

www.ala.org.au

Atlas of Living Australia

Infrastructure for Biodiversity Research

Donald Hobern

Donald.Hobern@csiro.au

Melbourne Museum, 28 July 2010



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

- Australian Government funding to June 2012
 - NCRIS 2006-2011: \$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

ALA Participants



- **Government:**

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

- **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

- **Universities:**

- Southern Cross University
- University of Adelaide



Australian Government
Department of the Environment,
Water, Heritage and the Arts



Australian Government
Department of Agriculture,
Fisheries and Forestry



THE UNIVERSITY
OF ADELAIDE
AUSTRALIA



The Council of Heads of Australian Faunal Collections (CHAFC)

The Council of Heads of Australian Entomological Collections (CHAEC)

The Council of Heads of Australasian Collections of Microorganisms (CHACM)

The Council of Australasian Museum Directors (CAMD)



An Australian Government Initiative

National Collaborative Research Infrastructure Strategy

- Integrated picture of Australia's biodiversity
 - Plants, animals and microorganisms
 - Marine and terrestrial
 - Native and non-native
- Information and tools to support:
 - Species identification
 - Taxonomy and collection management
 - Biosecurity
 - Conservation and land-use management
 - Ecological and agricultural research
 - Education

Philosophy

- Collaborative
 - Work with whole community
 - Address data sharing and data access
 - Showcase data providers
 - Reinforce existing successful activities
- Open access
 - But enable access to restricted data
- Comprehensive discovery portal
 - But supply tools and content to use anywhere
- Data quality
 - Automated analysis
 - User annotation
 - Feedback to providers – close the loop

Building on the work of others



The image shows the homepage of the Australian Virtual Herbarium (AVH). At the top left is the AVH logo with a stylized orange and green leaf icon. The text "Australia's Virtual Herbarium" is written vertically next to it. A yellow horizontal bar across the top contains the text "Log In | Log Out". Below the logo, there is a section titled "Australia's Commonwealth state and territory herbaria house over 10 million plant, seed and fungi specimens." It describes the collection of information associated with these specimens, including their scientific name, precise location, date of collection, and other details. To the right of this text are several circular thumbnail images showing various plants and fungi. On the left side of the page, there is a vertical navigation menu with links: "Query AVH", "About AVH", "Partners", "Sponsors", and "Credits". At the bottom of the page is a footer containing logos for various Australian herbaria and organizations, along with the text "Digitised by the National Herbarium of New South Wales".

The screenshot shows the OzCAM homepage. At the top, there's a horizontal navigation bar with links for Home, About OzCAM, OzCAM Data, Copyright, Contact us, and News. Below this is a large, vibrant image of a butterfly with black wings, red spots, and white patterns, resting on a yellow flower. To the right of the image is the OzCAM logo, which consists of a stylized sun-like icon followed by the text "OZCAM" in a bold, sans-serif font, with the subtitle "Online Zoological Collections of Australian Museums" underneath. Below the logo is a search bar with the placeholder "Search OzCAM". Further down the page, there's a section titled "Participating Organisations" featuring logos for various museums and institutions like CSIRO, the National Museum of Australia, the Australian Museum, and others. On the right side, there's a sidebar with links for "About OzCAM", "OzCAM Data", "Copyright", "Contact us", and "News". The footer contains the OzCAM logo and the text "OzCAM is an initiative of the Board of Heads of Australian Faunal Collections (BHAC)".



BioMaps

Home > About > Contact > Help

> SEARCH/MAP/MODEL

NEWS

Welcome to BioMaps

BioMaps is a gateway to Australian biodiversity data held by Natural History Institutions. Through this site you can search biodiversity databases and compile maps showing the locations of collected and observed biodiversity specimens.

MAP SPECIES RECORDS

Step 1: Select a species/taxon to search for

Step 2 (Optional): Choose search filters
[Region of Interest](#) [Institutions](#) [Other Data Filters](#)

Step 3: Start Database Search 

CREATE A SPECIES LIST

Step 1: Choose species group.

Step 2 (Optional): Choose search filters
[Region of Interest](#)

Step 3: Start Database Search 

TOOLS

 Ecological Niche Modelling

 Survey Gap Analysis

 Catalogue Number Search

FIND FACTSHEETS

Enter all or part of species or common name



 An Australian Government Initiative

Council of Heads of Australasian Herbaria 
Council of Heads of Australasian Herbaria

AD | BRI | CANB | DNA | HO | MEL | NSW | PERTH | ABRS | ASBS | HISCOM | ©
[Home](#) > [CHAH](#) > [Australian Plant Census](#)

Australian Plant Census - APC

Maintained by the Australian National Botanic Gardens as part of its larger BIS database, in collaboration with the Centre for Plant Biodiversity Research and the Australian Biological Resources Study.

About the Australian Plant Census

APC is a database of the accepted scientific names of the Australian vascular flora, both native and introduced, and lists synonyms and misspellings for these names. The APC will cover all published scientific plant names used in an Australian context in the taxonomic literature, but will not include names of species that have not been collected in Australia. The taxonomy and nomenclature adopted for the APC are endorsed by the Council of Heads of Australian Herbaria (CHAH).

For further information about names listed in APC, including bibliographic information, secondary references and typification, consult the [Australian Plant Name Index](#) (APNI). Alternatively, clicking on hyperlinked names in APC search results will link to the APNI data for any given name.

Information available through APC includes:

- Accepted scientific names and author abbreviation(s);
- Linkage to the taxonomic and nomenclatural concept adopted for APC;
- Synonyms and misspellings;
- State distribution;
- Relevant comments and notes

APC is coordinated through a network of contributors, and is maintained by the Centre for Plant Biodiversity Research with staff, resources and financial support from the Australian National Herbarium, Australian National Botanic Gardens, Australian Biological Resources Study, CHAH and State and Territory herbaria. These organisations collaborate to further the updating and delivery of APC.

Search the APC database:

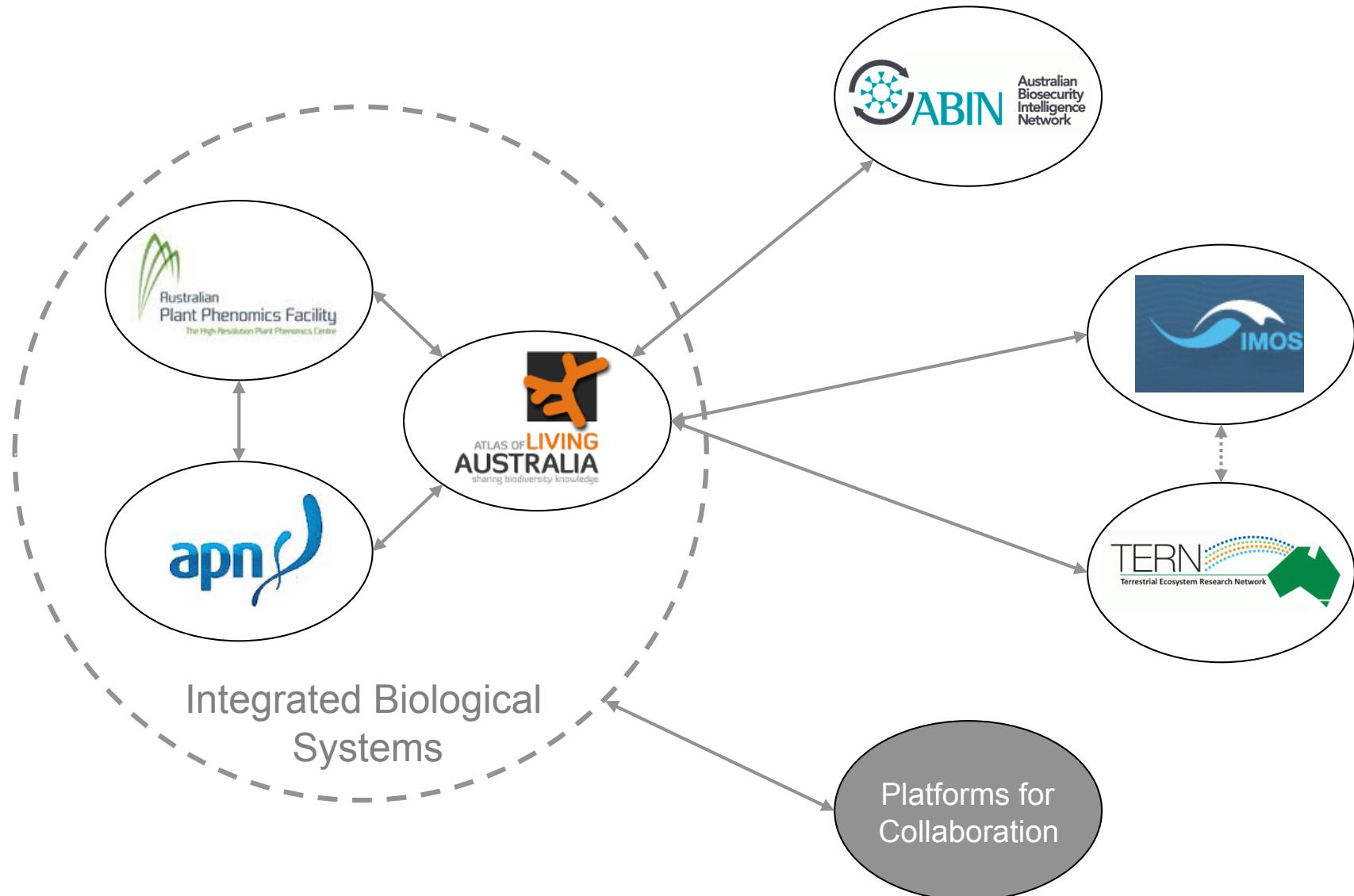
[APC search](#)

AD | BRI | CANB | DNA | HO | MEL | NSW | PERTH | ABRS | ASBS | HISCOM | ©

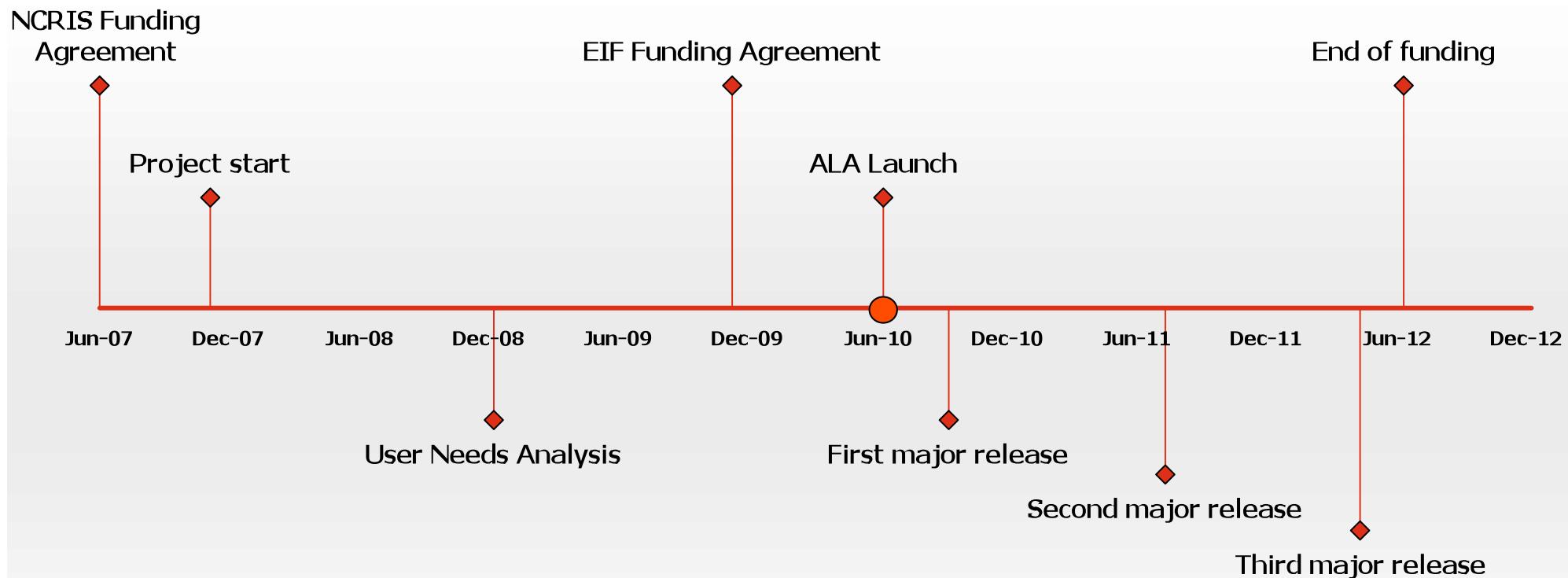
 Australian Government Department of the Environment, Water, Heritage and the Arts	Site content Change content Change
Australian Biological Resources Study Australian Faunal Directory	
<div style="border: 1px solid #ccc; padding: 10px; background-color: #f9f9f9;"> <div style="margin-bottom: 10px;"> Entomophaga <i>An Australian Resource Bulletin</i> Databases and online resources <i>Fauna collection and herbarium resources</i> ZPT Info <i>New ZPTs</i> <i>Barcode Images</i> <i>Check List</i> <i>New Search</i> <i>Bibliographic Search</i> <i>Advanced Search</i> <i>Barcode Search</i> <i>Access the ABD</i> <i>Map and Other Information</i> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Abstract </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Contact us </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> You can view Entomophaga, Bacillus, ABRS & Australia's Endemic Species databases here under the ABRSAustralia </div> </div> <div style="width: 45%;"> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Australian Faunal Directory </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> The Australian Faunal Directory is an online catalogue of taxonomic and biological information on all terrestrial species known to occur within Australia. </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Currently, AFD includes 81925 species/taxa/species names, in 6584 families. </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> There are two ways by searching them names or you can browse by group or use the main checklist. </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Main Search </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Species Search </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Check List </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Barcode Images </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Advanced Search </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Bibliographic Search </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> Search </div> </div> </div> <div style="margin-top: 10px;"> <p>You can use the '1st' of a word as a wild card to match any number of characters in your search. There are some examples:</p> <ul style="list-style-type: none"> - Polydora will match <i>Polydora</i> exactly. - Polydora? will also match the name <i>Polydora</i>, and will also start with polydora. - Polydora?? would match the species <i>Polydora</i>, part of the valid name <i>Polydora</i> (Polydora). <p>To match a species epithet only, you need to provide a wild card to match the other parts of the binomial or trinomial.</p> <p>For example:</p> <p>If you wanted to search for <i>Acrida</i> you could use Acrida??</p> <p>If you wanted to search for <i>Acrida</i> and <i>Acrida</i> sp. you could use Acrida??sp.</p> <p>Bibliographic Search</p> <p>This will search all publications in the AFD.</p> <p>Note: Currently there are many duplicate publications in the AFD. We are working to resolve this issue.</p> <p>Just like the name search, you can use the '?' character as a wild card in conjunction with a keyword to broaden the search. This is useful if you are unsure about the spelling of a genus or species name.</p> <p>In order to search a publication name, just type it in and click on the 'Search' button.</p> <p>Search</p> </div> </div>	

... and the Global Biodiversity Information Facility, Catalogue of Life, Encyclopedia of Life, Biodiversity Heritage Library, Barcode of Life Database, Ocean Biogeographic Information System, Morphbank, Taxonomic Databases Working Group, etc.

NCRIS context



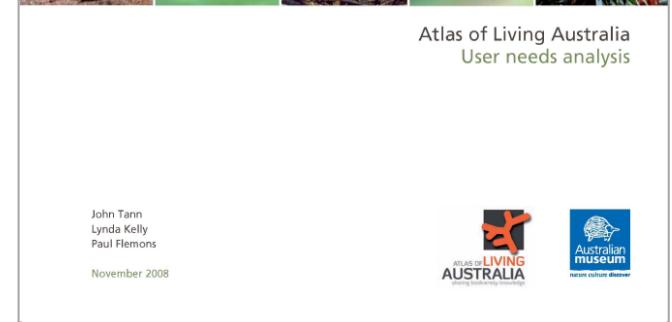
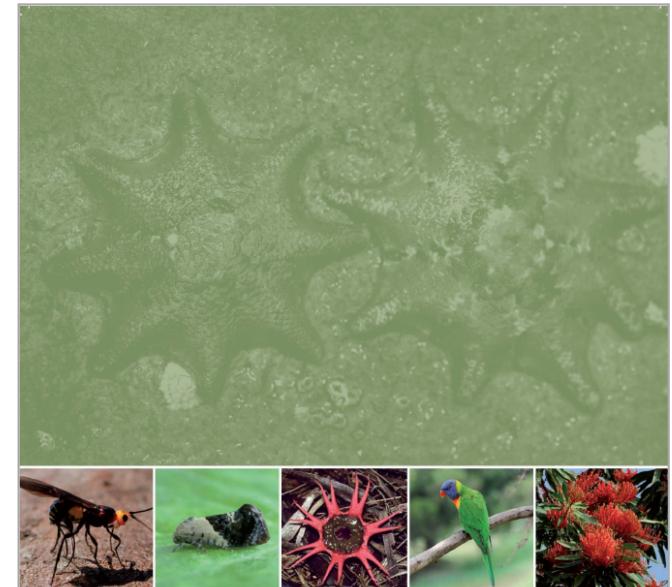
ALA timeline



User needs analysis



- Key user tasks
 - Distribution analysis
 - Identification
 - Site Assessment
 - Habitat management planning
 - Managing reference databases
 - Public education / fact-finding
 - Synecology / food-web analysis
 - Biosecurity
- Major interests
 - Resolving scientific names
 - Integrating amateur observations
 - Issues around sensitive data



Australian National Species Lists



Most people interviewed for this study indicated difficulties with discovering correct names of organisms for use in their work.

ALA User Needs Analysis

Australian National Species Lists

Addressing gaps



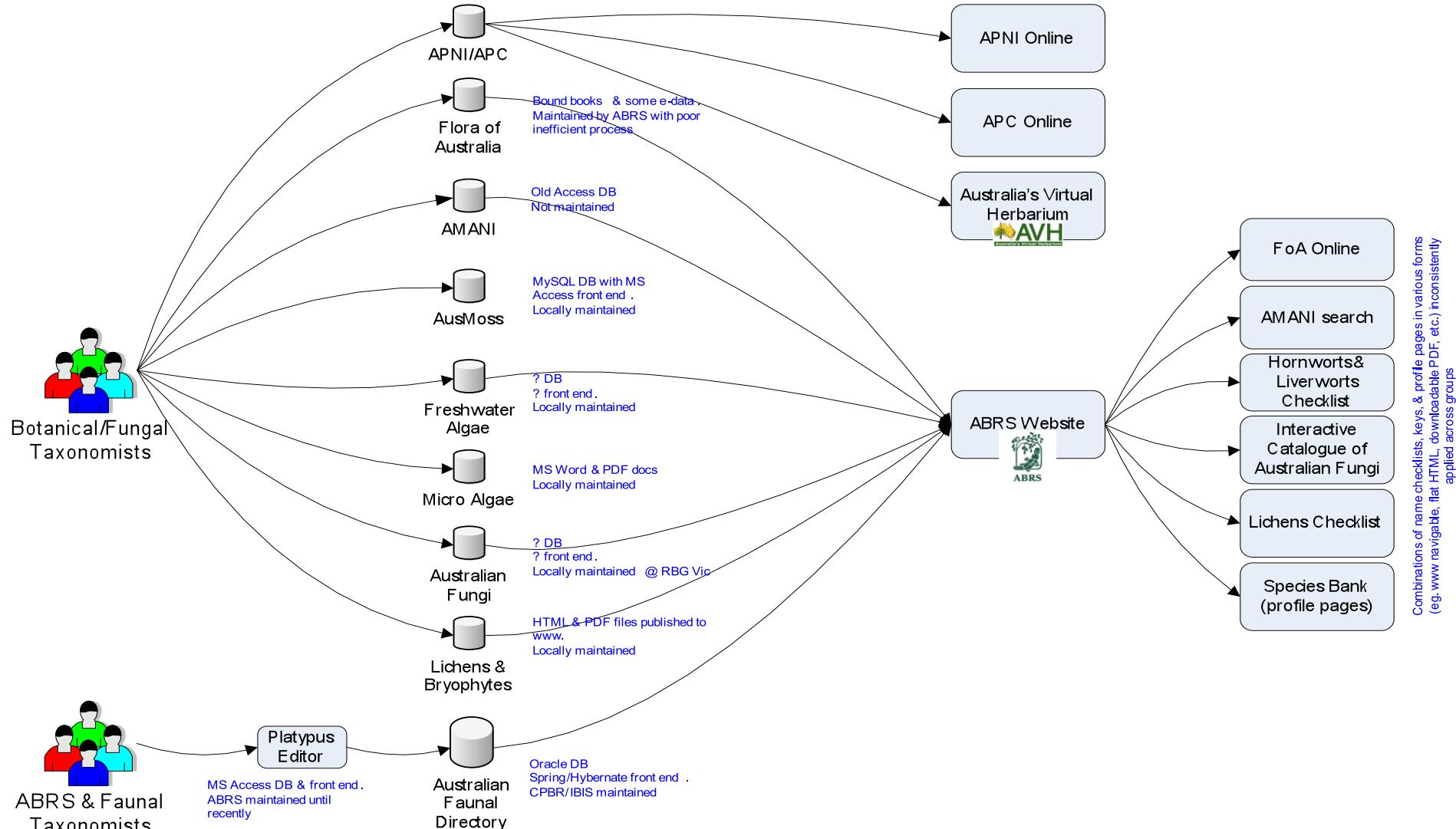
- Existing reference lists:
 - Australian Faunal Directory (AFD)
 - Australian Plant Census (APC)
 - Interactive Catalogue of Australian Fungi (ICAF)
 - Australian Marine Algal Name Index (AMANI)
 - Census of Freshwater Algae of Australia
 - AusMoss
- Significant gaps today
- Work through ABRS & CHAH
 - Add missing groups
 - Revise outdated taxonomy
 - Integrate access to all lists

Group	Described Species	To Be Added	To Be Updated
Vertebrates, including:	8,128		3,090
Birds			200
Fishes			1,000
Mammals			390
Reptiles & Frogs			1,200
Invertebrates, including:	98,703	24,440	25,060
Insects: Beetles	9,500		2,000
Insects: Moths	10,000		
Insects: Flies			4,000
Insects: Wasps	200		3,000
Insects: Other			1,000
Mollusca			8,000
Crustacea	200		2,600
Mites & Ticks	380		2,100
Nematodes	2,000		
Spiders	400		1,000
Miscellaneous	1,760		1,860
Plants, including:	24,716	11,250	45,000
Algae			3,034
Mosses	976		976
Liverworts	841		841
Hornworts	30		30
Fungi	11,846	5,212	3,405
Prokaryota	189	3	189
Chromista	2,130	74	0
Total	145,712	40,979	76,744

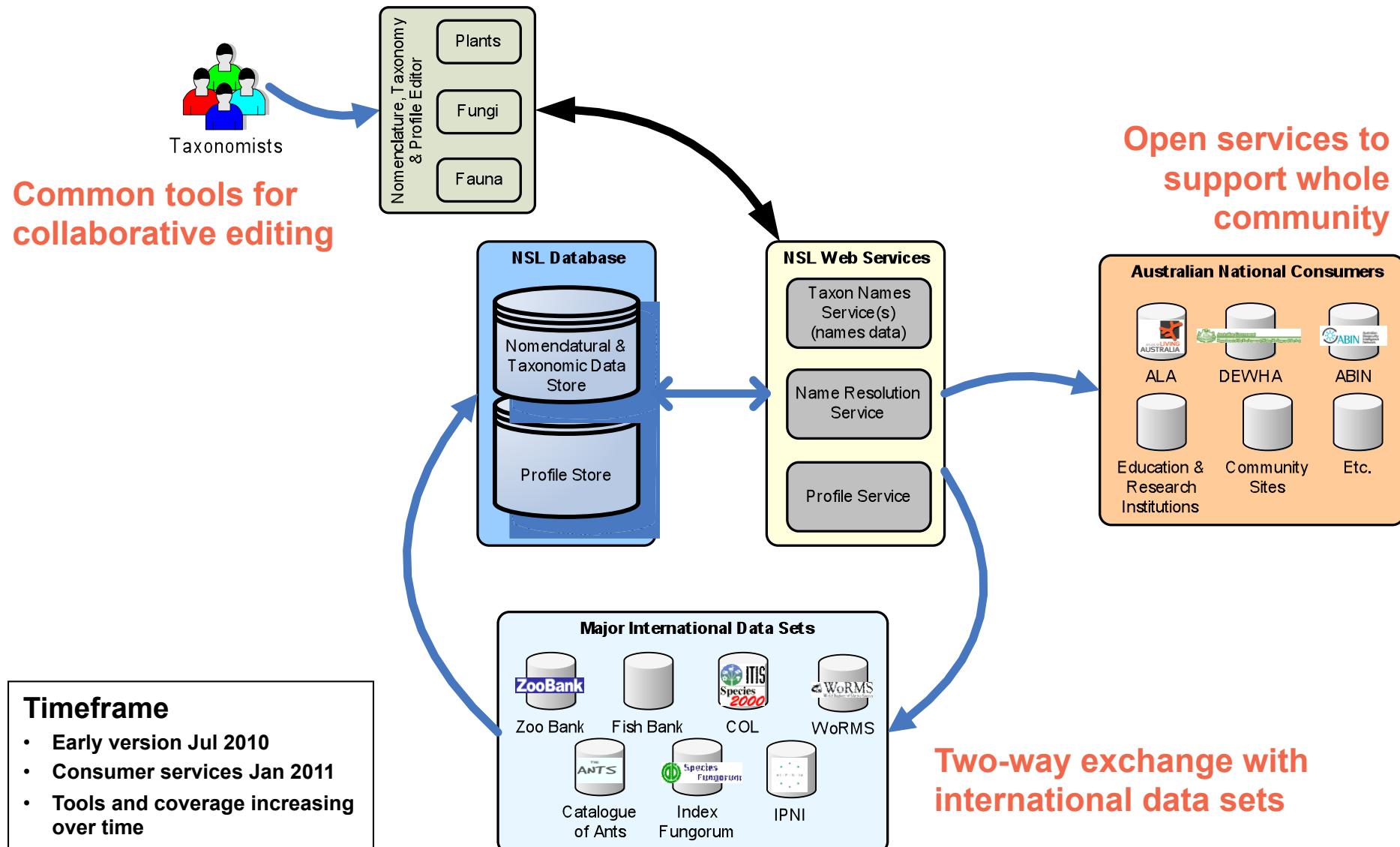
Australian National Species Lists

Current situation (complex)

Pre-ALA



Australian National Species Lists Project goals



Timeframe

- Early version Jul 2010
- Consumer services Jan 2011
- Tools and coverage increasing over time

Specimen and observation data

Distribution analysis has been the dominant task in our study. For a user, the ability to retrieve information spatially will be essential – varying in time, varying in scale, with many different forms of content.

ALA User Needs Analysis

Collection metadata



Home Explore Tools Contact Us Support About the Atlas Log in

Search the Atlas

Home : Explore : Natural History Collections

Australia's natural history collections

Learn about the institution, the collections they hold and view records of specimens that have been digitised.

Map List

Show collections for these groups:

Select all

- Birds
- Mammals
- Fish
- Frogs
- Reptiles
- Invertebrates
- Flowering plants
- Fungi
- Ferns
- Microbes

107 collections are selected.

107 collections are currently visible on the map.



A map of Australia and surrounding regions showing the locations of 107 natural history collections. The map includes state and territory boundaries and major cities like Darwin, Alice Springs, Sydney, Melbourne, and Hobart. Collection points are marked with orange location pins. A legend at the bottom left indicates that an orange pin means there are multiple collections at that location. The map is powered by Google.

POWERED BY
Google
Map data ©2010 • Terms of Use

indicates there are multiple collections at this location.

Collection metadata



Home Explore Tools Contact Us Support About the Atlas Log in

Search the Atlas

Home : Explore : Natural History Collections : Australian National Insect Collection

Australian National Insect Collection

Commonwealth Scientific and Industrial Research Organisation
[LSID](#)

[Overview](#) [Records & Statistics](#)

Description

The Australian National Insect Collection (ANIC) is the world's largest collection of Australian insects and related groups such as mites, spiders, earthworms, nematodes and centipedes.

ANIC is an important research collection used by CSIRO researchers, university staff and students, and scientists from Australian and international research organisations.

The collection was established in 1928 and continues to the present.

Taxonomic range

Kingdoms covered include: Animalia

Specimens in the Australian National Insect Collection include members from the following taxa:

- Insecta
- Arachnida
- Chilopoda
- Collembola
- Crustacea
- Diplopoda

Geographic range



One of the three collection halls within ANIC.

Location

Clunies Ross Street
GPO Box 1700
Canberra ACT 2601
Australia

Contact

Mr Tom Weir
ANIC Delivery and Development
phone: +61 2 6246 4267
fax: +61 2 6246 4264
email: Tom.Weir@csiro.au

Web site

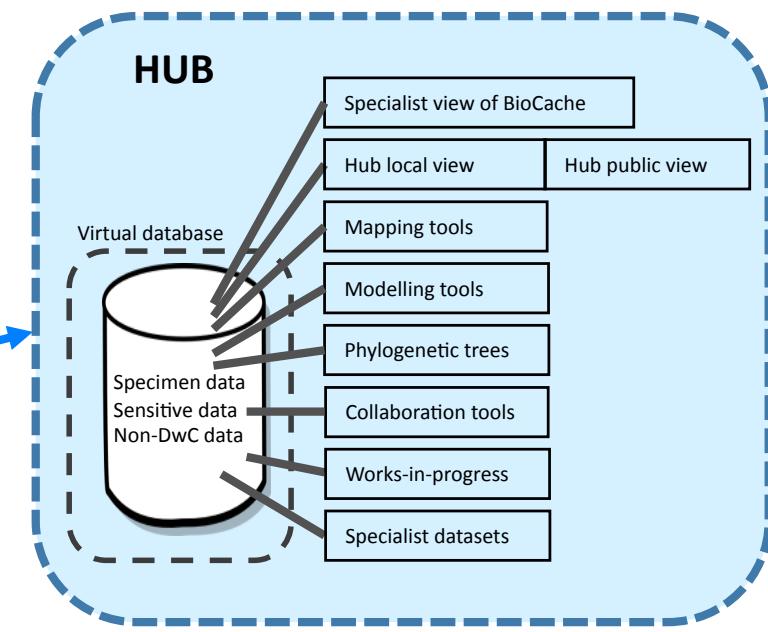
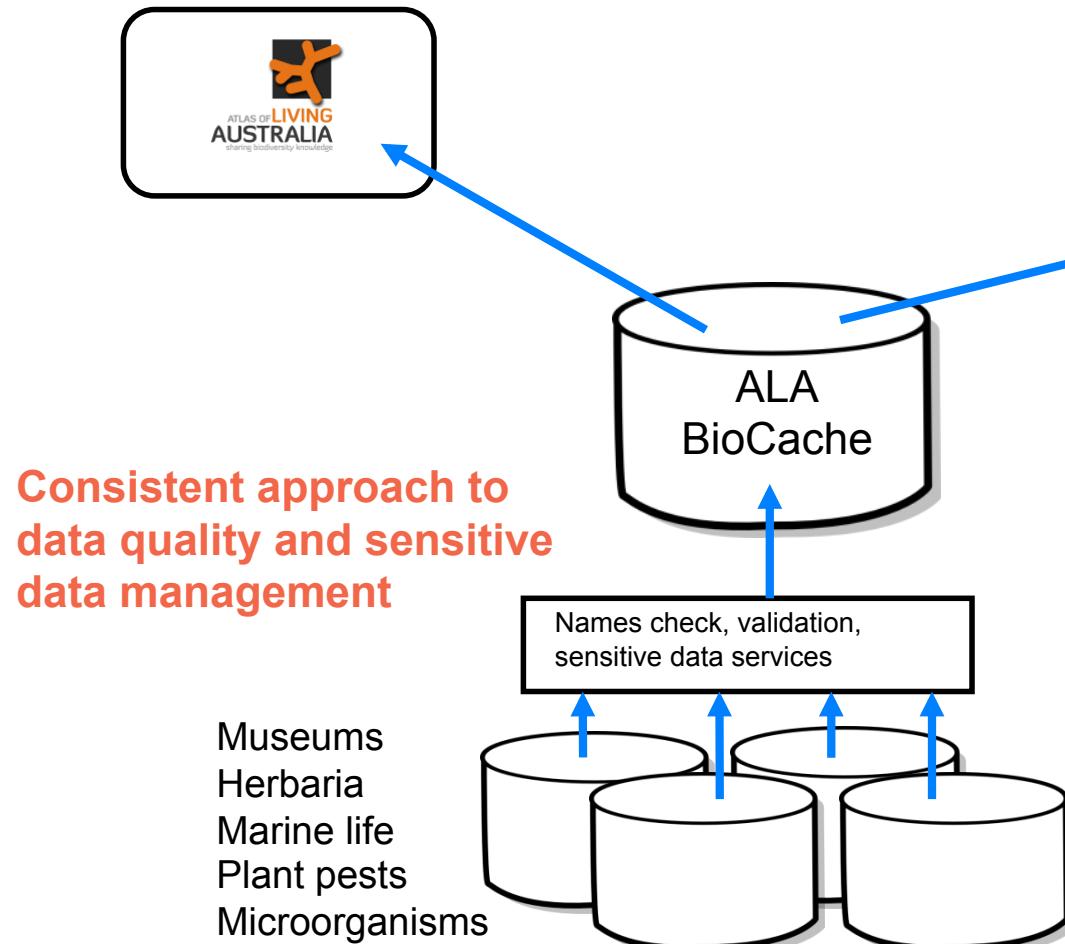
[Visit the collection's website](#)

Membership

Collection community hubs



Integrated access and discovery
through shared services



OZCAM
Online Zoological Collections of Australian Museums

OBIS
OCEAN BIOGEOGRAPHIC INFORMATION SYSTEM

AMRIN

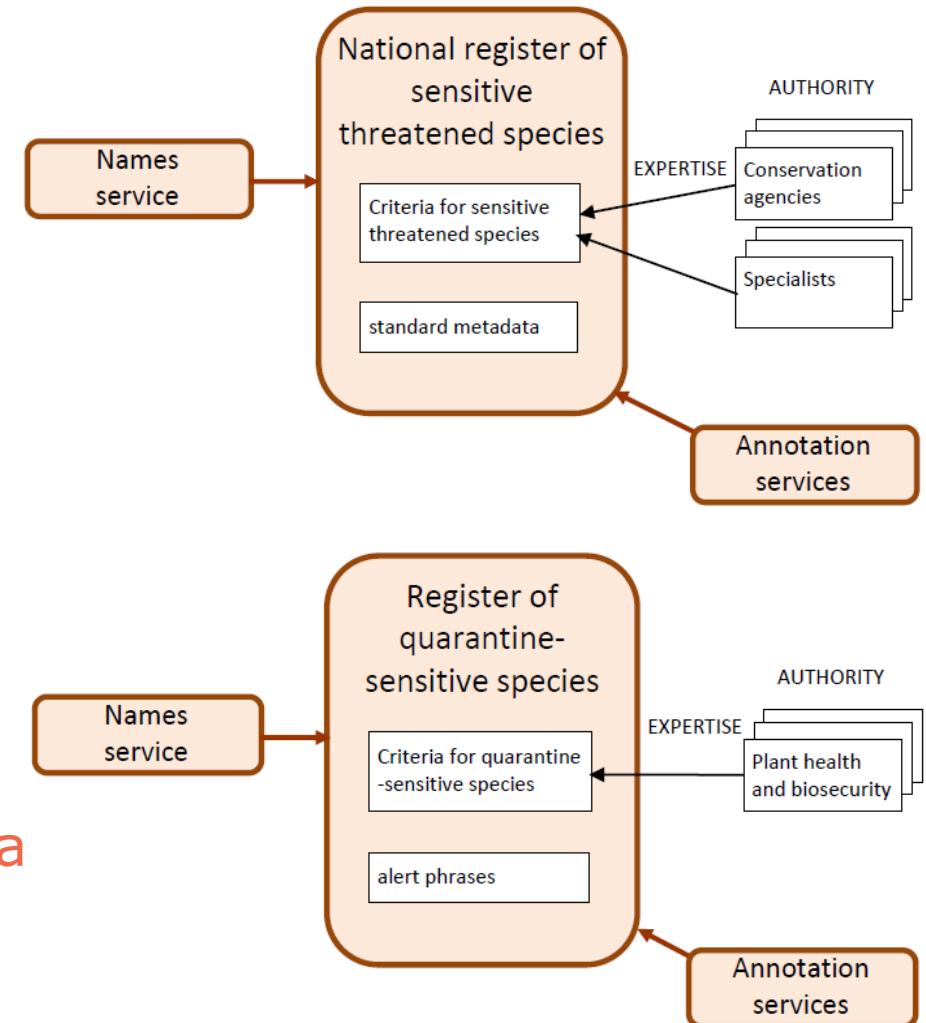


APPD

Support work and activities
of existing communities and
networks

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)



Imaging collections

Infrastructure to capture and manage images of collection materials

- Shared access to specialist imaging equipment
- Experiments in rapid digitisation
- Workflow for storing and documenting images



Type specimens

- Support taxonomic research
- Reduce need for loans

Diagnostic images

- Support taxonomic research
- Biosecurity identification tools

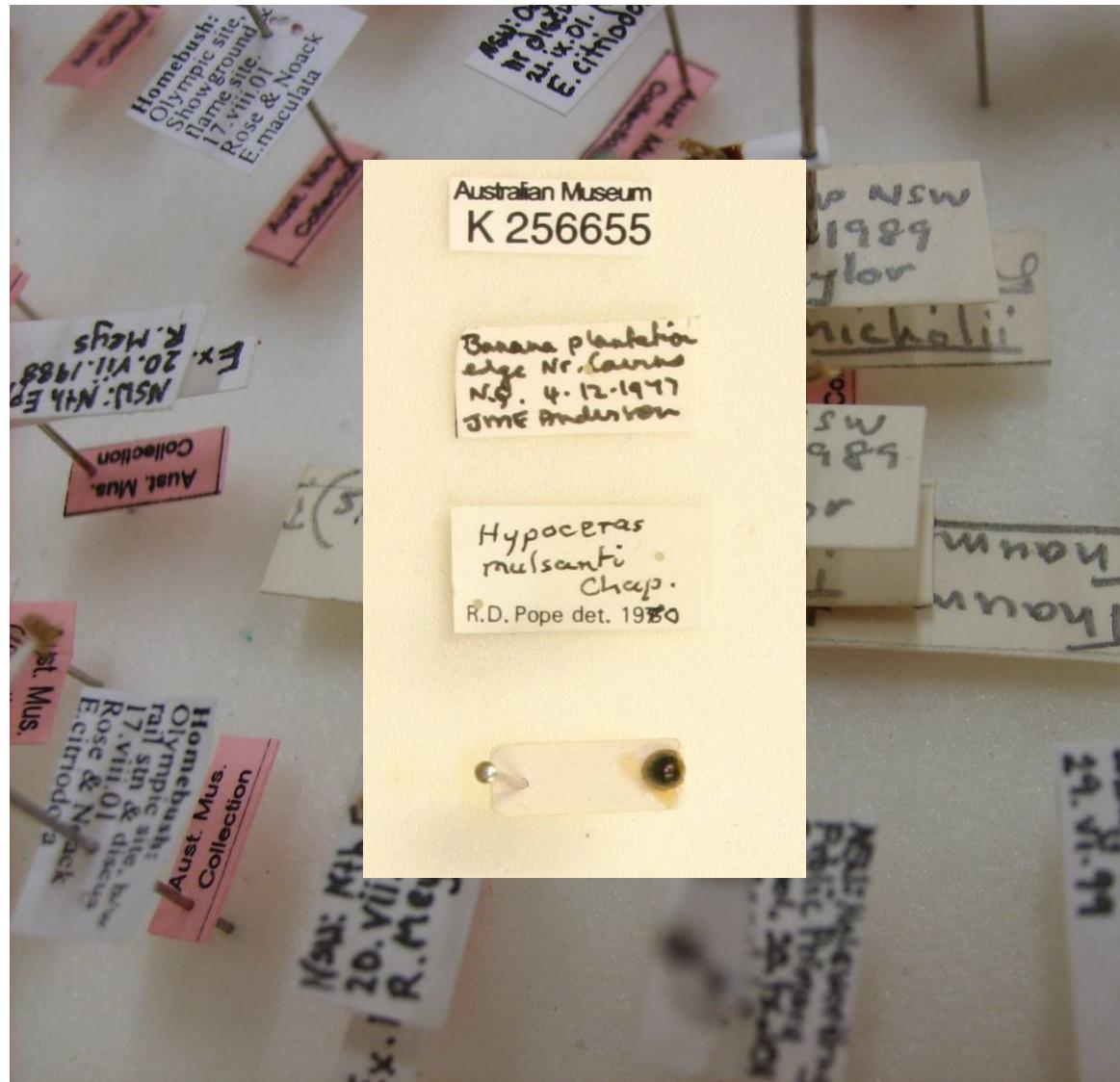
Collection accessibility

- Rapid initial digitisation
- Access to notebooks, drawer images, etc.

Drawer images



Volunteer contributions



Institution code	AM
Collection code	AM-Beetles
Catalogue No	K256655
Basis of record	specimen
Identifier name	R.D. Pope
Date identified (yyyy-mm-dd)	1980
Field number	
Collector name	J.M.E. Anderson
Date collected (yyyy-mm-dd)	1947-12-04
Scientific name	Hypoceras mulsanti
Author	Hypoceras mulsanti Cha
Kingdom	Animalia
Phylum	Arthropoda
Class	Insecta
Order	Coleoptera
Family	Coccinellidae
Genus	Hypoceras
State/Territory	Queensland
Locality	Banana plantation edge Nr. Cairns N.Q.
Latitude (in degrees)	
Longitude (in degrees)	

Amateur observations

Amateur observations and ad hoc data – how best to assist and encourage the capture of observational data from amateur naturalists and other independent specialists, and manage issues of quality

ALA User Needs Analysis

Citizen Science

Amateur observations



Observers



Data Input

Atlas of Living Australia

Institution code: Current AIMS Suggested: aims_itm_ns

Collection code: Catalogue No: HS101_Acropora

Basis of record: Identifier name: Date identified (yyyy-mm-dd): Field number: Collector name: Date collected (yyyy-mm-dd): 2004-03-23

Comment:

Choose an identity: Name/Email: Name: Email: Anonymous

Submit Cancel

GARDEN MOTH SURVEY TEMPLATE

Latitude: 35° 10' 00" S Longitude: 150° 45' 00" E

Altitude: 1000m

Time Type: Day

Wind: 0

Humidity: 0%

Moisture: 0%

Weather: Windy

Date of Survey: 21 Feb 2004

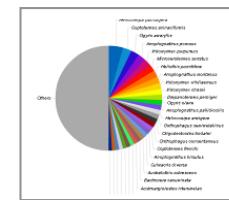
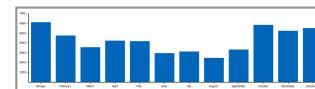
SE Number: Species Common Name: Species Latin Name: DATE OF SURVEY: 21 Feb 2004 20 Mar 2004 22 Mar 2004 17 Apr 2004



Personal Data



CollectionCode	CommonName	Country	Region	LastEncountered
12A	B	Australia	Southern Australia	2004-02-21 00:00:00
12B	B	Australia	Southern Australia	1995-06-21 00:00:00
12C	B	Australia	Southern Australia	1990-06-21 00:00:00
12D	B	Australia	Southern Australia	1990-01-01 00:00:00
12E	B	Australia	Southern Australia	1990-01-01 00:00:00



Projects



← Requests, fact sheets, presentations →

Close loop between amateur observers and research needs

Descriptive Data

Provision of identification tools and information will need to be in many forms and be able to show many levels of complexity.

There is an underlying emphasis on utility: high-quality photographs, good drawings, clear descriptions, easy-to-use keys.

ALA User Needs Analysis

Descriptive Data IdentifyLife





IdentifyLife

"The beginning of wisdom is to call things by their right names"

Home Browse Search Keys Help Register | Login

Welcome to IdentifyLife

IdentifyLife is a worldwide collaborative project to provide ways to identify the world's living organisms. Use IdentifyLife to find the keys you need to identify a living creature. If you know a little or a lot about a group of organisms, join the IdentifyLife community and get involved to share your knowledge with others.

IdentifyLife is a worldwide collaborative project to provide ways to identify the world's living organisms. Use IdentifyLife to find the keys you need to identify a living creature. If you know a little or a lot about a group of organisms, join the IdentifyLife community and get involved to share your knowledge with others.

IdentifyLife is a collaborative partnership, acknowledging funding from:



[How can I help with IdentifyLife and the Key to All Life project?](#)

Contact us | Privacy | Copyright © 2010, IdentifyLife | Last updated June 2010

 I'd like to learn about identification keys...

 I'm building a key; how can IdentifyLife help?

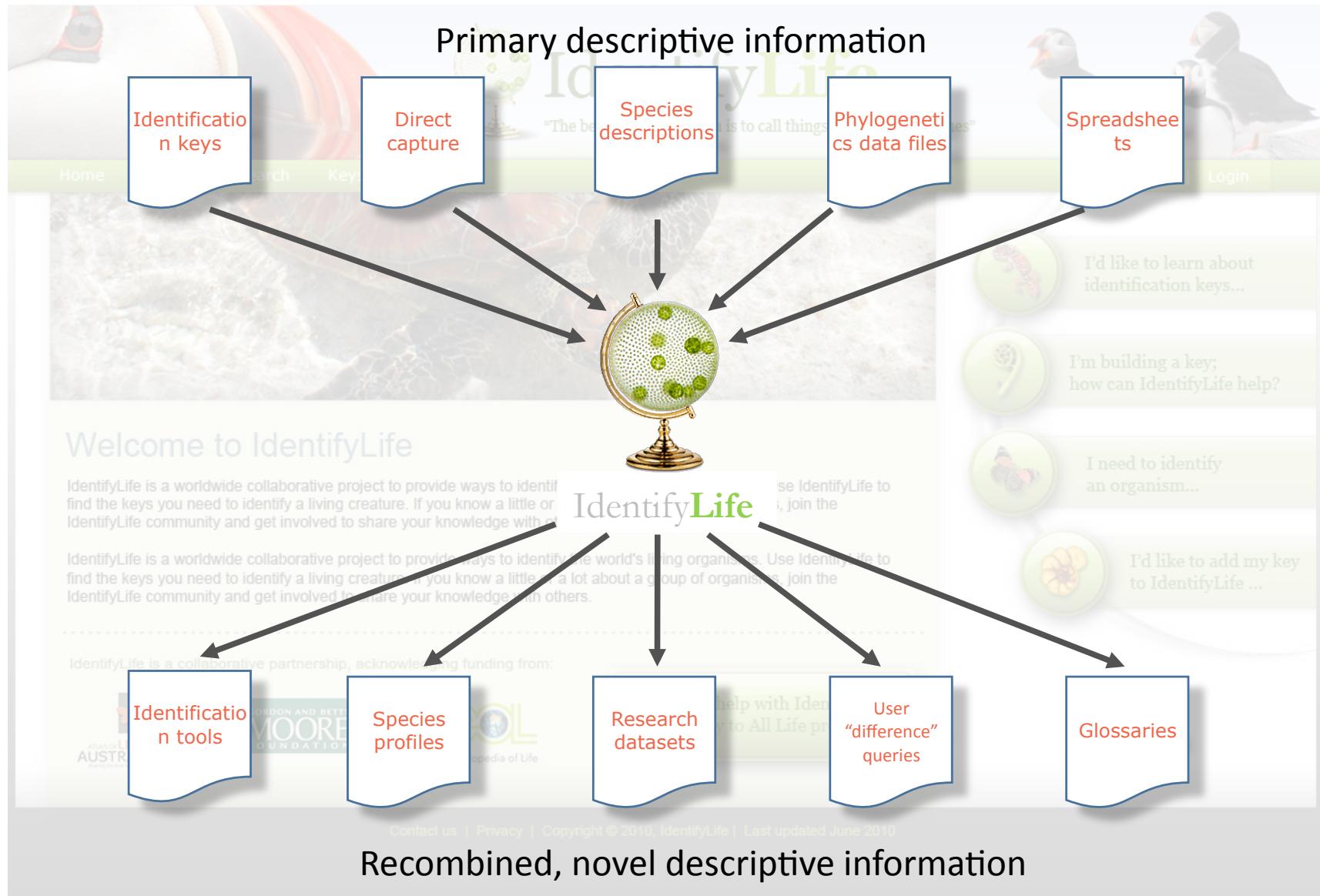
 I need to identify an organism...

 I'd like to add my key to IdentifyLife ...

Sharing biodiversity knowledge to shape our future

www.ala.org.au

Descriptive Data IdentifyLife



Digital Literature Biodiversity Heritage Library



The screenshot shows a page from the BHL website. At the top, there's a navigation bar with links to Feedback, About, Tools, BHL Members, Copyright, and Contact. Below that is a search bar with fields for Search, All Categories, and Go, along with Advanced Search and Published In (Any Language) and For (All Contributors) dropdowns. On the left, there's a sidebar titled 'Pages' listing pages 132 through 150. Below that is a section titled 'Names on this page' which says 'No Names Found - powered by uBio'. The main content area displays a historical map titled 'AUSTRALIAN BIRD MAPS' with a small inset map of Tasmania. The map includes labels for 'MAP 78' and 'TASMANIA'. To the right of the map is a detailed text about bird species and their distribution, mentioning the Tasmanian and New Zealand cormorants, the Bustard and Crane, and the true quail. It also discusses the Oyster catcher and the White-eye. At the bottom of the page, it says 'Book contributed by American Museum of Natural History Library'.

Examples of existing BHL content

- Search for *Acacia*:
 - 34,688 titles
 - 500+ species
- Search for genus *Carcharias*:
 - 4392 titles
- Historical titles such as:
 - *Illustrations of Australian plants collected in 1770 during Captain Cook's voyage round the world in H.M.S. Endeavour* - The Right Hon. Sir Joseph Banks and Daniel Solander, with determinations by James Britten
 - *Handbook to the Birds of Australia* - John Gould

- BHL projects: USA/UK, Europe, China, Brazil, Australia
- Australian mirror through ALA and Museums Victoria
 - Prioritise addition of Australian content
 - Integrate with ALA and other Australian projects
 - Focus on improving search and annotation capabilities

Digital Literature Journals relevant to ALA

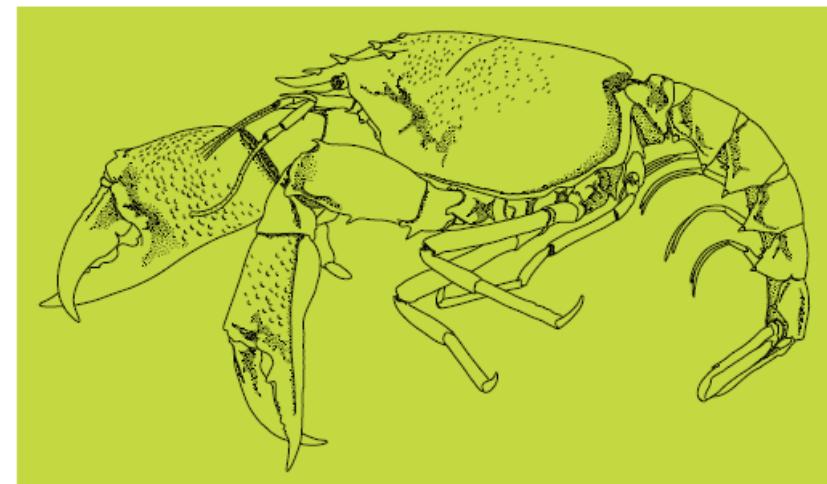
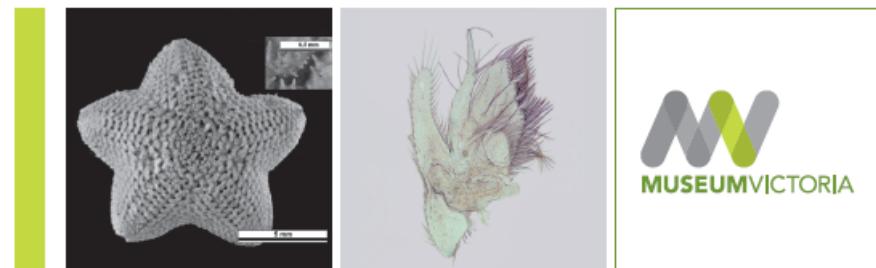


- Already in BHL (at least partially):
 - Proceedings of the Linnean Society of New South Wales
 - Proceedings of the Royal Society of Victoria
 - Proceedings of the Royal Society of Queensland
 - Transactions of the Royal Society of South Australia
 - Transactions of the Royal Society of Victoria
 - Transactions and Proceedings and Report of the Royal Society of South Australia
 - Transactions of the Philosophical Society of New South Wales
 - South Australian Naturalist
 - Papers and Proceedings of the Royal Society of Tasmania
- Museum journals already scanned include:
 - Records of the Australian Museum
 - Memoirs of the National Museum Victoria
 - Memoirs of the Queensland Museum
 - Kannunnah (Tasmanian Museum and Art Gallery)
- Others
 - Australian Journal of Zoology (CSIRO Publishing to offer 50 years through ALA)

MUSEUMVICTORIA

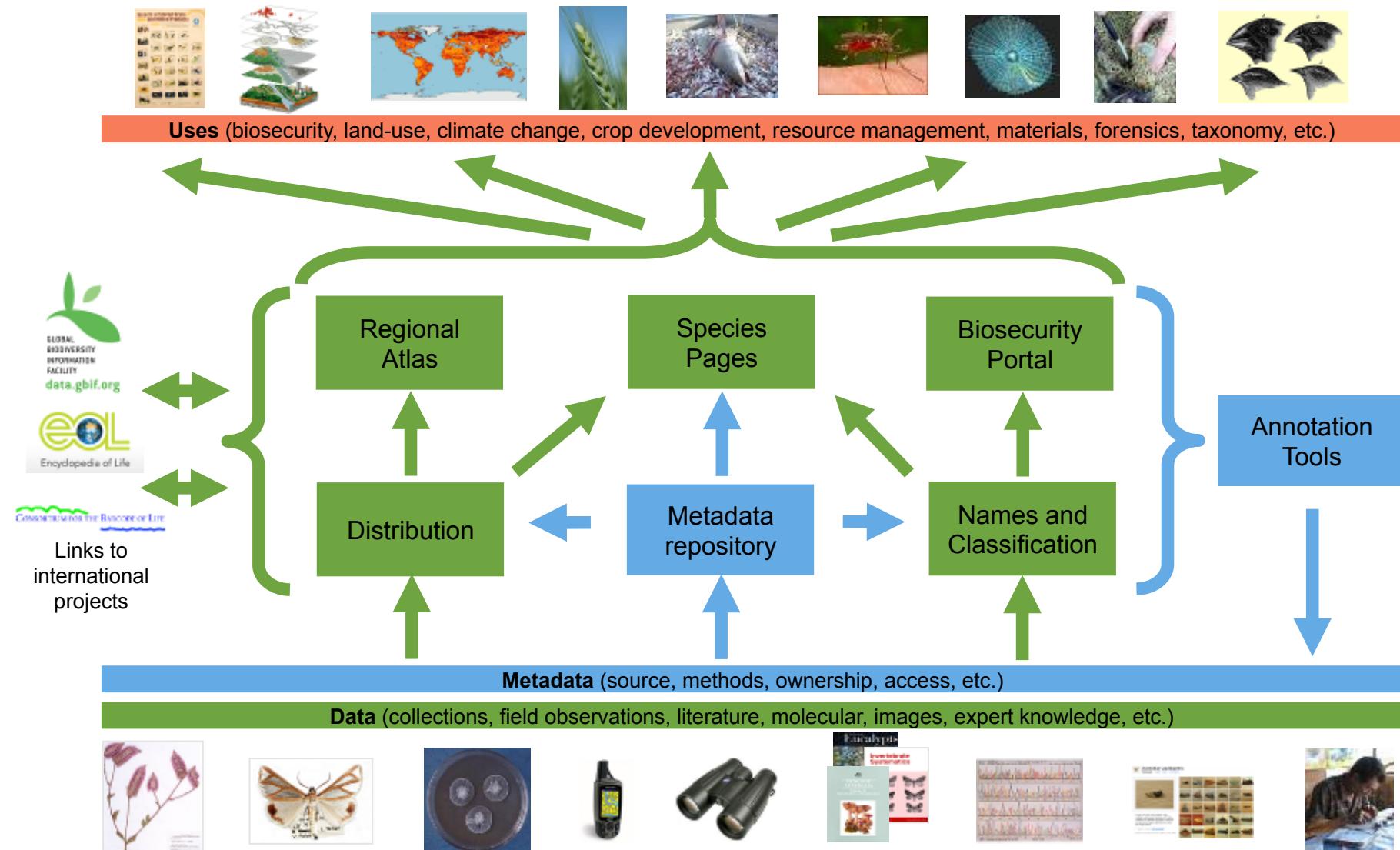
Memoirs of Museum Victoria

Volume 66 Issue Number 2 31 December 2009



Memoirs of Museum Victoria Volume 66 Issue Number 2 2009

Integrating it all



Integrating it all

Species information

Callocephalon fimbriatum
Gang-Gang Cockatoo

Animalia : Chordata : Aves : Psittacidae : Callocephalon : Callocephalon fimbriatum

Overview Gallery Identification Names Records References

Description

Gang-gang cockatoos are one of the more distinctive and charismatic members of Australia's avifauna. These birds are primarily slate-grey, with the males easily identified by their scarlet head and wispy crest, while females have a grey head and crest and feathers edged with salmon pink on the underbelly. ...

SOURCE: Department of Environment and Conservation - NSW threatened species ↗

The Gang-Gang Cockatoo is a dark grey cockatoo. It has prominent crest. The male has a red head and grey body. The female has grey head and body. Immature birds look like the hen except for some red in the head feathers in young males

SOURCE: OZ Animals ↗

Distribution

Gang-gang Cockatoos are endemic to south-eastern Australia. They are widespread in eastern New South Wales from the central slopes and tablelands to the south coast, down through Victoria's north-eastern regions to Seymour, with some records in east Melbourne, Mornington Peninsula and south-western Gippsland. ...

SOURCE: Birds in Backyards ↗

Victoria and southern NSW

SOURCE: OZ Animals ↗

The Gang-gang Cockatoo is distributed from southern Victoria through south- and central-eastern New South Wales. In New South Wales, the Gang-gang Cockatoo is distributed from the south-east coast to the Hunter region, and inland to the Central Tablelands and south-west slopes. It occurs regularly in the Australian Capital Territory. ...

SOURCE: Department of Environment and Conservation - NSW threatened species ↗

Morphological

33 - 35cm

SOURCE: OZ Animals ↗

Habitat

During summer, the Gang-gang Cockatoo is found in tall mountain forests and woodlands, with dense shrubby understoreys. In winter, Gang-gangs will move to lower altitudes into drier, more open forests and woodlands. At this time, they may be seen by roadsides and in parks and gardens of urban areas. ...

SOURCE: Birds in Backyards ↗

Species Profile

SOURCE: Australian Faunal Directory ↗
LSID | JSON

Contribute

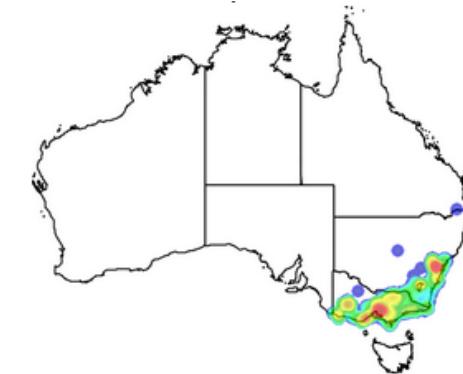
Images Data Links

Conservation Status

EX EW CR EN VU NT LC

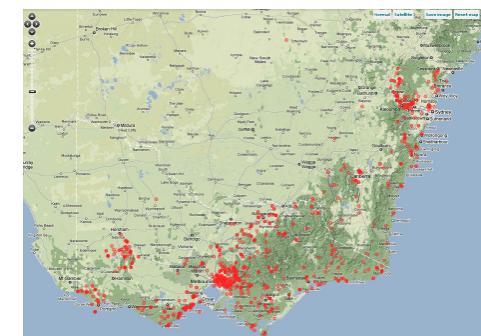
Vulnerable

SOURCE: Department of Environment and Conservation - NSW threatened species ↗



Resources contributing to this page

- Australian Faunal Directory ↗
- Catalogue of Life: 2010 Annual Checklist ↗
- Interim Register of Marine and Non-marine Genera ↗
- Birds in Backyards ↗
- Department of Environment and Conservation - NSW threatened species ↗
- Australian Faunal Directory ↗
- Flickr EOL ↗
- Wikipedia ↗
- OZ Animals ↗
- OZ Animals ↗



Integrating it all Geospatial data



Home | Explore | Tools | Contact Us | Support | About the Atlas | Log in

Search the Atlas

Home : Explore : Your Area

Explore Your Area

Enter your location or address:

11 nicholson street, carlton

Showing records for: 11 Nicholson St, Carlton VIC 3053, Australia

Display records in a 10 km radius

Group	Count	Species
All Species	1941	1. <i>Acridotheres tristis</i> - (866 records)
Animals	1147	2. <i>Tachybaptus novaehollandiae</i> - Australasian Grebe (820 records)
Mammals	38	3. <i>Streptopelia chinensis</i> - Spotted Turtle-dove (743 records)
Birds	283	4. <i>Turdus merula</i> - Common Blackbird (731 records)
Reptiles	28	5. <i>Grallina cyanoleuca</i> - Magpie-lark (721 records)
Amphibians	13	6. <i>Trichoglossus haematodus</i> - Rainbow Lorikeet (685 records)
Fish	0	7. <i>Anthochaera carunculata</i> - (682 records)
Insects	365	8. <i>Sturnus vulgaris</i> - Common Starling (681 records)
Plants	370	
Fungi	69	
Chromista	15	
Protozoa	0	
Bacteria	1	

Download

Powered by Google Imagery ©2010, Map data ©2010 - Terms of Use

Records: 1-9 10-49 50-99 100-249 250-499 500+

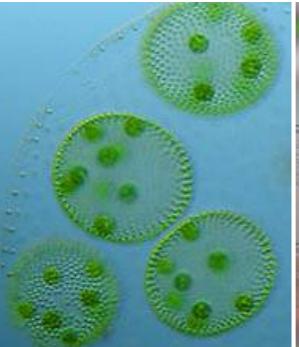
Home | Explore | Tools | Support | Contact Us | About the Atlas | Log in

Citing the Atlas | Disclaimer | Privacy Policy | Terms of Use

This work is licensed under a Creative Commons Attribution 2.5 Australia License

How to participate

- Comments, criticisms, concerns
 - Email: Donald Hobern, Donald.Hobern@csiro.au
- Share data through the ALA
 - Email: Miles Nicholls, Miles.Nicholls@csiro.au
- Use ALA services and tools
 - Email: David Martin, David.Martin@csiro.au
- Next steps
 - August 2010 onwards: Roadmap development with partners
 - October 2010: Web portal to be launched:
 - Collection Metadata
 - Species overview pages
 - Geospatial portal
 - Citizen science projects



The Atlas of Living Australia Participants

www.ala.org.au



Tasmanian Museum & Art Gallery
www.tas.gov.au/museum



Australian Government
Department of the Environment,
Water, Heritage and the Arts



Australian Government
Department of Agriculture,
Fisheries and Forestry



THE UNIVERSITY
OF ADELAIDE
AUSTRALIA



Southern Cross
UNIVERSITY
A new way to think

South Australian Museum



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

The Council of Heads of Australasian
Collections of Microorganisms (CHACM)

The Council of Australasian Museum
Directors (CAMD)



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