

Research Data Management (RDM) Brown Bag Information Series

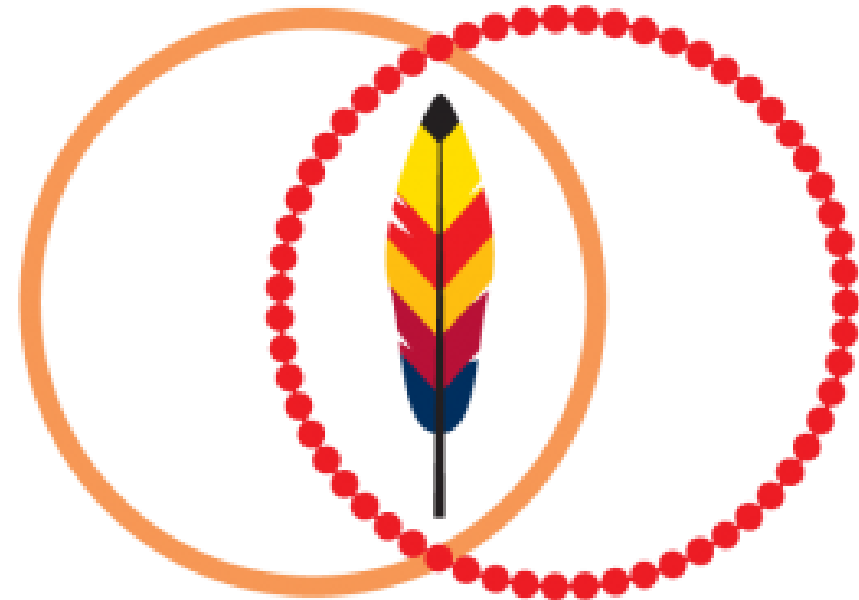
Session 3 – Depositing Your Research Data in a Repository

March 22, 2023



Land acknowledgement

To begin, we would like to acknowledge that Queen's University is situated on traditional Anishinaabe and Haudenosaunee Territory. We are grateful to live, learn and play on these lands. We acknowledge and respect, the Anishinaabe and Haudenosaunee peoples and we are committed to taking responsibility for redressing the injustices that enabled us to be here today.



Hello! Meet the Queen's Data Champions



Alicia Cappello
Engineering &
Science Librarian,
Queen's University
Library



Meghan Goodchild
Research Data
Management Librarian, Queen's
University Library



Elise Degen
Communications &
Relations, Centre for
Advanced Computing



Rebecca Pero
Information and Project
Coordinator, Vice-Principal
Research Portfolio



Matt Clapp
Manager, Data Platform
Services, Information
Technology Services

Featured Guest Presenter



Robert Montgomerie
Professor Emeritus of Biology
Queen's University

Agenda

1. Recap:

- Overview of Research Data Management (RDM)
- Tri-Agency RDM Policy
- Queen's-KHSC Institutional RDM Strategy

2. Data Deposit

- Data deposit and sharing landscape
- Queen's Dataverse Collection, part of Borealis, the Canadian Dataverse Repository

3. Disciplinary perspective - "The Sorry State of Data"

4. Resources

5. Q&A

Research Data Management Recap

What is research data management (RDM)?

Processes applied throughout the **lifecycle of a research project** to guide the collection, documentation, storage, sharing, and preservation of research data.



Why is RDM important?

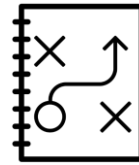
RDM practices are **integral to conducting responsible research** and can help you save resources by **ensuring your data are complete, understandable, and secure.**

Tri-Agency RDM Policy Requirements



Institutional Strategy

Posted March 2023



Data Management Plans

Implementation began in 2022



Data Deposit

Phased implementation (details released later in 2023)



Queen's-KHSC Institutional RDM Strategy



**Research
excellence**



**Open dissemination
of research results**



**Respect for
Indigenous
communities**



**Institutional support
for researchers**



**Strong
collaborations**

The Queen's Institutional Strategy is now available, and we invite feedback from the research community.

www.queensu.ca/vpr/resources/RDM/strategy

Data Deposit Requirement

Data deposit – Part of the research lifecycle



- Data deposit occurs during the final stages of a research lifecycle where research data can be shared, preserved, and reused.
- “Research data are **valuable assets**, which when properly managed, have the potential to be **reused and recombined in innovative ways** to derive greater value and advance research and scholarship.” ([Current State of Research Data Management in Canada, 2020](#))
- In order to share, preserve, and reuse research data, appropriate steps must be built into the planning process (e.g., ethics approval, consent from participants, appropriate data management and storage).

Data Deposit – Tri-Agency RDM Policy



What is the Data Deposit requirement?

- Grant recipients are required to **deposit into a digital repository** all digital research data, metadata and code that directly support the research conclusions in journal publications and pre-prints that arise from agency-supported research.

Do I need to deposit everything?

- Determining what counts as relevant research data ... is often highly contextual and should be guided by disciplinary norms.

When do I need to deposit?

- The deposit must be made by the **time of publication**.

What is the timeline for this requirement?

- **Phased implementation** (details will be released later in 2023)

Data Deposit – Tri-Agency RDM Policy



Am I obligated to share my data?

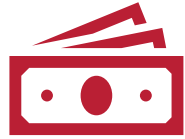
- Grant recipients are not required to share their data. However, the agencies expect researchers to provide appropriate access to the data where **ethical, cultural, legal and commercial requirements allow**, and in accordance with the FAIR principles and the standards of their disciplines.

Are there exceptions?

- For research conducted by and with **First Nations, Métis and Inuit communities, collectives and organizations**, these communities, collectives or organizations will guide and ultimately determine how the data are collected, used and preserved, and have the right to repatriate the data. This could result in exceptions to the data deposit requirement.

Data deposit and sharing landscape

Policies and practices



Funder Policies

- Funding agencies around the world developing policies to support access to publicly funded research:
 - Tri-Agency RDM Policy (2021); Tri-Agency Statement of Principles of Digital Data Management (2016)
 - International funders, including NIH, NSF, UK Research and Innovation Funders, Horizon 2020
- Mandates have been shown to strongly influence researcher behaviour



Journal policies and disciplinary practices

- **Mandated data sharing or archiving policies** have been found to significantly increase the likelihood of finding the data online
- Data sharing practices and data availability in journals **differ strongly by discipline**
- Reported results are not always fully reproducible from the shared data, often due to the lack of adequate dataset documentation and metadata

(Sources: Alliance RDM WG, 2020; Riesberg et al., 2021; Tendersoo et al., 2021; Vines et al., 2013)

Data deposit – Why deposit in a repository?



Sharing data by request has many downfalls (discoverability, long-term storage, transfer mechanism, license/citation)



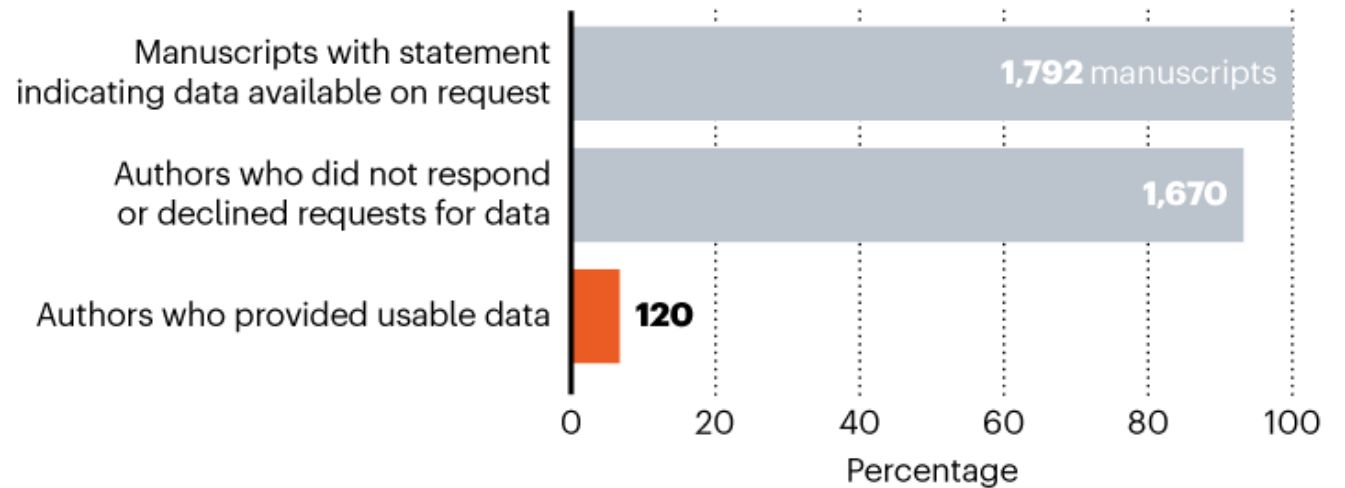
Personal websites are ephemeral



Journal supplementary material is not easily discoverable and can be paywalled

DATA-SHARING BEHAVIOUR

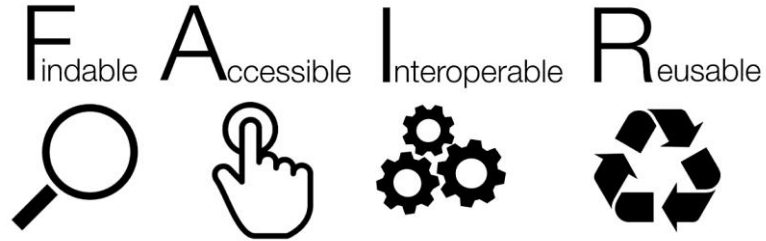
Of almost 1,800 manuscripts for which the authors stated they were willing to share their data, more than 90% of corresponding authors either declined or did not respond to requests for data. Only about 7% of authors actually handed over data.



©nature

(Source: [Watson, 2022](#))

Data Deposit – Why deposit in a repository?



<https://www.go-fair.org/fair-principles/>

Findable

- Digital Object Identifier (DOI)
- Indexed in a searchable resource

Accessible

- Ensure controlled access, where appropriate

Interoperable

- Integrate with other data (metadata standards)

Reusable

- Clear and accessible data usage license
- Data are well-described



Repositories also offer secure storage and long-term stewardship

Data Deposit – Which repository?

Disciplinary or Specialized Repository

- Built to handle specialized datasets
- Storage likely outside of Canada
- Eligibility, pricing, repository functionality vary
- May only accept certain file types



Queen's Dataverse Collection

- Multi-disciplinary
- Canadian storage
- File size <3 GB
- Open to Queen's researchers
- File-level restrictions possible
- Supports versioning



Federated Research Data Repository (FRDR)

- Multi-disciplinary
- Canadian storage
- Big data support
- Open to faculty at Canadian institutions
- No file restrictions
- Limited versioning



What is Borealis?

- **Borealis, the Canadian Dataverse Repository**, is a bilingual, multidisciplinary, secure, Canadian research data repository
- Shared service provided in partnership with Canadian regional academic library consortia, institutions, research organizations, and the Digital Research Alliance of Canada
- 65+ subscribing institutions across Canada
- Technical infrastructure hosted by Scholars Portal and the University of Toronto Libraries.
- Data stored on the Ontario Library Research Cloud (OLRC)
- Indexed in Datacite search, Google dataset search, FRDR for discoverability



Production: <https://borealisdata.ca>
Demo: <https://demo.borealisdata.ca>

Queen's Dataverse Collection?

- **Queen's Dataverse Collection** is managed by your library!
- We provide data curation services to support dataset deposit and sharing to enhance datasets for discovery and reuse
- Check it out at <https://borealisdata.ca/dataverse/queens>



Queen's University Collection (Queen's University)

Borealis >

[✉ Contact](#) [🔗 Share](#)

The Queen's University Dataverse is a research data repository for our faculty, students, and staff. Files are held in a secure environment on Canadian servers. Researchers can choose to make content available publicly, to specific individuals, or to keep it locked.

Before starting, please review our [Dataverse Data Deposit Guidelines](#).

For more information on best practices for research data management, consult our [Research Data Management guide](#).

Need assistance? [Contact us](#).



Search this dataverse...



[Advanced Search](#)

[+ Add Data](#)

 **Dataverses (21)**

 **Datasets (153)**


 **Files (4,652)**


Dataverse Category

[Researcher \(7\)](#)


[Laboratory \(3\)](#)

1 to 10 of 174 Results

 Sort ▾

 **Culture and Cognition Lab** (Queen's University. Department of Psychology)

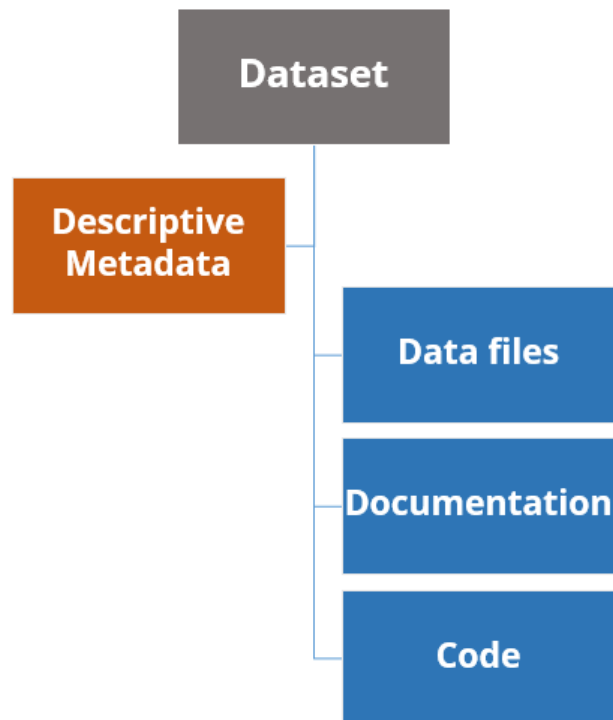
Oct 7, 2022

 The Culture and Cognition Lab investigates cultural differences between European North Americans and East Asians in perception, memory, categorization, prediction, judgment and decision making. Current research focuses on cultural differences in lay theories of change, and their...

What is a collection? What is a dataset?

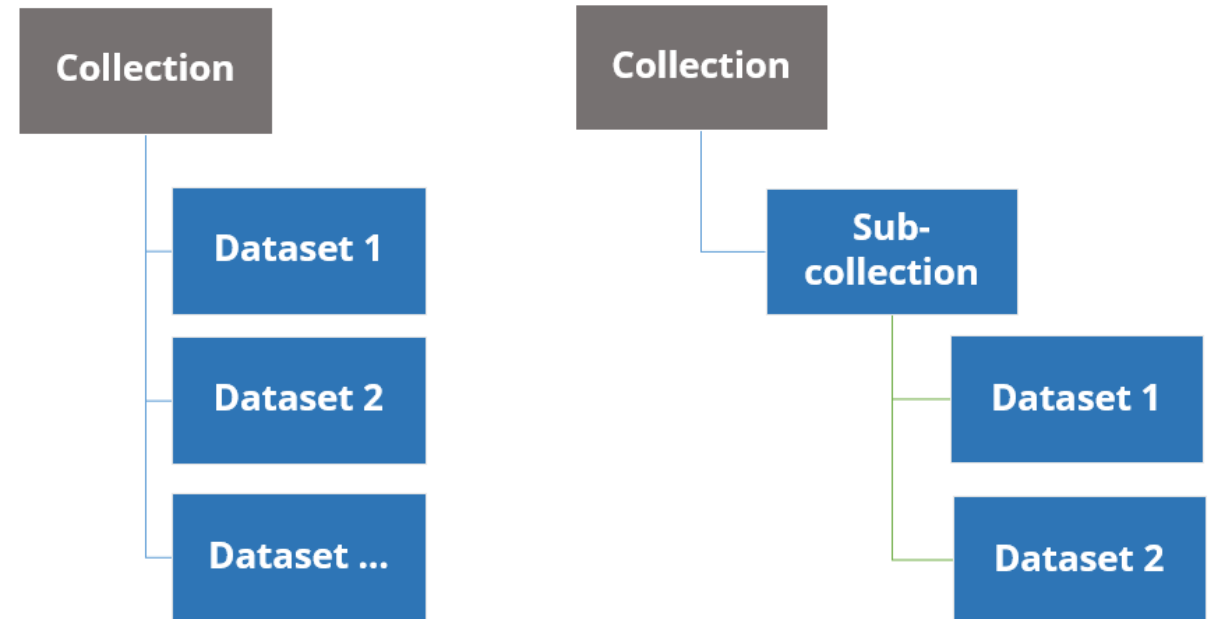
Dataset

- Container for your data files, documentation, and code with descriptive metadata



Collection

Container for datasets and/or sub-collections



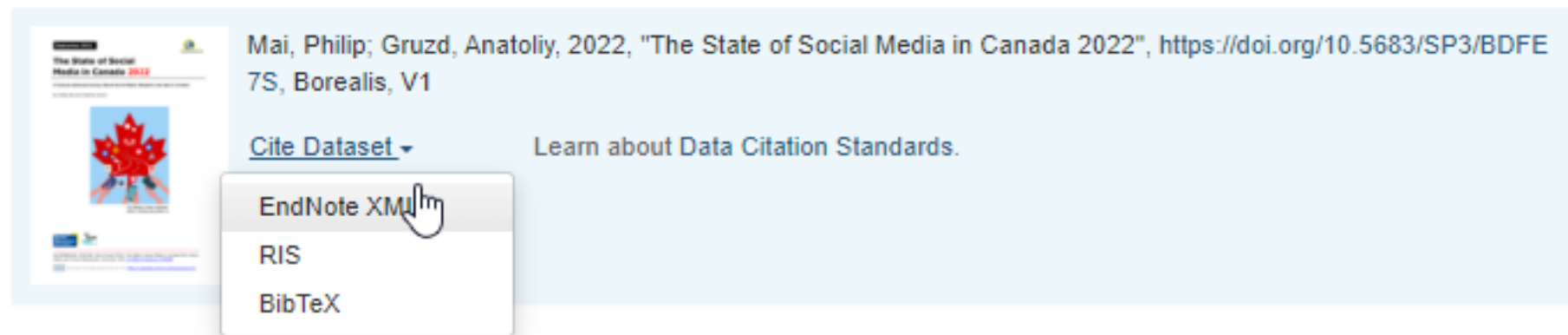
What is a Data Citation?

- Automatic DataCite Canada DOI reservation and minting
- DOI used in standard data citations
- Cross-reference research outputs
 - Establish unbreakable links between scholarly output and associated data

Borealis > Toronto Metropolitan University Dataverse > Social Media Lab >

The State of Social Media in Canada 2022

Version 1.0



Mai, Philip; Gruz, Anatoliy, 2022, "The State of Social Media in Canada 2022", <https://doi.org/10.5683/SP3/BDFE7S>, Borealis, V1

[Cite Dataset](#) ▾ [Learn about Data Citation Standards.](#)

- EndNote XML
- RIS
- BibTeX





borealis The Canadian Dataverse Repository
Le dépôt Dataverse canadien

Store, share, publish and discover research data!

[EXPLORE BOREALIS](#)

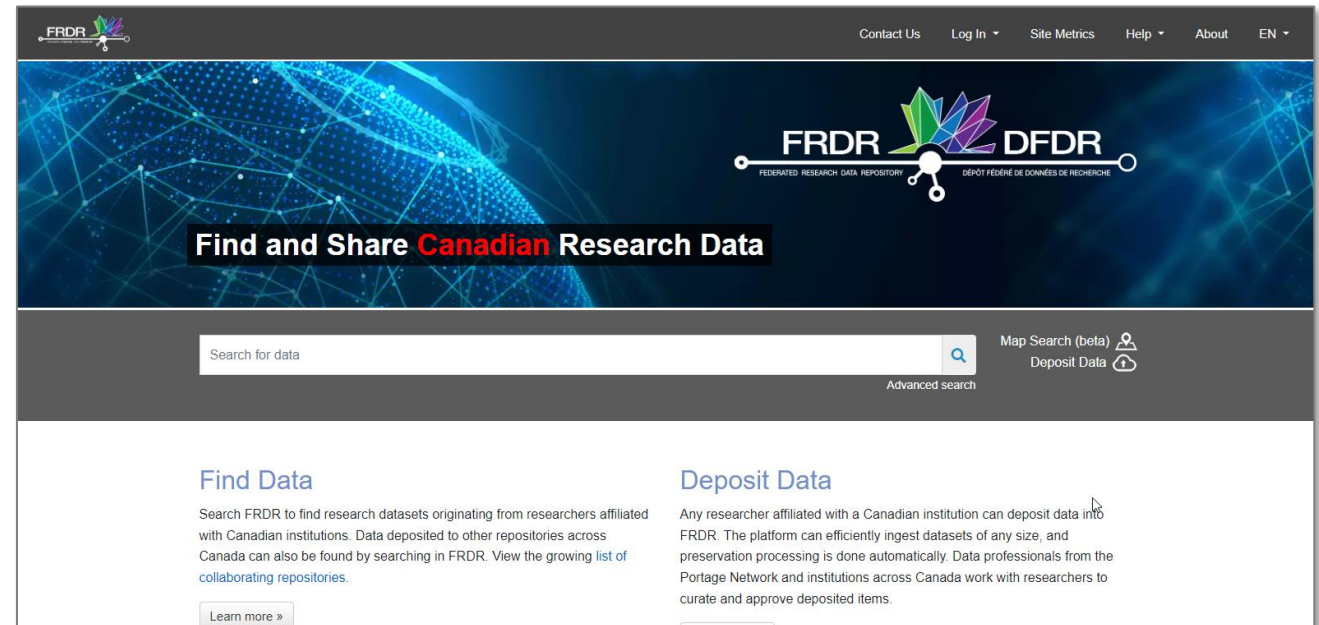
[ABOUT US](#)

Search Borealis

Finding research data

Search the national discovery portal for Canadian research data

- [FRDR](#) (current search)
- Lunaris will be launched on March 29
- Discovery tool decoupled from FRDR



The screenshot shows the FRDR/DFDR website homepage. At the top, there is a navigation bar with links for Contact Us, Log In, Site Metrics, Help, About, and EN. The main header features the FRDR and DFDR logos, with the text "FIND AND SHARE Canadian Research Data". Below the header is a search bar with the placeholder text "Search for data" and a search icon. To the right of the search bar are links for "Map Search (beta)" and "Deposit Data". Below the search bar, there are two main sections: "Find Data" and "Deposit Data". The "Find Data" section includes a description of the search capabilities and a "Learn more" link. The "Deposit Data" section includes a description of the deposit process and a "Learn more" link.



The image shows the Lunaris logo, which consists of a stylized yellow and orange circular graphic made of dots. To the right of the graphic, the word "lunaris" is written in a large, bold, black font. Below "lunaris", the tagline "Discover Canadian Research Data" is written in a smaller, black font, with "Canadian Research Data" highlighted in yellow.

Records Management and Privacy Office

Jordan Phoenix

Records Manager

Phone: 613-533-6000 ext. 74250

recordsmanagement@queensu.ca

<https://www.queensu.ca/accessandprivacy>

sample-data-sheet.html

Getting Started Latest Headlines

Getting Started Latest Headlines

sorry

The ~~X~~ State of Data

Bob Montgomerie
Dept Biology, Queen's University
Data Editor, American Naturalist



EVOLUTION OF A JOURNAL: Stage 1

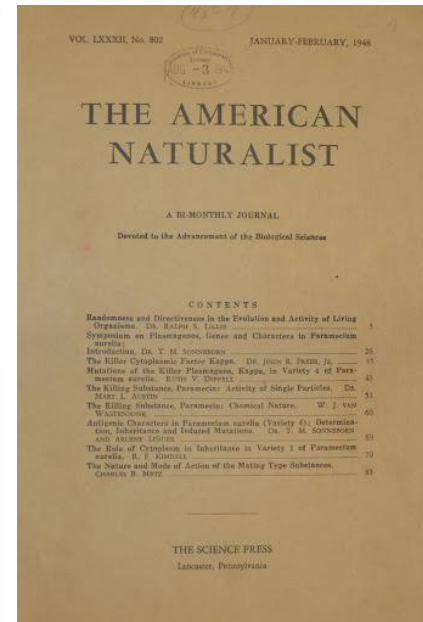
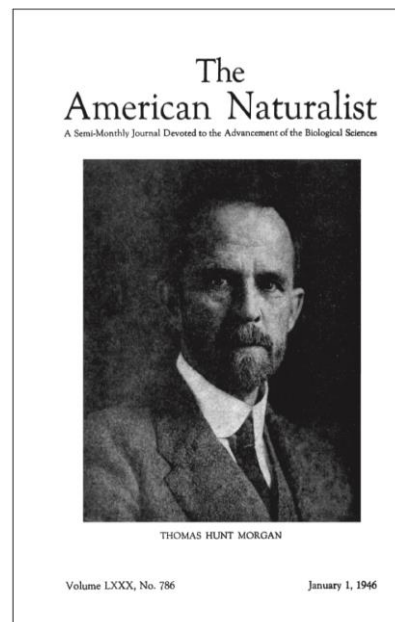
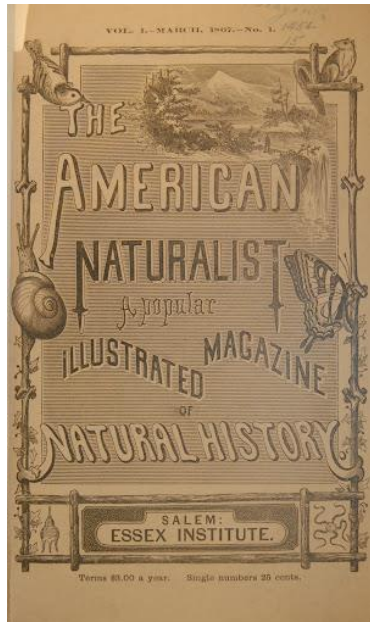
American Naturalist begins publishing in print

American Naturalist begins publishing online version

1867

1999

2000



First set of raw data published in print as an Appendix

Appendix

Table A1: Data for the "all data" data set

Species	No. males	No. females	No. immatures	Metabolic needs	Home range size (ha)
<i>Lemur catta</i>	5.9	6.4	5	27.54	14.4
<i>Eulemur fulvus</i>	3.2	3.5	2.2	13.68	48.6
<i>Eulemur macaco</i>	4	3.1	2.5	15.02	5.3
<i>Haplelemur griseus</i>	1	1	2	2.77	11.3
<i>Varecia variegata</i>	2.5	3	1	15.7	110.2
<i>Avahi laniger</i>	1	1	1	2.57	1.9
<i>Propithecus verreauxi</i>	3	2.8	1.7	17.54	5.3
<i>Indri indri</i>	1	1	2.5	13.92	22.5
<i>Daubentonia madagascarensis</i>	1	1	1	5.24	35.6

EVOLUTION OF A JOURNAL: Stage 2

GitHub

GitHub established

2007

2009



DRYAD

DRYAD established

All authors required to publish their raw data

2011

DRYAD chosen by American Naturalist as preferred repository at no charge to authors

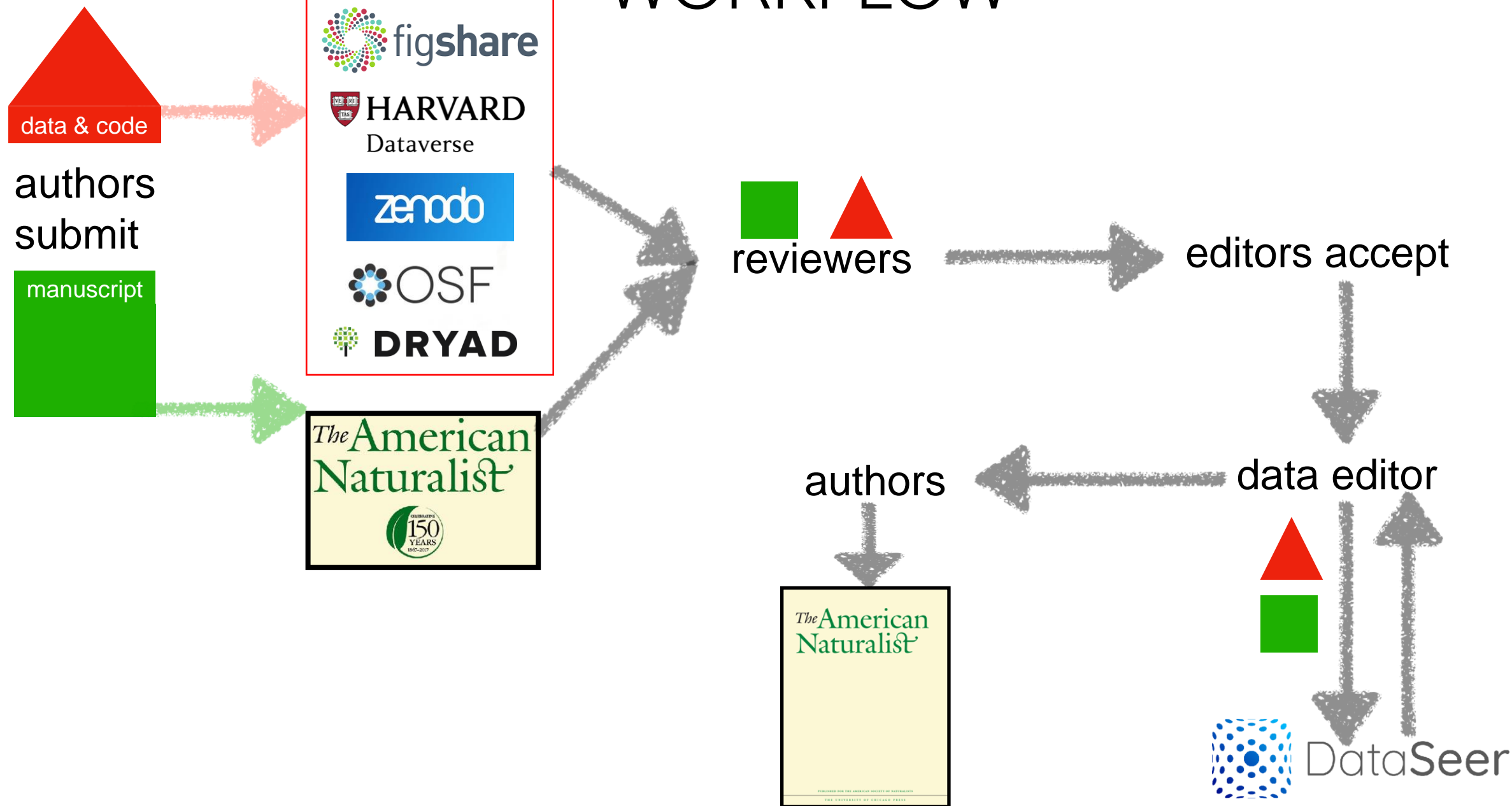
2021

Data editors evaluate each accepted ms to ensure minimal standards of completeness and usability

DRYAD no longer the preferred repository

2023

WORKFLOW





IN THEORY



data
code
metadata



researchers
reuse
reproduce
evaluate

VOL. 158, NO. 6 THE AMERICAN NATURALIST DECEMBER 2021

E-ARTICLE

The Shapes of Birds' Eggs: Evolutionary Constraints and Adaptations

Robert Montgomerie,^{1*} Nicola Hemmings,² Jamie E. Thompson,² and Tim R. Birkhead²

¹ Department of Biology, Queen's University, Kingston, Ontario K7L 3N6, Canada; ² School of Biosciences, University of Sheffield, Sheffield S10 2TN, United Kingdom
Submitted August 26, 2020; Accepted June 29, 2021; Electronically published October 26, 2021
Online enhancement: supplemental PDF. Dryad data: <https://doi.org/10.5061/dryad.sj3tx9648>.

ABSTRACT: We studied the shapes of eggs from 955 extant bird species across the avian phylogeny, including 39 of 40 orders and 78% of 249 families. We show that the elongation component of egg shape (length relative to width) is largely the result of constraints imposed by the female's anatomy during egg formation, whereas asymmetry (pointedness) is mainly an adaptation to conditions during the incubation period. Thus egg elongation is associated with the size of the egg in relation to both the size of the female's oviduct and her general body conformation and mode of locomotion correlated with pelvic shape. Egg asymmetry is related mainly to clutch size and the structure of the incubation site, factors that influence thermal efficiency during incubation and the risk of breakage. Importantly, general patterns across the avian phylogeny do not always reflect the trends within lower taxonomic levels. We argue that the analysis of avian egg shape is most probably conducted within taxa where all species share similar life histories and ecologies, as there is no single factor that influences egg shape in the same way in all bird species.

Keywords: birds, egg shape, oviduct, pelvic shape, clutch size, relative egg size.

Introduction

For centuries, naturalists have marvelled at the diversity of sizes, colors, and shapes of what Thomas Wentworth Higginson, in 1862, called the most perfect things in the universe (Birkhead 2016)—the eggs of birds. The diversity of egg size—spanning five orders of magnitude from the eggs of *Melospiza helensae* (bee hummingbird, at 0.5 g) to those of *Appyrnis maximus* (elephant bird, at 8 kg)—is largely explained by life histories and body size allometries (Lack 1968). The colors and shapes of birds' eggs also vary among orders, families, genera, species, populations, and even in-

dividuals, but the causes of variation in these traits remain somewhat elusive.

The study of egg shape has progressed along two fronts: (i) quantification and (ii) attempts to explain variation. Since D'Arcy Wentworth Thompson (1908, 1917) first tackled the quantification problem in 1908, more than 20 studies have attempted both mathematical and practical descriptions of avian egg shape with mixed success, especially for the most asymmetric eggs (Biggins et al. 2018). Preston's (1953, 1966, 1969) mathematical formulations provided an accurate descriptor of all avian egg shapes using four parameters but have rarely been used to assess interspecific variation in shape. Simpler measures have not been as accurate as Preston's for all species, but a new software tool (Biggins et al. 2018) uses Preston's parameters to derive three accurate indexes of egg shape—elongation, pointedness, and polar asymmetry—that are readily obtained from digital images (Birkhead et al. 2018).

The first studies on the adaptive significance of egg shape focused on species that laid the most asymmetric (pointed) eggs: *Uria murre*s (*Uria gallemlots* in Europe; Tschanz et al. 1969) and vanders (Anderson 1978), both in the order Charadriiformes. The earliest studies of murre eggs suggested that their pear-like shape was an adaptation that made their eggs spin or roll in a tight circle when knocked, thus reducing the chance of rolling off the bare cliff ledges where those birds incubate their eggs (Tschanz et al. 1969). More recent work has shown instead that this shape makes the murre's eggs more stable and less likely to move during incubation changeovers (Birkhead et al. 2018). The pointed shape of wader eggs, on the other hand, allows eggs in their typical four-egg clutches to pack more closely together, presumably enhancing incubation efficiency (Anderson 1979).

We embarked on this study with the primary goal of identifying the evolutionary pressures and anatomical/

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ORCID: Montgomerie, <https://orcid.org/0000-0003-4701-4325>; Hemmings, <https://orcid.org/0000-0003-2418-9625>; Thompson, <https://orcid.org/0000-0003-0008-7865>; Birkhead, <https://orcid.org/0000-0003-2916-4076>.

Online enhancements: supplemental PDF. Dryad data: <https://doi.org/10.5061/dryad.sj3tx9648>.

IN PRACTICE

The American Naturalist



The Shapes of Birds' Eggs: Evolutionary Constraints and Adaptations

Robert Montgomerie,* Nicola Hemmings, Jamie E. Thompson, and Tim R. Birkhead†

Journal of Animal Ecology, 2010, 79, 106–114. doi: 10.1111/j.1365-2656/2009/01592.x

Summary: We studied the shapes of eggs from 100 species to test the idea that egg shape is constrained by the size of the egg-laying female. We found that egg shape is constrained by the size of the egg-laying female, but that the relationship is more complex than a simple linear relationship. We found that egg shape is also constrained by the size of the egg-laying female, but that the relationship is more complex than a simple linear relationship. We found that egg shape is also constrained by the size of the egg-laying female, but that the relationship is more complex than a simple linear relationship.

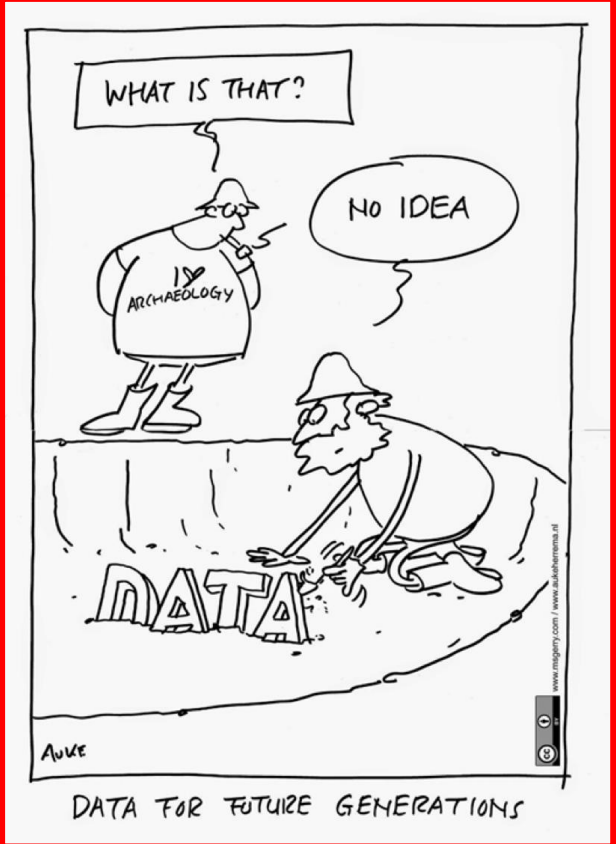
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researchers

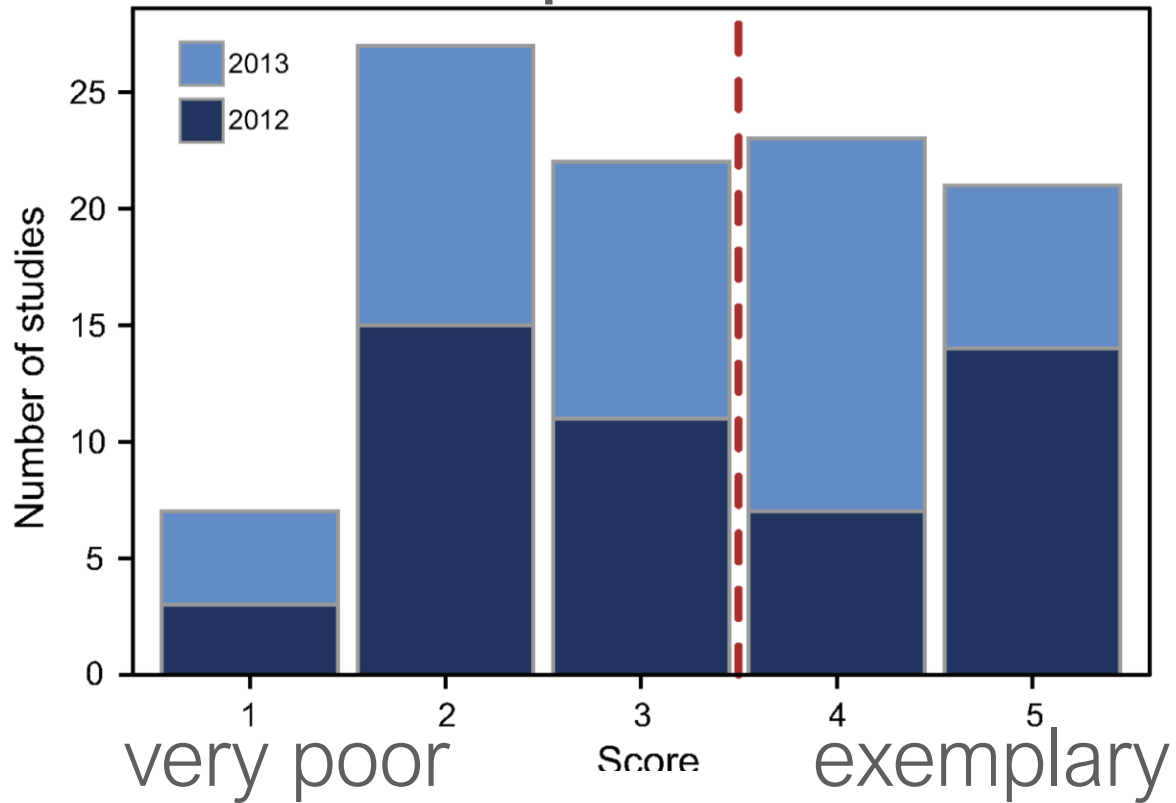
Sample-Data-Sheet.htm

No.	Time	Sex	SVL	Wt.	T _s	T _b	No.	Time	Sex	SVL	Wt.	T _s	T _b
01	08:05	F	74	34.1	29.4	30.1	01	11:55	M	69	8.4	37.1	39.1
02	08:10	F	64	24.1	27.8	31.7	02	12:05	F	68	10.2	27.8	37.8
03	08:24	M	59	16.8	28.4	29.3	03	12:08	F	72	14.2	36.1	39.8
04	09:20	M	58	16.2	29.1	29.3	04	12:40	F	69	10.4	28.1	38.2
05	09:28	F	64	25.0	30.1	31.6	05	12:44	M	65	7.1	36.1	39.1
06	09:35	M	60	19.1	31.2	31.6	06	12:46	M	58	5.8	28.6	38.4
07	09:38	M	59	19.3	30.2	34.6	07	13:00	F	70	13.6	31.4	36.2
08	09:45	F	66	27.2	31.4	34.2	08	13:05	M	67	7.9	29.0	38.2
09	10:06	M	52	14.9	32.6	33.1	09	13:10	M	64	6.4	33.7	33.2
10	10:15	F	66	28.4	32.6	34.0	10	13:28	F	69	10.5	29.2	36.2
11	10:44	M	63	23.6	33.1	35.2	11	13:35	M	66	8.7	29.0	37.1
12	11:12	F	71	33.6	33.2	33.2	12	13:40	F	68	7.9	34.1	35.1
13	11:24	M	51	14.1	33.2	34.3	13	13:44	M	66	8.8	36.6	38.3
14	11:55	F	62	21.4	33.5	35.1	14	13:55	M	64	8.8	40.1	37.1
15	15:22	F	64	26.3	33.7	33.4	15	14:04	M	66	7.0	31.3	35.4
16	15:38	M	58	15.1	33.8	34.2	16	14:10	M	64	7.9	39.6	41.6
17	15:46	F	67	28.2	33.9	36.3	17	14:15	F	70	12.8	34.1	37.4
18	16:04	F	70	32.4	34.1	34.6	18	14:22	F	71	9.5	38.2	36.5
19	16:20	F	64	25.1	35.1	35.4	19	14:34	F	71	13.4	26.8	37.2
20	16:20	F	69	30.2	35.2	35.1	20	14:40	F	66	8.4	34.8	37.4

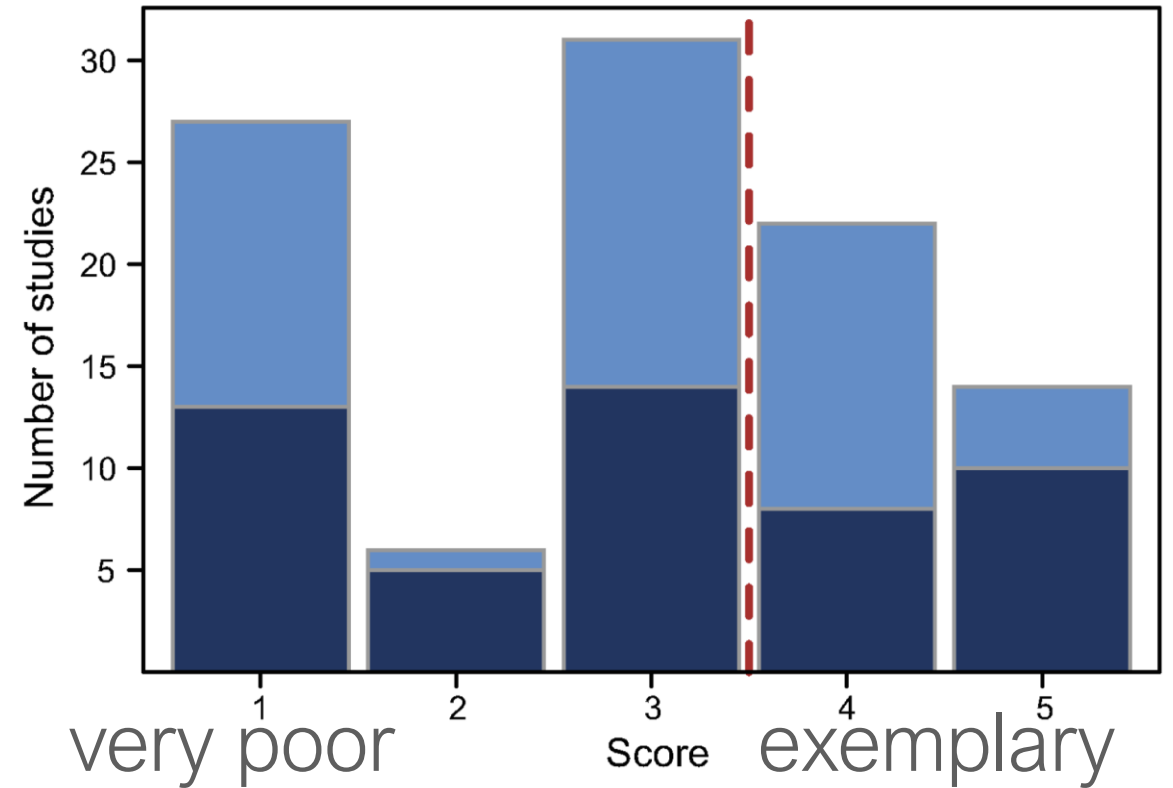


DRYAD repositories 2012-2013

completeness



reusability



My experience

Instructions to authors says:

- Specification of where all data underlying the study are available, or will be deposited, and whether there are any restrictions on data availability such as an MTA.


Paper says: **SUPPLEMENTARY MATERIALS**

www.sciencemag.org/content/356/6344/1249/suppl/DC1

Materials and Methods

Figs. S1 to S16

Tables S1 to S5

 Data S1 and S2

References (33–63)

Data S1

	A	B	C
	MVZ Specimen ID		
1	MVZ Egg 10000		
2	MVZ Egg 10001		
3	MVZ Egg 10002		
4	MVZ Egg 10003		
5	MVZ Egg 10004		
6	MVZ Egg 10005		
7	MVZ Egg 10006		
8	MVZ Egg 10007		
9	MVZ Egg 10008		
10	MVZ Egg 10009		
11	MVZ Egg 1000		
12	MVZ Egg 10010		
13	MVZ Egg 10011		

A

model

**Data repository contains
NONE of the data used
in the main analysis in
this paper**

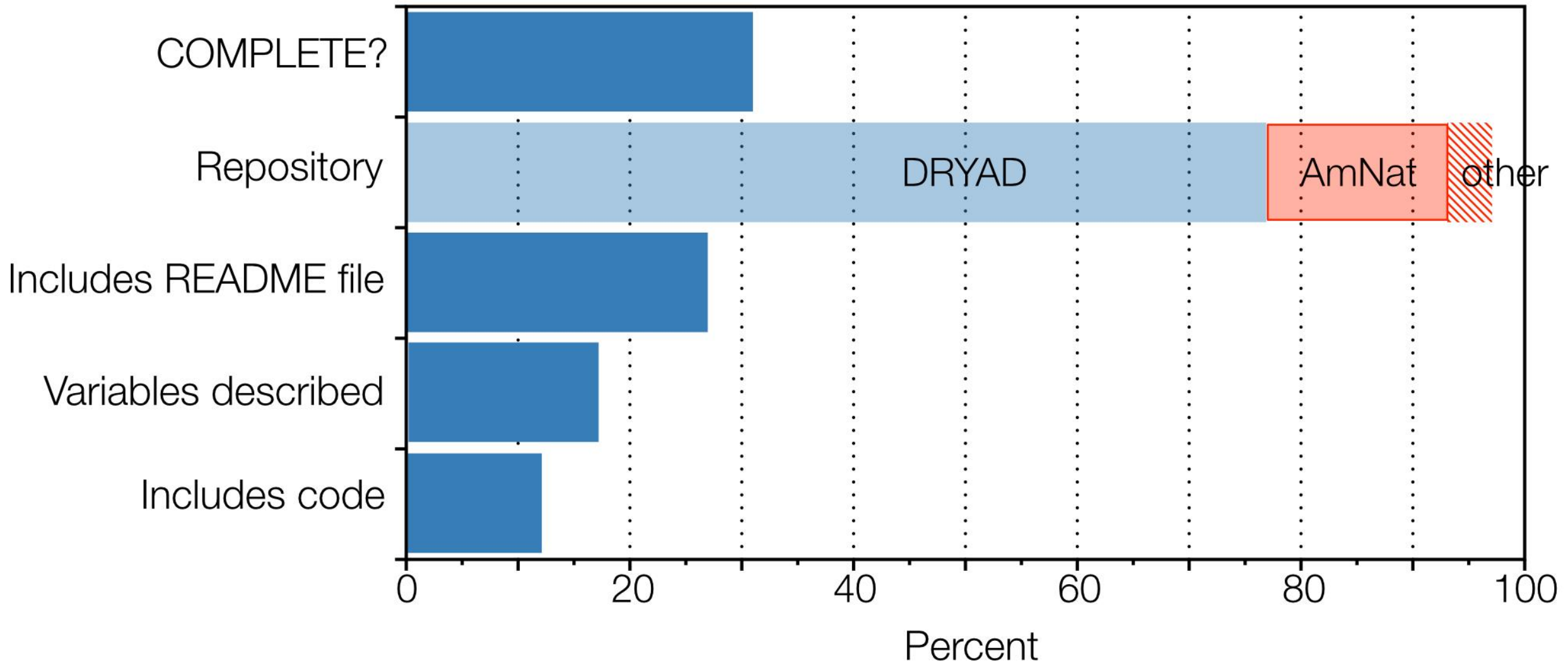
- Intercept
- Clutch Size**
- Nest - Plate
- Nest - Cup
- Nest - Elevated
- Nest - Cavity
- HWI
- Body Mass**
- Latitude
- Temperature
- Precipitation
- Diet**
- Constrained
- Development**

Data S2

Order	Family	MVZDatabase	Species	Asymmetry	Ellipticity	AvgLength (cm)	Number of images	Number of eggs
ACCIPITRIFORMES	Accipitridae	Accipiter badius	Accipiter badius	0.1378	0.3435	3.8642	1	2
ACCIPITRIFORMES	Accipitridae	Accipiter cooperii	Accipiter cooperii	0.0937	0.2715	4.9008	27	103
ACCIPITRIFORMES	Accipitridae	Accipiter gentilis	Accipiter gentilis	0.1114	0.3186	5.9863	7	18
ACCIPITRIFORMES	Accipitridae	Accipiter nisus	Accipiter nisus	0.0808	0.2391	4.0355	13	61
ACCIPITRIFORMES	Accipitridae	Accipiter striatus	Accipiter striatus	0.0749	0.2543	3.8700	15	57
ACCIPITRIFORMES	Accipitridae	Aegyptius monachus	Aegyptius monachus	0.0700	0.3476	8.9076	1	1
ACCIPITRIFORMES	Accipitridae	Aquila chrysaetos	Aquila chrysaetos	0.1192	0.3058	7.7318	191	391
ACCIPITRIFORMES	Accipitridae	Aquila rapax	Aquila rapax	0.1250	0.3518	6.8420	1	2
ACCIPITRIFORMES	Accipitridae	Buteo albicaudatus	Buteo albicaudatus	0.0818	0.2840	5.8095	7	17
ACCIPITRIFORMES	Accipitridae	Buteo brachyurus	Buteo brachyurus	0.1396	0.2371	5.5972	2	4
ACCIPITRIFORMES	Accipitridae	Buteo buteo	Buteo buteo	0.0704	0.2610	5.6364	5	12

B

AM NAT data repositories 2020 (n = 58)



AM NAT data repositories 2021 (n = 58)

QUALITY

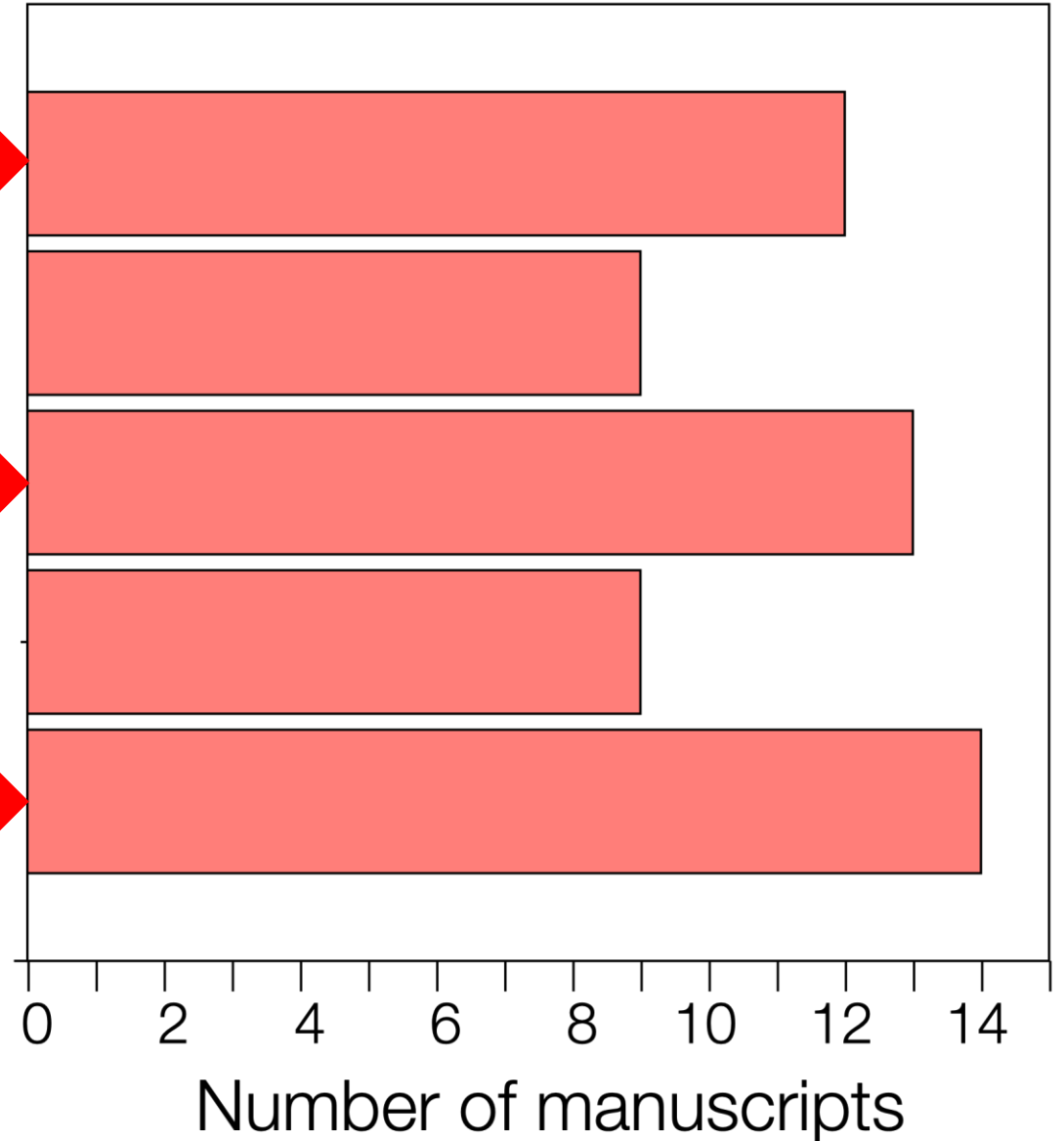
Excellent, complete
and usable

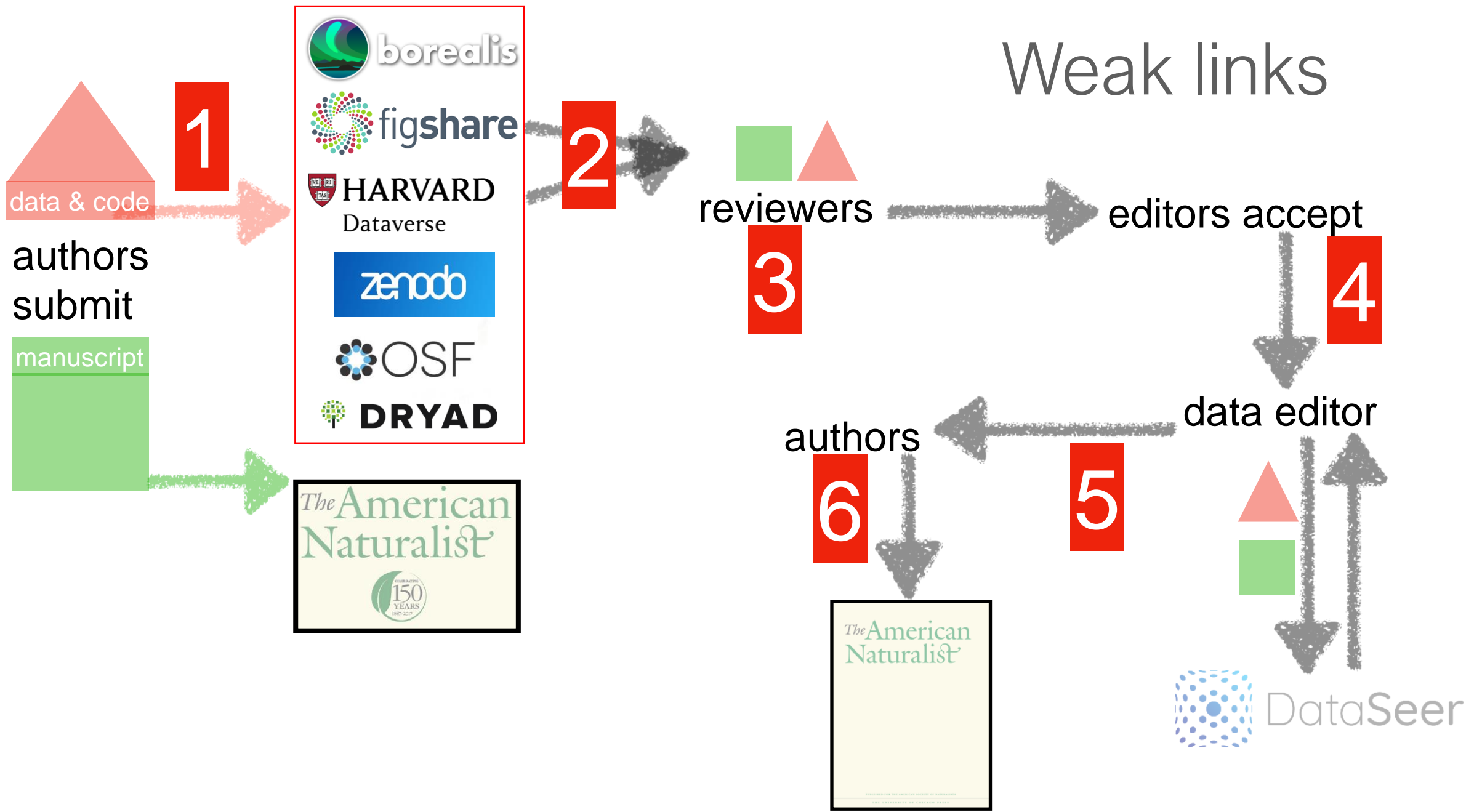


Usable but
incomplete and
confusing



Useless, incomplete
or absent, no raw
data, no metadata





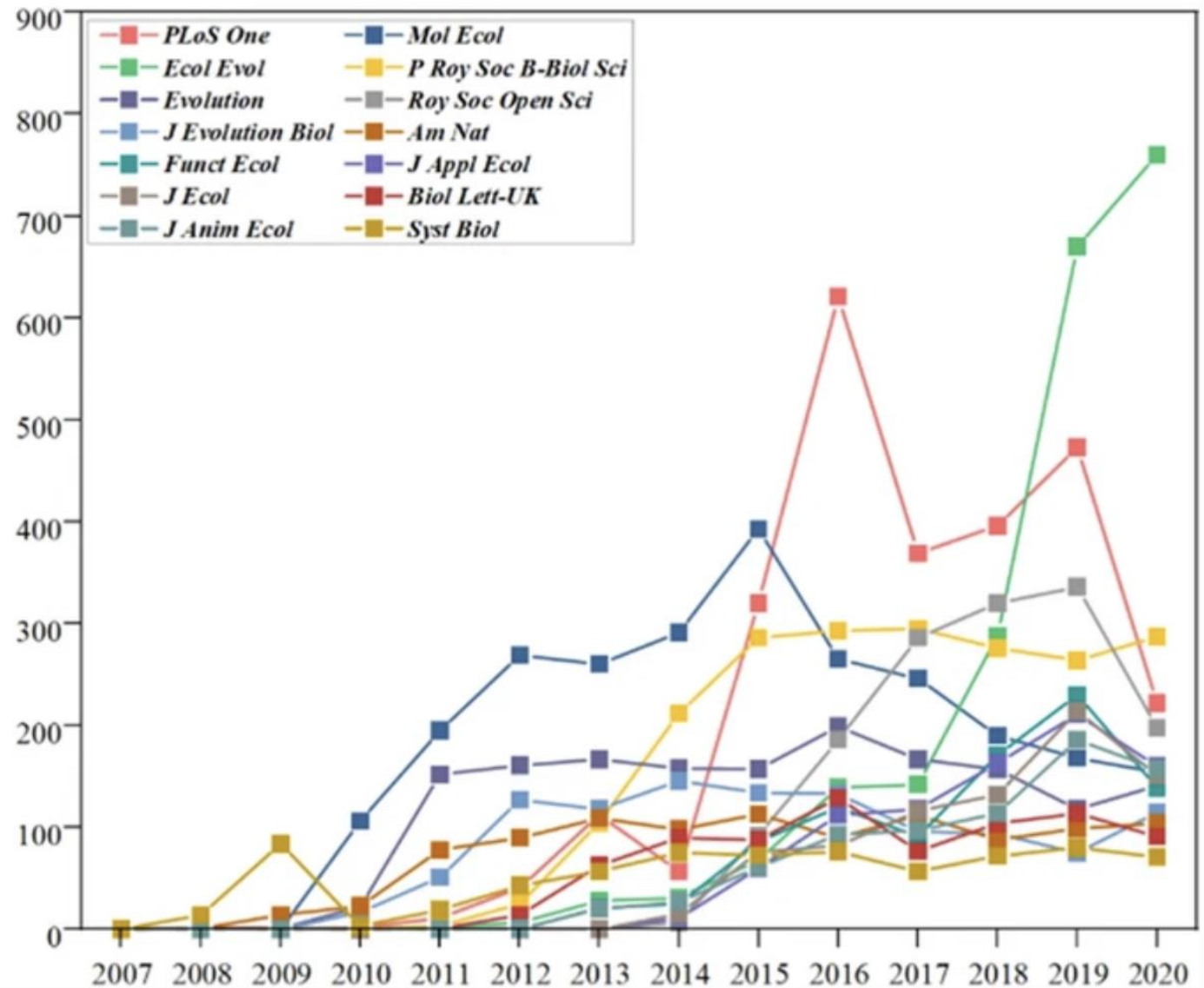
WHY NOT MAKE DATA AVAILABLE?

- "I still want to do more analyses and write more papers using this dataset." **So?**
- "Competitors might scoop me with my own data" **Highly unlikely**
- "Making a data repository is time consuming" **TRUE**
- "Someone might find fault with my data or analyses" **TRUE**

WHY?

- can be used in meta-analyses
- enhances collaborations (current & future)
- paid for with public funds
- transparency of analyses; allows re-analysis
- easy access (even for you)
- reduces fraud **Highly unlikely**

Number of
papers
with open data

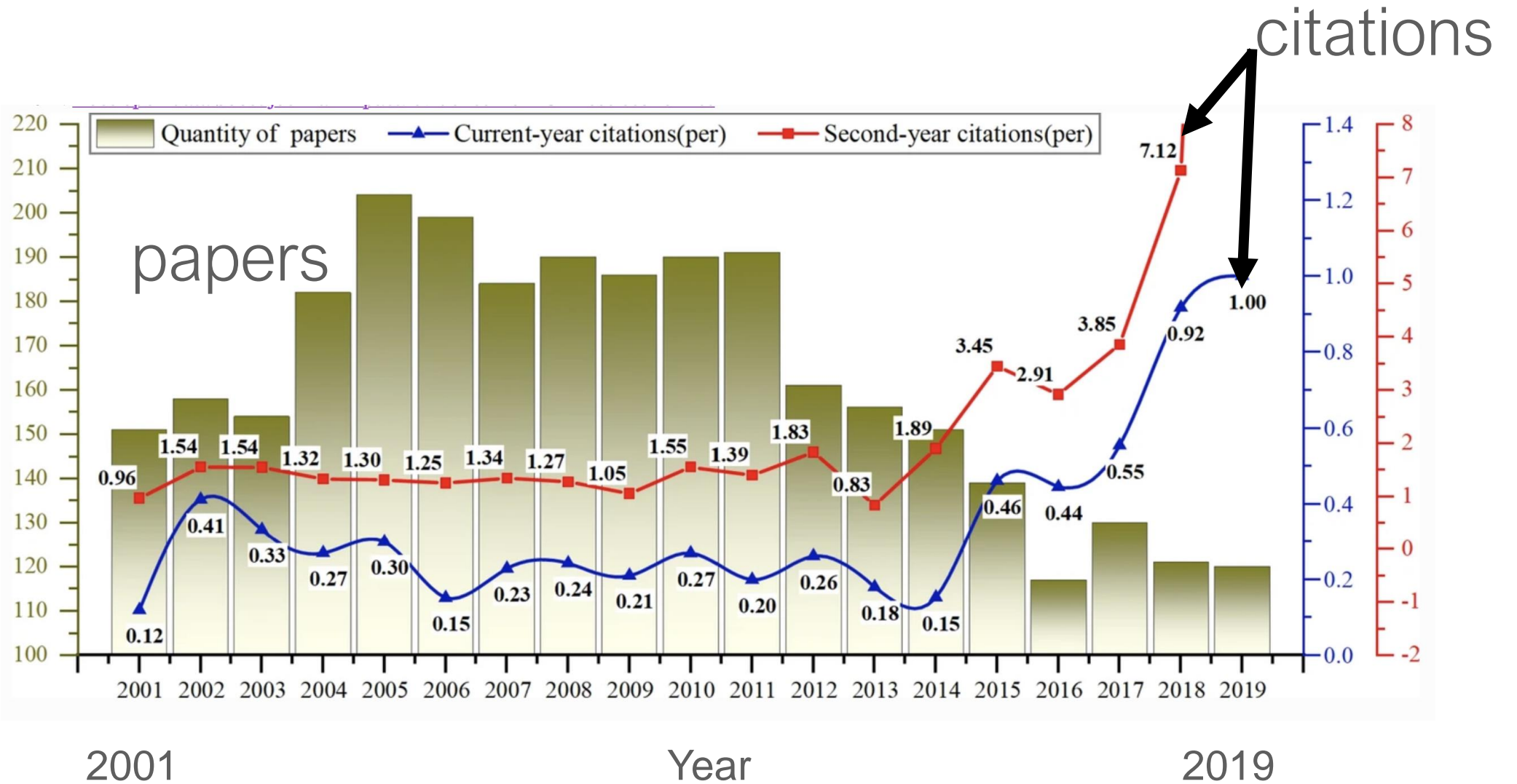


2007

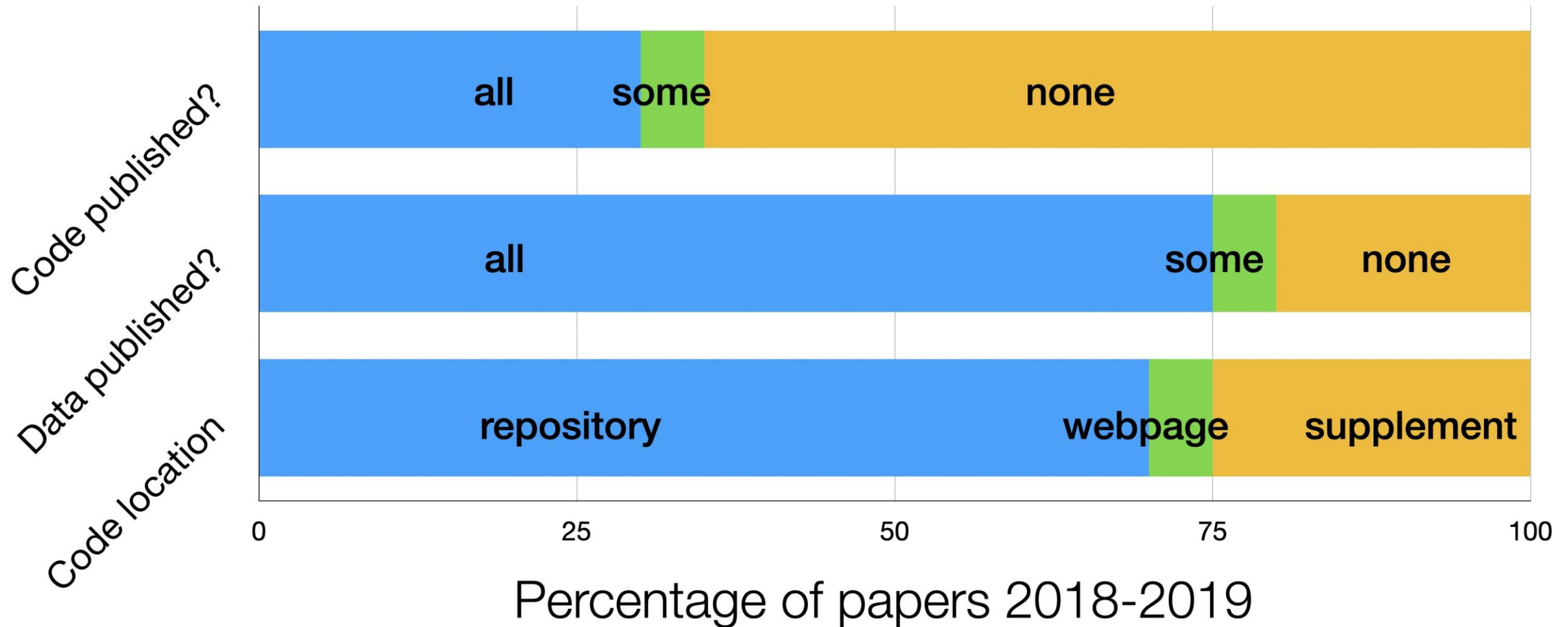
Year

2020

Open Data Improves Impact



What about sharing code?



data from Culina et al. 2020 PLoS BIOLOGY

The open data community needs to shift focus from mass data publication towards an understanding of good data quality. Yet, there is no shared definition what constitutes 'good' data quality.

and code

DATA ~~MANAGEMENT~~

should not be an

AFTERTHOUGHT

Questions, Feedback & Resources

Questions?



Please feel free to contact us if you have additional questions

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Join the [Queen's Data Champions](#) (qDC) for the culmination of the RDM brown bag informational series.

Research Panel:

"Tales from the Trenches: Research Data Management in Practice"

April 12, 12:00-13:30 ET

Learn about various journeys in RDM, lessons learned and best practices, and participate in a community of collaboration at Queen's.

[Register in advance](#) to secure your spot online!

Featured panelists

- **Dr. Amber Simpson**, Canada Research Chair, Biomedical Computing and Informatics
- **Dr. Nathan Brinkow Thanyehténhas**, Associate Head and Professor, Indigenous Studies
- **Dr. Patricia Collins**, Associate Professor, Geography and Planning, School of Kinesiology and Health Studies
- **Ruslan Kain**, PhD student (3rd year), School of Computing and Telecommunications Research Lab

Feedback Survey



Your voice matters! Please help us plan for future sessions by telling us how we did today! Click the link below or scan the QR code to provide feedback!

<https://tinyurl.com/R4R-RDM-Feedback>



RDM Community of Practice

Are you interesting in joining a Community of Practice at Queen's that's focused on research data management?

If so ... please provide your name and email address [via this link](#) or by scanning the QR Code to join the community and learn more.



RDM Resources at Queen's

Policies

- Tri-Agency [Research Data Management Policy](#) (2021)
- Tri-Agency [RDM Policy FAQs](#)
- Tri-Agency [Statement of Principles on Digital Data Management](#) (2016)

Tools

- [DMP Assistant](#)
- re3data.org
- [Queen's Dataverse Collection](#) in [Borealis](#)
- [Borealis Demo](#)– Try it out!
- [FRDR](#)
- Lunarix (coming soon)

Resources

- [Queen's Data Champions](#)
- Queen's Library RDM [Guide](#)
- [FAIR principles](#)
- The First Nations [Principles of OCAP®](#)
- [CARE Principles](#) for Indigenous Data Governance

Summary resource document:
<https://guides.library.queensu.ca/rdm/RDM-Resources-List>

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**Digital Research
Alliance** of Canada

**Alliance de recherche
numérique** du Canada

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