

## **Biodiversity Heritage Library: Co-creating global natural history networks**

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Abstract:

The Biodiversity Heritage Library (<http://www.biodiversitylibrary.org/>) was organized to digitize, serve, and preserve the legacy literature of biodiversity with a policy of open access. The BHL grew out of an identified market need to make the published literature of biodiversity available for free to a global audience. As much of the legacy literature on biodiversity is available in only a few select libraries in the developed world, this wealth of knowledge had only been available to those few who could gain direct access to significant library collections. Especially in the case of developing countries, the literature about the biota existing in these places is often not available within their borders. Biologists have long considered that access to the published literature is one of the chief impediments to the efficiency of research in the field. Free, global access to digitized versions of the literature not only repatriates

information about the earth's species to all parts of the world, but makes it available on a large scale for the general public and citizen scientists.

The BHL started as a small consortium of natural history, botanical and research libraries in the US and UK in 2005. By adopting a rapid prototyping approach to developing an open access digital library, the BHL created a product that has inspired a global movement. Largely driven from the ground up, and without any institutional mandate to expand, the BHL has successfully and organically executed a low overhead business model. Promoting flexibility, creativity, and trial-and-error problem solving, the Biodiversity Heritage Library attracts new partnerships by making it easy to get involved. New BHL nodes are free to shape their own expression of the project so long as they adhere to the principles of open access and open data. BHL-Europe, for example, delivers content to Europeana in order to integrate natural history content into context with cultural heritage materials.

Now, various BHL nodes across Europe, Australia, China, Egypt and Brazil share the common motivation to liberate the content essential to biodiversity scholarship from the printed page and plug it into a networked environment. BHL nodes share the work by contributing content and technology from their own cultural and political backgrounds. This has the potential to create a sea change in natural history institutions, particularly ones that have traditionally had less access to information, now have a digital repository upon which to extend their collections and implement new data services. Going beyond free and open access to the digitized texts, the BHL provides data export services and application programming interfaces (APIs) that allow the taxonomic names and bibliographic data associated with the content to be creatively re-used by other technology projects. This is critical to connecting content throughout the cycle of research.

Currently BHL delivers more than 34 million digitized pages. BHL capitalizes on features such as taxonomic intelligence, user feedback, and an article repository to deliver and refine services. This demonstration will show the global linkages, collaborative tools, and user experience that forms the global Biodiversity Heritage Library.