Leveraging the Symbiota Support Hub for Biodiversity Data Mobilization

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Abstract

Symbiota is an open source software for managing and mobilizing biodiversity data from physical and virtual collections. Over 700 natural history collections use Symbiota as their primary content management system, and over 600 additional collections use Symbiota portals to mobilize a copy or subsamples of their data for use by specific communities of expertise. For both "live-managed" and "snapshot" collections, Symbiota provides data import, export, and publishing tools to lower data mobilization barriers. For example, collections in Symbiota portals can publish their data directly to the Global Biodiversity Information Facility (GBIF) and Integrated Digitized Biocollections (iDigBio) using Darwin Core Archive protocols for data sharing, obviating the need to install or host local Integrated Publishing Toolkit (IPT) instances. Over 150 institutions currently use this workflow to publish datasets to GBIF. The strengths of Symbiota's approach to mobilization are part technical and part social. Once a collection has data in a portal, using the portal's built-in data mobilization tools requires little technical expertise, and Symbiota portal managers are typically very accessible and helpful in assisting with the process. With sustained funding of the iDigBio Symbiota Support Hub, we are increasing the capacity of Symbiota to mobilize biodiversity through (1) improved documentation regarding the data mobilization process (https://symbiota.org/docs); (2) increased capacity for individualized attention to users through a larger service team and a robust help desk system; (3) the launch of "Portal Advancement Campaigns"-targeted efforts to promote data quality and mobilization (e.g., publishing to data aggregators); and (4) the development of an API infrastructure to enhance data interoperability and accessibility. We provide an overview of these new technologies and services for promoting and assisting with data mobilization, and we discuss future developments.

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