## Australian National Data Service

#### Our Vision: More valuable data for Australian research

ANDS is enabling the transformation of:

Data that are: to Structured Collections that are:

Unmanaged Managed

Disconnected Connected

Invisible Findable

Single-use Reusable



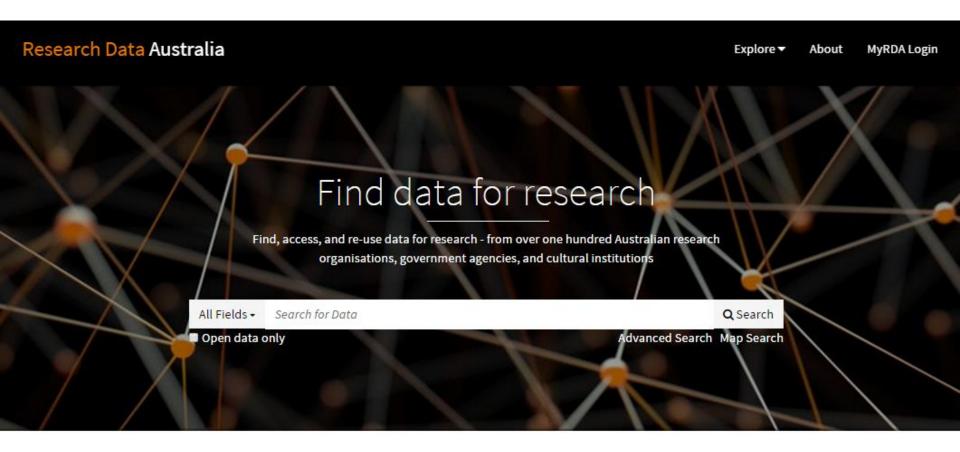
ANDS is supported by the Australian Government through the National Collaborative Research Infrastructure Strategy Program.

The ANDS Members are:









Research Data Australia "RDA" researchdata.ands.org.au

99 research organisations from around Australia contribute information to...

Research Data Australia

RDA is managed by...

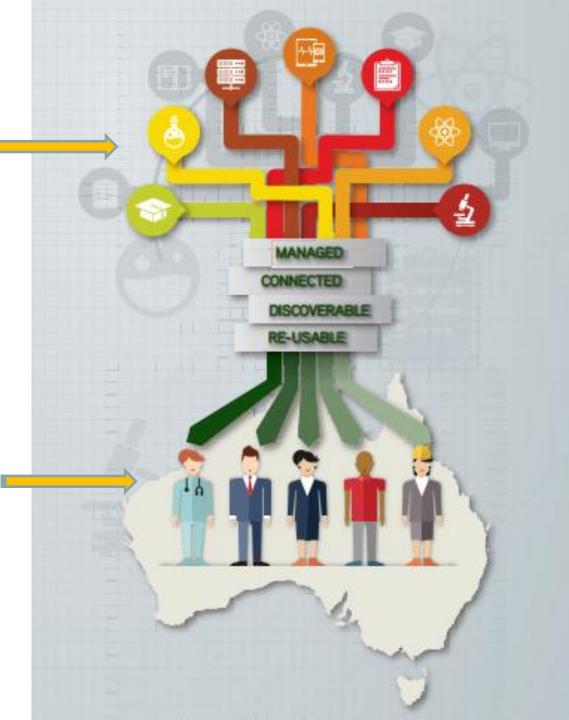


These 100,000+ datasets are used by...

In order to...

Investigate and solve the Big

Questions facing Australia



# Public Librarians and Public Library Services in a data infused world

## Why is research data such a hot topic?





## **Government policy**



**Department of the Premier and Cabinet** 

Queensland Government data

vernment Open Data Policy

Western Australian Whole of Government Open Data Policy



Data → apps4nsw → OpenGov Spatial Data FAQs Information Asset Register

**DATA NSW** PROVIDING ACCESS TO NSW GOVERNMENT DATA









## Few have witnessed what you're about to see

Experience a privileged glimpse of the distant universe as observed by the SDSS and the CTIO, and tested through state-of-the-art simulations.

#### **Classify Galaxies**

To understand how galaxies formed we need your help to classify them according to their shapes. If you're quick, you may even be the first person to see the galaxies you're asked to classify.

**Begin Classifying** 



#### University of Oxford, 2007

"...it all began, with the Galaxy Zoo project cooked up by a few researchers in the University's astrophysics group. ... a data set made up of a million galaxies ..... With so many galaxies, we'd assumed it would take years ... to work through them all

## Research data from/for everyone



.... but within 24 hours of launch we were stunned to be receiving almost 70,000 classifications an hour. In the end, more than 50 million classifications were received by the project during its first year, contributed by more than 150,000 people

## Who uses Research Data?

#### Case studies



#### Open Data case study

State Library of Queensland uses Queensland open data to populate and validate Queensland addresses entered in SLQ's online membership registration form.



## Travelling around Brisbane on public transport just got easier

The Brisbane Bus and Train app uses Queensland open data to provide users with arrival times and stop locations of Brisbane buses and trains.



#### Placing land zoning information in the hands of users

Pocket Zoner Pro provides easy access to town planning information for over two million properties in Queensland.



## Using education and transport data to make roads safer for kids

The Qld School Zones app helps keep kids safe in school areas by notifying drivers when they are approaching a designated Queensland school zone.



## Weather data for irrigation scheduling/crop modelling

Historical weather information for Queensland helps sugarcane producers to plan their irrigation needs.



#### Sharing Queensland wildlife data

WildNet helps to provide free access to information on Australia's flora and fauna.



## Using multiple soil datasets to inform client decision-making

Soil and mapping datasets in GIS format help to support strategic investment and development decision-making.



Queensland Government data

## What does research data include?

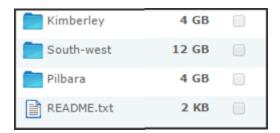
#### Stanley Fowler Image Collection



State School, Mallacoota.

+10,000 other photos

## Downscaled Climate Projections for Western Australia



#### Insect collections going 3D

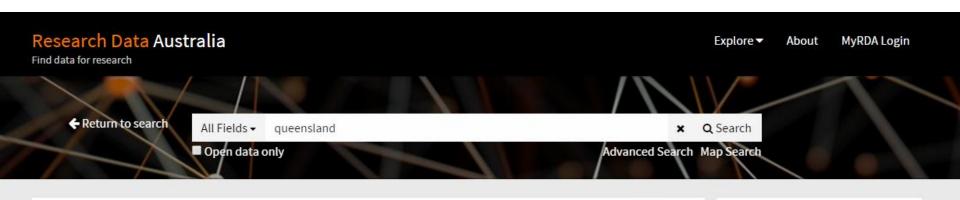




#### Marmion Benthic Survey 2007



## What does a research data catalogue record look like?





#### Dugong aerial survey, Gulf of Carpentaria, 2007

James Cook University

Alana M Grech (Aggregated by) H Marsh Helene (Aggregated by)





f y g Viewed: 19

Dataset

#### Go to Data Provider

☑ Cite

☐ Save to MyRDA

#### Licence & Rights

View details

#### Access rights

Open Access. If the data is not available via the provided link, please contact an associated party (preferrably the Manager as specified) for access.

#### Brief description

This survey provides the first synopsis of the distribution and abundance of the dugong in the Gulf of Carpentaria. The estimate of the dugong population in the Gulf of Carpentaria from the 2007 survey is much lower than previous estimates for the Northern Territory 16846 + 3259 in 1985 and 23336 + 3040 in 1994 and higher than the previous estimate for Queensland 4266 + 657 in 1997 (see Saalfeld and Marsh 2004). There are methodological reasons for these differences: (1) the methodology used to correct for availability bias was different for the 1991 and 1997 Queensland surveys; (2) the

#### Similar datasets you may be interested in:

- Dugong aerial survey (dugongs, turtles) Southern Great Barrier Reef, 1986
- Dugong aerial survey (dugongs, cetaceans, turtles) Southern Great Barrier Reef, November 1994
- Dugong aerial survey (dugongs) Hervey Bay, August 1988
- Dugong aerial survey (dugongs) Hervey Bay, December 1993
- Dugong aerial survey

## **Research Data for Public Librarians**

..... who support active learning (at all ages)



#### LOGAN-ALBERT RIVER



http://www.theopenriver.org.au/



#### learn discover access







Home > Convict Portal > Before Transportation

Locations + Hours Courses + Events How to Get Help About us Home

Search... Library Catalogue, Website, Tasmanian Names Index, Selected Archives, etc.

Search



#### Before transportation: Who were the convicts?

From 1788 to 1868 over 160,000 men, women and children from a range of social and ethnic backgrounds were punished with transportation to Australia. On this page you will find links to information on the life of convicts before their arrival in Australia and their journey to Australia.



#### Life and conditions in the 1800s

Urban centres grew across Great Britain and Ireland in the 18th and 19th centuries. As industralisation increased, wealth distribution and social structures changed, requiring new policing and legal institutions. The justice system produced a large number of convicts, often convicted of minor crimes, requiring confinement.

- End of transportation to America
- Conditions in Great Britain & Ireland

Irish rebellions of the 1800s



#### Crimes and trials

Crimes punishable by transportation ranged from serious transgressions, with transportation used in place of the death penalty, to very minor crimes where transportation was used as an alternative to adding more criminals to already full and inadequate gaols. Around 1000 convicts were transported for political crimes such as rio... more

- Offences tried at Old Bailey (Criminal Court)
- Policing & criminal law in Ireland

- Criminal law of England
- Case studies



#### Female convicts

Over 24,000 women were transported to Australia as convicts. 12,500 of them were sent to Van Diemen's Land. Most

SA TAS ACT NT AUSTRALIA

GLOBAL ANTARCTICA



#### Climate

- Outlooks
- E Reports & summaries
- Weather & climate data
- Long-term temperature record
- Data services
- Maps recent conditions
- Maps average conditions
- Climate change
  - Trend maps
- Timeseries
- Extremes trend maps
- Extremes timeseries
- Site networks
- Global trend maps
- Global timeseries
- Extremes of climate
- About Australian climate

Bureau home ➤ Climate ➤ Climate change and variability

#### Climate change and variability

**(1)** Climate updates Future impacts Tracker About climate change Datasets

#### Winter 2015 the coolest in decades for parts of the southeast

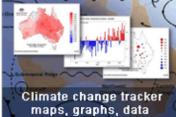
Some of the headlines this winter-Bitter cold snap', 'Icy cold front to hit much of Australia'. 'Australia's sunshine state covered in snow', etc .- may have implied that Australia just survived one of its coldest winters on record.

For some it was on the cool side. Victorians shivered through a mean temperature (the average of the maximum and minimum) of just 8.3 °C; the coldest since the last big El Niño year of 1997. Melbournians had the coldest winter in nearly 30 years (1989) and the coldest night in nearly 20 years. Tasmania had its coldest winter in nearly 50 years with a State mean temperature of just 5.8 °C (Table 1).

Snow did fall in 'unusual' places, including the Granite Belt of Queensland, the ranges near Adelaide, Melbourne and Sydney, and even settled on the beaches south of Hobart. Pictures of surfers standing in snow near Hobart, and the 'Welcome to the Sunshine State' sign surrounded by snow, reinforced a view of a cold harsh winter. In the Alps, a late start to the ski season turned into a series of blizzards, bringing smiles to skiers in the southeastern states.















America

Debt at



Login





Information Access in North Korea Continues to Increase

See more on the TwD Blog

Home Search About Us Data Resources Instructor Resources User Support

#### Data in the News America's Missing Black Men Beauty Bias In Hiring Decisions: It Depends On The Context Marijuana In 24 Maps And Charts The "Dark Figure" of Police Killings in the US The Hidden Costs Of Low-Wage Work In America See more on the TwD Blog Events (conferences, webinars, etc.) Data for online analysis Pedagogical resources Data providers Teaching TeachingWithData.org Like 173 Data in the News Teaching TeachingWithData.org . Share of Young Americans With Debt at Lowest Level Since 1983 . U.S. Hispanic Adults Twice as Likely to Identify or Lean Democratic Share of States of Medicaid Expansion Young Good Weather for the Global Economy?

## **Data for Public Librarians**

..... who support business and industry





Business and industry

Contact us

Search website

Sign up

My account

For business For industry **Investing in Queensland** 

**Commonwealth Games** 

**Business events** 

In this guide:

1. Market research kit

2. Step 1: Economic conditions

3. Step 2: Community profiles

4. Step 3: Competitors and suppliers 5. Step 4: Financial benchmarks

6. How to use market research data

Print entire quide

Print this page

Business planning kit

Australian Business Account

Information Service (ABLIS)

Business readiness quiz

Intellectual property info kit

ADVANCE

Two new Advance Queensland funds

Apply now for the \$1.9 million PhD

Women's Academic Fund.

Scholarships program and \$1 million

OUEENSLAND

Jobs now, jobs for the future

**Features** 

open

Australian Business Licence and

Market research kit

Tools

★ Home → For business → Support, tools, grants, services → Tools → Market research kit → How to use market research data

#### How to use market research data

Thinking of starting a business?

Be prepared - take our business readiness guiz.

This hypothetical example shows how you can use market research data to:

- · assess the potential of your business idea
- · identify areas of potential opportunity
- · develop informed strategies to overcome obstacles.

#### Sam's ice cream shop

Sam was a successful civil engineer but wanted a career change. She had always dreamed of opening her own business and considered an ice cream shop.

Sam thought about opening her business at Mount Tamborine in the Gold Coast hinterland. It was a popular tourist destination that potentially offered good prospects for an ice cream shop.

The following information helped Sam refine and enhance her business idea.

#### Demographic, economic and social data

- Interstate visitor numbers to the Gold Coast rose by 9%, intrastate visitors rose by 6% and international visitor numbers rose by 4% in the year ended December 2012.
- . Domestic day trip visitors in Queensland in the same period rose by 15% with expenditure also increasing.
- In mid-2013, there was one specialty ice cream shop in Mount Tamborine and more than 30 food businesses, many of which offered sweets, desserts or an alternative to ice cream.
- Desktop research indicated that, based on proximity to Brisbane and the Gold Coast, the location was a popular tourist destination with an average mean temperature of 22 degrees Celsius.

#### Do it online

- Australian Business Account
- OSRconnect



Contact Have your say

General enquiries 13 QGOV (13 74 68)





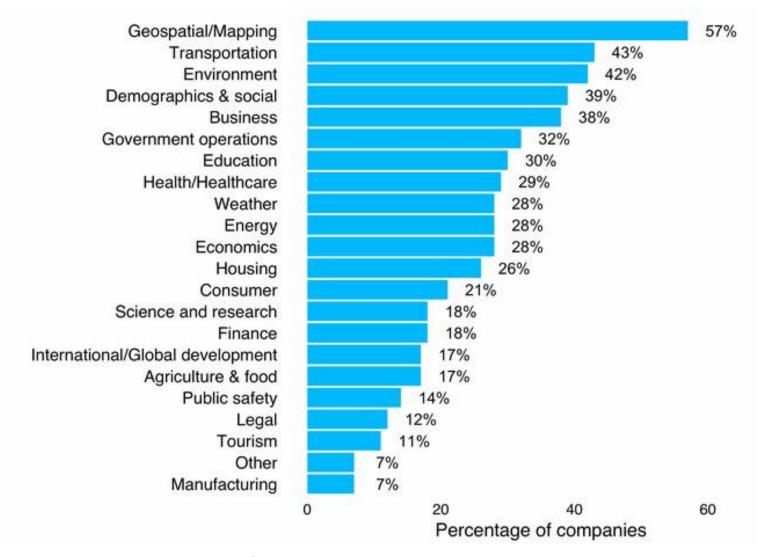




DEC Business Excellence Roundtable: Coorparoo



## What research data do business use?



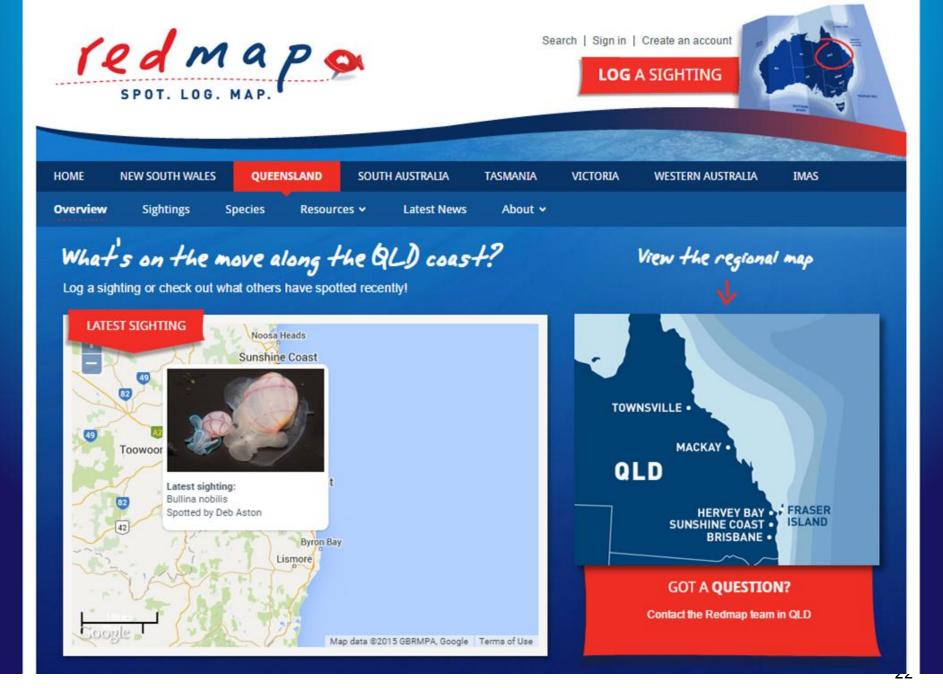
UK study *Open data that drives business* http://theodi.org/open-data-that-drives-business

## **Data for Public Librarians**

..... who support data savvy seniors (and juniors....)



The Tech Savvy Seniors Queensland Program aims to encourage more seniors to embrace information technology by the delivery of training through selected public libraries across Queensland. By participating, it is expected that seniors will be assisted to get connected and participate in the online world, with the objective of increasing digital inclusion, helping reduce social isolation, increasing access to government information and services via the internet, and improving awareness and resilience to online fraud and financial abuse.



http://www.redmap.org.au/region/qld/









CALENDAR

#### There is a Citizen Science Project for Everyone

#### THE CITIZEN SCIENCE ALLIANCE

Citizen Science is the active involvement of the wider community in scientific research – ordinary people from diverse walks of life and of different ages, experience and skills.

With over 6000 plant and animal species, the Great Barrier Reef is a rich and diverse environment that continually challenges science to unravel its mysteries. What better natural laboratory to explore than the Great Barrier Reef – the largest and most famous coral reef system in the world?

There is a citizen science project for everyone. You can study anything - from Mangroves to Manta rays, from coral to coastal habitats. Join like-minded people for group activities, or collect data in your own time, in or out of the water. Volunteers produce real and tangible results, with data being used by professional scientists, reef managers, communities or conservation groups.

Want to contribute to a great cause and explore the wonders of this unique environment at the same time? Citizen Science gives you the opportunity of a lifetime to experience the Great Barrier Reef and beyond - like never before.











News









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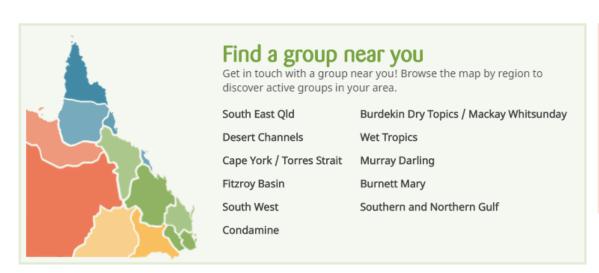
### Queensland Water & Land Carers

Queensland Water and Land Carers (QWaLC) is the peak body for natural resource management (NRM) volunteers. QWaLC's roles include representation, advocacy, promotion, networking and insurance administration. QWaLC's board includes representatives from each of Queensland's regions. Our membership consists of over 300 groups and 29,000 individuals.

#### The story of landcare

A look at some of the people, places and events that have shaped Landcare in Queensland and Australia.





#### Register your group

QWaLC offers membership to community NRM volunteer groups. This includes groups such as, Landcare inc Coastcare, Bushcare, Catchment Associations, Species-specific protection groups and Friends of groups.

Register here

## Search the Atlas

Search the Atlas

## Sharing biodiversity knowledge

Contributed by Australia's academic, scientific, environmental communities and you.

#### Get involved

#### Blogs & news

DATA

ClimateWatch now available on the Atlas of Living Australia

1 May, 2014

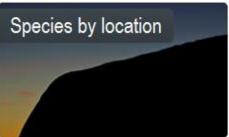


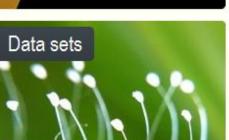




## **Explore**









Natural history collections



500 million records downloaded between Jan-April 2014



#### Learn about Trove

A guide to Trove How to correct newspaper text How to order a copy of an item

#### Contribute

Join the community that's organising and improving this information resource.

91,518 newspaper text corrections today

2,803 images from users this month

16,925 items tagged this week

2,365 comments added this month

392 works merged or split this month

1,074 lists this month

Connect to others with similar interests on the Trove forum Anonymous

Milne Bay Buna Wewak

1943-1944

## **Research Data for Public Librarians**

..... who support school kids

### **Data infused clients**

### A new opportunity

The Australian Curriculum places significant emphasis on the integration of ICT capabilities within science subjects. It states that Year 9 and 10 students will:

... employ their ICT capability to access information; collect, analyse and represent data; model and interpret concepts and relationships; and communicate science ideas, processes and information.

http://www.australiancurriculum.edu.au/Science/General-capabilities

## **Research Data for Librarians**

## ..... who do collection development

(and have a limited budget)

## Where can I find research data?





more than 1,130 data repositories

most are freely accessible

Details and pamphlets at back of the room

## **Ideas for Public Librarians**

..... who want to try new things



## **Unleashed**

#### Open data competition

GOVHACK UNLEASHED ▼

N3XGEN UNLEASHED ▼

MACHINERY OF DATA

NEWSROOM ▼

PAST COMPETITIONS -





#### **USEFUL LINKS**

GovHack data.sa.gov.au Subscribe to News



#### Welcome to GovHack Unleashed South Australia!

Unleashed is South Australia's annual open data competition which is part of the GovHack competition held across Australia and in New Zealand.

Registrations are now open for Unleashed 2015 on July 3-5.

- Adelaide, Register Here
- Mount Gambier (SA) SAUnleashed + N3xGen Register Here
- Playford (SA) N3xGen Node Register Here
- Onkaparinga (SA) N3xGen Node Register Here

#### FROM THE NEWS ROOM

Unleashed Connections June 15, 2015

Media Release - SA Digital Entrepreneurs ready for Unleashed Challenge June 11, 2015

Unleashed and N3xGen Registrations are live! May 27, 2015

#### TWITTER: SAUNLEASHED

Check out new #opendata released for #GovHack #SAunleashed http://t.co/XhxR1THQfu 07:10:34 AM JUNE 24, 2015 FROM HOOTSUITE

Check out this awesome video on Open Data and the Future of Science by Professor Geoffrey Boulton! http://t.co/SiNf3Hzojc #opendata 03:00:09 PM JUNE 23: 2015 FROM HOOTSUITE

Check out the new 'Fund My Idea' data set from DPC on Data SA! http://t.co/eH70TPRz11 #opendata #SAUnleashed #GovHack 12:15:17 PM JUNE 23, 2015 FROM HOOTSUITE

Follow @saunleashed 732 followers

## **Ideas for Public Librarians**

## ..... who want to know more about Research Data

(and have limited time)

## Settle down with a cuppa and find out more from Librarians who are into data

andsdata youtube research data librarians playlist



#### Subscribe to



Join in (2016)

### 23 Things: Libraries for Research Data

An overview of practical, free, online resources and tools that you can begin using today to incorporate research data management into your practice of librarianship.

People don't need a data genius as much as a data guide—and that's what librarians are there for.

Celia Emmelhain May 18, 2015

People don't need a data genius as much as a data guide—and that's what librarians are there for.

Celia Emmelhain May 18, 2015

Librarians: you are the future in a ....



.... infused world

## Acknowledgement

Australian National Data Service is funded by the Commonwealth under the NCRIS Program

National Research Infrastructure for Australia

An Australian Government Initiative

## **Questions from Public Librarians?**

## ..... who want to know more about Research Data

(and have limited time)