



April-June 2012

Biodiversity Heritage Library

Quarterly Report



Biodiversity Heritage Library

The Biodiversity Heritage Library is a growing international consortium, with program nodes in Europe, Australia, Brazil, Egypt, and China, as well as the US and UK. This quarter we celebrated these global achievements and planned for continued global growth and prosperity with the BHL-Europe, BHL-Global, and BHL-Africa meetings, held June 4-15, 2012, in Berlin, Germany and Cape Town, South Africa.

On April 30, 2012, the EU funded BHL-Europe project officially came to a close. To celebrate the project, BHL-E hosted a variety of workshops and meetings June 4-5, 2012, in Berlin, Germany, attended by representatives from around the globe, including 12 US/UK project members. The events included a Symposium on Communicating Biological Diversity (June 4) and a BHL-Europe Demonstration and Training Workshop (June 5). The Communicating Biological Diversity event, a joint symposium with GTI and NeFo, aimed to inspire discussions among interested stakeholders regarding the current biodiversity and taxonomic knowledge environment and biological diversity education. On June 5, BHL-Europe hosted a workshop for the BHL-Europe portal, soon-to-be officially launched. BHL-E will provide multi-lingual access to content scanned by European and global BHL partners while also supporting common name searching, search within text, faceted searching, and alternative search term recommendations.

June 7-8, 2012, BHL-Europe hosted the third annual BHL-Global meeting at the Museum für Naturkunde. Representatives from nearly all BHL-Global (gBHL) nodes participated, including Europe, the US, Australia, Brazil, and Egypt. Partners provided project updates and engaged in crucial discussions regarding project sustainability, content synchronization and replication, communication and outreach collaboration, and workflow, scanning, and licensing cooperation. Significant outcomes included the approval of BHL-Global bylaws, as well as the election of an Executive Committee for the BHL Global Coordinating Committee. Elected Executive Committee members include Ely Wallis (BHL-Australia) as Chair, Henning Scholz (BHL-Europe) as Vice-Chair and Nancy Gwinn (BHL-US/UK) as Secretary.

On June 14-15, 2012, over 25 librarians, scientists and information technology managers came together at Kirstenbosch National Botanical Garden to discuss the development of a BHL node in Africa. Six representatives from the BHL U.S./U.K. node were present to provide an introduction to the BHL, report on the current



global environment and lead important breakout discussions regarding various administrative and technical aspects of the BHL. By the conclusion of the meetings, attendees had drafted a "Concept Document" for a BHL-Africa, which will be presented to leadership at various institutions in order to secure consortium commitment and influence the creation of an MOU. A finalized MOU is scheduled to be completed by November, 2012, where, in conjunction with the Berlin10 conference in Cape Town, BHL-Africa will be officially announced.

The future for global BHL is bright, with the addition of new nodes on the horizon and the commitment from existing partners to continue development, seek additional funding, and explore additional opportunities for collaboration. We believe it is critical to liberate biodiversity knowledge in all parts of the world for the global community. One BHL project at a time, we're working towards achieving that goal.



BHL SciELO in Washington

In April, 3 representatives from BHL SciELO in Brazil visited the Smithsonian Institution to discuss technical and workflow related issues with SI and MOBOT staff. SciELO plans to ramp up their scanning operations through the use of 5 new scanning machines. Content will be uploaded to Internet Archive, where it can be shared with other global BHL partners.

JSTOR Content in Citebank

In May, BHL ingested nearly 30,000 articles from JSTOR's Early Journal Content into Citebank, significantly increasing the body of early article-level content available to users.

BHL on Pinterest

On June 1, BHL launched on Pinterest, an online application that allows users to organize and share images from the web. This tool offers another great opportunity to share BHL images with new audiences.

Flickr Tagging Party

In April, in collaboration with EOL, BHL staff hosted the first Flickr Tagging Party at the Smithsonian Institution. The event provided an opportunity to teach attendees how to add species name machine tags to BHL Flickr images, allowing them to be automatically ingested onto EOL Species Pages. The success of this event has prompted scheduling of future events, the next to occur in July, 2012.

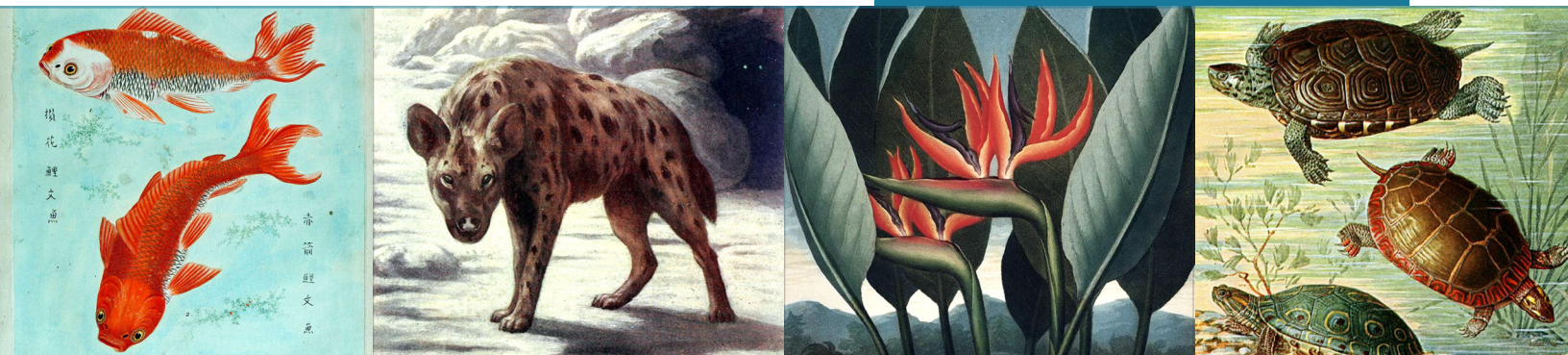
BHL Newsletter Launch

In May, BHL launched the first issue of its digital newsletter. The newsletters provide project highlights to subscribers on a quarterly basis.

Acclaim for BHL:

"Amazing tool for students of the world. Thanks so much and congratulations for the idea!"

- Felipe



iTunes U, Roosevelt, & Linnaeus

This quarter, BHL launched 2 new collections on iTunes U: a Theodore Roosevelt Collection and a Carl Linnaeus Collection. These collections feature content written by or about these important historical figures. New iTunes U collections will launch on a quarterly basis, allowing BHL to curate content around specific themes and reach audiences via new platforms.

"I think BHL is a fabulous entity!! I will die happy having been able to view so many of the great natural history volumes, especially the birds, of such as Gould and Elliot."

- William Linton



Digitization Statistics

Content for BHL is collected via a variety of methods. Primarily, BHL partner institutions scan items within their collection to build the BHL corpus. BHL also harvests materials from other digitization projects that match BHL collection criteria. Finally, BHL's article repository, Citebank, serves as a means by which to serve articles and display citations with links to digitized content.

As a global initiative, efforts are made to replicate scanned content among the variety of BHL nodes throughout the world. The goal is to ensure that content scanned for one global partner is available via all BHL portals.

Statistics presented below represent those of the BHL US/UK portal. Global Partners refers to BHL partner projects other than the US/UK.

Did You Know?

BHL has content in 61 languages, contributed from 137 institutions located in the United States, Canada, Europe, Asia, and Australia. This content represents publications about biodiversity living in over 2,100 locations around the globe.

To date, our global partners have contributed over 316,000 pages to the BHL-US/UK portal and over 7,000 citations to our article repository, Citebank. Nearly 16,000 BHL-US/UK items are currently being hosted and served via our global partners' portals.

Quarterly Digitization:

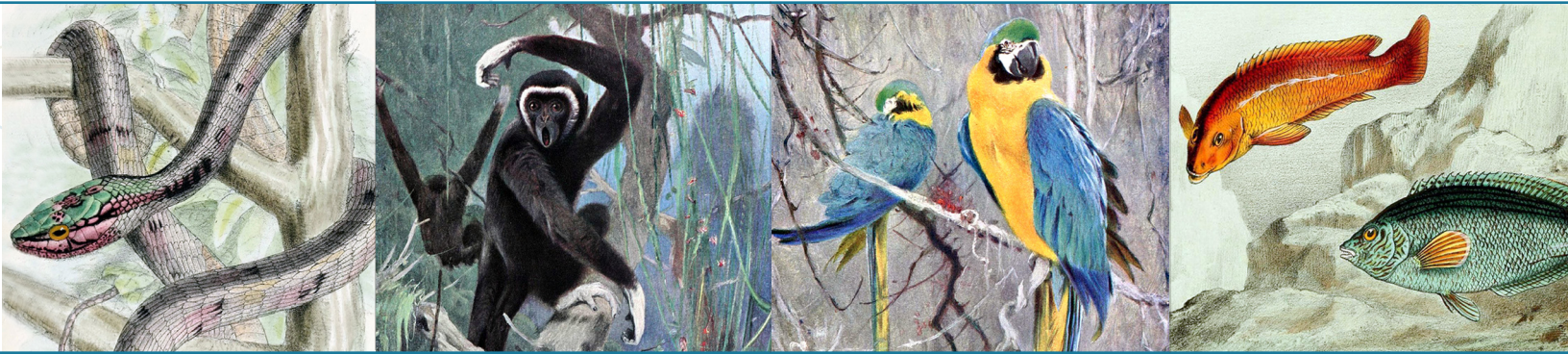
Items in Production: 1,716
 Pages in Production: 558,716
 Names in Production: 1,695,996
 Permissions Received: 5

Cumulative Digitization:

Items in Production: 106,288
 Pages in Production: 39,050,658
 Names in Production: 98,294,877
 Permissions Received: 223

Global Digitization:

Items Rehomed by Global Partners (Total): 15,938
 Pages Contributed by Global Partners (Quarterly): 14,587
 Citations Contributed by Global Partners (Total): 7,049



Collaboration Statistics

BHL collects user feedback and collaborates to resolve this feedback using an issue tracking system called Gemini. User feedback includes notification of errors with scanned content, suggestions for service improvements, and requests for content to be scanned. Many scanning requests are considered “Special Handling” as they constitute requests for rare, oversized, or fragile material. Gemini is particularly helpful when coordinating the scanning of material for BHL among global partners.

Acclaim for BHL:

“Just want to say ‘thank you very much’ for making many old journals available online in different way of downloading. They are really very useful and helpful for my research and dissertation. I very much appreciate that.”
- Nareerat Boonchai

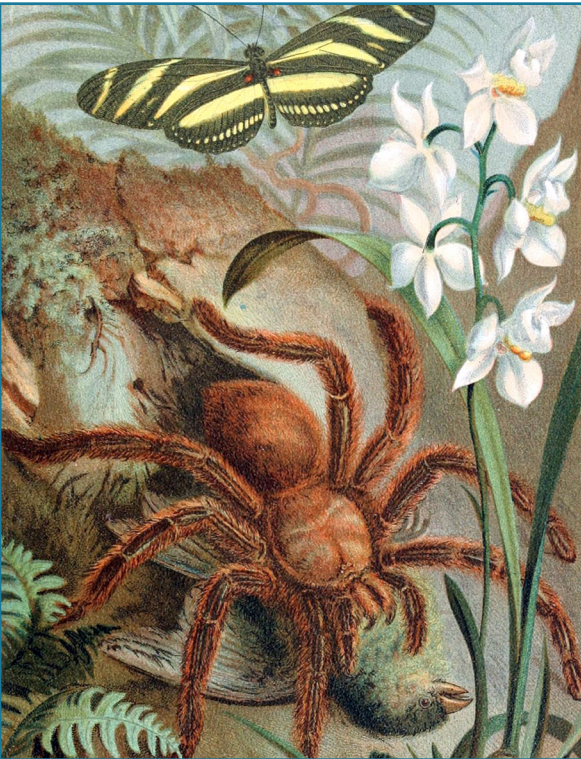
Gemini Statistics:

Quarterly:

- Issues Received: 340
- Scanning Requests Received: 207
- Special Handling Scanning Requests Received: 24
- Scanning Requests Closed: 116
- Special Handling Scanning Requests Closed: 35
- Issues Resolved: 223

Cumulative:

- Issues Received: 4,359
- Scanning Requests Received: 1,754
- Special Handling Scanning Requests Received: 386
- Scanning Requests Closed: 903
- Special Handling Scanning Requests Closed: 180
- Issues Resolved: 3,137



Website Statistics

Much of BHL's success can be measured via website statistics that provide detailed information about the traffic to and users of BHL resources. This quarter, BHL received 305,521 visits, 46.5% of which were new visits, or visits from users that had never before used our services. This constituted 142,271 New Visitor visits, with 163,250 Returning Visitor visits.

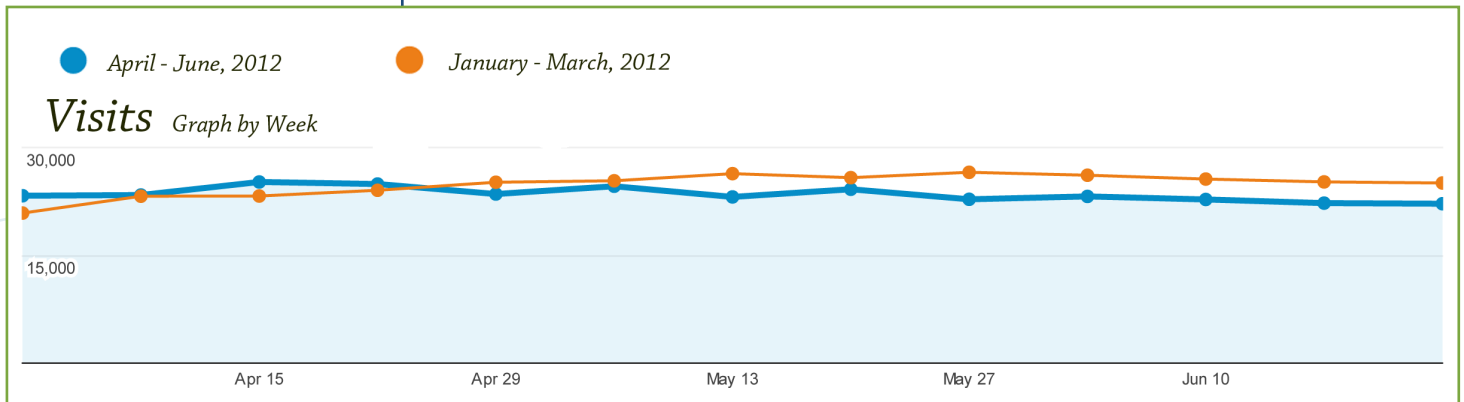
Below are graphs and statistics representing major website statistics for the BHL US/UK portal for the months of April-June, 2012, as well as brief statistics for BHL's article repository, Citebank.

Visit Statistics:

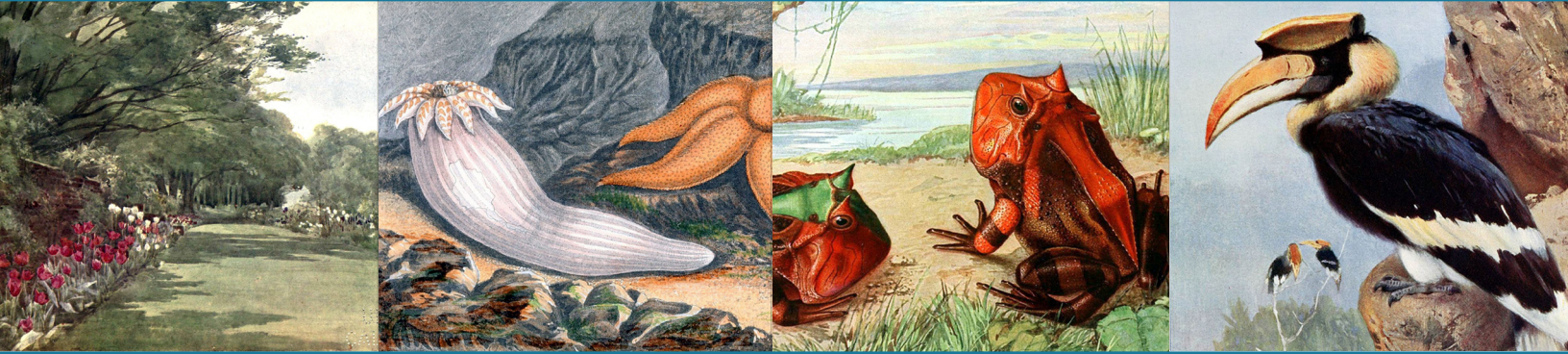
- Visits: 305,521
- New Visits: 46.5%
- Returning Visitor Visits: 163,250
- New Visitor Visits: 142,271
- Pages Per Visit: 4.5
- Citebank Visits: 14,530

Did You Know?

Nearly half of all BHL traffic originates from search engines, 96% of which comes from Google. Nearly 40% of our traffic is referral traffic, with the top 3 referrers being Tropicos, Internet Archive, and Wikipedia.



April-June, 2012 Visits compared to January-March, 2012 Visits



Acclaim for BHL:

“Thank you for this excellent service, this is a huge asset to professional wild-life biologists. Quick and easy, much appreciated.”
- Lee Kantar

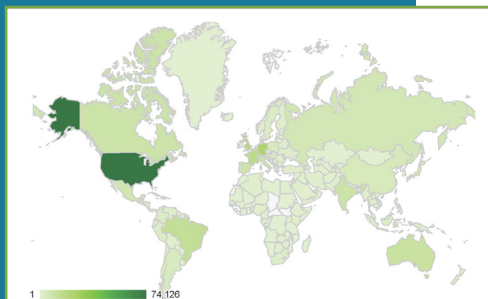
“Addicted to @BioDivLibrary.”
- @anatotitan

Visitor & View Statistics:

Unique Visitors: 172,659
Page Views: 1,495,669
Unique Page Views: 1,375,788
Average Time on Page: 00:01:39
Average Time on Site: 00:05:50
Bounce Rate: 47.72%



New vs. Returning Visitors



Visitor Country of Access Map

Visits		Pageviews	
305,521		1,375,788	
* of Total: 100.00% (305,521)		* of Total: 100.00% (1,375,788)	
Visit Duration	Visits	Pageviews	Percentage of total
0-10 seconds	157,884	171,755	51.68% 12.48%
11-30 seconds	20,686	53,935	6.77% 3.92%
31-60 seconds	17,798	69,224	5.83% 4.30%
61-180 seconds	29,551	134,575	9.67% 9.78%
181-600 seconds	32,488	218,235	10.63% 15.86%
601-1800 seconds	30,627	303,858	10.02% 22.09%
1801+ seconds	16,487	434,206	5.40% 31.56%

Visitor Engagement

Country / Territory	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
1. United States	74,126	4.17	00:05:03	52.93%	51.77%
2. Germany	24,001	4.79	00:05:59	44.37%	43.11%
3. United Kingdom	20,666	4.59	00:05:55	41.86%	45.16%
4. France	15,997	5.25	00:07:08	37.28%	41.80%
5. Brazil	13,426	5.22	00:07:30	38.18%	40.54%
6. Australia	10,827	4.39	00:05:49	43.94%	46.86%
7. Italy	9,831	5.62	00:06:35	41.51%	42.09%
8. Canada	9,276	3.67	00:03:59	58.68%	53.54%
9. India	9,009	3.37	00:04:10	64.21%	57.84%
10. Spain	8,867	5.76	00:07:33	41.61%	40.45%

Visitor Country of Access



Outreach

BHL has an active presence on a variety of social media platforms, including Twitter, Facebook, Flickr, and a blog. This quarter, BHL officially launched on Pinterest, a photo-sharing web application. This outlet serves as an excellent opportunity to expose BHL images to a new community of users.

This section present the goals and metrics for each social media application for April-June, 2012.

Twitter

BHL's goals for Twitter include fostering dialogue and promoting BHL resources.

Fostering dialogue refers to stimulating conversations about and increasing awareness of BHL via Twitter. This goal is measured by follower growth, retweets and mentions, and conversation reach, which is the number of retweets and mentions divided by total number of followers.

Promoting resources involves showcasing BHL content via Twitter. BHL supports several regular series to accomplish this goal, including "Species of the Day," a daily series featuring a species, a factoid about that species, and a link to content about it in BHL, and "Page of the Day," a daily series highlighting particular images in the BHL collection. The effectiveness of staff efforts in this arena is measured by the number of clicks on links to BHL content within tweets and the number of tweets posted about BHL content.

Did You Know?

BHL is the digitization component of the Encyclopedia of Life, an online encyclopedia dedicated to creating a webpage for every species.

Name occurrences found in BHL literature link to EOL species pages, and EOL species pages link to mentions of each species in BHL.

To date, there are 1,258,612 EOL species pages linking to BHL and 4,431 of those pages have no content other than links to BHL literature. BHL has 67,033,514 links to EOL in 13,130,175 BHL pages.

Twitter Statistics:

- New Followers: 263
- Total Followers: 1,709
- Tweets: 388
- Retweets and Mentions: 483
- Clicks on Links: 1,452
- Conversation Reach: 30%



Facebook

BHL's primary goals for Facebook include promoting resources and fostering dialogue. BHL staff hope to promote resources by showcasing BHL content within posts on the Facebook page, and hope that these posts will foster dialogue by generating conversations about BHL via the Facebook platform.

Staff create two regular types of posts on the BHL Facebook page. The first is daily quizzes, which pose questions about biodiversity for users to answer. The second is biodiversity news updates, which are posts highlighting news stories relevant to the biodiversity realm. Whenever possible, staff link all posts back to BHL content.

To measure Facebook goals, BHL keeps a number of statistics, including the number of people interacting with our page (either by liking posts, adding comments to posts, sharing posts, or answering trivia questions), the number of these interactions, the number of people liking and unliking our page, the number of engaged users (number of people performing any action described in "interacting" plus the number of people who simply clicked on a link in a post), and the reach of our posts (the number of people who have seen any content posted on our page).

Acclaim for BHL:

"I have really come to appreciate the kind of effort you are undertaking - it is opening up the old literature to scholars, many of whom have had little access in the past."

- Bill Di Michelle

Facebook Statistics:

People Interacting with Page: 2,886

Interactions: 3,938

New Page Likes: 629

Total Page Likes: 2,740

Page Unlikes: 17

Engaged Users: 6,815

Reach of Posts: 187,834



Outreach

Flickr

The BHL Flickr account, which provides improved accessibility to images in the BHL collection, continues to be a highly celebrated aspect of the BHL project. As of June, 2012, the BHL Flickr page housed over 35,000 images.

This quarter, BHL began extensive collaboration with EOL to add species name tags to images in the BHL Flickr, allowing them to be automatically ingested into EOL species pages. To date, BHL and EOL have hosted 1 Flickr Tagging Party at the Smithsonian Institution and have scheduled a second event for July, 2012. The first event was attended by 23 people and 170 BHL images were tagged with species names.

The BHL Flickr account also helps feed the new BHL Pinterest Account, which launched June 1, 2012. To date, the BHL Pinterest has 13 Boards, or Image Collections, featuring 513 Pins, or Images. 60 people currently follow us on Pinterest and have Repinned, or Shared, our BHL images 179 times.

BHL's primary goals for Flickr are to document BHL visual resources used via other social media platforms (i.e. Facebook and Twitter), to provide a pool of image content for dissemination and promotional purposes, to promote BHL's visual resources to Flickr's user group, thus introducing BHL to a new community of users, and to foster interaction with BHL visual resources in new and innovative ways.

Flickr Statistics:

Images Added: 9,398
 Total Images: 35,781
 Views on Content: 812,332
 Total Views: 1,859,869
 New Followers: 412
 Total Followers: 1,233

Image Statistics:

Numbers in this section are cumulative for project

Images with Comments: 689
 Images Favorited: 6,610
 Images with Notes: 2
 Images with Tags: 4,599
 Images Added to Galleries: 172



The Blog

BHL goals for blogging include fostering dialogue with our users and promoting our services and resources. Our effectiveness in meeting these goals are measured by the number of visits to the blog and the number of unique visitors.

The blog serves as a “press release” application for BHL. Staff publish posts about project updates via this outlet, and all other social media platforms generally link back to the blog to provide more detailed information about important developments.

The blog also gives staff the opportunity to showcase important items in the BHL collection (through the weekly series “Book of the Week”) and learn more about the people using our resources (through user interviews presented via the bi-weekly series “BHL and our Users”).

Blog Statistics:

Visits: 7,466
 Unique Visitors: 5,882
 Number of Blog Posts: 34

Fans on Twitter:

“We love Biodiversity Heritage Library @BioDivLibrary - improving access to the natural history images. SO FABULOUS!”

- @fishconserve

“loving the @BioDivLibrary today. Their pdf of Falconer’s memoirs is MUCH nicer than google’s!”

- @ToriHerridge

Did You Know?

There is an estimated total of 100,000,000 pages of taxonomic literature related to the fields of botany, mycology, and zoology, published before 1923. BHL has scanned nearly 40,000,000 of those pages. It costs an estimated \$.40 per page to digitize this literature. On these estimates, it will cost \$24,000,000 to digitize the remaining public domain biodiversity literature.



Biodiversity Heritage Library



About

The Biodiversity Heritage Library (BHL) is a consortium of natural history and botanical libraries that cooperate to digitize and make accessible the legacy literature of biodiversity held in their collections and to make that literature available for open access and responsible use as a part of a global “biodiversity commons.”

The BHL consortium works with the international taxonomic community, rights holders, and other interested parties to ensure that this biodiversity heritage is made available to a global audience through open access principles. Today, in partnership with the Internet Archive and through local digitization efforts, BHL has digitized over 39 million pages of taxonomic literature, representing over 55,958 titles and 106,288 volumes (June 2012).

The published literature on biological diversity has limited global



distribution; much of it is available in only a few select libraries in the developed world. These collections are of exceptional value because the domain of systematic biology depends more than any other science upon historic literature. Yet, this wealth of knowledge is available only to those few who can gain direct access to significant library collections. Literature about the biota existing

in developing countries 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. Among other results, free global access to digitized versions of the literature would repatriate information about the earth's species to all parts of the world.

Since 2009, the BHL has expanded globally. The European Commission's eContentPlus program has funded the BHL-Europe project, with 28 institutions, to assemble the European language literature. Additionally, the Chinese Academy of Sciences, the Atlas of Living Australia, Brazil (through SciELO and BIREME), and the Bibliotheca Alexandrina have created regional BHL nodes. These projects will work together to share content, protocols, services, and digital preservation practices.

Acclaim for BHL:

"I can't begin to tell you how much I use your Biodiversity Heritage Library – very cool!"

- Kristen L. Metzger



"Thank you very much for the excellent service you provide! The service has given me access to old literature, which was earlier inaccessible to me. It has made it so much easier and faster to work with old publications, I am so excited! Keep up the good work!"

- Pasi Sihvonen

