Diana Rosenthal

American Museum of Natural History | Pratt SILS

The Biodiversity Heritage Library: Open Access at Work

BHL Biodiversity Heritage Library

Introduction

The Biodiversity Heritage Library (BHL) is an open-access archive created by a consortium of natural history and botanical science libraries in 2006.

Members of the BHL cooperate to digitize and host the items within their collections that concern biodiversity.

The BHL currently operates primarily in the U.S., though it is rapidly spreading to other countries and continents. Recently, outfits in Europe, China, Australia, Brazil, and Africa have been created.

The main focus of the BHL is digitizing biodiversity items in the public domain, as well as those materials for which copyright permission has been obtained.

As of May 2014, nearly 139,000 volumes had been digitized.

History of Open Access

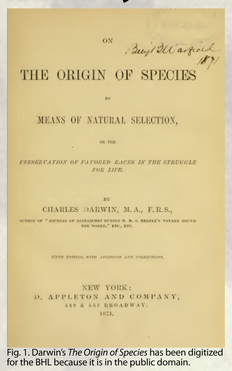
ON
THE ORIGIN OF SPECIES
BY
MEANS OF NATURAL SELECTION,
OR THE
PRESERVATION OF FAVOURED RACES IN THE STRUGGLE FOR LIFE.
BY
CHARLES DARWIN, M.A., F.R.S.,
NEW YORK:
D. APPLETON AND COMPANY,
549 & 551 BROADWAY.
1871.

Fig. 1. Darwin's *The Origin of Species* has been digitized for the BHL because it is in the public domain.

"'Open Access' literature is digital, online, free of charge, and free of most copyright and licensing restrictions" (Suber, 2013).

Widespread availability of the Internet in the 1990s inspired scholars to make journals available online for free, which coincided with journal price inflation.

The Budapest Open Access Initiative of 2002 set the wheels in motion for mass digitization of scholarly work.

Among the first open-access websites were arXiv.org, the Public Library of Science (PLoS.org), and the Social Science Research Network (SSRN.org), which focused on disseminating article preprints. Today, portals like BHL and the Internet Archive host public-domain works, and publications like PLoS ONE function as born-digital open-access journals.

Biodiversity Heritage Library

Fig. 2. Map showing United States-based Biodiversity Heritage Library consortium members (red), affiliates (blue), and contributing collections (yellow). Some locations are too close together to be distinguished (i.e. different branches of the Harvard libraries).

The BHL exists to serve a specific research population whose usage of historic literature is essential to its work.

The majority of biodiversity literature exists in hard copy within the United States.

This creates a wide access gap to the public-domain literature within the biodiversity discipline, restricting the knowledge of these subjects to researchers within North America and Europe, and therefore excluding the rest of the world.

The project is funded by grant money; the primary funding came from Encyclopedia of Life through a grant from the John D. and Catherine T. MacArthur Foundation. In 2013, BHL was awarded a grant from National Leadership Grants for Libraries in the amount of $449,641 (BHL Quarterly Report, 2013).

Researchers in 233 countries have utilized biodiversity materials provided by BHL. The BHL uses Countersoft's issue-tracking Gemini product to record clicks registered on the BHL website, the BHL blog, Digital Object Identifier clicks (through BioStor), and social media sites like Flickr and Facebook (BHL Quarterly Report, 2013).

BHL has some room for improvement in areas like searchability, metadata, and customer service. Some users have struggled with the OCR features related to taxonomic databases and others have found inconsistencies in the dowloadable material. Critics believe the BHL would be better served with a more robust full-time staff.

Fig. 3. This word cloud was generated using the text from Rosenthal's 2014 research paper on this topic and the website Tagul.

Digitization

The BHL partnered with the Internet Archive (IA) to digitize literature to the standards developed by the IA.

Fig. 4. Photograph of a Scribe machine, from the Internet Archive scanning offices.

The material digitized utilizes the Scribe machine and IA's software, which creates images of a higher quality than traditional scanners or cameras. By providing access to biodiversity materials, BHL members get free scanning.

Conclusions

The Biodiversity Heritage Library is one example of an open-access digital library working to provide users with a point of entry to rich legacy literature that is essential to the growth of the discipline.

The global expansion and widespread usage of BHL are indicators that it is currently meeting its goal of disseminating biodiversity research materials. The BHL could serve as model for other open-access discipline-specific digital portals in the future.

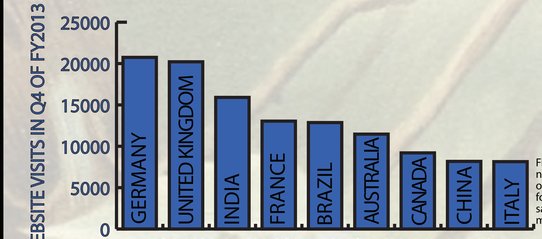

Fig. 5. Bar graph showing top usage numbers of BHL materials among countries other than the United States during the fourth quarter of fiscal year 2013. In the same timespan, the United States had more than 82,000 website visits.

References[1]

Biodiversity Heritage Library. (2014). Retrieved April 21, 2014, from http://www.biodiversitylibrary.org/

Biodiversity Heritage Library. "Biodiversity Heritage Library quarterly report: July–September 2013," 2013.

Suber, P. (2013). Open access overview. Retrieved April 04, 2014, from http://legacy.earlham.edu/~peters/fos/overview.htm

[1] Full list of references consulted for this project available upon request.