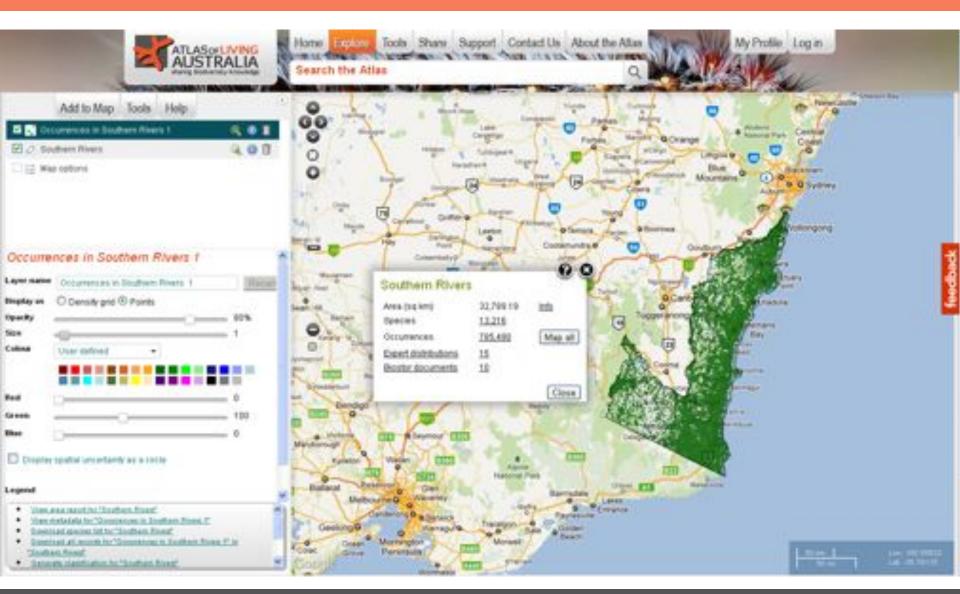
#### Explore Your Area





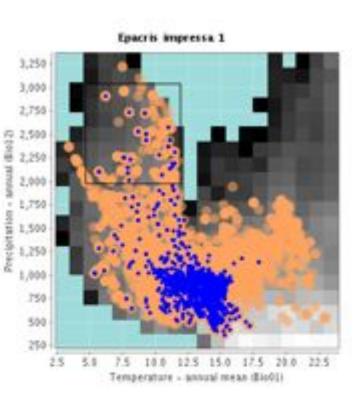


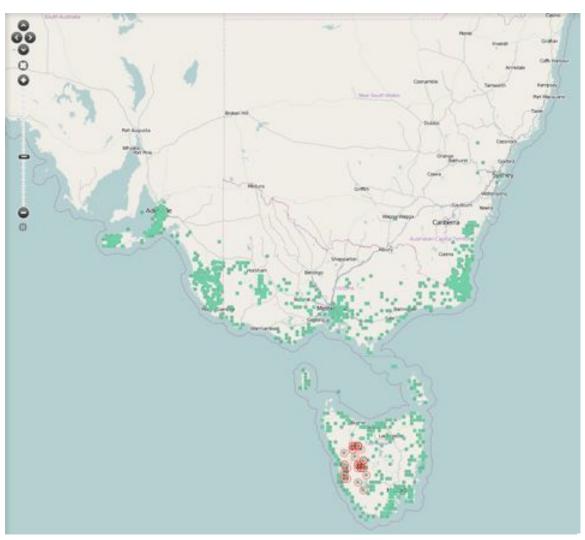
## Regional information











## 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.

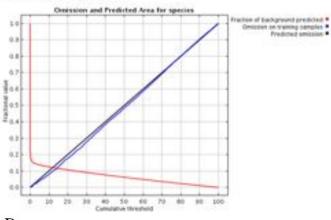
Model reference mumber: 1311909973484 Specier: Epactic impressa (species)

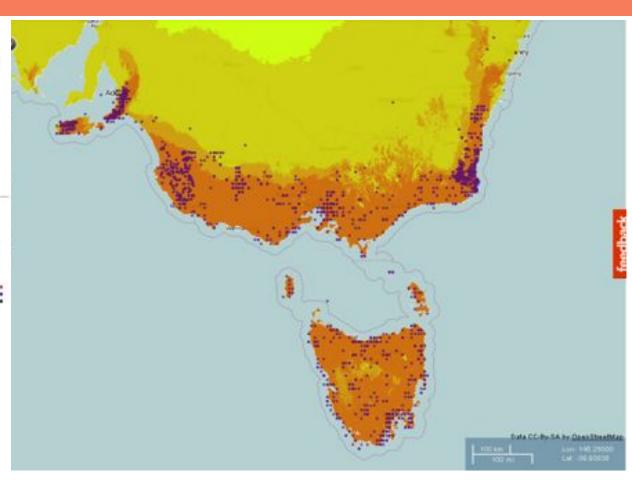
Зреция: Ераско імрення (греция Lapum

- · Precipitation sensal (Bio12) (bioclim\_bio12)
- · Precipitation susual reasonality (resinft)
- Temperature annual mean (BioU1) (bioclim\_bio1)
- . Temperature annual range (Bio07) (bioclim\_bio7)
- · Arpect (arpect)
- · Elevation (slevation)

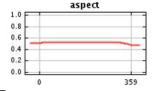
#### Analysis of omission/commission

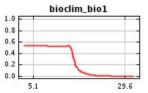
The following picture shows the consistent rate and predicted area as a function of the cumulative threshold. The consistent rate is a calculated both on the training presence records, and (if test data are used) on the test records. The consistent rate should be close to the predicted consistent, because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

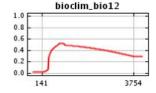


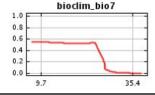


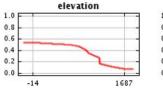
#### Response curves

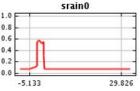








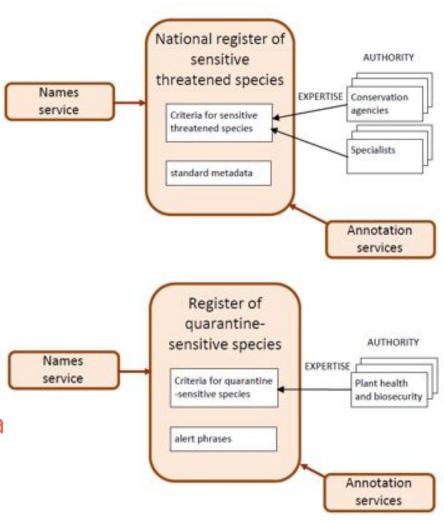




### Sensitive Data Service

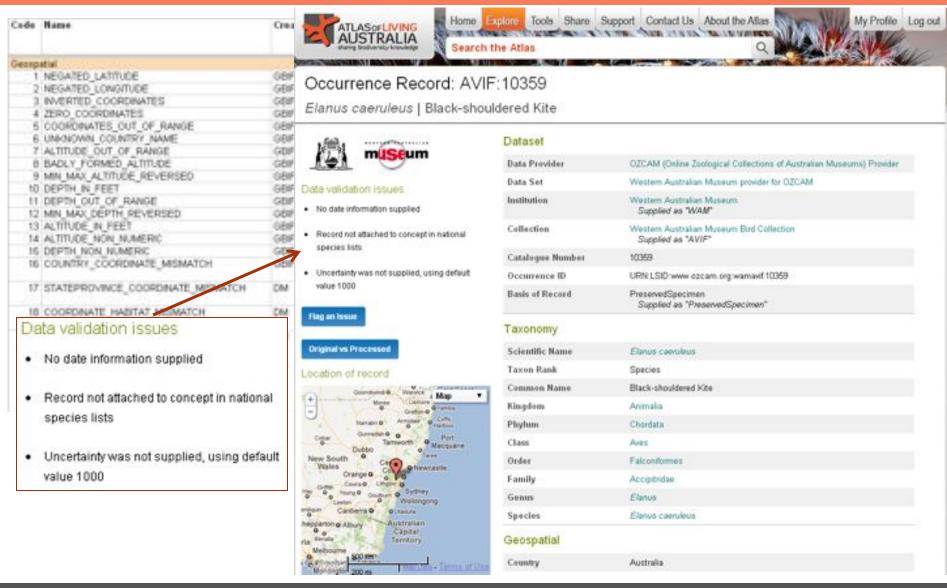


- Sensitive geospatial data
  - Threatened species
  - Quarantine-sensitive species
- Registers of sensitive species
  - Conservation agencies
  - Biosecurity agencies
  - National and state-by-state
- Configurable rules
  - Suppress from public views
  - Reduce coordinate precision
  - Require additional metadata
- Timeline
  - Standalone tool to check data (April 2011)
  - Integrated into data integration (June 2011)





## Assessing fitness-of-use

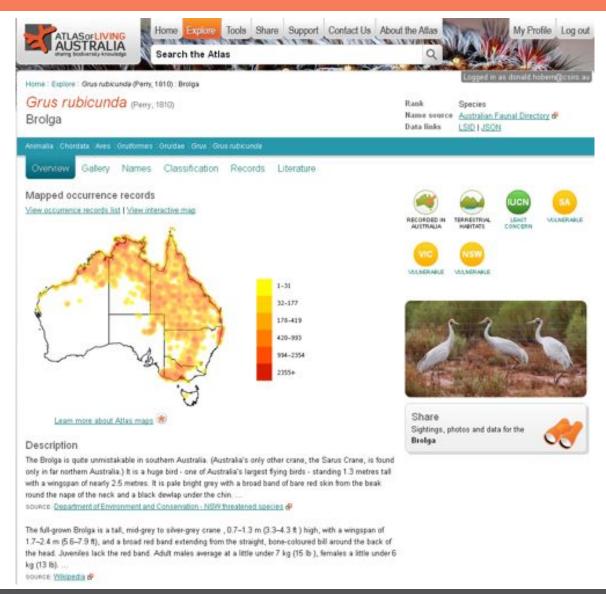




# Other species information

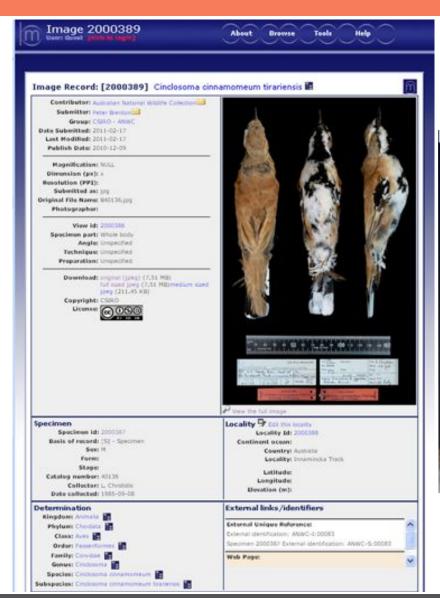


## Species page: Brolga





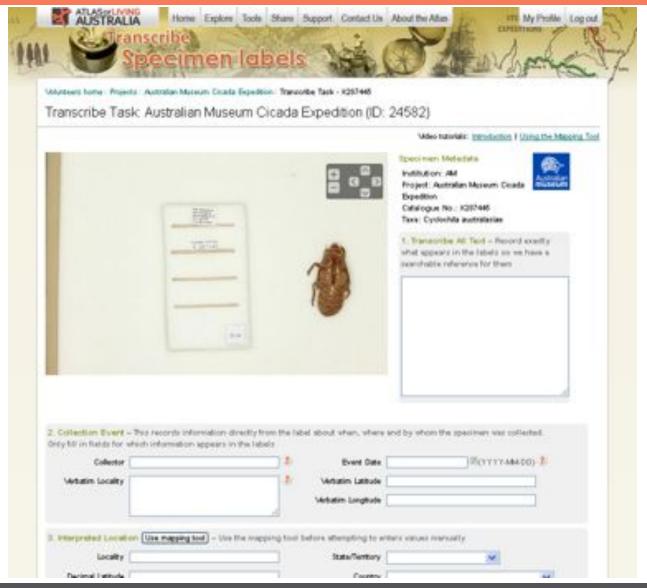






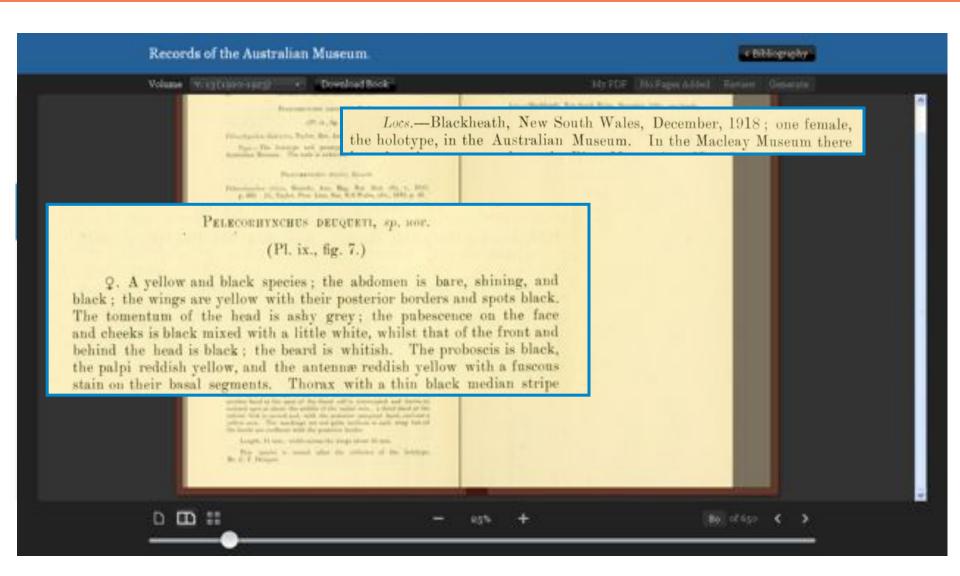


## Volunteer activity



### Literature





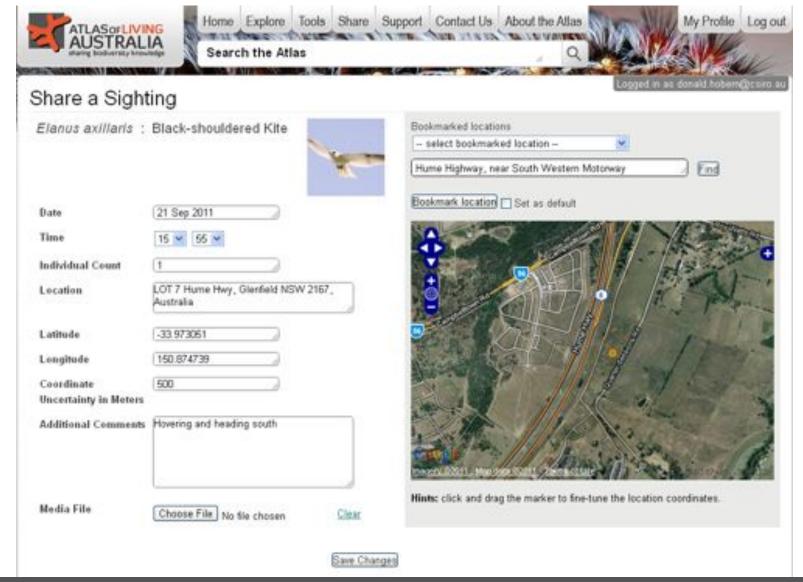
### Identification tools





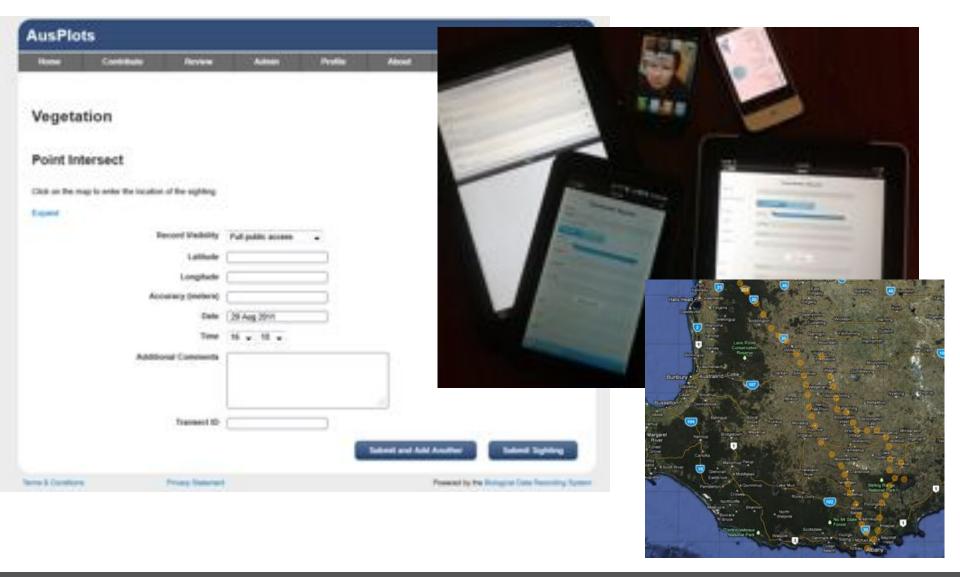


### Citizen science





## Mobile data capture





## Partnership with GER Initiative

Five pilot projects are currently in progress:

- Border Ranges MER on onground activities
- Hunter Valley –research and education project for schools on bird monitoring
- Southern Highlands potential add-on to current CFOC project with HNCMA
- K2C building reptile survey site with ACT Herpetology Society
- S2S expanding scope of existing Squirrel Glider monitoring project in peri-urban Albury Build upon its existing mapping analysis capabilities







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







queensland museum

Tasmanian Museum & Art Gallery





















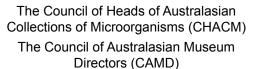








The Council of Heads of Australian Faunal Collections (CHAFC) The Council of Heads of Australian Entomological Collections (CHAEC)





An Australian Government Initiative

National Collaborative Research Infrastructure Strategy



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