

Stewardship of physical data: Use case and community engagement



Project Goals

ESIP supports a wide variety of work related to earth science information. One prominent group within ESIP is the Data Stewardship Committee. Outcomes from this committee include data citation recommendations, work on a data maturity matrix, and numerous publications etc. These outcomes focus on the broader concept of earth science data, typically relating to digital data, observations, etc. as opposed to the narrow topic of physical data. There are many other communities working on physical data such as RDA, the USGS, and EarthCube (iSamples and the CDF).

Given the overwhelming activities the DSC is working on, there is a need to explore an ESIP cluster to focus on this narrow subset and to act as a leader among this community. The project will develop a use case describing the existing issues related to stewardship of physical data and work on building connections between these diverse communities.

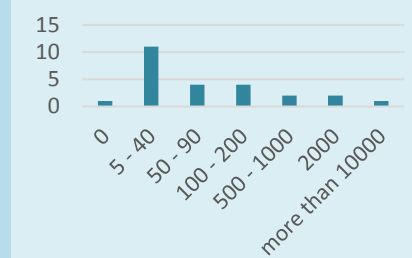
Use case State geological surveys

Objective: State level repositories that maintain physical sample collections which may be used as a guide for developing points of engagement or duplicating efforts at other similar institutions.



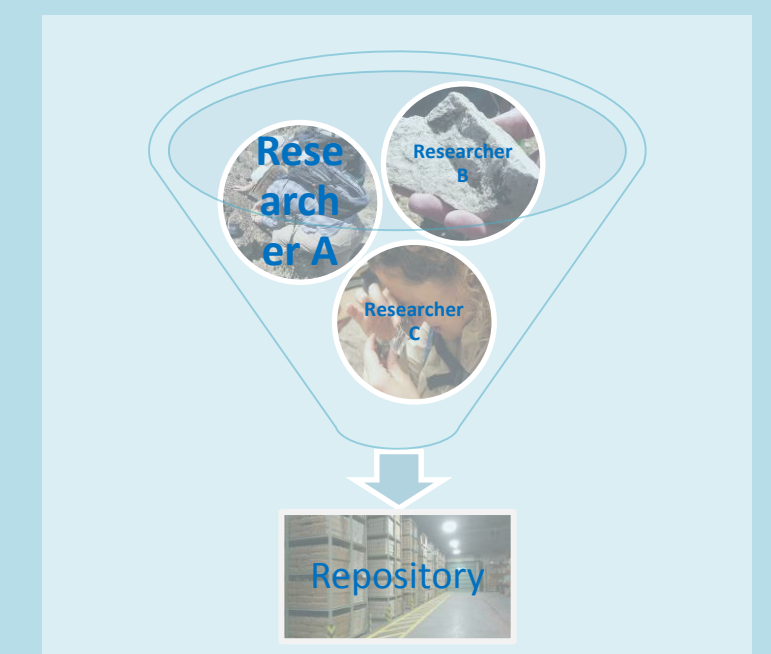
Outcomes: There is a documented need for improved funding and educational opportunities in relation to information and data management. This includes storage space as well as documentation of collection materials. It is important to note that collections with public access were not fully accessible based on these needs. 11 out of 27 respondents have less than 70% of their collections documented. This inhibits discovery and access of these collections.

Yearly visitors



Outside users of the collection

K-12 students and/or educators	19%
General Public	38%
University Students	88%
Regulatory Agencies	31%
Other Government Agencies	65%
Professional Researchers	88%
Private Sector	88%



There is a need for community development – a space where the information managers of these organizations can gather and learn from each other – ESIP?

Community engagement

Geological Society of America

Objective: Attend GSA. Present in session on engagement and meet with AASG representatives at their bi-annual meeting



Outcomes: Assisted with an EarthCube iSamples workshop on identifiers and workflows for physical objects. Presented on the need to engage the user community in cyber system development. Networked with AASG members at their booth. Attended Geoinformatics Division session and made valuable connections for this work.



Why GSA as opposed to AGU-ESSI

In discussions with leaders at GSA's Geoinformatics Division meeting the difference between small science and large scale system science was discussed. The audience for physical samples is not limited to small science, but this is where the current work and effort is coming from on this topic.



Research Data Alliance



Objective: Attend RDA: Engage other disciplines through BOF - Specifically other groups who manage physical data (sample materials etc.).

Outcomes: Helped organized "Persistently Linking Physical Samples with Data and Publications: A Matter of Reproducible Research" BOF session at the RDA 6th Plenary in Paris.

Over 25 attendees. From various fields such as:

- Material science
- Biodiversity
- Meteorology
- Astrophysics
- Neurobiology

Next steps from the BOF – we are working on a charter for an interest group.

