GRSciColl: What is the Global Registry of Scientific Collections and How to Contribute?

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Abstract

The Global Registry of Scientific Collections, GRSciColl, is a community-curated clearing house of collection information. It was originally developed and maintained at the Smithsonian Institution and now lives in the Global Biodiversity Information Facility (GBIF) registry (see this news item).

GRSciColl contains information about physical scientific collections: their content, location, contacts as well as information about their associated institutions. It is also a reference for institutions and collections codes and identifiers such as ROR (Research Organization Registry) and GRID (Global Research Identifier Database) identifiers.

Anyone can access the information available on GRSciColl via the website and the GRSci Coll API (called Collections API). Institutions and collections are searchable by attributes such as country, city or preservation types and the GRSciColl lookup service can resolve institution and collection-codes and identifiers.

GRSciColl and its lookup service can help improve database interoperability and enable links with other systems. A practical application is the linking of specimen-related occurrences, published on GBIF, with institution and collection entries on GRSciColl (see this example). The process happens automatically during occurrence interpretation, based on the institution and collection codes and identifiers. Specimen-related occurrences are then aggregated under their GRSciColl-registered collections and institutions, regardless of
the way they were published on GBIF. This can help users and institutions get an overview of the collections digitization progress, whether through their own initiative, or from datasets contributed by other data publishers.

Furthermore, the ability to get an overview of institutions and collections by country can help guide some of the data mobilization efforts by national organizations. In this presentation, we will share our experience with setting up a workflow to identify institutions in underrepresented regions which could potentially share specimen-related occurrences on GBIF.org.

Institutions can use GRSciColl to make their work and collections more visible and discoverable. This visibility isn’t limited to GBIF, for example, the Integrated Digitized Biocollections (iDigBio) uses GRSciColl to maintain the collection information displayed on their portal.

The information in GRSciColl is maintained by a community of editors, including representatives from the registered institutions.

The simplest way to contribute to GRSciColl is to use the suggestion system to update, add or merge records. This suggestion system is available to anyone and suggestions will be reviewed by the relevant people before being applied.

A number of GRSciColl records are maintained in external sources. GRSciColl synchronizes every week with Index Herbariorum, which automatically adds new entries. In addition, the metadata of datasets published on GBIF can be used as a source of information for GRSciColl collections. Once a GBIF dataset is linked to a GRSciColl collection, any update to the dataset metadata will update the collection record.

The GRSciColl permission model also allows institutions and national organizations like GBIF Nodes to become editors or mediators. Those roles allow users to maintain entries at the collection, institution or national level. For example, GRSciColl currently has 27 mediators able to edit records, handle information sources and apply suggestions for 15 countries as of June 2022.

The Collections API can also be used to update GRSciColl records. So far this year, three countries have used this system to update GRSciColl records based on their national registries.

By working together with the community, we want to ensure GRSciColl becomes and remains a tool that they can rely on.

There are many ways to get involved with GRSciColl:

• Anyone can check their institution and collection entries and suggest updates or additions via the suggestion buttons in the GRSciColl interface.

• You can become a registry editor on behalf of your institution or collection.
• If you work with a National registry and are interested in sharing the data on GRSciColl, please contact us at scientific-collections@gbif.org.

• Tell us how you would like to use the registry and GRSciColl. You can contact us by email (scientific-collections@gbif.org) or via our GitHub repository.

• You can become a volunteer translator to make the GRSciColl forms accessible in more languages.

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GBIF, community, editors, API, specimens, digital collection, collection code, collection identifier, institution code, institution identifier

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