

www.ala.org.au

How can the ALA help BIGnet?

Citizen Science at work

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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

- An introduction to the Atlas of Living Australia (ALA)
- The ALA's Citizen Science project
- The ALA's Citizen Science solution
- Where to from here?
- Questions
- Demo at morning tea

- Australian Government funding to June 2012
- Mission
 - To develop an authoritative, freely accessible distributed and federated biodiversity data management system
- Working in a range of areas to deliver this, all around the ALA web site:

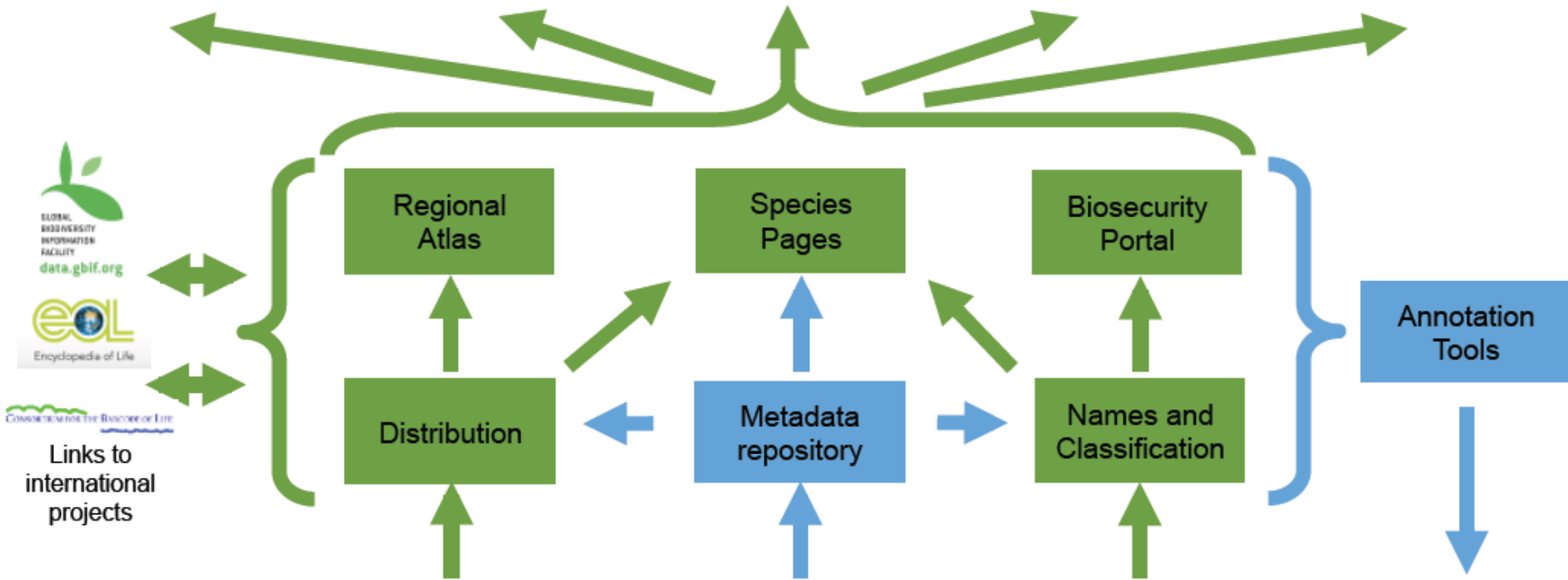
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- Integrated picture of Australia's biodiversity
 - Plants, animals and microorganisms
 - Marine and terrestrial
 - Native and non-native
- Information and tools to support:
 - Species identification
 - Taxonomic and collection management
 - Biosecurity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

Atlas of Living Australia



Uses (biosecurity, land-use, climate change, crop development, resource management, materials, forensics, taxonomy, etc.)



Metadata (source, methods, ownership, access, etc.)

Data (collections, field observations, literature, molecular, images, expert knowledge, etc.)



ALA and Citizen Science

Six Main Components of the Atlas

AUSTRALIAN NATIONAL SPECIES LISTS

- Comprehensive lists of Australian species.
- Classifications.
- Support national checklists: Australian Fauna Directory, Australian Plant Census.
- Web Services.
- Tools to share and manage lists.

DATA SHARING

- Tools and portals for users.
- Citizen science portal.
- Web services.

DATA INTEGRATION

- Integrated data from all sources.
- Data quality.
- Sensitive data service.

DATA MANAGEMENT

- Databases to store and manage:
 - descriptive data (Identify Life)
 - images (Morphbank)
 - sequences (BOLD)
 - digital literature (BHL).

BIOLOGICAL COLLECTIONS

- Work with the collection community.
- Tools for imaging and databasing.
- Support national collection databases, OZCAM, AVH.
- Field capture of data.
- Directory of Natural History Collections.

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ALA and Citizen Science



- Undertook a review of the citizen science projects that were running in late 2009, and further user needs analysis in 2010
- Developing flexible, open source web-based (and mobile-compatible) software that will enable a wide range of parties to record and manage records of Australian biodiversity
- Software is called the “Biological Data Recording System” (BDRS) and has been in development for close to a year

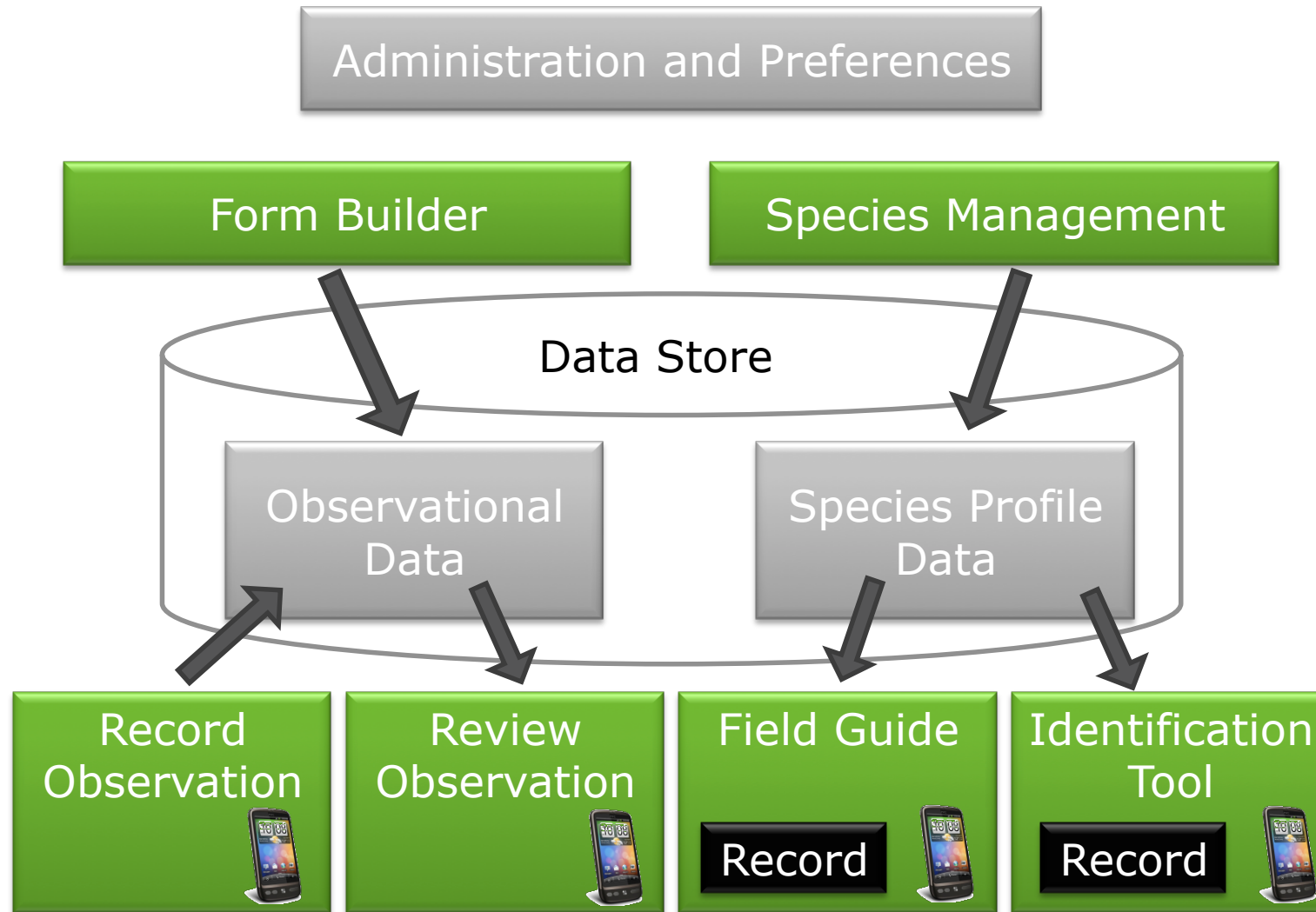
BDRS in action



- Deployed in several production web sites now...

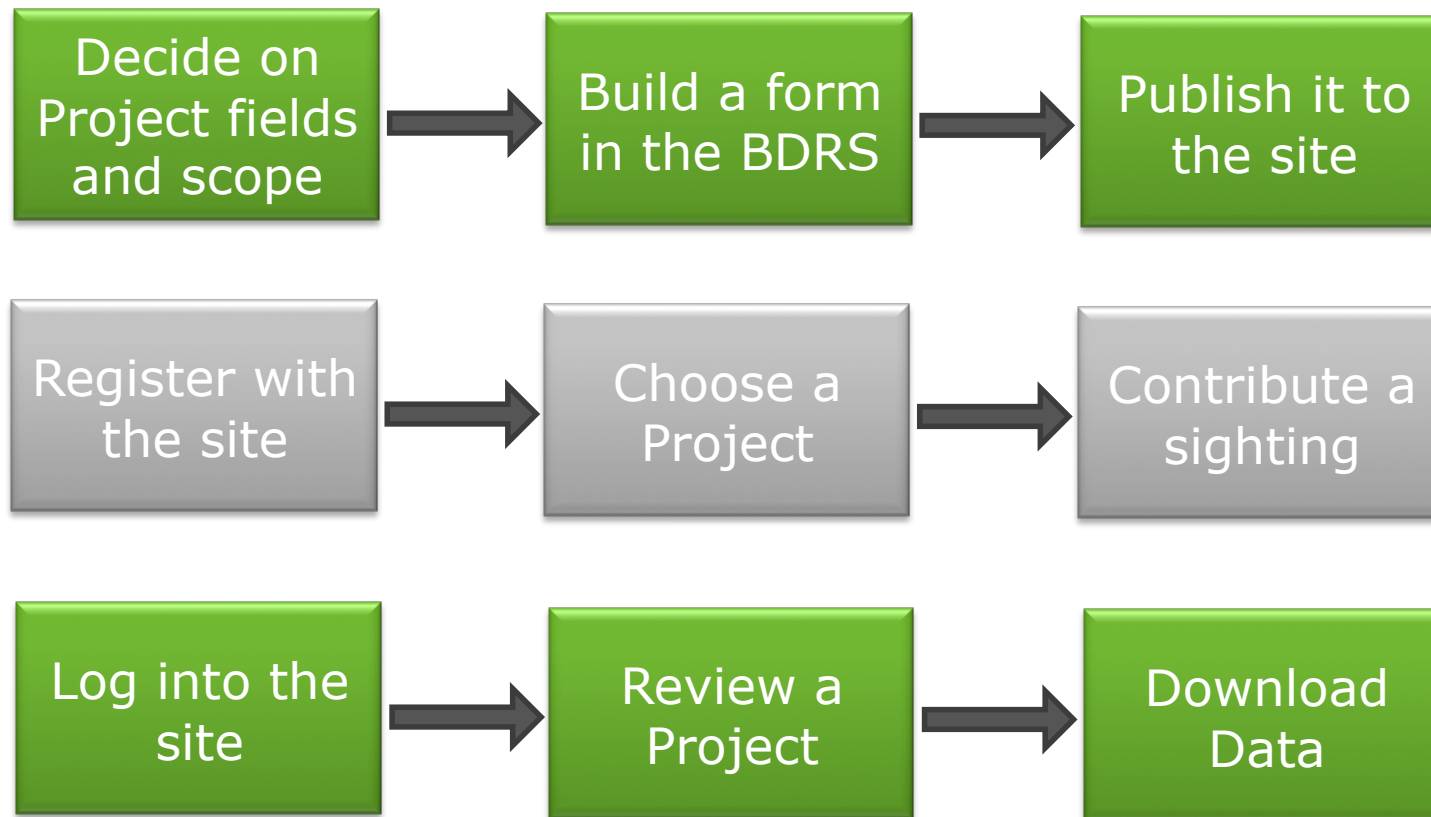
A collage of three web pages. The leftmost page is ClimateWatch, an initiative of Earthwatch Institute, featuring a large image of a green tree frog. The middle page is the Birds Australia Citizen Science Portal, with a header for "Birds Australia CONSERVATION THROUGH KNOWLEDGE" and a main banner for "BIODIVERSITY OUR LIVES DEPEND ON IT" with a "2010" graphic. The rightmost page is the Atlas of Living Australia, showing a navigation menu with "Program", "About", and "Help" options, and a section for "Our Education Program".

BDRS in action

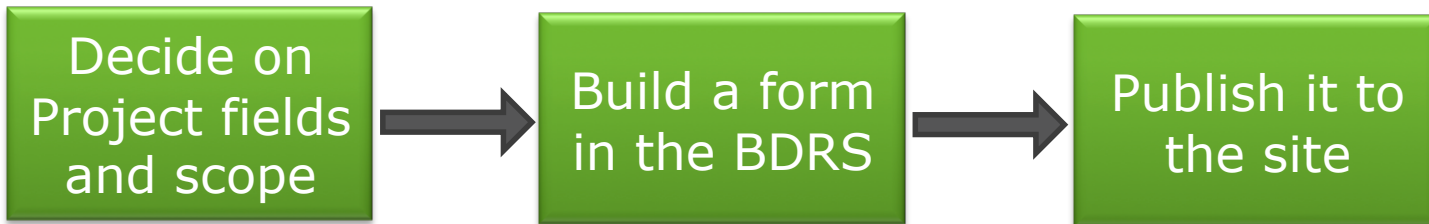


BDRS in action

- How does it work? Here's three examples of how you might want to use it.



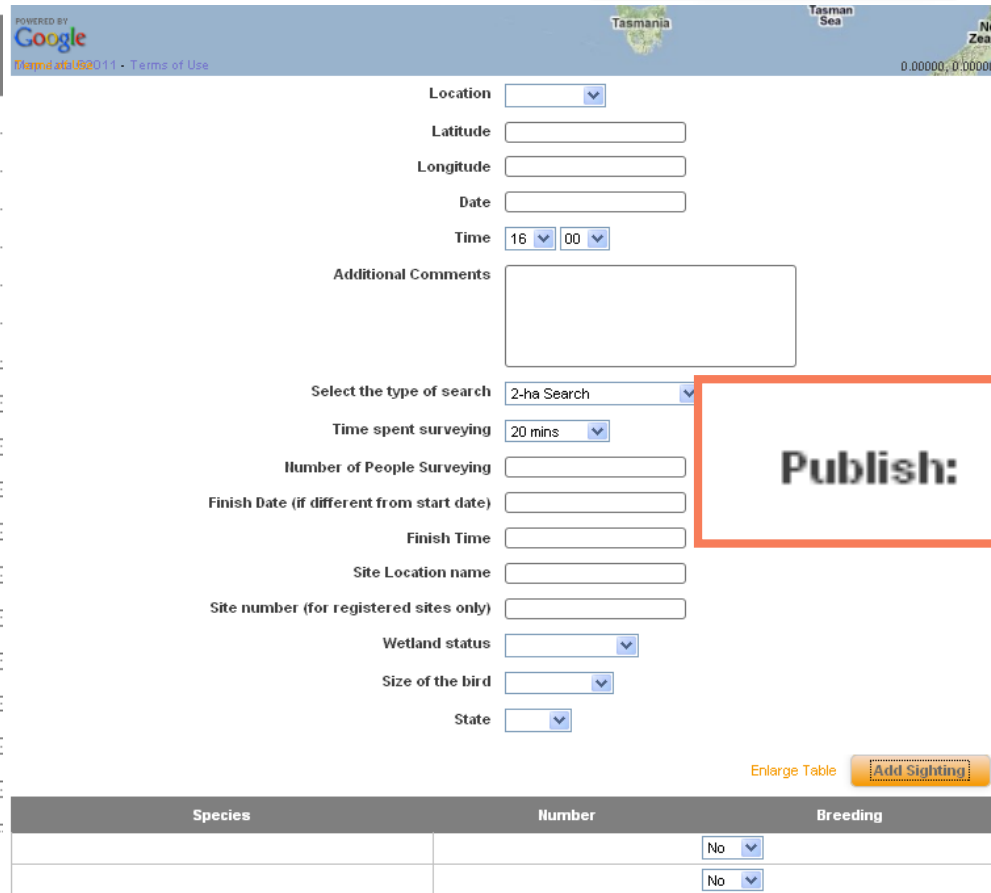
BDRS in action



Site: *New L*
 A Class Bander:

Bander	Bag #	Net #
JB	90	11 011
JB	95	7 011
JB	96	7 011
JB	81	8 03
JB	87	1 026
SB	84	3 011
JB	99	10 011
SB	86	3 011
SB	91	6 011
JB	93	1 021
SB	94	3 011
SB	65	5 011
SB	83	3 011
JB	89	8 021
SB	97	1 021

Description on the Form	Name in the Database
Species	N/A
Number	N/A
Location	N/A
Position	N/A
Date	N/A
Time	N/A
Additional Comments	N/A
Select the type of search	survey_type
Time spent surveying	survey_time
Number of People Surveying	number_people
Breeding	breeding
Finish Date (if different from start date)	Finish Date
Finish Time	Finish Time
Site Location name	Location
Site number (for registered sites only)	Site number
Wetland status	Wetland
Size of the bird	size
State	state



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 Map data ©2011 - Terms of Use

Tasmania Tasman Sea New Zealand
 0.00000, 0.00000

Location

Latitude

Longitude

Date

Time 16 00

Additional Comments

Select the type of search 2-ha Search

Time spent surveying 20 mins

Number of People Surveying

Finish Date (if different from start date)

Finish Time

Site Location name

Site number (for registered sites only)

Wetland status

Size of the bird

State

Publish:

Enlarge Table

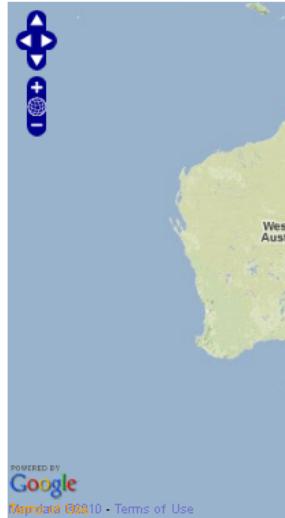
Species	Number	Breeding
		No <input type="text"/>
		No <input type="text"/>

BDRS in action

- The BDRS handles different types of forms...

Bittern Survey

Click on the map to enter the location of the



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Calendar sightings

This is a yearly calendar form — simply pick the location you are recording for, then click on the day you are reporting on (today is highlighted) and then enter the number of individuals that you saw on that day.

Species *Trichoglossus haematodus*

Location Add Location

Additional C

Select the type

Time spent

Number of People

Jan 11 Feb 11 Mar 11 Apr 11 May 10 Jun 10 Jul 10 Aug 10 Sep 10 Oct 10 Nov 10 Dec 10

1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												

Submit and Add Another

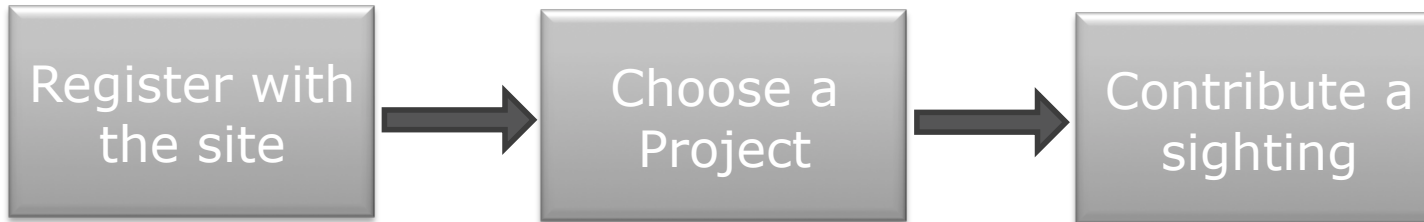
Submit Sightings

Species

Pomatostomus sul

Egretta sacra

BDRS in action



Birds Australia Citizen Science Registration

To start contributing your observations to Birds Australia Citizen Science, please enter the following details:

Account Details

Desired username*:

Email Address*:

Choose a password*:

Repeat your password*:

Birds Australia Membership Details

BA/Atlasser Number (if applicable):

Forgotten your BA member / Atlasser number?

Personal Details (Only required if not a BA member)

Title*:

First Name*:

Last Name*:

Group/Business Name:

Postal Address*:

Suburb*:

State*:

Country*:

Postcode*:

Home Phone:

Work Phone:

- Contribute
- Atlas General Form
- BA Training Survey
- BIBY-BackyardBirds
- BIBY-Common Koel
- Bittern Survey
- Calendar sightings
- Carnaby's Cockatoo Track
- Carnabys Locations
- Carnaby's Nesting
- HP Flocks
- HP Nest Monitoring
- HP Sightings
- Red-Tailed Blacks
- Secret Red-Tails
- Shorebirds 2020

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Tasmania Tasman Sea New Zealand

0.00000, 0.00000

Location:

Latitude:

Longitude:

Date:

Time: 16:00

Additional Comments:

Select the type of search: 2-ha Search

Time spent surveying: 20 mins

Number of People Surveyed:

Finish Date (if different from start date):

Finish Time:

Site Location Name:

Site number (for registered sites only):

Wetland status:

Size of the bird:

State:

Submit Sighting

Enlarge Table

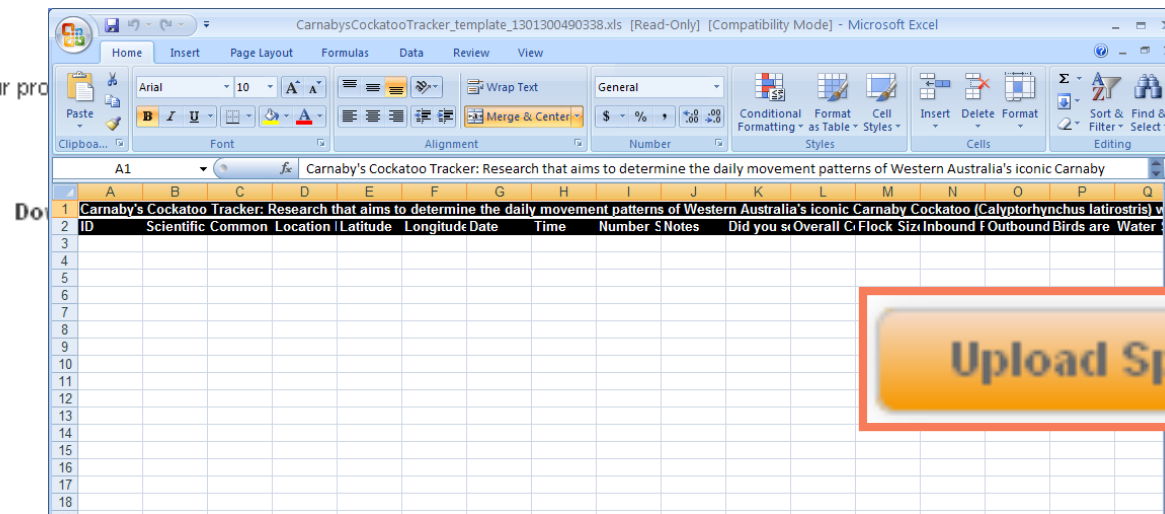
Species	Number	Breeding
		No
		No

BDRS in action

- The BDRS can also accept bulk uploads...

Download Template Spreadsheet

Download your template below for your project



Upload Spreadsheet

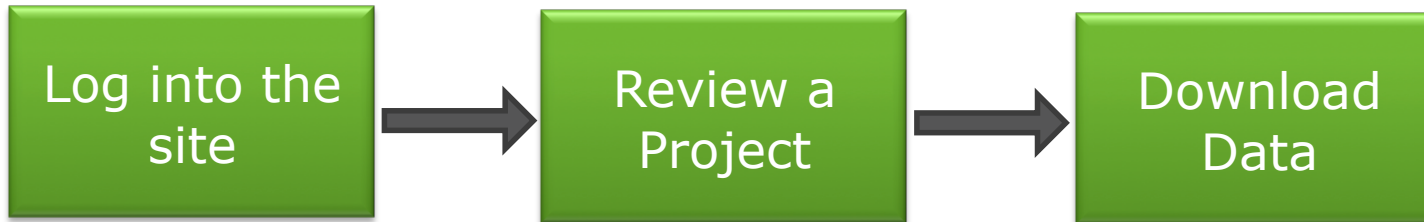
[Collapse](#)

Once you have filled out your template, upload it below. When you upload a file, it will be checked against the project to make sure it matches the project requirements.

Project:

Spreadsheet:

BDRS in action



Birds Au

Welcome to the

If you have not

If you already ha

Please enter

Please enter

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Map data ©2011 - Terms of Use


Collapse

Date	Species	Location	Number	Notes
17 Mar 2011	<i>Calyptorhynchus latirostris</i>	-32.842673631954, 117.421875	1	
07 Mar 2011	<i>Calyptorhynchus latirostris</i>	-24.126701958682, 12		
16 Dec 2010	<i>Calyptorhynchus latirostris</i>	-24.607069137709, 12		
16 Dec 2010	<i>Calyptorhynchus latirostris</i>	-30.961123839412, 119		
16 Dec 2010	<i>Calyptorhynchus latirostris</i>	-31.938260427838, 119		
03 Nov 2010	<i>Calyptorhynchus latirostris</i>	-37.805376134761, 144		
02 Nov 2010	<i>Calyptorhynchus latirostris</i>	-18.145851771694, 145		
02 Nov 2010	<i>Calyptorhynchus latirostris</i>	-26.745610382199, 127		
01 Nov 2010	<i>Calyptorhynchus latirostris</i>	-24.527134822598, 132		
27 Oct 2010	<i>Calyptorhynchus latirostris</i>	-34.705493410226, 139		
26 Sep 2010	<i>Calyptorhynchus latirostris</i>	-31.83004222036167, 1		
12 Sep 2010	<i>Calyptorhynchus latirostris</i>	-31.945024963615047, 1		
12 Sep 2010	<i>Calyptorhynchus latirostris</i>	-31.719245685346383, 1		
12 Sep 2010	<i>Calyptorhynchus latirostris</i>	-31.76260380462574, 1		
11 Sep 2010	<i>Calyptorhynchus latirostris</i>	-32.008766932103036, 116.02292597293854		At least 30 to 40 flying north east. I heard even more in the distance flying in that direction.
11 Sep 2010	<i>Calyptorhynchus latirostris</i>	-31.717055342984906, 115.72071075439453		Feeding mainly on dryandra sessilis flower in the Tamala Park Conservation Reserve.
				Possibly the same two CBC's that I reported this

Download XLS

Opening records_1301299906753.xls

You have chosen to open

 **records_1301299906753.xls**

which is a: Microsoft Office Excel 97-2003 Worksheet

from: <http://ba.gaiareources.com.au>

What should Firefox do with this file?

Open with: Microsoft Office Excel (default)

Save File

Do this automatically for files like this from now on.

OK Cancel

BDRS in action

- The BDRS can also allow for thresholds to notify you of a special case...

For all **Records** where:

Records Enlarge Table Add Condition

Rules			Delete
behaviour	is equal to	nesting	✗

the system shall perform the following actions:

Enlarge Table Add Action

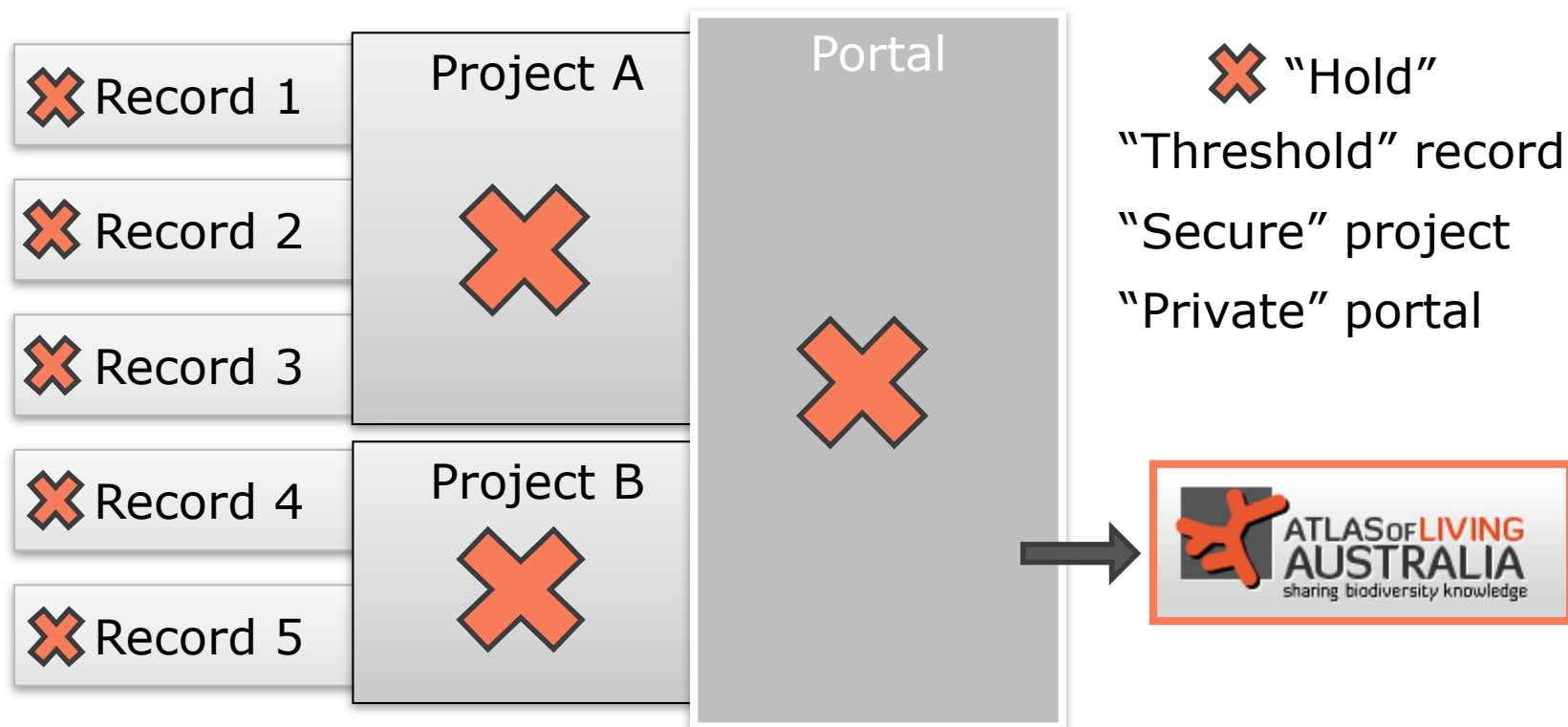
Action	Input	Delete
Send an email to		✗
Hold Record	N/A	✗

Enable this threshold

Save

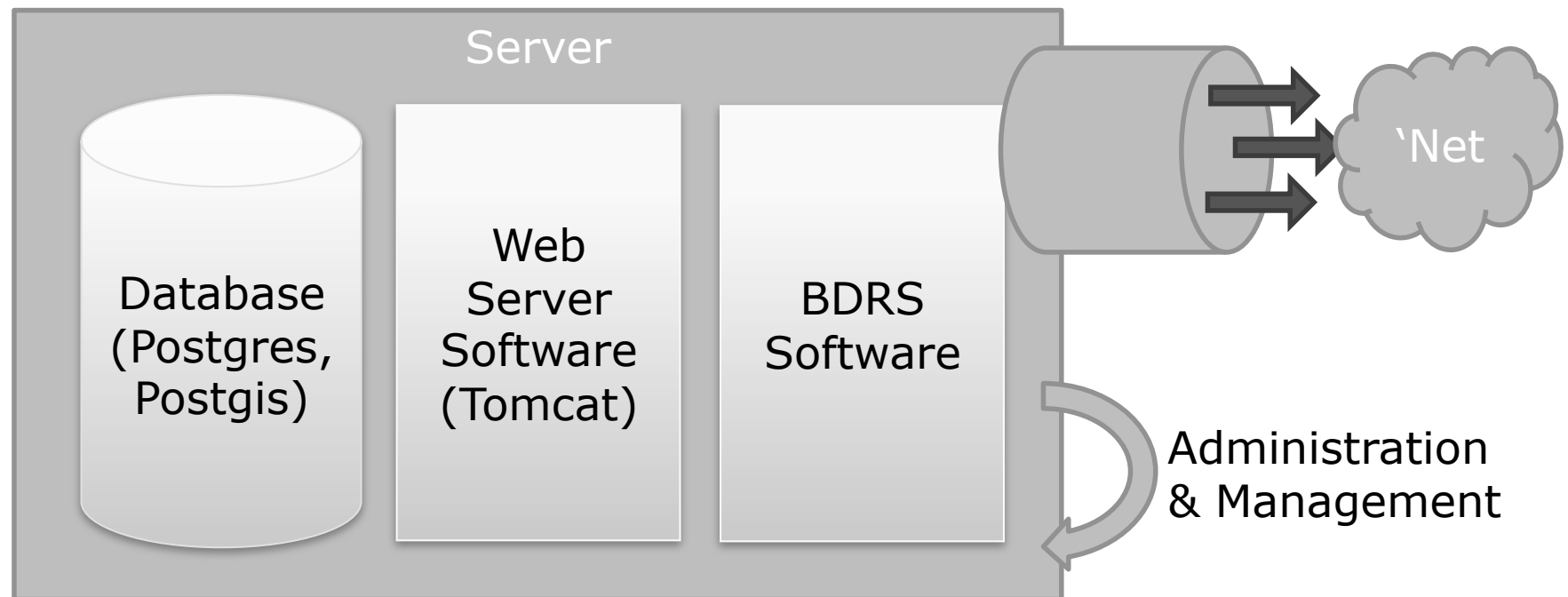
BDRS in action

- We have a range of permissions in the software to allow data to be controlled for an individual record, a project, or a portal – internally and externally.



Where to from here?

- To run an instance of the BDRS there are several requirements...



- ...all of which are actually in place with Birds Australia under the current support from the ALA

Where to from here?

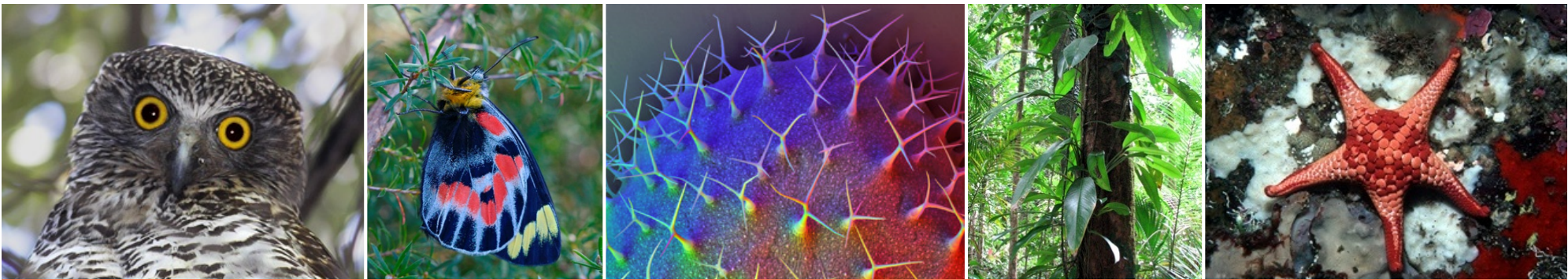


- You could set up a joint project such as the Important Bird Areas surveys and test using the BA implementation of the BDRS software
- We can set up a version of the software that will “re-skin” the forms for each project or even each group that sets up a project
- We can provide materials and so on to help you get set up as we develop them – helped by Birds Australia staff who have had two training sessions from Gaia Resources and the ALA

Want to see it in action?



- Demonstrations of the software can be done at morning tea and lunchtime
- You can access our “staging” server yourself to get a feel for the software and how it works:
- <http://ba.gaiaresources.com.au/>
 - Login as user/password
 - Login as admin/password
- Please note: as this is a “staging” server, it may not be available 24/7



The Atlas of Living Australia Participants

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Tasmanian Museum & Art Gallery



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



ABRS



CSIRO



Australian Government
Department of Agriculture,
Fisheries and Forestry



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Council of Heads of Australasian Herbaria



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A new way to think

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

The Australian Microbial Resources
Research Network (AMRRN)
The Council of Heads of Australasian
Museum Directors (CAMD)



An Australian Government Initiative
National Collaborative Research
Infrastructure Strategy



ATLAS OF **LIVING**
AUSTRALIA
sharing biodiversity knowledge

The Atlas is funded by the
Australian Government under the
National Collaborative Research
Infrastructure Strategy
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Education Investment Fund