4.2. Communities of practice (GOVERNANCE)

dhobern #1 March 27, 2020, 11:11am

> This is topic 4.2. in the *Governance* section of the ***Advancing the Catalogue of the World's Natural History Collections*** consultation. Use this topic to discuss the questions listed below.

Background
Communities such as IH, CETAF, ALA, iDigBio, etc. play an important role supporting collections and promoting standards-based practices. In many cases, these communities have a high level of understanding and participate closely in the development of biodiversity informatics solutions. Their roles and rights need to be well defined and supported in any integrated solution.

Other materials

The following contributed presentation is particularly relevant to this topic:

- **Presentation: Index Herbariorum - Perspectives of a Long-Standing Collection Catalog**

Questions

- What do these communities require to be able to carry out their work efficiently and support their collections?
- How can an integrated approach enhance their offerings?
- What risks need to be addressed?

Presentation: Index Herbariorum - Perspectives of a Long-Standing Collection Catalog

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建立《全球自然历史馆藏名录》

Faire Avancer le Catalogue des Collections d'Histoire Naturelle du Monde

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Collections Catalogue - Daily Summaries

Adelantando el Catálogo de Colecciones de Historia Natural del Mundo

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Integrated summary from 17 to 30 April 2020

Adelantando el Catálogo de Colecciones de Historia Natural del Mundo

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Advancing the Catalogue of the World's Natural History Collections

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mswoodburn #4 April 23, 2020, 5:45pm

Areas where the communities (regional, disciplinary etc) overlap is one of the risks to address - for example, a European herbarium might be part of the IH community, the CETAF community and the DiSSCo community. There's a risk of duplication of effort for that institution if those communities don't work together to make their collection catalogues complimentary and interoperable. People generally don't want to provide the same data in more than one place, and there's a risk to each of the communities if they're having to compete for that limited resource.

1 Like

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elyw #5 April 24, 2020, 8:39am

In the Australian context (and I can only speak on that for this question) ALA would certainly play a role of ‘knowlege disseminator’ to bridge between global initiatives and local responsibilities.
Having a ‘champion’ that can act as that knowledge broker might be a way to approach the problem? GBIF already has other ‘champions’ communities so this could be another opportunity?

1 Like

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Integrated summary from 17 to 30 April 2020

agosti #6 April 27, 2020, 7:10am

I would consider the publishers as part of this community. They are most likely one of the biggest users of collection codes in publications, and in fact there must be a great interest from the collections community to promote an increased usage of collection codes in publications.

At the same time, the publishers are an important source of collection data that is not in GRScicol, such as data of private collections, alternative acronyms of the same collection, such as BM for NHM for NHMUK that also changed through time.

Finally, publishers also provide the provenience of data, such as this collection code has been publihsed in this article in this taxonomic treatment in this material citation, each of it can be cited using a persistent identifier.

What needs to be addressed is that publishers and this group works more closely together to promote the usage of collection codes to serve the best linking of the two sources. The risk of not collaborating is that collections will have a continued deficit on understanding the use of their data.

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Integrated summary from 17 to 30 April 2020

Debbie #7 April 28, 2020, 4:52am

I think this is a huge opportunity for **@SPNHC** @barbaraThiers 👆

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Integrated summary from 17 to 30 April 2020

neilcobb #8 April 28, 2020, 4:28pm

The NSF-ADBC program revealed one important fact…taxonomy matters! Almost all of the thematic collection networks were taxonomically defined. You really want to engage mycology collections in North America then include the MycoPortal people.

Collections Catalogue - Daily Summaries

Integrated summary from 17 to 30 April 2020

Adelantando el Catálogo de Colecciones de Historia Natural del Mundo

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igladstone #9 April 29, 2020, 8:08pm

*How can an integrated approach enhance the offerings of communities of practice?

The Natural Sciences Collections Association (NatSCA) is the UK Subject Specialist Network for natural science collections. As part of our work we hold data on collections across the UK & Ireland, promote standards and training, and maintain communication networks.

We would welcome an integrated approach to institution and collection-level data, for example extending GRSciColl's approach and incorporating TDWG CD standards, to make the catalogue data we hold on/for our community more visible, discoverable, connected and useful. For example, we hold impressive data sourced by UK community initiative FENSCORE in the 1980s-90s – thousands of collector/institution-based records including geographical and taxonomic scope, size, published references, etc., now effectively siloed due to outdated infrastructure. As we seek to revive this, we are looking to an integrated solution to enhance sustainability and use.

An integrated global catalogue would also offer our community enhanced opportunities for international connectivity – for example around world collections held across the wider UK (if the catalogue extends to collection-level descriptions).

*What do these communities require to be able to carry out their work efficiently and support their collections?

Communities of practice like NatSCA's can help make global initiatives 'real' locally – using established networks and infrastructure to help maintain data or promote best practice.

In NatSCA's case, we require more biodiversity informatics expertise to make our catalogue data more effective for external users (e.g. to facilitate research or collaboration opportunities), and are connecting to UK centres such as NHM Digitise to enhance this.

Our collections community benefits from user-friendly 'ways in', low-cost solutions and minimum duplication of effort – even large significant UK collections can be an early stage of the biodiversity informatics journey, or may have low in-house resource.

NatSCA use our catalogue-type data ourselves in advocacy (promoting significance of wider UK collections) or to monitor sector health (including collections at risk, staffing resource, storage / care needs). This means we have needs for linked data that may be outside that of a world catalogue.

*What risks need to be addressed?

Sustainability. Overload. Lack of engagement.

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bsterner #10 April 29, 2020, 11:05pm

I'm very excited to see communities of practice be explicitly incorporated into governance, but I'm not clear yet on what they're about. According to Wenger's (2000) discussion, communities of practice are held together by a shared interest in learning and improving a particular practice. They often cross organizational units, either within an institution (e.g. people from different units of a business) or across institutions (e.g. people in the same industry working at different businesses). Typically communities of practice arise organically and can't be implemented top down, but they can be fruitfully encouraged or prohibited by organizational leadership and culture.

A fully centralized governance model for the catalogue would therefore be unlikely to do much to create or support existing communities of practice around the description and operations of collections. On a more distributed model, the crucial point would be engaging with groups of people who already have a shared identity that specifically includes improving access to and knowledge about collections. Engaging local communities of practice seems likely to drive more volunteer contributions to expanding and maintaining the collections catalog.

Support for these groups could include things as simple as providing dedicated meetings, infrastructure, or advice for activities they already prioritize and have started working on. Some of the other comments point to professional society focused on particular taxonomic groups, for example, or working groups that have come out of various national/regional museum initiatives. To be clear, these communities of practice are not identical to the people or organizations involved with IH, CETAF, or ALA, etc.

Wenger, Etienne. 2000. "Communities of Practice and Social Learning Systems." *Organization* 7 (2): 225–46. doi:10.1177/135050840072002.

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dhobern #11 April 30, 2020, 2:10am

Thanks @bsterner . To be fair, the use of the term "communities of practice" here is probably rather sloppy - something for which I take responsibility. I see this mainly as a recognition that we need to find a model that avoids the possible pitfalls you identify in your post on **Topic 4.4 Governance Arrangements**.

I find it easiest to approach this from the aspect of GBIF's role. I realise that this reflects my own biases and may make me blind to some aspects, but I do think it's helpful.

GBIF has a role both as an aggregation point for information on biodiversity and as a facilitator for the community of biodiversity stakeholders represented by the GBIF Participants (although of course GBIF aims to be a global public good and serve other stakeholders as well).

The role as an aggregation point addresses the fact that, in a complex field such as biodiversity research, there are *some* use cases that cannot be properly satisfied or that are seriously compromised if there is no efficient way to search for and relevant information regardless of where it is held. GBIF's role in trying to facilitate

discovery of all spatiotemporal evidence for the occurrence of species is an example of this. A comprehensive aggregation point can vastly simplify data access for many purposes. In the same way, a comprehensive look-up service for discovering “all” natural history collections plays a role and can answer questions that a multitude of partial collections cannot address. Some of these questions are of course important for GBIF for its other data management activities, but the ability to slice this information in many different ways and the ability to offer resolution services around a comprehensive resource will support many platforms and researchers.

However, GBIF does not itself need to support *or take ownership for* all of the domain-specific or national requirements that are important to IH, ALA, GGBN, CETAF and other communities. All of these have needs that probably include the common elements needed by GBIF but also have additional needs and may have learned lessons of their own that do not apply to the other communities.

GBIF’s second role as a facilitator for the whole GBIF community means that it has a strong interest in helping each of these communities achieve their goals. This means that, as GBIF works out how to achieve the data integration it requires around collection information, it will aim as far as possible to do so in ways that also benefit these other communities.

In some cases, the balance of interests is best met by GBIF assuming responsibilities that are not strictly part of its own mandate or mission - the adoption of the whole of GRSciColl (rather than just GRBio) is an example of this. In the same way, this consultation has partly been to understand in which ways the GBIF/GRSciColl core should be extended to take responsibility for what to GBIF are peripheral needs. If this means that the resulting “central catalogue” simplifies life for one or more communities, then it may make sense to aim for a unified solution/implementation.

In other cases, for GBIF to try to solve the problems of other communities would be inappropriate, undercutting the ability of these communities to remain sustainable and to serve their own constituents. This means that the overall approach to building a global catalogue will almost certainly at some level be a mosaic that federates across different communities and services, each with their own focus and strengths.

You are correct that IH, CETAF, ALA, etc. are themselves organisations rather than strictly “communities of practice” but each of these to a variable extent is the expression of a sense of community bringing together a subset of collection stakeholders. Each of these has its own vision, goals and needs. I hope that we can use a model of overlapping communities to strengthen all of these, while bringing their core information together as a comprehensive global catalogue (whether genuinely unitary or more accurately federated) to support the services that require such a centralised endpoint.

4.4. Governance arrangements (GOVERNANCE)