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Earthwatch promotes sustainability by engaging people in science-based conservation.

- ▶ Founded in Massachusetts, 1971
- ▶ Earthwatch Australia incorporated 1982
- ▶ Solutions focused and non-adversarial
- ▶ In 2009, 100 projects in 42 countries
- ▶ 3,500 '**citizen scientists**' involved each year
- ▶ Making a difference
 - More than 150 new species of plants & animals discovered in Australia in 2009
 - Partnering with responsible businesses for more than 20 years
 - 139 new management strategies developed since 2002
 - 224 peer reviewed scientific publications in Australia



Winner of the 2009 Prime Minister's Award for Australian Environmentalist of the Year



**Field-based Earthwatch project:
5 – 14 days**

**Green
Champions**

My Planet

My Region

**Short term volunteering:
1-2 Days**

Scientist for a Day

My Town

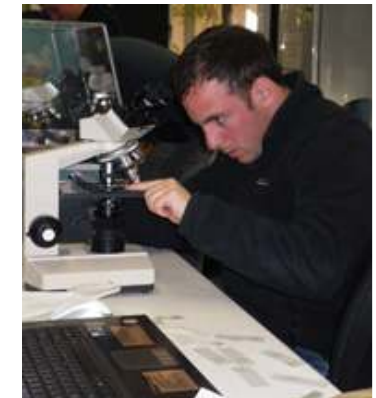
My Company

**Climate Watch &
Web Learning**

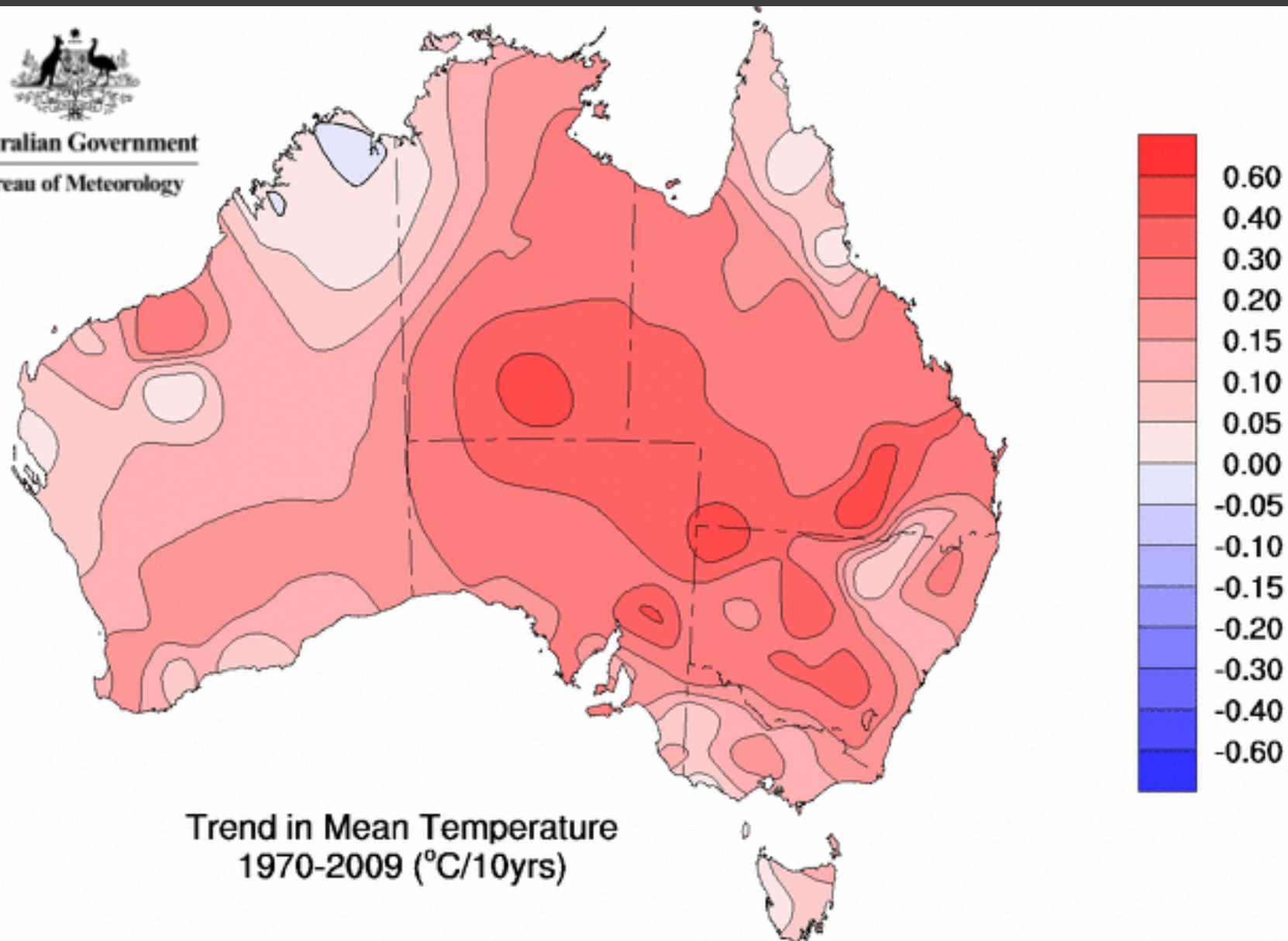
Citizen Science Online

My Home

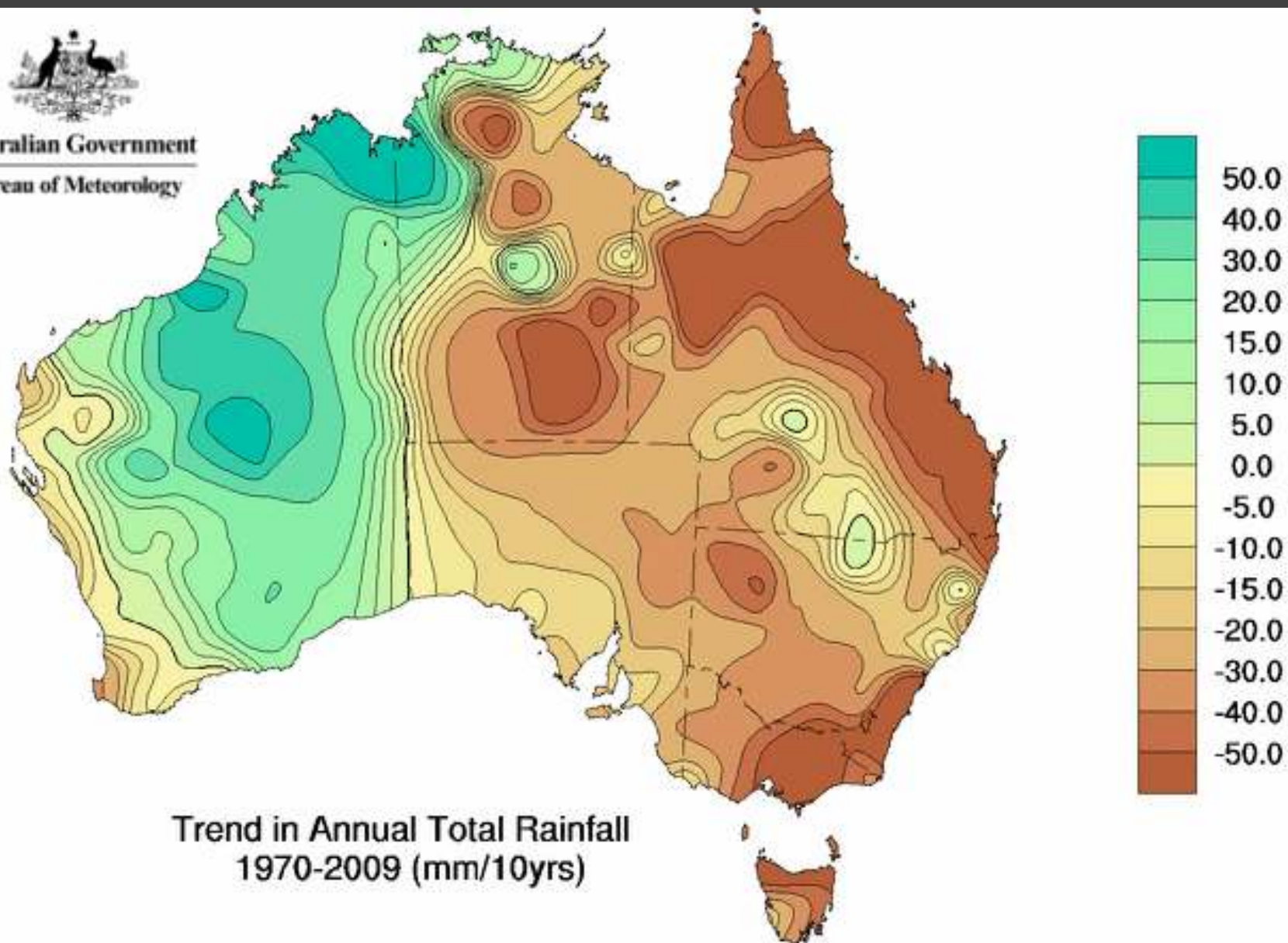
My Desktop




Australian Government
Bureau of Meteorology

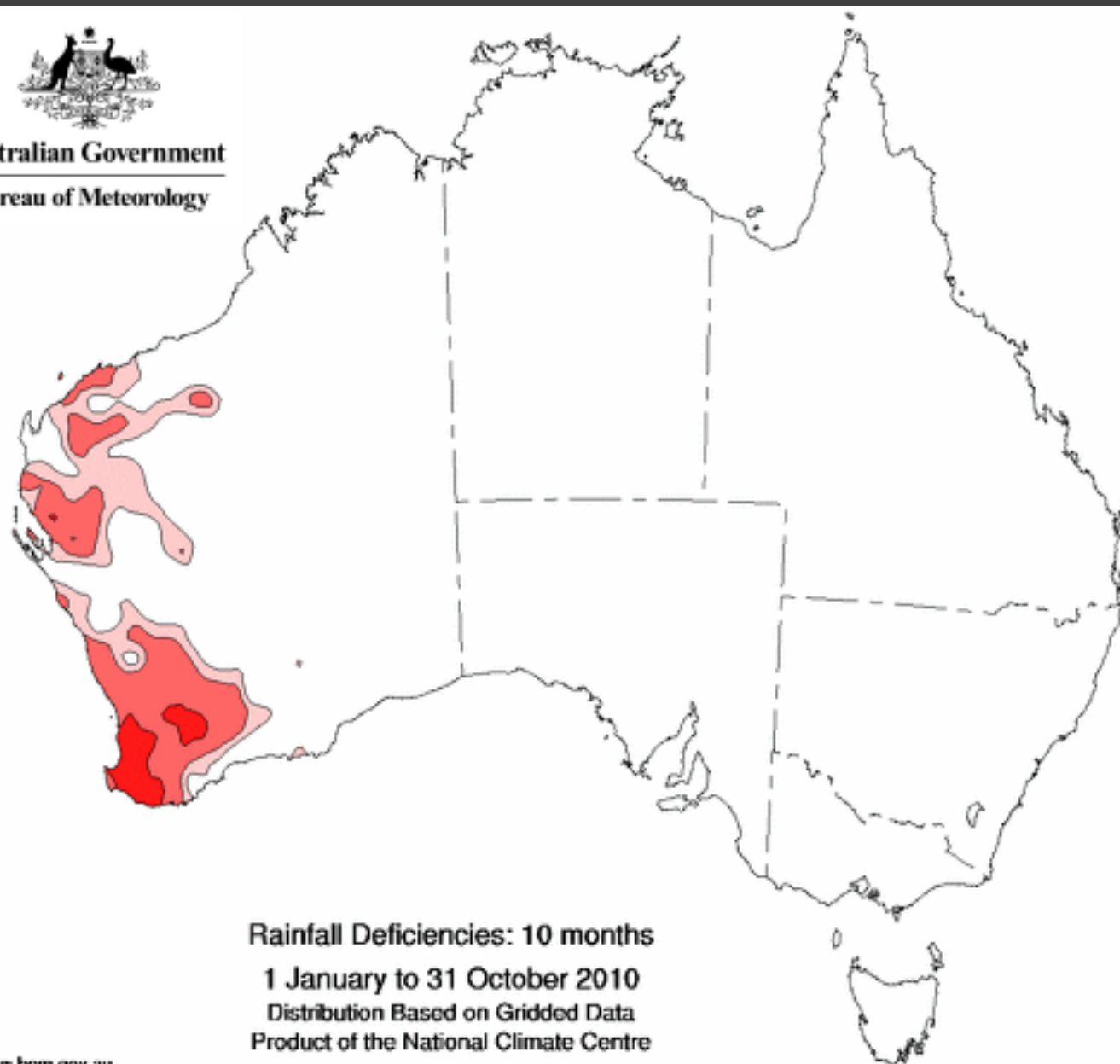



Australian Government
Bureau of Meteorology





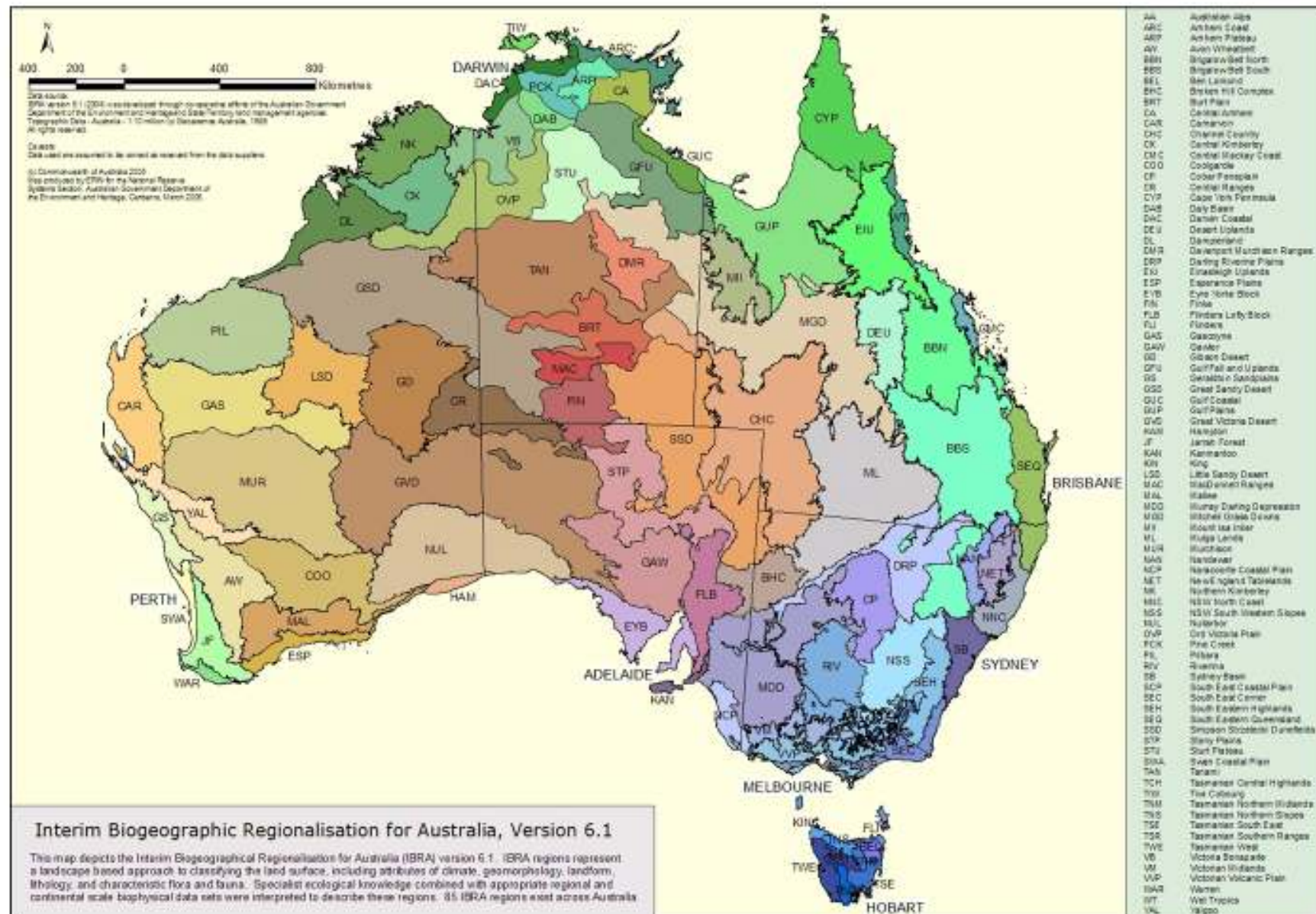
Australian Government
Bureau of Meteorology

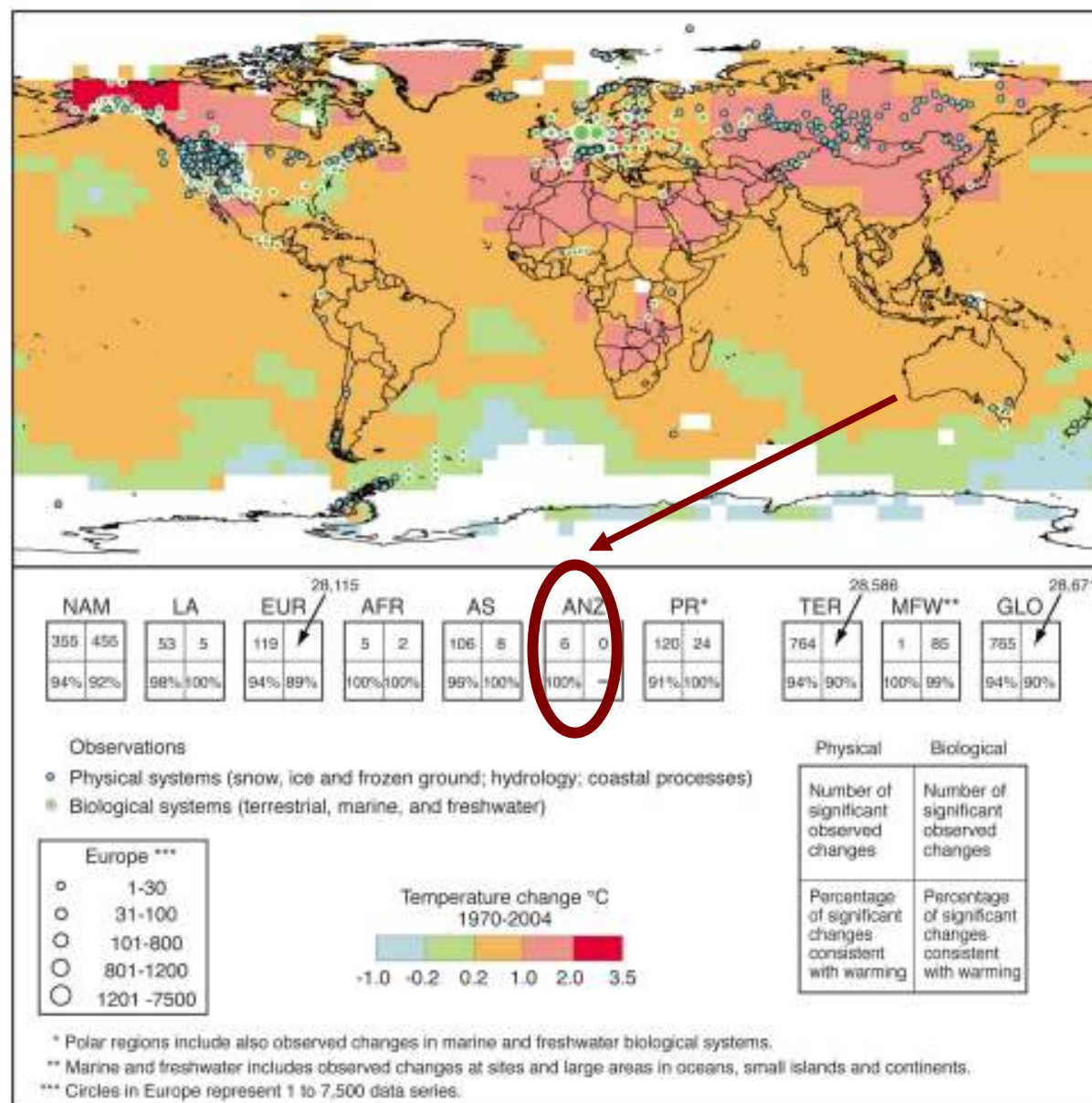


Rainfall Percentile Ranking

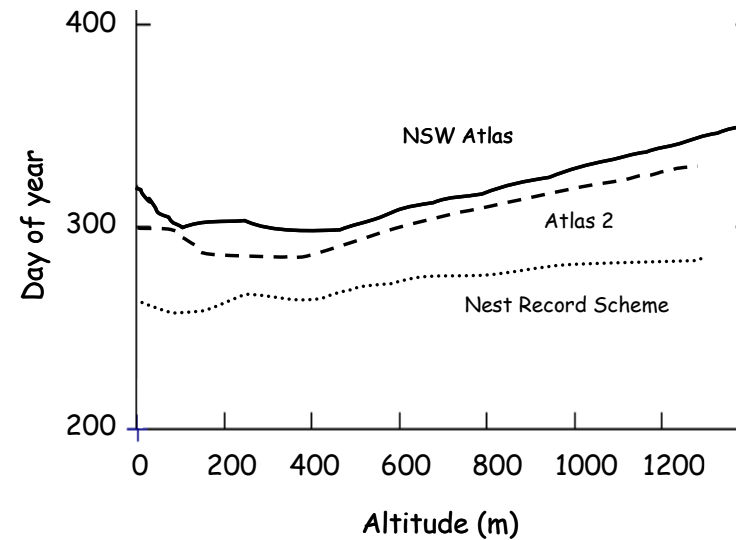


Australia's Biogeography





AUSTRALIAN MAGPIE (Gibbs 2007 Emu 107: 284-293)



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ABC News

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CLIMATE CHANGE [SPECIAL COVERAGE](#)

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Butterflies 'fly early as planet warms'

By Anna Salleh for ABC Science Online

Updated Wed Mar 17, 2010 3:03pm AEDT

Australian scientists say they have uncovered a "causal link" between the early emergence of a common butterfly and human-induced global warming.

Dr Michael Kearney of the University of Melbourne and his colleagues report their study on the butterfly *heteronympha merope* in this week's issue of Royal Society journal *Biology Letters*.

"It's now coming out about 10 days earlier than it was 60 years ago," Dr Kearney said.

"When you look at the air temperatures over that time, it's getting warmer."

Dr Kearney says the local Wurundjeri Aboriginal people have traditionally defined one of their seasons as beginning when they see the male of the common brown butterfly on the wing.

"That part of their calendar would be shifted 10 days earlier," he says.

Dr Kearney says that while previous studies have found a correlation between global warming and animals coming out earlier in spring, this study is the first to provide evidence of a causal link between this phenomenon and human-induced global warming.

He says his team has carried out laboratory experiments to quantify the physiological effect of rising temperatures on butterflies and has also shown the measured temperature increases are not due to natural climatic variation.



Some Aboriginal people have traditionally defined one of their seasons by the emergence of this common butterfly. (Paul Sunnucks)

MAP: [University of Melbourne 3010](#)

The northern hemisphere response

► UK Phenology Network:

www.naturescalendar.org.uk



► From 200 to now 25,000 observers

► 600,000 records annually



Solution: climatewatch.org.au



Observe. Record. Discover.

Watch your favourite wildlife or plants and record changes here online!

<input checked="" type="radio"/> All Species	<input checked="" type="radio"/> All Regions	<input checked="" type="radio"/> All Periods
<input type="radio"/> Birds	<input type="radio"/> ACT	<input type="radio"/> Summer
<input type="radio"/> Frogs	<input type="radio"/> NSW	<input type="radio"/> Autumn
<input type="radio"/> Insects	<input type="radio"/> NT	<input type="radio"/> Winter
<input type="radio"/> Mammals	<input type="radio"/> QLD	<input type="radio"/> Spring
<input type="radio"/> Marine Animals	<input type="radio"/> SA	
<input type="radio"/> Plants	<input type="radio"/> TAS	
<input type="radio"/> Reptiles	<input type="radio"/> VIC	
<input type="radio"/> Spiders	<input type="radio"/> WA	
	<input type="radio"/> International	

[Go](#)

Volunteer Spotlight

Landcare Australia are asking all Australians to become citizen scientists as part of Landcare Week 6 - 13 September, 2010. Check out the [feature species](#).



[Register now](#)

Get involved - scientists need your help

Help scientists understand the impact of climate change on our environment. Simply [browse species](#), select a species to **watch** and keep your eyes peeled.



[Join the community](#)

Recent News

[Australian Magpie](#)

[Did You Know...](#)

[What ClimateWatchers are recording](#)

[Butterflies linked to climate change](#)

[more news](#)

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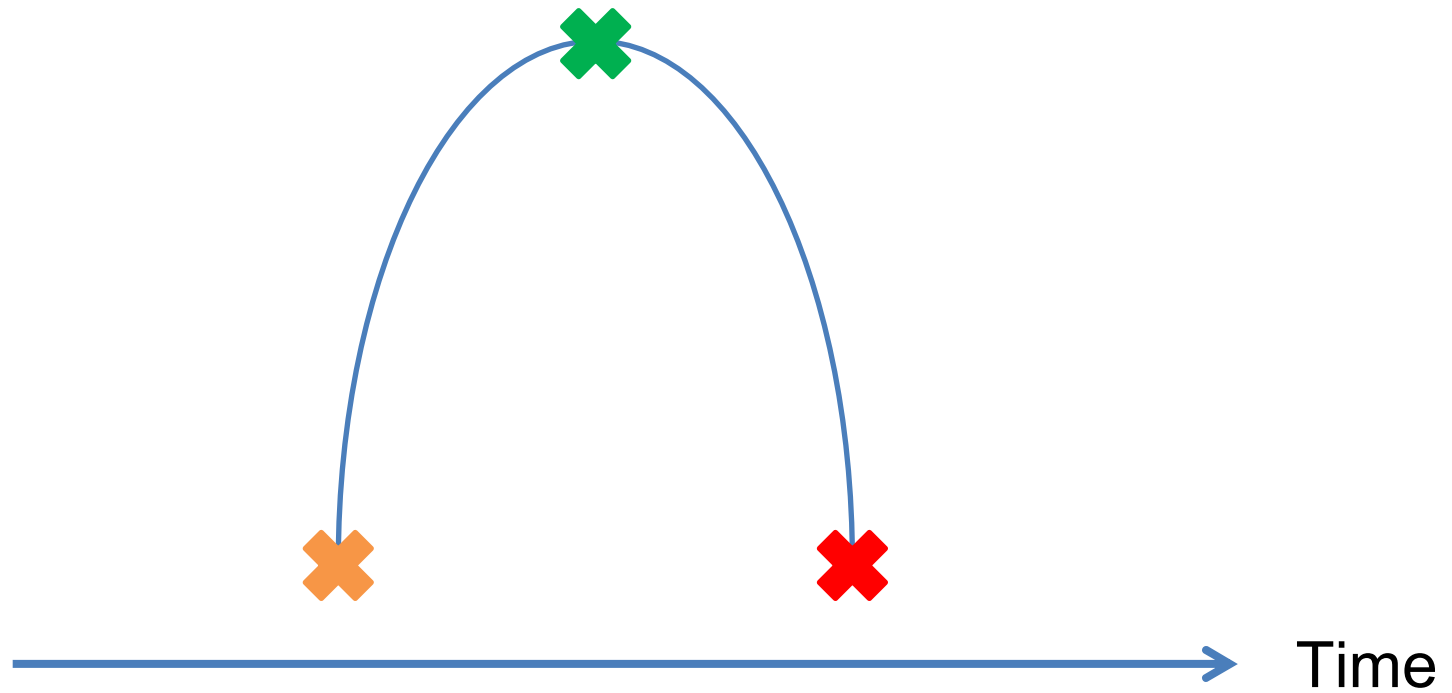
Program Partners



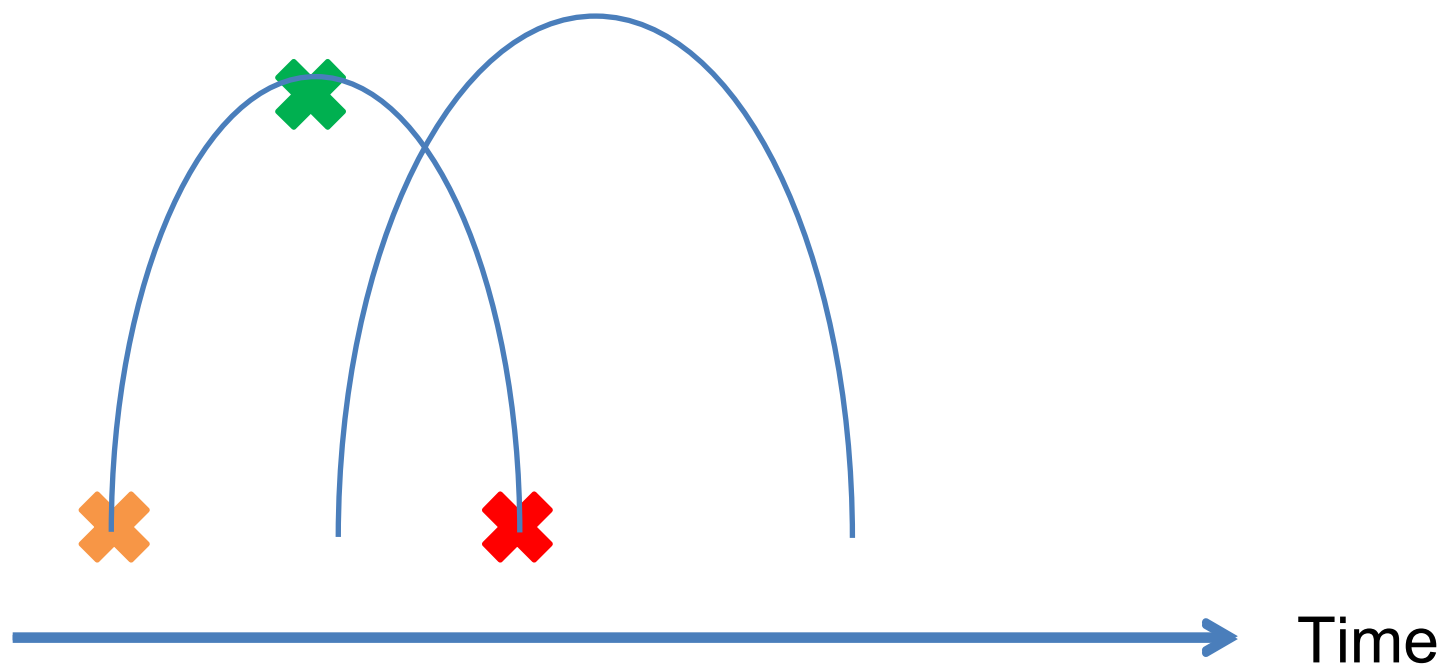
ClimateWatch allows **every Australian** to help shape our country's scientific response to climate change.

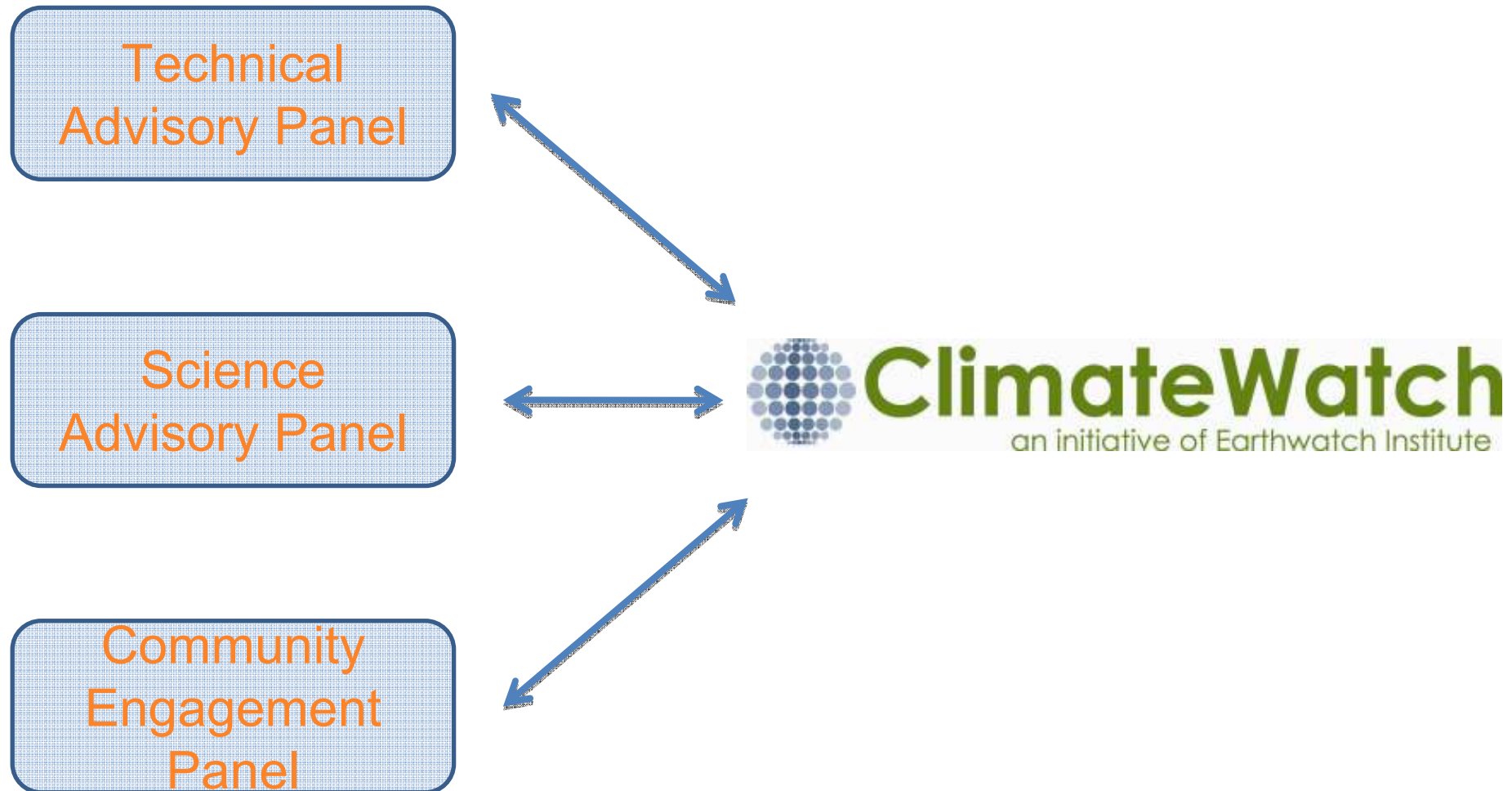
- What is it? – which species
- Where was it? – location it was seen
- When was it there? – date of the observation
- How was it behaving? – nesting, flowering, calling



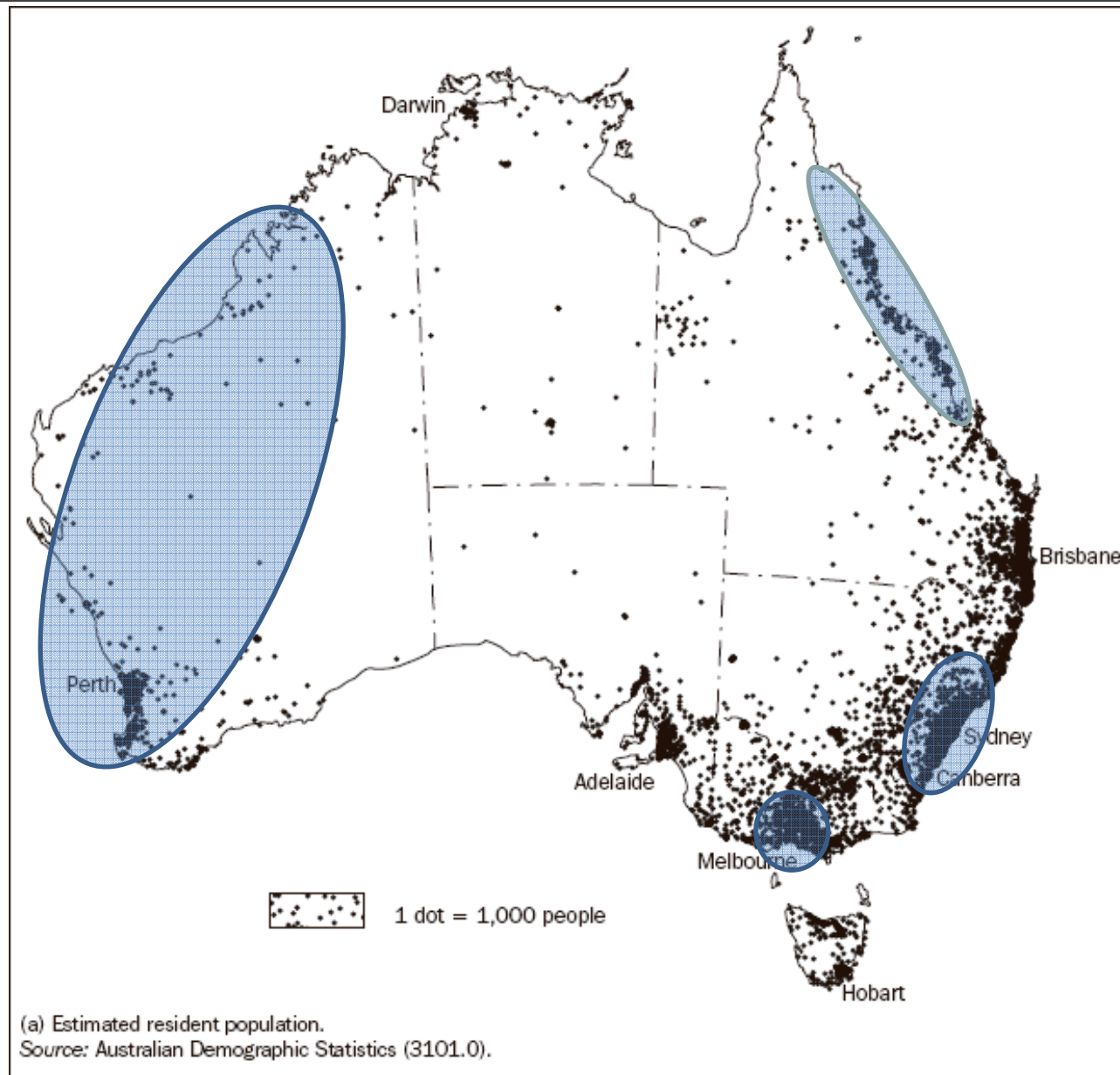


?





Australia's population



ClimateWatch Indicator Species



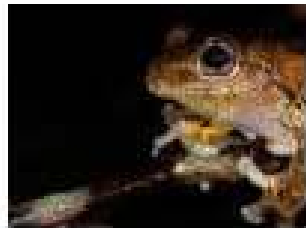
Birds

32



Marine Animals

6



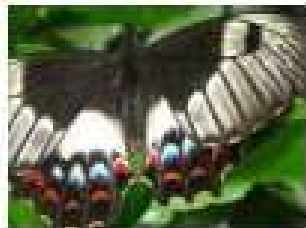
Frogs

10



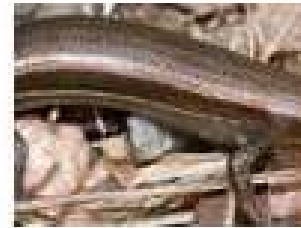
Plants

33



Insects

18



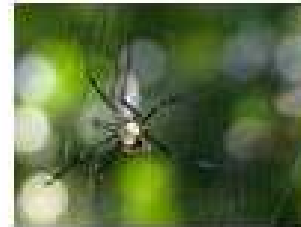
Reptiles

7



Mammals

5



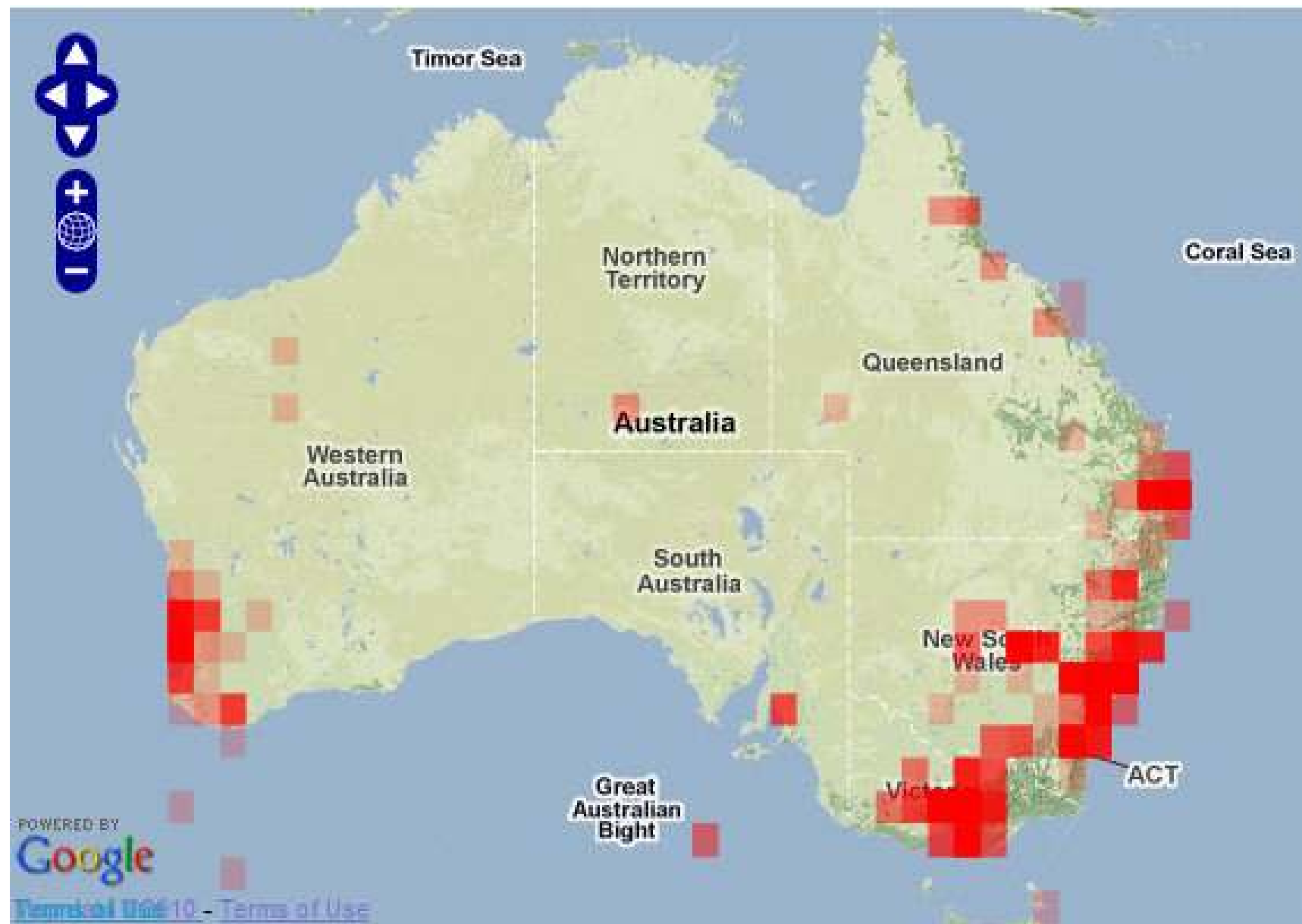
Spiders

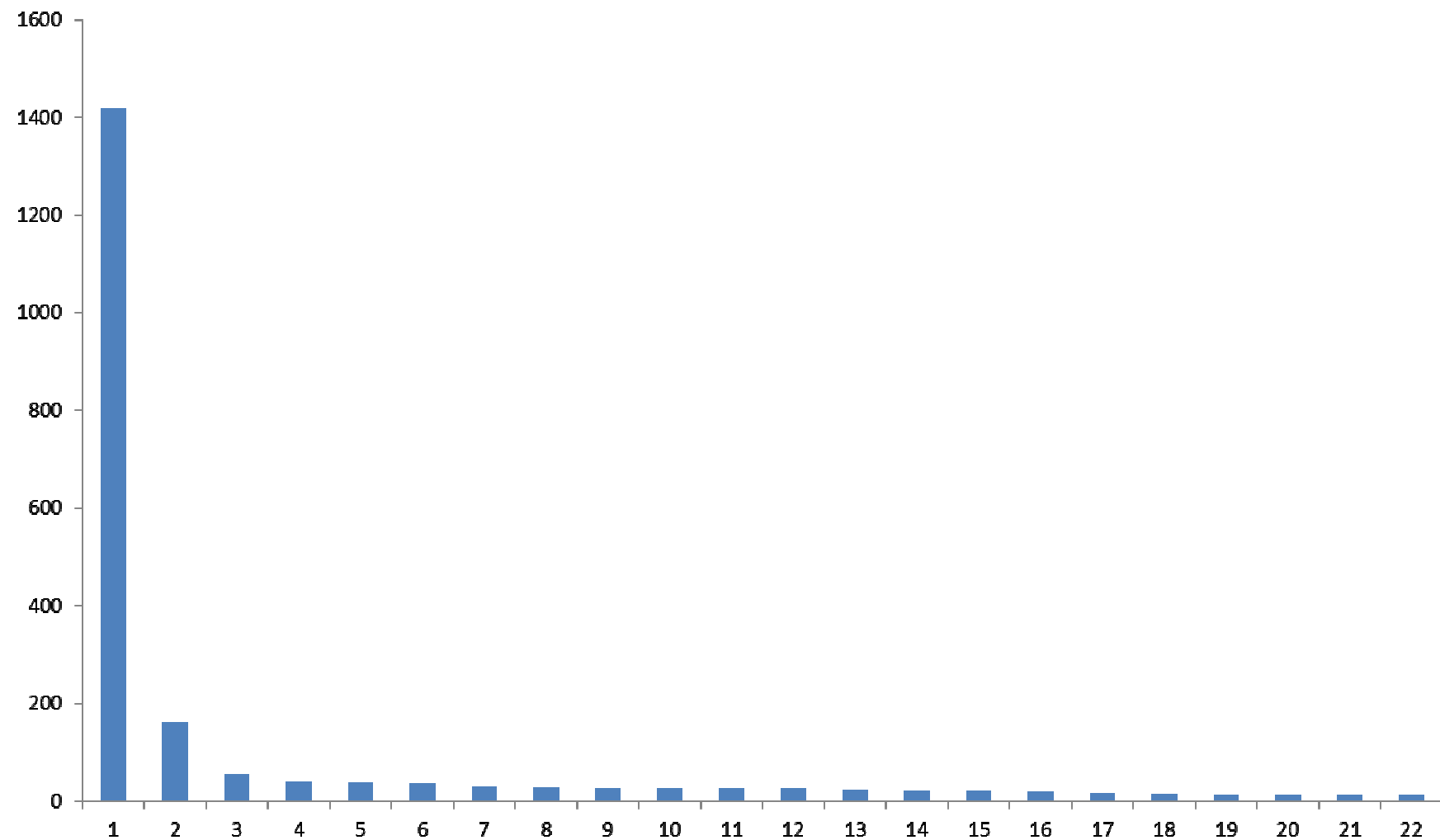
5

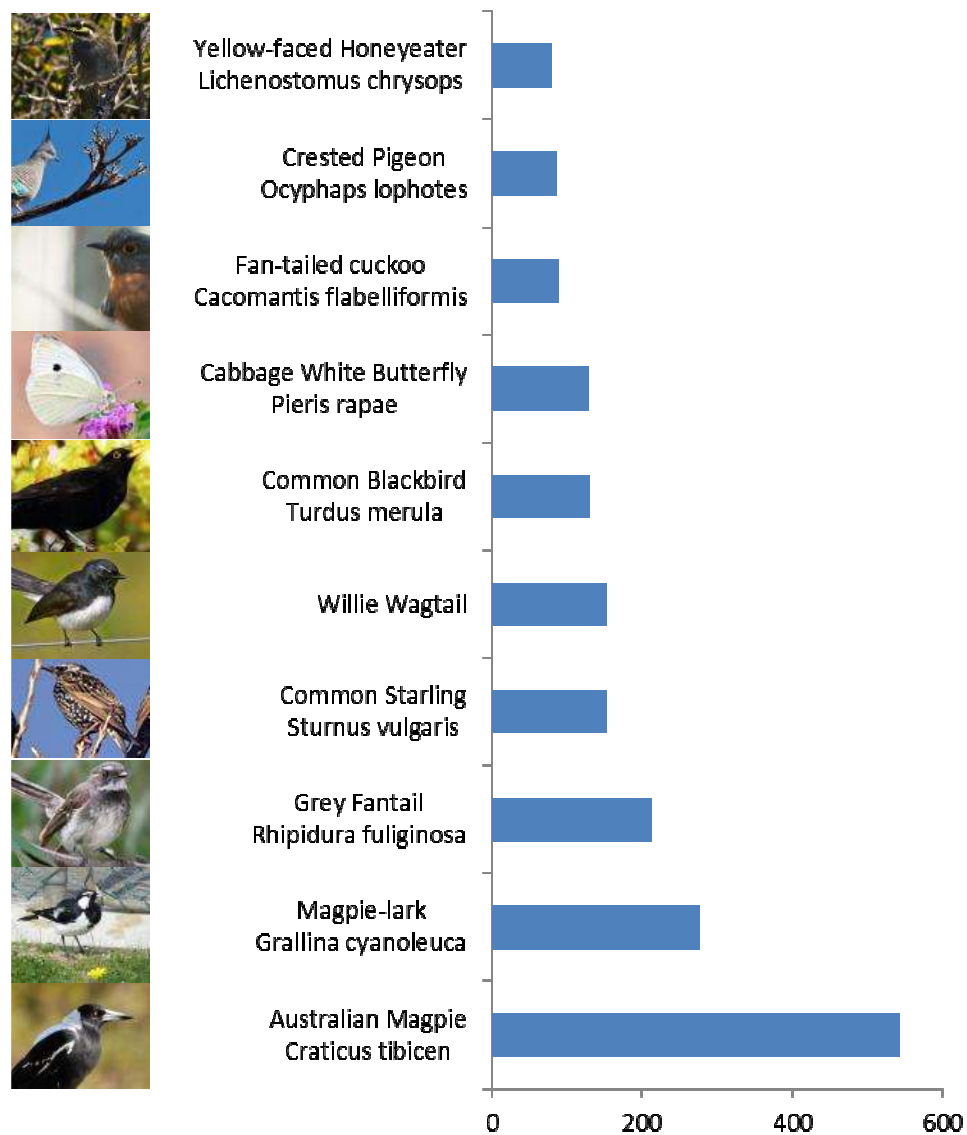
ClimateWatch:

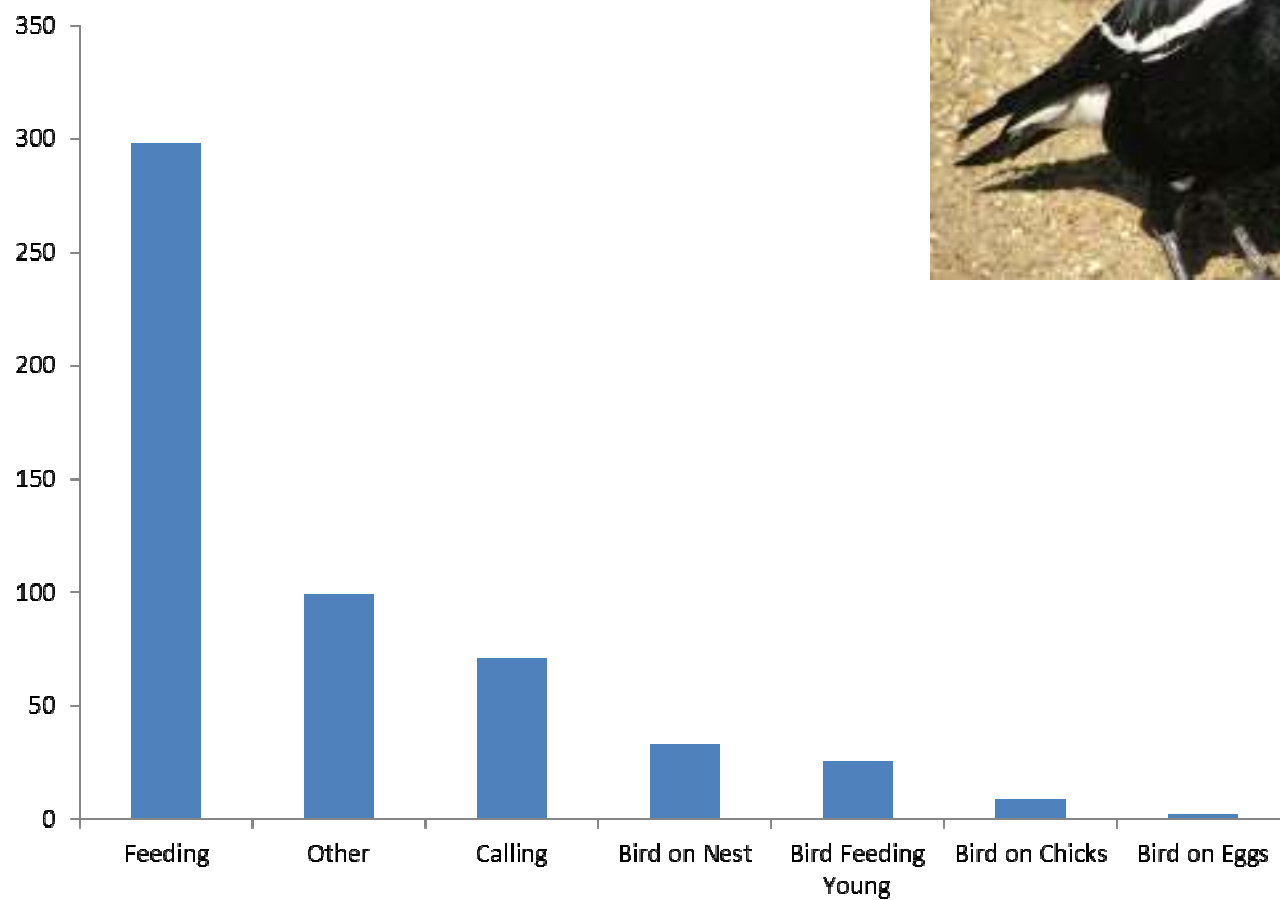
climatewatch.org.au













Welcome to ClimateWatch - the unique program where your eyes and ears will help shape Australia's scientific response to climate change. ClimateWatch is the feature of this year's Landcare Week, where by collecting and recording information from your own backyard, you will help scientists study the impact of climate change on our ecosystems. Simply [register now](#) to become a ClimateWatcher.

Five species to start you off

To start you off five species have been selected as part of Landcare Week; [Willy Wagtail](#), [Magpie](#), [Striped Marsh Frog](#), [Ribwort Plantain](#) and [Cabbage White Butterfly](#).



Note: There are over 80 indicator species to observe so you can be sure there will be plenty to look out for in your area.

Download the Landcare registration pack

To find out more about each of these species download the [Landcare Week Welcome Pack](#).

ClimateWatch:

Conservation Week

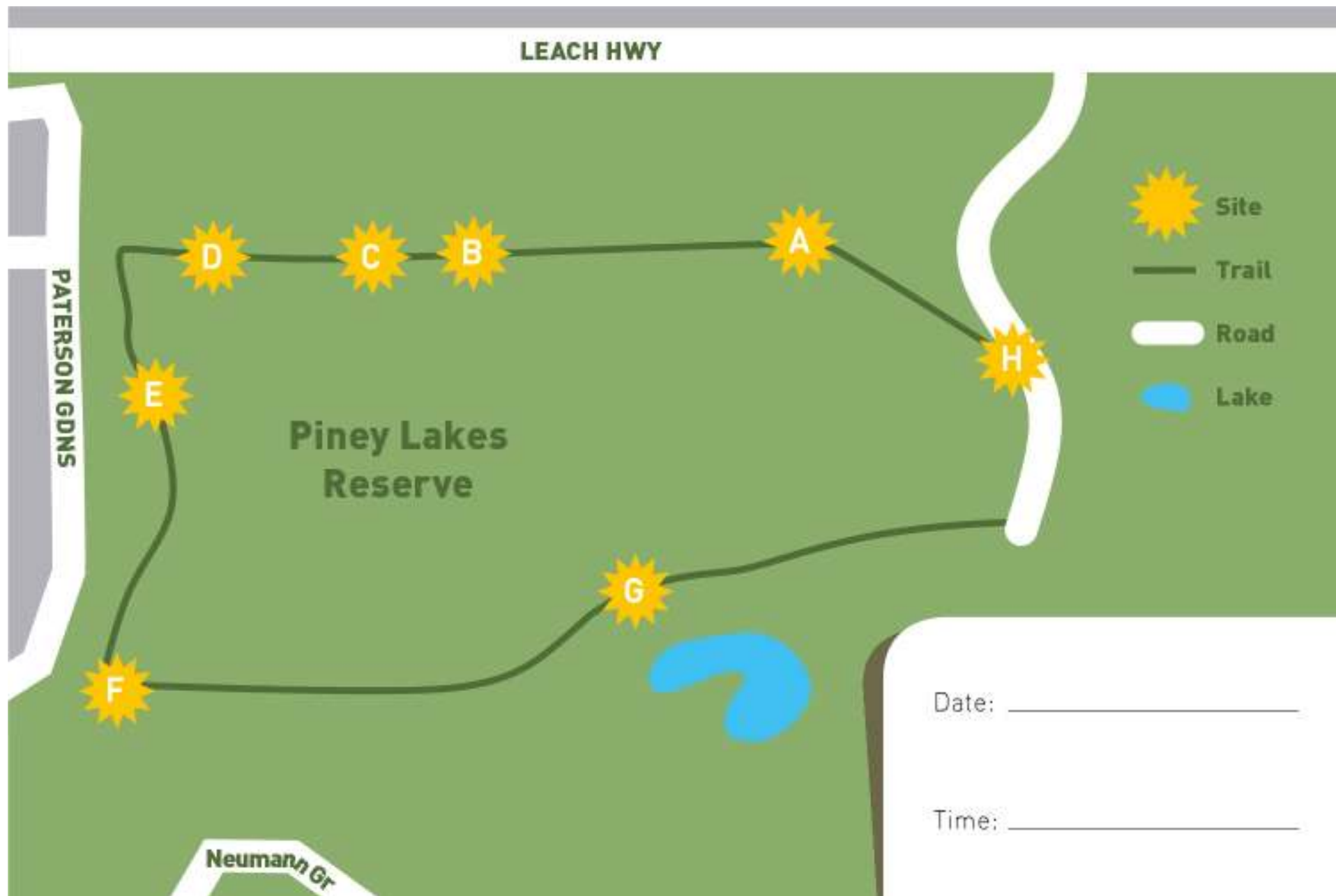




ClimateWatch
Trail Pocket Guide
Piney Lakes Reserve



ClimateWatch
an initiative of Earthwatch Institute





Marri
Corymbia callophylla

Photo by Rich Weatherill

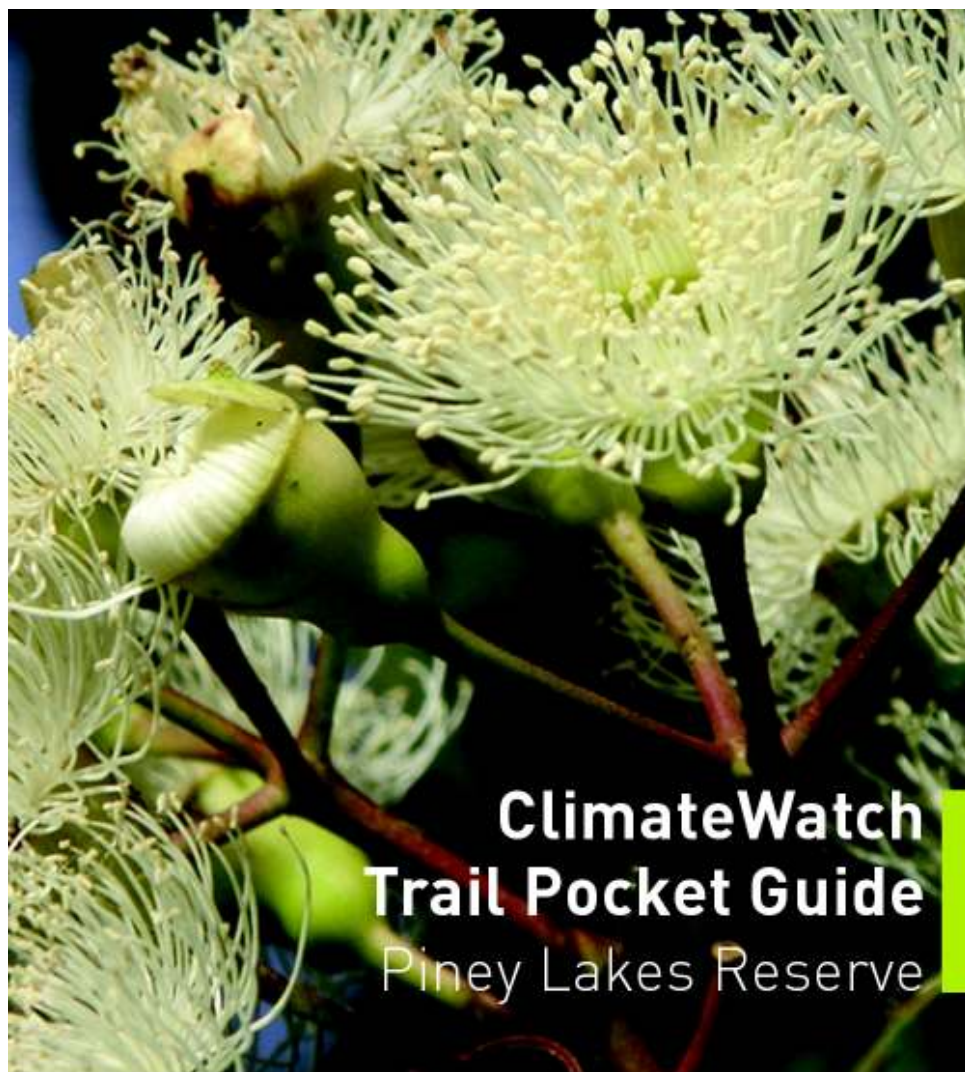
Site A End of carpark
Site E Look east

What did you see? (please tick)

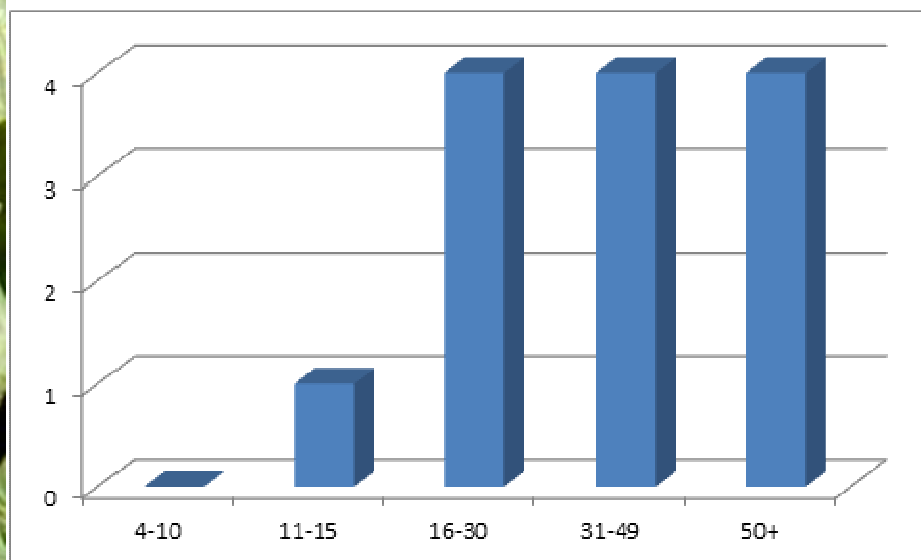
A E

- ☐ ☐ First fully open single flower
- ☐ ☐ Full flowering
- ☐ ☐ End of flowering (when 95% of the flowers have faded)

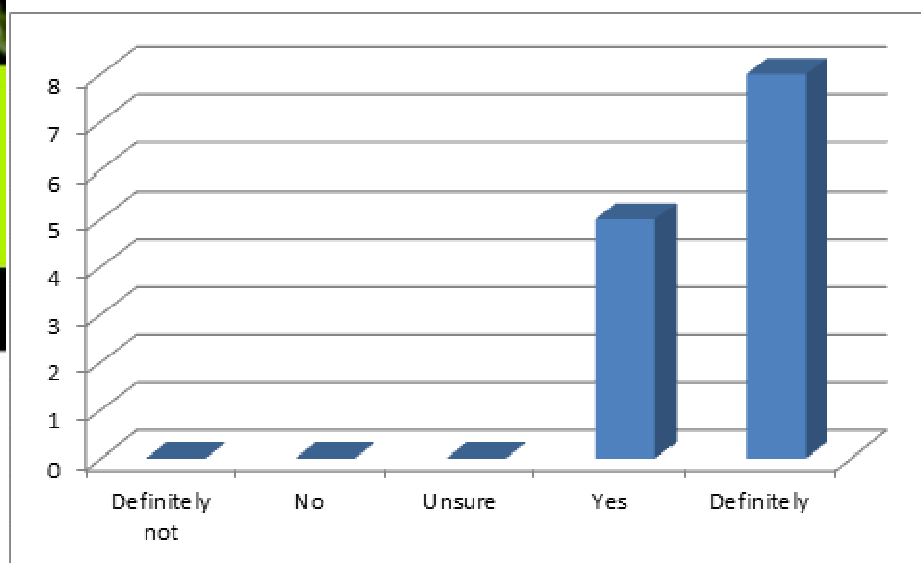
When to look: December to May



Evaluation Participants age



Did you enjoy the event?





climatewatch.org.au

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