



PROMOTING SCHOLARSHIP THROUGH OPEN DATA

2015 Organizational and Membership Report

Table of contents

[Organizational milestones](#)

[Partner journals](#)

[New partner journals in 2015](#)

[Data packages published in 2015](#)

[Membership](#)

[Data publishing charges](#)

[Payment plans](#)

[Sponsoring organizations](#)

[Revenue, by payment plan, 2015](#)

[Data packages published, by payment plan, 2015](#)

[Waivers](#)

[Financials](#)

[Downloads and web traffic](#)

[Web traffic](#)

[Outreach](#)

[Blog posts](#)

[Twitter](#)

[Conferences and seminars](#)



Organizational milestones

2015 was a big year for Dryad. We grew staff, integrated several new journals and publishing partners, celebrated our 10,000th Twitter follower (in 2016), and officially became a virtual team to work more effectively with our distributed staff and continue to attract top talent. But, the biggest story in 2015 is that the repository itself has grown, and done so at a rapid pace.

Dryad published 3,926 data packages in 2015 – 44% more than in 2014. And, we blew past the 10,000 mark for total data packages in the repository. As always, each data package – which includes all the files associated with one publication – is reviewed by a professional curator.

One of the biggest trends in 2015 is the increase in the mean size of data packages. In 2014, that figure was 212MB. One year later, it increased by a whopping 127% to 481MB. This is one reason why at the start of 2016, as part of our new pricing structure, we opted to double the maximum package size before overage fees kick in. Previously, they started at 10GB – now they do so at 20GB. We believe that it is imperative that researchers have the ability to archive all the data underlying their published findings, and to do so affordably.

While the mean number of files per data package in 2015 has remained nearly constant (it is currently 3.4), the range is considerable – one data package boasted 105 separate files – and an increasing number of data packages include compressed archives with many files.

Dryad, and the practice of data publishing, has grown in scope and complexity. And, it has done so very quickly. Just four years ago, we stated that nearly 80% of data packages were less than 1MB and data packages usually only contained one data file. The repository is now home to many more multimedia files, programming scripts, and other file formats from an increasing diversity of disciplines. While more researchers gain a broader understanding of what should and can be published and made open, so has Dryad welcomed larger and more complex data.

Dryad's vision, to promote a world where research data is openly available, integrated with the scholarly literature, and routinely re-used to create knowledge, continues to be our focus and passion. We know that 2016 will continue to bring growth and more open research. To that end we are thankful to you, our community and members, for continued support and encouragement.

A handwritten signature in black ink, reading "Meredith Morovati". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

Meredith Morovati, Executive Director

Partner journals

Submission integration is a free service that allows journal publishers to coordinate the submission of manuscripts with submission of data to Dryad, used by over 80 partner journals. Dryad supports submission integration for any organization that publishes a scientific journal irrespective of whether the organization sponsors submissions through a payment plan or is a member of Dryad. The submission integration process works with many different online manuscript processing systems. It is lightweight, customizable to each journal's needs, and brings a number of benefits:

- Simplify the process of data submission for authors.
- Allow authors to deposit, to a single repository, gigabytes of data files in their original formats.
- Reduce the rate of noncompliance with journal data policy.
- Have the option of making data available for editorial or peer review, via secure access for editors and reviewers.
- Ensure bidirectional links between the article and the data and increased visibility for both.
- Ensure that the data is accessible once the article becomes available online.
- Give authors the option to embargo public access to data for a limited time after publication, if permitted by the journal's data policy.

New partner journals in 2015

Title	Workflow	Sponsorship
<i>Ecology</i>	basic	Yes
<i>The Bone & Joint Journal</i>	basic	Yes
<i>Bone & Joint Research</i>	basic	Yes
<i>Bone & Joint360</i>	basic	Yes
<i>Evidence-based Preclinical Medicine</i>	review	Yes
<i>Physiological and Biochemical Zoology</i>	review	Yes
<i>Nota Lepidopterologica</i>	basic	Yes
<i>Biodiversity Data Journal</i>	basic	Yes
<i>International Journal of Plant Sciences</i>	basic	Yes

Title	Workflow	Sponsorship
<i>American Journal of Botany</i>	review	Yes
<i>Biology Open</i>	review	No
<i>Development</i>	review	No
<i>Disease Models & Mechanisms</i>	review	No
<i>Journal of Cell Science</i>	review	No
<i>Journal of Experimental Biology</i>	review	No

Data packages published in 2015

Dryad published 3,927 data packages in 2015, 45% more than in 2014. They were associated with articles from over 230 different journals. Dryad also continued to receive a small number of data packages associated with books and theses.

There were an average of 3.4 files per data package, almost exactly the same as the prior year, while the average size per data package was 481MB, an increase of 127%. Only 4% of data packages contained files embargoed for one year or longer.

The ten journals with the most data packages published in 2015

Journal	Data packages
<i>PLOS ONE</i>	584
<i>Molecular Ecology</i>	393
<i>Proceedings of the Royal Society B</i>	263
<i>Evolution</i>	159
<i>Journal of Evolutionary Biology</i>	137
<i>Functional Ecology</i>	122
<i>The American Naturalist</i>	113
<i>Ecology and Evolution</i>	113
<i>Journal of Applied Ecology</i>	108
<i>Molecular Ecology Resources</i>	104

Membership

Membership is open to any stakeholder organization, including but not limited to journals, scientific societies, publishers, research institutions, libraries, and funding organizations. Members help advance Dryad's mission and have a say in the governance of the organization through nomination and election of its Board of Directors, and voting on amendments to its Bylaws at the Annual Meeting. Members benefit from discounts on submission fees and participation in an active knowledge sharing network. Memberships run from January through December. Annual dues are \$1,000 for organizations with gross income below 10 million USD, and \$5,000 if above. Members can also join for \$500, irrespective of budget size, but will not benefit from DPC savings. Current Dryad members:

- [American Association for the Advancement of Science](#)
- [American Society of Naturalists](#)
- [The American Genetic Association](#)
- [Association for Tropical Biology and Conservation](#)
- [Botanical Society of America](#)
- [British Ecological Society](#)
- [BMJ Publishing Group, Ltd.](#)
- [The Biological Journal of the Linnean Society](#) (Linnean Society of London)
- [BioMed Central](#)
- [Cambridge University Press](#)
- [Ecology Letters](#)
- [Ecological Society of America](#)
- [Elementa: Science of the Anthropocene](#)
- [European Society for Evolutionary Biology](#)
- [The Genetics Society](#)
- [German National Library of Medicine](#)
- [HighWire](#)
- [Molecular Ecology](#)
- [Molecular Ecology Resources](#)
- [Oxford University Press](#)
- [The Paleontological Society](#)
- [Pensoft Publishers](#)
- [PLOS](#)
- [The Royal Society](#)
- [Society for Molecular Biology and Evolution](#)
- [Society for the Study of Evolution](#)
- [Society of Systematic Biologists](#)
- [United States Fish and Wildlife Service](#)
- [Wiley](#)

Data publishing charges

Payment plans

Independently of membership, organizations may contract with Dryad to provide a valuable service to researchers: allowing them to deposit data without paying a deposit fee at the time of submission.

To do this, Dryad offers a variety of flexible payment plans, all of which provide a volume discount. If no payment plan is in place, authors pay a deposit fee at the time of submission, with the exception of researchers from developing countries, who may deposit data at no charge.

In 2015, the Board of Directors approved and Dryad announced a revised pricing structure that was implemented in early 2016. The new structure simplifies payment plans and individual charges, increases the base Data Publishing Charge (DPC), and raises the maximum package size before overage fees kick in (to 20GB).

The following payment plan details were in place through the end of 2015:

1. Voucher Plan. Organizations purchase a block of vouchers for future submissions. This plan is open to any organization.

2. Deferred Payment. DPCs are invoiced for the number of packages submitted in the previous quarter for a particular publication. Participants must enter into a contract of at least one-year duration and may cap the number of submissions for which they are charged. This plan is open to publishers, publishing societies and independent journals.

3. Subscription Plan. A journal (or journals) with an active Subscription Plan may make an unlimited number of submissions for a fixed cost. This cost is calculated based on the total number of research articles published by the journal(s) in the prior year, or a reasonable estimate of anticipated volume for new titles.

While base DPCs cover the entire cost of most submissions, additional charges will apply when data packages are in excess of the 10 GB size limit (\$15 will be charged for the first GB and \$10 for each additional GB or part thereof, payable by the submitter) and/or are associated with a data package from a non-integrated journal (\$10).

Summary of payment plan options through 2015

Payment plan	For members	For non-members	Minimum purchase
1. Voucher	\$65 per data package	\$70 per data package	25 vouchers
2. Deferred Payment	\$70 per data package	\$75 per data package	1 yr contract
3. Subscription	annual fee based on \$25 per published research article	annual fee based on \$30 per published research article	2 yr contract

Sponsoring organizations

More than 30 organizations sponsor DPCs on behalf of researchers and authors. The publishing organizations in this list collectively sponsor DPCs for 80 titles, while the research organizations sponsor DPCs on behalf of their affiliated researchers wherever they choose to publish. An up-to-date list of journals with sponsored DPCs is available at <http://datadryad.org/pages/journalLookup>.

- American Genetic Association
- American Society of Naturalists
- American Society of Plant Biologists
- American Society of Plant Taxonomists
- BioOne/Elementa: Science of the Anthropocene
- Botanical Society of America
- British Ecological Society
- British Editorial Society of Bone and Joint Surgery
- Canadian Healthy Oceans Network CHONE
- Ecological Society of America
- Ecology and Evolution
- eLife
- European Society for Evolutionary Biology
- Evidence-Based Preclinical Medicine
- Evolutionary Applications
- German National Library of Medicine
- Journal of Consumer Research
- Molecular Ecology
- Molecular Ecology Resources
- Nature Publishing Group
- NIOO-KNAW
- Nordic Society Oikos
- Pensoft Publishers

- Society for the Study of Evolution
- Society of Systematic Biologists
- The Genetics Society
- The Palaeontological Association
- The Paleontological Society
- The Royal Society
- University of Chicago Press
- University of Rochester
- US Fish and Wildlife Service

Revenue, by payment plan, 2015 (in USD)

	Q1	Q2	Q3	Q4	Total
Subscription Plan	\$0	\$33420	\$12700	\$27004	\$73124
Voucher Plan	0	0	3780	9550	13330
Deferred Payment Plan	8100	9245	18505	13665	49515
Single vouchers	0	1750	3635	16	5401
Individuals	24050	28425	34940	25225	112640
Total	\$32150	\$72840	\$73560	\$75460	\$254010

Data packages published, by payment plan, 2015

	Q1	Q2	Q3	Q4	Total
Subscription	344	392	441	477	1654
Voucher account	31	25	15	10	81
Deferred payment	112	129	139	128	508
Single voucher	2	2	0	0	4
Individual	278	295	333	333	1239
Total	767	843	928	948	3486

The number of data packages submitted, often lags behind the number released.

Waivers

Waivers are granted upon request for submissions originating from researchers based in countries classified by the World Bank as low-income or lower-middle-income economies. Waivers were granted for 44 data packages in 2014, compared with only 8 in 2013.

Financials

In addition to the budget for the nonprofit, the final year of a four year \$2.18M award from the National Science Foundation for research and development started in March 2015. Institutions that partnered with Dryad on this award included the University of North Carolina at Chapel Hill, the Metadata Research Center at Drexel University, the North Carolina State University Digital Libraries, and Duke University.

Downloads and web traffic

There were 93,061 data file downloads in 2015.

The five most frequently downloaded data packages published in 2015. Although most activity from automated “bots” has been filtered out of these statistics, they may still include counts from individual users downloading files multiple times.

Publication	Data package	Downloads
Nunez JCB et al. (2015) Population genomics of the euryhaline teleost <i>Poecilia latipinna</i> . PLOS ONE 10(9): e0137077. doi.org/10.1371/journal.pone.0137077	Nunez JCB et al. (2015) Data from: Population genomics of the euryhaline teleost <i>Poecilia latipinna</i> . Dryad Digital Repository. doi.org/10.5061/dryad.kd00n	2,678
Class B, Brommer JE (2015) A strong genetic correlation underlying a behavioural syndrome disappears during development because of genotype-age interactions. Proceedings of the Royal Society B 282(1809): 20142777. doi.org/10.1098/rspb.2014.2777	Class B, Brommer JE (2015) Data from: A strong genetic correlation underlying a behavioural syndrome disappears during development because of genotype-age interactions. Dryad Digital Repository. doi.org/10.5061/dryad.443g2	1,868
Kardos M et al. (2015) Whole-genome resequencing uncovers molecular signatures of natural and sexual selection in wild bighorn sheep. Molecular Ecology 24(22): 5616–5632. doi.org/10.1111/mec.13415	Kardos M et al. (2015) Data from: Whole-genome resequencing uncovers molecular signatures of natural and sexual selection in wild bighorn sheep. Dryad Digital Repository. doi.org/10.5061/dryad.3f2t2	1,324
Hinchliff CE et al. (2015) Synthesis of phylogeny and taxonomy into a comprehensive tree of life. Proceedings of the National Academy of Sciences of the United States of America 112(41): 12764–12769. doi.org/10.1073/pnas.1423041112	Hinchliff CE et al. (2015) Data from: Synthesis of phylogeny and taxonomy into a comprehensive tree of life. Dryad Digital Repository. doi.org/10.5061/dryad.8j60q	601
Drake JM et al. (2015) Ebola cases and health system demand in Liberia. PLOS Biology 13(1): e1002056. doi.org/10.1371/journal.pbio.1002056	Drake JM, Kaul RB, Alexander LW, O'Regan SM, Kramer AM, Pulliam JT, Ferrari MJ, Park AW (2015) Data from: Ebola cases and health system demand in Liberia. Dryad Digital Repository. doi.org/10.5061/dryad.17m5q	367

Web traffic

Dryad collects a variety of web analytics for <http://datadryad.org>, but pays particular attention to the number of “sessions,” or visits from the same user with gaps of no more than 30 minutes between subsequent hits. The number of sessions increased 28%, from 192,803 in 2014 to 247,185 in 2015.

Sessions by language (top 5)

Language	Percentage
English	69.6%
Chinese	4%
French	3%
German	2.7%
Spanish	2.6%

Sessions by country (top 10)

Country	Percentage
United States	36%
United Kingdom	9%
Canada	5%
Germany	4.5%
Australia	3.5%
China	3.5%
France	3.3%
Japan	2.9%
Brazil	2.7%
Spain	2.2%

Outreach

Blog posts

There were 9 posts to <http://blog.datadryad.org> in 2015, which collectively received 7,383 pageviews from 4,564 visitors.

The most popular was “New pricing structure with simplified terms and increased size limits”, which announced an increase in DPCs for 2016 and explained Dryad’s financial model. Second most popular was “What were the most downloaded data packages in 2014?”

Blog posts from 2015, in reverse chronological order

- New pricing structure with simplified terms and increased size limits
- New integrated journals from the University of Chicago Press – Journals Division
- Dryad curators: wizards behind the curtain?
- A new institutional sponsor: The Netherlands Institute of Ecology
- Three newly sponsored journals from The British Editorial Society of Bone & Joint Surgery
- A snapshot of life on the savannah
- 2015 Dryad Community Meeting: Taking a closer look at data
- Introducing our new Executive Director Meredith Morovati
- What were the most downloaded data packages in 2014?

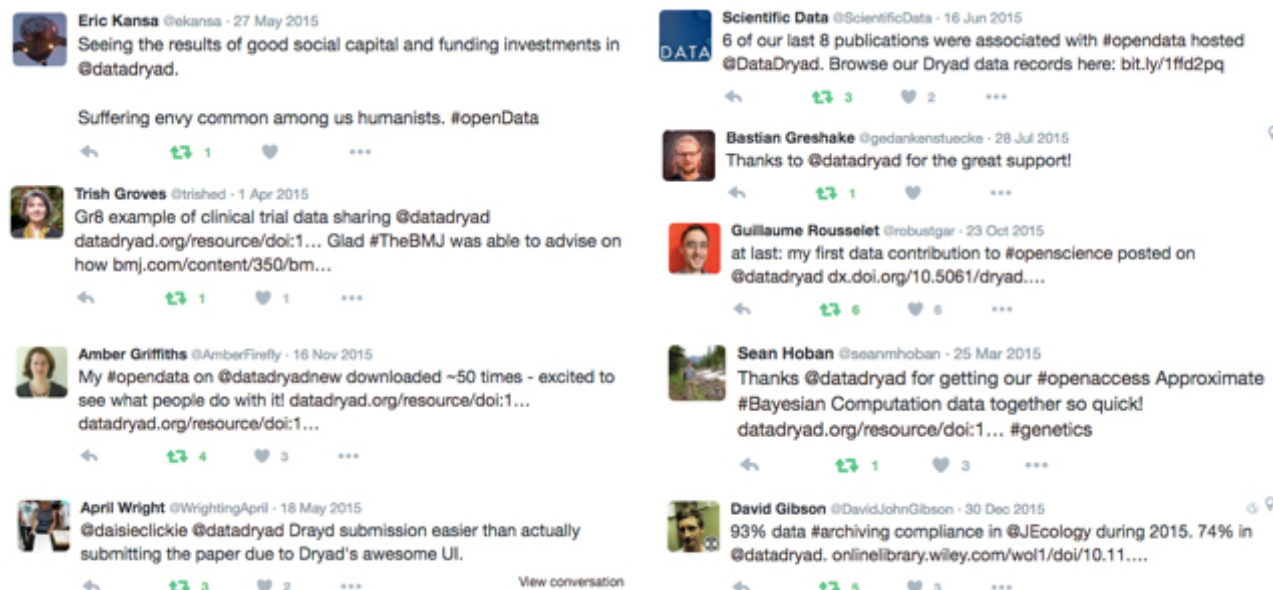
Blog readership, by country (top 10)

Country	Number of visits
USA	3,473
UK	617
Canada	310
Germany	306
Australia	209
Netherlands	187
China	186
France	155
India	131
Spain	111

Twitter

The @datadryad twitter account had roughly 9,400 followers by the end of 2015 (up approximately 25% from the year before). We also continue to post all new data packages, and Featured Data, to @datadryadnew.

A sample of tweets from 2015



Conferences and seminars

Dryad had a presence through either a presentation, conference table or sponsorship at the following events in 2015.

- CurateGear, 7 January, Chapel Hill, NC, USA
- FORCE2015, 11-13 January, Oxford, UK
- RECODE (Policy RECommendations for Open Access to Research Data in Europe) conference, 15-16 January, Athens, Greece
- Research Data Alliance and Preservation and Archiving Special Interest Group, 8-13 March, San Diego, USA
- Metadata in the Metropolis, 2 April, Philadelphia, USA
- STM Spring Conference 21-23 April, Washington DC, USA
- National Data Integrity Conference, 7-8 May, Fort Collins, USA
- Society for Scholarly Publishing, 27-29 May, Arlington, USA
- Open Repositories, 8-11 June, Indianapolis, USA
- Connecting Researchers to Repositories Workshop, 15-16 June, Purdue, IN
- Ecological Society of America, 8-9 August, Baltimore, MD, USA
- International Society of Managing and Technical Editors, 20-21 August, Baltimore, MD, USA

- DCMI International Conference, 1-5 September, São Paulo, Brazil
- International Conference on Digital Preservation (iPRES) 2-6 November, Chapel Hill, NC, USA
- OpenCon 14-16 November, Brussels, Belgium
- OpenCon Research Triangle 30 November, Durham, NC, USA
- Coalition for Networked Information, 14-15 Dec, Washington, DC, USA