

A new era of sharing sustainable science with global agricultural communities

Helen Macpherson Department of Agriculture and Fisheries, Queensland, AUSTRALIA





https://era.daf.qld.gov.au/id/eprint/14014/





slide before you've read almost all of it out loud?"

90 97

3 comments





A quick history lesson

Harnad, Stevan (1999) Free at Last: The Future of Peer-Reviewed Journals. D-Lib Magazine, Vol. 5, No. 12.

To free this literature virtually overnight, all its authors need do is to self-archive their own portion of it online in their institution's "e-print" archive. Free archive-creating software (www.eprints.org) is now available to make all such institutional e-print archives "interoperable" (www.openarchives.org), hence "harvestable" into one global virtual archive (http://cite-base.ecs.soton.ac.uk/cgi-bin/search).

Free for everyone, everywhere, forever.

Harnad, Stevan (2001) In the name of freedom: <u>The (Refereed) Literature-</u> <u>Liberation Movement</u>. *New Scientist*, 2292, 53.

Prof. Harnad spoke at Information Online in Sydney in 2001. As a result of his vision and the work of University of Southampton ePrints staff, our ePrints repository was created in 2001 by Systems Librarian, Geoff Collins.







Timeline

- 2001 internal repository created using eprints software
- 2003 500 records
- 2006 evaluation of alternative software/hosting ePrints3 hosted by University of Southampton
- 2008 Open Access repository launched https://era.daf.qld.gov.au/
 Macpherson, H. (2009) eResearch Archive: reaching global agricultural communities. In: ALIES 2009 Conference, 5-9 April 2009, Emergency Management Australia, Mount Macedon, Victoria.
- 2009 766 records 24% fulltext, 91% journal article records
 - 16,393 downloads from 185 fulltext records
- 2011 datasets option added, more government publications (manuals, guides, reports)
- 2012 1,508 records 39% fulltext, 70% journal article records, 19% monographs
 - 177,333 downloads from 836 fulltext records





Timeline

- Format shifting with digitisation of 'How to' guides, reports
- Change in publishing of government information, website rationalisations, less Open Science
- 2012 Change of Government "Farmers don't need libraries"
- 2012 Change of Government near elimination of repository and library service <u>Back from the brink: saving the Queensland Department of Agriculture</u> <u>Library.</u> In: ALIA National Conference : 2016, Adelaide.)
- 2013 –Transition to a fully Digital Library Scientists rallied, Librarians adapted, demonstrated value/impact, focus on digital
- 2022 Landmark 'Read and Publish' agreements via CAUL* Wiley, Springer, Oxford, Cambridge and CSIRO

(*Council of Australian University Librarians – DAF is an external member)



Open Science - making taxpayer funded science available to all

Home > Our department > News > News > Agriculture >
RIS saved DAF authors more than \$100,000 in Open Access publishing fees in 2022

RIS saved DAF authors more than \$100,000 in Open Access publishing fees in 2022

1 Feb 2023









Cambridge **Core**

4500 eligible journals

Total APC savings to date – \$242,840

Highest R&P OA article download to date – 2927







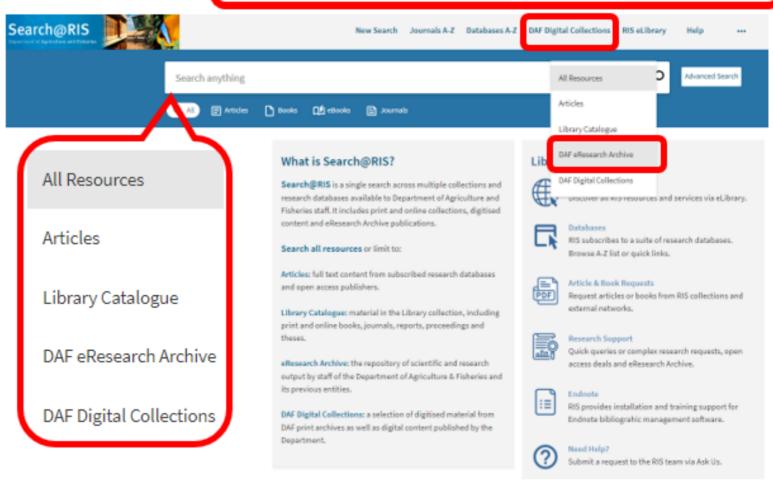


Repository integrated into Alma/Primo VE

Staff can search across all collections and content:

- Subscribed
- Journal articles, eBooks
- Internal digitised/born digital
- Print
- eResearch Archive
- + expand results option

DAF Digital Collections: digitised material from our print archives as well as born digital content published by the Department.

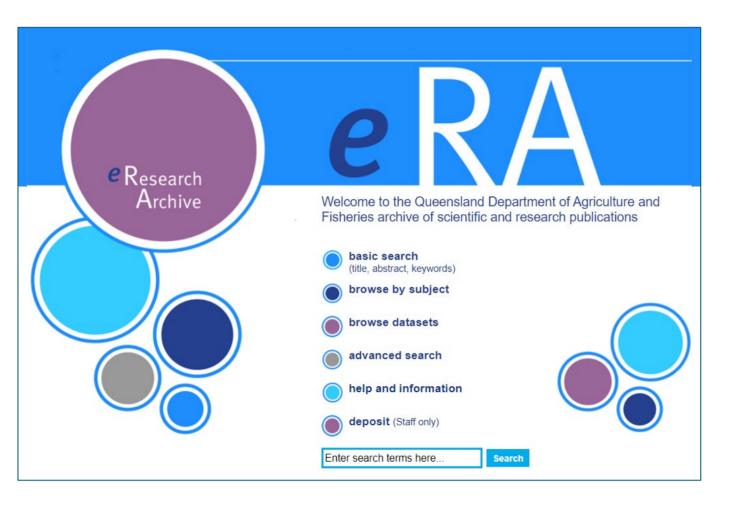








eResearch Archive 2024



eRA - journal articles since R&P OA agreements

2022 to current = 599Open access = 441

= 74% full text Open Access





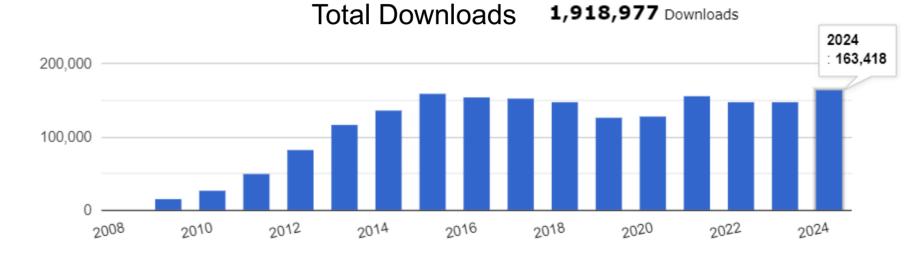
Current Metrics

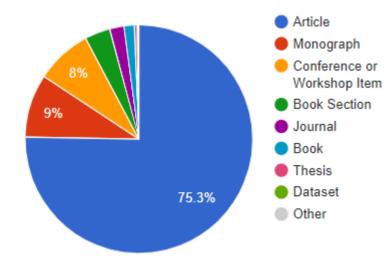


11,589 Items



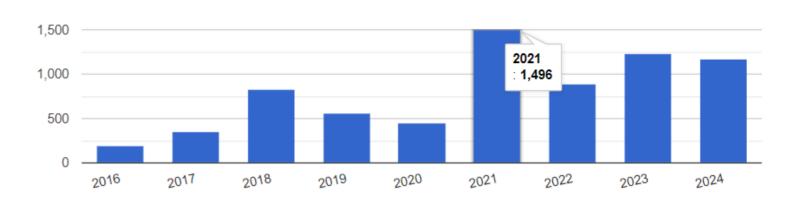
50% Full text





Example of Author Download Metrics

7,189 Downloads







Research Impact – SDGs (Scopus – work in progress)

8,823 2,268

Documents (i) Authors

Open access	^
All open access	2,659
Green	1,394
Bronze	725
Gold	599
Hybrid gold	315

Industry, innovation and infrastructure Goal 9

View 148 documents

Climate action
Goal 13

View 215 documents

View 532 documents

Partnership for the goals
Goal 17

Zero hunger

View 1,046 documents

Clean water and sanitation

Goal 6

View 241 documents

Reduced inequalities

View 12 documents

Life below water

View 356 documents

Good health and well-being Goal 3 View 299 documents

Affordable and clean energy

Goal 7

View 118 documents

Sustainable cities and communities

View 65 documents

Life on land

View 543 documents



Impact examples

Macadamia Information Kit. Agrilink, your growing guide to better farming guide

O'Hare, P., Quinlan, K., Stephenson, R., Vock, N., Drew, H., Ekman, J., Firth, D., Gallagher, E., O'Farrell, P., Rigden, P., Searle, C., Vimpany, I. and Waite, G. (2004) Macadamia Information Kit. Agrilink, your growing guide to better farming guide. Manual. Agrilink Series Q103052. Department of Primary Industries, Queensland Horticulture Institute. Brisbane, Oueensland.

- 264k downloads from 261countries with 9 Africa nations in top 20 (63,000)

Integrated management of Fusarium wilt of bananas in the Philippines and Australia

Pattison, A. B., Limbaga, C., Gervacio, T., Notarte, A., Juruena, M., Dennis, P. G., Lindsay, S. J. and Molina, A. (2019) Integrated management of Fusarium wilt of bananas in the Philippines and Australia. Project Report. ACIAR.

- collaborations with research organisations – Aust. Centre for International Agricultural Research

Impacts of pesticides and fertilisers on soil biota

Seymour, N. P. (2005) Impacts of pesticides and fertilisers on soil biota. In: Soil Biology - Soil Health Conference, Condamine Catchment Management Association Inc, 4th -5th May 2005, RSL, Dalby.

- 2005 conference paper downloaded 14k

Identification of insects, spiders and mites in vegetable crops. Workshop Manual, 2nd edition

Heisswolf, S., Kay, I. and Walsh, B. (2010) Identification of insects, spiders and mites in vegetable crops, Workshop Manual, 2nd edition. Manual. State of Oueensland.

27,715 Downloads





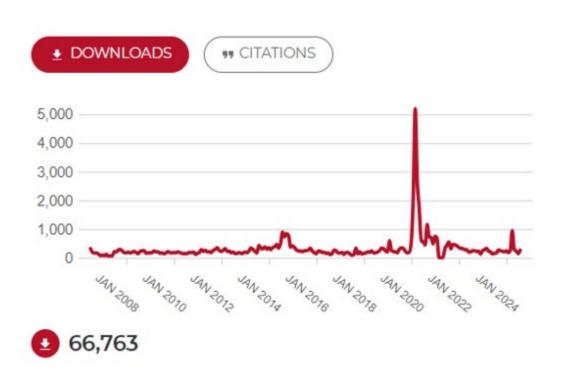
Impact examples

Bats: Important reservoir hosts of emerging viruses

Calisher, C.H., Childs, J.E., Field, H., Holmes, K.V. and Schountz, T. (2006) Bats: Important reservoir hosts of emerging viruses, Clinical Microbiology Reviews, 19 (3), pp. 531-545.

Focus on highly cited content

>66k downloads on publisher site, added fulltext to our repository in 2020





37 readers on Mendelev eaders on CiteULike

(OPLUM)



Citations

Citation Indexes: 1133 Policy Citations: 13

Captures

Readers: 1744

Mentions

Blog Mentions: 3 News Mentions: 18 References: 13

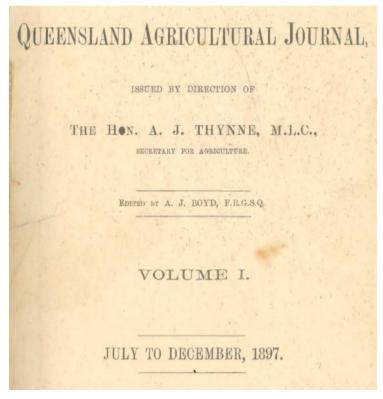
Social Media

Shares, Likes & Comments:

518



Future Focus



- Increase digital content and target impact
 - prioritise digitising key content
 - digitise on demand and make it findable
 - archival content is relevant and important
 - Queensland Journal of Agricultural and Animal Sciences 1944 1988
 - Queensland Agricultural Journal 1897 1989 (digitised and ready)
- Use AI tools for contents pages, article level indexing, text recognition
- Improve subject hierarchy
- Total revamp of graphical display without loss of useability/search complexity
- Retrospective time series data to be digitised
- Fix author duplication for improved metrics to support early career scientists in building profiles
- More promotion with executives, authors and funders "Show them the metrics!"

We fully support CAUL's statement "Australia needs a multi-faceted open access strategy" and its response to recent "Advice on open access models.







- Budget software costs, staffing costs
- Changes of government
- Changes in parent organisation's strategy and policies
- Insecure funding
- Publisher negotiations (large and small)

- IT issues, security, upgrades
 - Duplicate content is OK, have multiple backups
 - Persist in finding for efficient solutions and better IT
 - Consider external hosting, it has worked brilliantly for us!
- Succession planning
 - Mentor, PD opportunities
 - Support creativity, innovation, flexible work arrangements
 - Provide org structure with opportunities for promotion

Acknowledgments

My team, all those who have worked on the repository since 2001, ePrints staff in the UK, our authors and executive, CAUL, ALIA and Queensland Government.

Take home messages

- Libraries are publishers. High value content can be easily packaged and made accessible.
- Keep up with Open Access developments
- CAUL are leaders in this field. We totally support their Open Access advocacy and strategies
- Don't discount Open-source software. ePrints has been great and budget friendly!
- Starting small is OK, site appearance is not paramount as long as it works
 - interoperability, output and sharing options AND ADVANCED SEARCH!
- Consider 'Citizen Scientists'/volunteers to help add content
- Governments and funders change broad nonpartisan engagement is key
- Your researchers are your advocates.
- Demonstrate value using irrefutable metrics
- Special and Government libraries and repositories act on UN SDG and Climate Change and are contributing to a cleaner, greener world with secure food supply chains and improved health outcomes. We are making a difference in social conditions in local and global communities.
- Advertise your social responsibility and environmental credentials to attract motivated, innovative early career librarians.

