Introducing the importance of data management within the humanities and social sciences

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Antarctic Legacy of South Africa
Stellenbosch University, South Africa
People - Machinery - Infrastructure - Live - Survival
Data Management Workshop

Antarctic Connections at the End of the World: Understanding the Past and Shaping the Future through a workshop at SCHASS Conference in Ushuaia
At University of Tierra del Fuego

PROGRAM

<table>
<thead>
<tr>
<th>PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCADM, ADMS and AMD (background)</td>
</tr>
<tr>
<td>Research Data Management</td>
</tr>
<tr>
<td>Developing a data management plan (resources)</td>
</tr>
<tr>
<td>Process of preserving data/information</td>
</tr>
<tr>
<td>Importance of metadata</td>
</tr>
<tr>
<td>Creating access to data</td>
</tr>
<tr>
<td>Customised Data Management Plan (DMP)</td>
</tr>
</tbody>
</table>
Role of SCADM are:

- To promote long-term preservation and accessibility of data relating to Antarctica and the Southern Ocean in sustainable repositories,
- To assist in establishing Antarctic data management policies, priorities and best practices,

**SC-ADM coordinates the Antarctic Data Management System (ADMS).**

The ADMS is composed of:
- The Antarctic Master Directory (AMD)
- The National Antarctic Data Centres (NADCs)

The NADCs are a link between Antarctic scientists and the AMD. Antarctic scientists are responsible for creating metadata, but are also the major beneficiaries of the system.

The ADMS is a data index providing a unique, consistent and uniform source of information about all Antarctic data (multi-disciplinary and multi-national), no matter where they are located.

**AMD (Antarctic Master Directory)**  AMD: largest collection of Antarctic data set description in the world - over 7700.

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryosphere</td>
<td>1. Monitoring of glacial dynamics in Johnson Dock (Livingston Island) [CNDA-ESP_ANT95-1628-E]</td>
</tr>
<tr>
<td></td>
<td>2. Physical parameters in the study of atmosphere/permafrost interaction to describe the annual active layer evolution. Livingston and Deception islands [CNDA-ESP_ANT1998-0571]</td>
</tr>
<tr>
<td>Human Dimensions</td>
<td>1. San Telmo: the archaeological investigation in the Antarctic in order to locate the wreck of the Spanish ship San Telmo, to identify it and examine the environment (archaeology) of the wreck resting site. [CNDA-ESP_ANT92-1360-E]</td>
</tr>
<tr>
<td></td>
<td>2. Study of the benthic fauna and flora of the seabeds in southern area of Livingston Island [CNDA-ESP_93-94-0996-1161_16-21]</td>
</tr>
<tr>
<td>Land Surface</td>
<td>1. Physical parameters in the study of atmosphere/permafrost interaction to describe the annual active layer evolution. Livingston and Deception islands [CNDA-ESP_ANT1998-0571]</td>
</tr>
<tr>
<td></td>
<td>2. Previous planning and studies for the accomplishment of geologic map of the island James Ross [CNDA-ESP_ANT95-0924-E]</td>
</tr>
<tr>
<td>Oceans</td>
<td>51. Hesperides Microbiological Campaign: collection of genetic material, measurement of microbial processes, and the analysis of temperature effects [CNDA-ESP_ANT97-1155-HE52]</td>
</tr>
</tbody>
</table>
Data Management Plan - DMP

A data management plan is a formal document that outlines what you will do with your data during and after a research project.

Most researchers collect data with some form of plan in mind, but it's often inadequately documented and incompletely thought out.

Many data management issues can be handled easily or avoided entirely by planning ahead.

With the right process and framework it doesn't take too long and can pay off enormously in the long run (https://dmptool.org/general_guidance)

(http://www.dcc.ac.uk/dmponline)

IMPORTANT MESSAGE (TIP)
Collaborate and work together with your own institution data and information services, either the institution library or data management centres

YOU DO NOT NEED TO BE THE DATA MANAGER
For research teams to enjoy the full benefit of the research data that is produced, institutions must put in place skilled digital curators and effective curation lifecycle management. This will help to ensure that important digital research data is adequately safeguarded for future use.  

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http://www.dcc.ac.uk/digital-curation
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**IMPORTANT MESSAGE (TIP)**

Customise process for your environment, make the process to enhance your research and not create more work.
**Importance of Metadata**

“a set of data that describes and gives information about other data”

- ISO Standards and Qualifiers
- DSpace Qualifiers
- Unique Qualifiers
- SCADM Metadata guidelines
- Countries Metadata Guidelines

**Example of Metadata**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filename</td>
<td>filename(all small caps/space is underscore_)</td>
</tr>
<tr>
<td>Contributor.author</td>
<td>Surname, Initials. (title)</td>
</tr>
<tr>
<td>Coverage.spatial</td>
<td>Geographical area</td>
</tr>
<tr>
<td>Date.created</td>
<td>Time of event or timeframe</td>
</tr>
<tr>
<td>Description</td>
<td>Short description of event or abstract</td>
</tr>
<tr>
<td>Title</td>
<td>Descriptive title of image or title of document</td>
</tr>
<tr>
<td>Sponsorship</td>
<td>Indicate if sponsorship is applicable</td>
</tr>
<tr>
<td>Statementofresponsibility</td>
<td>Research Project name</td>
</tr>
<tr>
<td>Language</td>
<td>Language especially in regards to documents</td>
</tr>
<tr>
<td>Rights.holder</td>
<td>Indicate Copyright holder</td>
</tr>
<tr>
<td>Rights</td>
<td>Copyright</td>
</tr>
<tr>
<td>Subject</td>
<td>Keywords</td>
</tr>
<tr>
<td>Type</td>
<td>Format of entry, image/map/artefact/diary etc</td>
</tr>
<tr>
<td>Constraints.uselimitation</td>
<td>Copyright statement</td>
</tr>
<tr>
<td>Distributorcontact</td>
<td>Indicate owner</td>
</tr>
<tr>
<td>Format.name</td>
<td>Format (jpg/pdf etc)</td>
</tr>
<tr>
<td>Deliverypoint</td>
<td>Physical address</td>
</tr>
<tr>
<td>Electronicmailaddress</td>
<td>Contact email</td>
</tr>
</tbody>
</table>

**IMPORTANT MESSAGE (TIP)**

Metadata needs to enable you to get your information back (garbage in - garbage out)
Information (data) Access

OPEN ACCESS

Berlin Declaration – 2003 - Budapest Statement:

• By 'open access' to this literature, we mean its free availability on the public internet,
• the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited

"Scientific observations and results from Antarctica shall be exchanged and made freely available." section III.1.c

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• where human subjects are involved, confidentiality must be protected;
• where data release may cause harm, and where specific aspects of the data may need to be kept protected.
Information (data) Access

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Information (data) Access

**Private Items**

Welcome to the item management page. From here you can withdraw, reinstate, move or delete the item. You may also update or add new metadata / bitstreams on the other tabs.

Item Details:
- **Item Internal ID:** 2081
- **Handle:** 123456789/2102
- **Last Modified:** 2016-04-06 14:16:33.363
- **Item Page:** [URL]

**Edit Item's authorization policies:**
- Authorizations...

**Withdraw item from the repository:**
- Withdraw...

**Move item to another collection:**
- Move...

**Make item private:**
- Make it private...

**Completely expunge item:**
- Permanently delete

**Return**

---

**Embargo Items**

Policies for item 123456789/2102 (ID=2081)

With this editor you can view and alter the policies of an item, plus alter policies of individual item components: bundles and bitstreams. Briefly, an item is a container of bundles, and bundles are containers of bitstreams. Containers usually have ADD/REMOVE/READ/WRITE policies, while bitstreams only have READ/WRITE policies.

You will notice an extra bundle and bitstream for each item containing the license text for the item.

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Action</th>
<th>Group</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>215377</td>
<td>huntley_brian_transcript.pdf</td>
<td>READ</td>
<td>Anonymous</td>
<td>[Edit]</td>
<td></td>
</tr>
</tbody>
</table>

[Add a new Bitstream policy]
Customised Data Management

These questions are now clarified and every researcher (or research project) need to answer these questions when starting or assessing their data/information situation

- Why do I need to manage my data and why does it need to be organised?
- In what form/type is my data currently?
- What do I want the outcome to be of this data management?
- Will I be able and do I have the resources to create a data management tool?
- What will the access be to my data (rules)?
“even the most brilliant scientific discovery is of little value if not communicated widely and accurately”

Maria McNutt

"The early researchers did not think that at one time what they were doing would become history, but today we are globalizing that history. The opportunity is now there for South African and international academics to discuss and critically evaluate how researchers with Antarctic interests can fruitfully use the growing accessibility of diverse source material to further research."

Cornelia Lüdecke - 2011

- Destruction of heritage is an attack on the history of humankind.
- There is no culture without people and no society without culture.
- Digitization can keep the information value of threatened archives alive.
- After a conflict, heritage can be a starting point for rebuilding a common identity.
- Preserving heritage helps to understand the past and build a future.

*(photo exhibition "Culture Under Attack," organized by the Netherlands National Commission for UNESCO)*
Social Science and Humanities Data Management

- Do we have a policy in SC HASS
- Representative on SC HASS and SCADM
- How do we link all countries together
- Create an Action Plan /Group

**Action Committee:**
- Create Policy within SCADM
- Create Links on HASS website
- Add necessary links for resources

**Individual (projects):**
- Identify materials
- Collaborate with institution
- Create a system
CONCLUSION & COMMENTS

All attendees received a Memory stick with

- relevant articles
- Data management plans
- Presentation of workshop

Presentation may be distributed but with acknowledging the following:
South African National Antarctic Programme
Antarctic Legacy of South Africa Project
MPOlivier, Principal Investigator, SANAP
Standing Committee on Antarctic Data Management
CONCLUSION & COMMENTS

FUTURE:

Polar Data Forum create a working group for social sciences and Humanities that will include all other disciplines that are not natural sciences. This working group can establish the following:

- Create a set of metadata to be used for these disciplines
- Create and maintain a Reference repository of resources
- Advise countries in maintaining a social science and humanities repository

Thank You