LIVING DATA PROJECT

Rescuing Ecological Data from Extinction

Presented by Samantha Straus, PhD
Postdoctoral Researcher

Natural Sciences and Engineering Research Council of Canada
Conseil de recherches en sciences naturelles et en génie du Canada
Canada
cjee icéé
canadian institute of ecology and evolution
institut canadien d'écologie et d'évolution
THE UNIVERSITY OF BRITISH COLUMBIA
Université de Montréal
University of Regina
McGill

1) Certificates/coursework

Modules (1-credit each, 3 credit bundle)

- Productivity and Reproducibility in Research (Jason Pither, UBC-O)
- Scientific Data Management (Sally Taylor, UBC)
- Scientific Collaboration (Kerri Finlay, U Regina)
- Synthesis Statistics for Ecology and Evolution (Pollock, Sunday; McGill)

Certificate in Data Management and Reproducible Research

Certificate in Synthetic and Collaborative Science

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2) Data rescue Internships

Pair senior scientists with legacy datasets with LDP graduate students

Emeritus Professor, Dr. Tony Sinclair, works with former LDP intern, Francisco Henao-Diaz.

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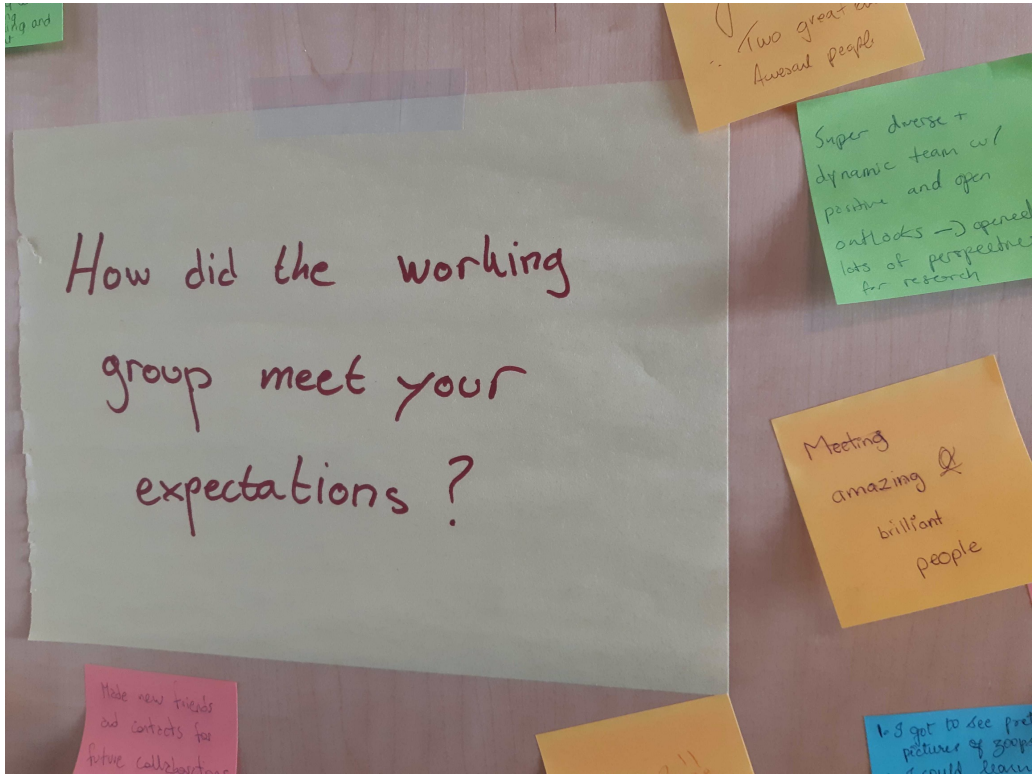
3) Working groups

Funding for week-long working groups that involve LDP students



What to learn more about data rescue?

Check out this recent paper by members of the Living Data Project!

Bledsoe, Burant, Higino et al. (2022). Data rescue: saving environmental data from extinction. Proceedings B.

Scan to get the Open Access paper!

Data rescue: saving environmental data from extinction

Ellen K. Bledsoe[1,2,3,†], Joseph B. Burant[1,4,5,†], Gracielle T. Higino[1,6,†], Dominique G. Roche[1,7], Sandra A. Binning[1,5], Kerri Finlay[1,3], Jason Pither[1,8], Laura S. Pollock[1,4], Jennifer M. Sunday[1,4] and Diane S. Srivastava[1,6]

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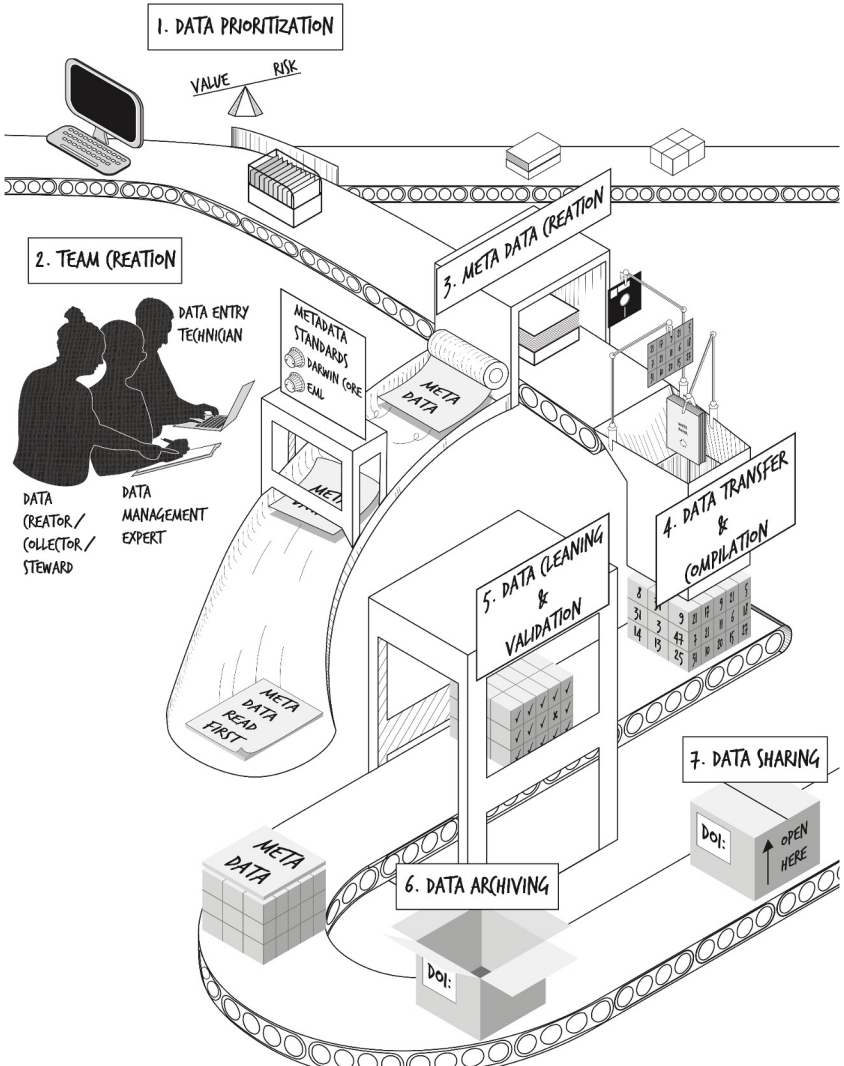
Historical and long-term environmental datasets are imperative to understanding how natural systems respond to our changing world. Although immensely valuable, these data are at risk of being lost unless actively curated and archived in data repositories. The practice of data rescue, which we define as identifying, preserving, and sharing valuable data and associated metadata at risk of loss, is an important means of ensuring the long-term viability and accessibility of such datasets. Improvements in policies and best practices around data management will hopefully limit future need for data rescue; these changes, however, do not apply retroactively. While rescuing data is not new, the term lacks formal definition, is often conflated with other terms (i.e. data reuse), and lacks general recommendations. Here, we outline seven key guidelines for effective rescue of historically collected and unmanaged datasets. We discuss prioritization of datasets to rescue, forming effective data rescue teams, preparing the data and associated metadata, and archiving and sharing the rescued materials. In an era of rapid environmental change, the best policy solutions will require evidence from both contemporary and historical sources. It is, therefore, imperative that we identify and preserve valuable, at-risk environmental data before they are lost to science.

7 steps to data rescue

1. Data Prioritization
2. Team Creation
3. Metadata Creation
4. Data Transfer & Compilation
5. Data Cleaning & Validation
6. Data Archiving
7. Data Sharing



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How to get involved

Apply for data rescue internships!

Propose topics or apply to participate in working groups!

Enroll in/encourage your students to enroll in graduate level courses!

Come see our documentary!

April 20th at 5pm
Université de Montréal
Carrefour des Arts et Sciences C-1017-02