

Environmentally Sustainable Australia

Atlas of Living Australia presentation to Environmentally Sustainable Australia Expert Working Group

Donald Hobern, Donald.Hobern@csiro.au Director, Atlas of Living Australia

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ALA - current investment



- 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

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

ALA Resources and Services



Species Names & Classification

> **ABRS** CHAH

Geospatial Context

Gazetteers, Climate, Geology, Land-use, Etc.

Statutory Lists

Conservation & Biosecurity Agencies

User Feedback

Annotations, Corrections, Quality Review Available

Development

Planning

Taxonomic and ecological research, Conservation, Biosecurity







Data normalisation,

validation and cleansing

Aggregated

occurrence data

Specimen Data

Natural History Collections

AVH, OZCAM, APPD, AMRIN, OBIS

Monitoring Data

Government

TERN/IMOS

Resource Managers

Observations

Species

information

Birds Australia

EarthWatch

Citizen Science

Flickr

Digital Literature

Biodiversity Heritage Library, Journals, Species Pages

Images and Multimedia

MorphBank and other image libraries

Identification Keys

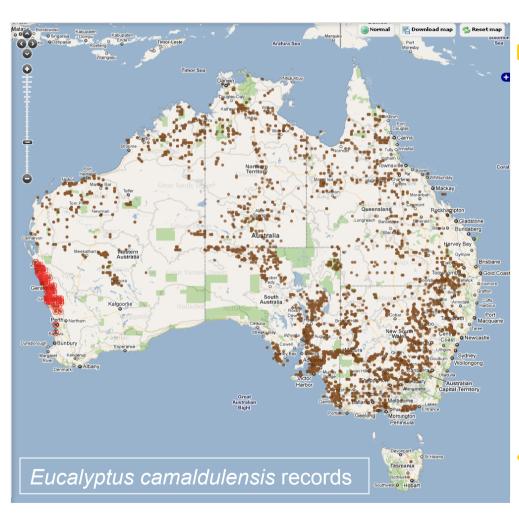
IdentifyLife (Lucid, DELTA, dichotomous keys, etc.)

Molecular Data

Barcode of Life, GenBank

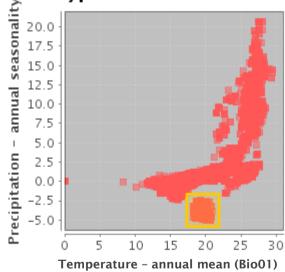
Example – environmental exploration





Map localities onto environmental parameters

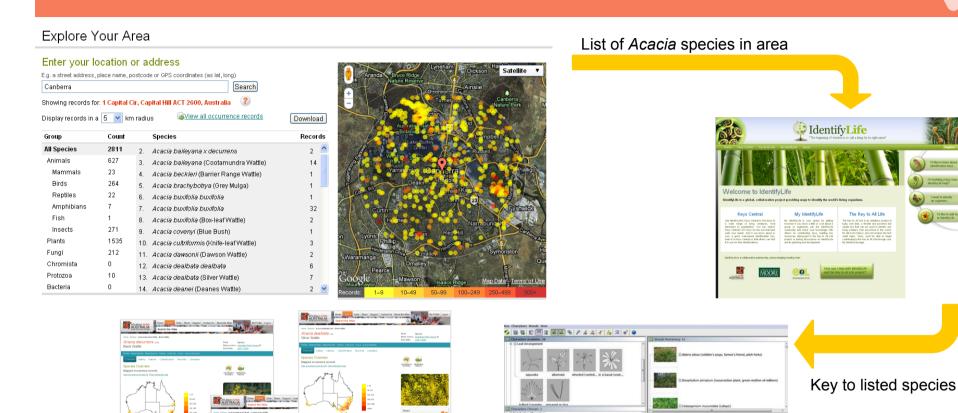




Select records by environmental envelope

Example – contextual identification

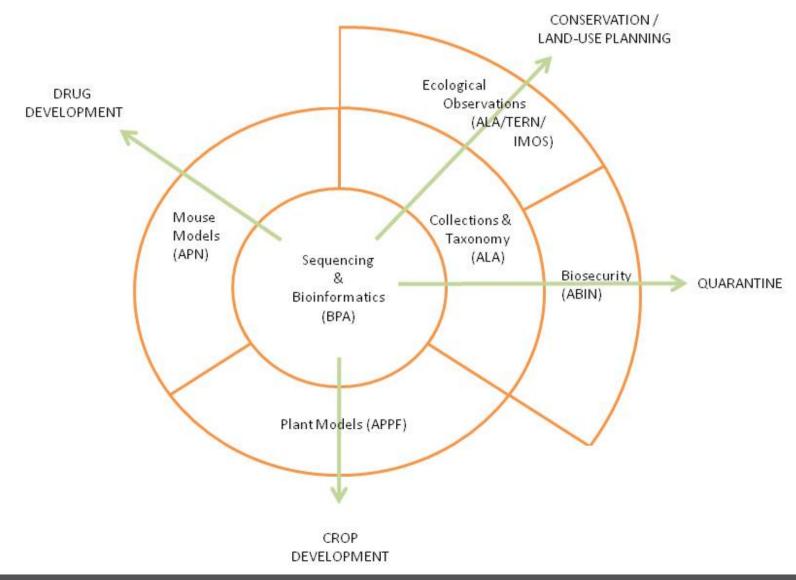




Links to aggregated species information

Broader NCRIS linkages





Environmentally Sustainable Australia



- Aggregation of information on all Australian taxa
 - Includes native and non-native, marine and terrestrial
- Integrated data management
 - Occurrence data from all sources
 - Consistent management, quality control and presentation
 - Faceted exploration of data (by species, data source, etc.)
 - Integration with environmental data
 - Data download
 - Platform for integrating analytical software
- Support for citizen science and community involvement
 - Field observations
 - Reports and tools for land managers and communities
- Close linkages with TERN and IMOS
 - Common data standards and software components
 - Liaison in developing common architecture































An Australian Government Initiative

National Collaborative Research Infrastructure Strategy

