

Initiatives to the Global Representation of Scientific Collections

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Abstract

Ensuring that all global scientific collections become accessible online is a challenge. [The Global Biodiversity Information Facility \(GBIF\)](#) maintains a [Global Registry of Scientific Collections \(GRSciColl\)](#) but as of May 2023, 58% of the collections included in the registry were from institutions based in Europe or North America. This shows a low representation of organizations from other regions.

GBIF is addressing the bias with the help of its [participant network](#) and regional support teams. The GBIF participant network is actively encouraging institutions in its regions to register and describe their collection data through GBIF and GRSciColl. To complement this effort, the regional support teams based in Africa, Asia, Latin America and the Caribbean, and Europe are engaged in mobilizing new collections and updating existing ones (Fig. 1). In addition, a community of editors review changes proposed via a user suggestion system and keeps the entries in GRSciColl updated.

The work of the regional support teams involves reviewing institutional web pages or other available online sources to update GRSciColl entries. In cases where the data are not accessible on the web, contacts from the institutions are invited to suggest changes to their GRSciColl pages. As a next step, institutions are contacted to inquire about their interest and plan for sharing open access data. If the response is positive, technical support is offered to help the institutions mobilize and publish the collection data through GBIF.

The regional support teams have contacted a number of institutions and several institutions have shown interest in publishing collections on GBIF. Some organizations have already started digitizing and publishing their collection(s). With the training and technical support from the regional support teams, the following institutions have started to share data on GBIF:

- [Instituto de Biodiversidad de Venezuela - INBIO](#) has published data on 23,414 herbarium specimens.
- [Natural History Museum, Tribhuvan University, Nepal](#) has started digitizing its collections and has published [eight datasets](#) constituting 1,776 specimens.
- [National Museum of Natural History at the Bulgarian Academy of Sciences](#) has started digitizing 31 out of its 32 collections, of which they have published two herbarium collections represented as two datasets consisting of over 6,357 specimens.

This presentation will highlight the data mobilization activities of the institutions, the progress of the GBIF regional support teams (Fig. 2), and the opportunities and challenges experienced in the mobilization effort.

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biodiversity data, data mobilization, specimen, open access

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Figure 1.

GRSciColl Workflow: Begins with updating the GRSciColl institution and collection entries, checking whether they have published any data from their collections on GBIF and finally providing technical support to the institutions interested in sharing the collection data on GBIF.



Figure 2.

Progress of GRSciColl work: Out of 2439 GRSciColl institutions from Asia, Africa, Latin America and Caribbean, and Europe, information on 453 organizations has been updated with 80 duplicate institutional entries merged and updates on 563 institutions are in progress. Contact has been established with 84 institutions and, as a result, 16 institutions are in the process of mobilizing their collections. Among them, 3 institutions have already published data on 31,547 specimens in total.