The Biodiversity Heritage Library

Q1, FY12, Oct.-Dec. 2011

A Report on the Smithsonian Libraries’ Activities in the BHL
Introduction

The Biodiversity Heritage Library started fiscal year 2012 with a multitude of exciting events, including a global BHL meeting, the Life and Literature Conference, the first in-person meeting of BHL staff members since the 2009 meeting in Washington, and a JRS-funded meeting focused on literature digitization in Africa. Furthermore, this quarter saw the addition of two new member libraries to the consortium: the United States Geological Survey and Cornell University.

On 13 November, 2011, BHL hosted the second global BHL planning meeting at the Field Museum in Chicago, IL. Representatives from all BHL nodes (with the exception of Bibliotheca Alexandrina) attended and presented project updates. Updates for the BHL-US/UK node included a new logo, the implementation of the BHL Flickr project, and the election of a new Executive Committee in keeping with the new governance structure reported on in the last report. Updates for the Australian node included the launch of the new Australian portal, which received very positive feedback from the user community. BHL-China, members of which visited SIL in early November to discuss project status and future collaborations and development, has continued digitization of Chinese materials, which have been presented through the BHL-US/UK portal. BHL-Europe is on target to release their portal, which will aggregate content from the multiple European library members, by the end of this year. Finally, SciELO-Brazil continues to contribute content to BHL via Citebank. As a whole, the group decided to form a Coordinating Committee to establish bi-laws and improve global project coordination, integration, and communication in the future.

The BHL Life and Literature conference, also hosted at the Field Museum in Chicago, IL, occurred following the global meeting, on 14-15 November, 2011. The conference, conducted with the express purpose of generating conversations about the priorities for biodiversity literature digitization, particularly as it pertains to BHL, for the next 4-5 years, brought together interested parties in a variety of disciplines, including science, education, informatics, and the humanities. The conference was divided into four panel discussions, followed on the second day by break-out sessions that allowed attendees to delve deeply into the various topics discussed during panel sessions, ultimately leading to an outline of the various areas deemed
most important for BHL to focus on in the next 4-5 years. The winner of the Life and Literature Code Challenge, Ryan Schenk, was also presented at the conference. His winning application, “Synynyms”, works as a taxonomic name aggregator, finding all of the different names given to a species over the years and displaying the frequency of each name variety throughout history.

On Wednesday, 16 November, the BHL Staff Member and the JRS African meetings occurred. The BHL staff meeting was an opportunity for librarian staff at BHL member institutions to gather to discuss collective workflow issues. BHL Staff discussed the new ideas resulting from the Life and Literature conference as well as issues related to governance, social media, scanning workflow and technical development. The JRS African meeting, sponsored by the JRS Foundation, which funded the attendance of 11 colleagues from Africa, was an opportunity to bring together African librarians, biologists, computer scientists, publishers and students to discuss and decide on African needs and objectives for Biodiversity Literature Digitization.

As BHL staff look towards the next quarter of fiscal year 2012, we plan to continue governance discussions at the annual Institutional Council meeting in March and promote BHL at a variety of events, including the ALA Midwinter conference. Further staffing and consortium developments are also anticipated for the New Year. We have no doubt that future quarters will be as successful as this past quarter.
The first quarter for fiscal year 2012 is yet another testament to the value and success of the Biodiversity Heritage Library. As Dennis Meritt affirms, “I am most grateful for the ability to obtain a hard copy of an obscure article from The Nautilus (Volume 37 January 1924, No.3 pages 73-77). This reference is most useful to work that I am currently undertaking in the Chaco of Paraguay with apple snails and snail kites. Thank you most sincerely for your work in making the early issues of Nautilus available to researchers. With personal best wishes and regards.”
Biodiversity Heritage Library
Total Additions:
- Total Items Added: 127,964
- Total Pages Added: 49,739,879
- Total Names Added: 131,894,689

Smithsonian Libraries’ Total Additions BHL:
- Total Items Added: 14,329
- Total Pages Added: 5,752,096
- Total Names Added: 19,264,651

Cumulative Statistics

Smithsonian Libraries’ Total Gemini Statistics:
- Total Non-Rare Requests Received for SIL: 274
- Total Rare Requests Received for SIL: 209
- Total Non-Rare Requests Closed for SIL: 192
- Total Rare Requests Closed for SIL: 73
- Total Non-Request Gemini Issues Closed by SIL Staff: 1,321

Smithsonian Libraries’ Total Items Scanned*:
- Total Non-Rare Items Scanned: 14,365
- Total Rare Items Scanned: 953
- Total Items Scanned at Pennsy: 130

* Some items scanned by SIL may have not yet been ingested into BHL.
Website Statistics

For Quarter One, Fiscal Year 2012, BHL had a total of 288,287 visits, with 148,054 unique visitors. This is compared to 253,456 visits and 123,727 unique visitors for Quarter Four, Fiscal Year 2011. This represents an increase of 13.74% visits from the last quarter (from 253,456 to 288,287) and 19.66% unique visitors (from 123,727 to 148,054).

<table>
<thead>
<tr>
<th>288,287 Visits</th>
<th>3,133.55 Visits / Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous: 253,456 (+13.74%)</td>
<td>Previous: 2,794.96 (+13.73%)</td>
</tr>
</tbody>
</table>

Q1 Web Statistics Compared to Q4 Web Statistics

<table>
<thead>
<tr>
<th>148,054 Absolute Unique Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 1, 2011 - Oct 31, 2011</td>
</tr>
<tr>
<td>Nov 1, 2011 - Nov 30, 2011</td>
</tr>
<tr>
<td>Dec 1, 2011 - Dec 31, 2011</td>
</tr>
</tbody>
</table>

Q1 Visitors by Month
“Early #ff because I’m in a ‘going rogue’ sort of mood: @BioDivLibrary. You’ll be bettr for it.”
~ @anatotitan, via Twitter

“Loving these gorgeous illustrations in Kunstformen der Natur, part of the @BioDivLibrary Book of the Week series.”
~ @eol, via Twitter

### Q1 Web Statistics

- **288,287 Visits**
- **148,054 Unique Visitors**
- **1,376,584 Pageviews**
- **4.78 Pages/Visit**
- **00:06:05 Avg. Time on Site**
- **46.33% Bounce Rate**
- **46.67% % New Visits**

### Most Visited Pages for Q1

<table>
<thead>
<tr>
<th>Page</th>
<th>Pageviews</th>
<th>Unique Pageviews</th>
<th>Avg. Time on Site</th>
<th>Bounce Rate</th>
<th>% Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>92,702</td>
<td>17,427</td>
<td>00:00:36</td>
<td>27.91%</td>
<td>22.30%</td>
</tr>
<tr>
<td>2.</td>
<td>20,812</td>
<td>11,569</td>
<td>00:00:36</td>
<td>32.72%</td>
<td>21.07%</td>
</tr>
<tr>
<td>3.</td>
<td>14,885</td>
<td>6,694</td>
<td>00:00:36</td>
<td>5.91%</td>
<td>24.02%</td>
</tr>
<tr>
<td>4.</td>
<td>13,870</td>
<td>6,435</td>
<td>00:00:36</td>
<td>14.38%</td>
<td>8.34%</td>
</tr>
<tr>
<td>5.</td>
<td>10,286</td>
<td>2,127</td>
<td>00:00:36</td>
<td>37.97%</td>
<td>27.73%</td>
</tr>
<tr>
<td>6.</td>
<td>8,693</td>
<td>2,121</td>
<td>00:00:36</td>
<td>57.90%</td>
<td>29.81%</td>
</tr>
<tr>
<td>7.</td>
<td>9,559</td>
<td>1,004</td>
<td>00:00:36</td>
<td>4.16%</td>
<td>3.69%</td>
</tr>
<tr>
<td>8.</td>
<td>6,150</td>
<td>1,615</td>
<td>00:00:36</td>
<td>20.88%</td>
<td>7.34%</td>
</tr>
<tr>
<td>9.</td>
<td>5,987</td>
<td>4,208</td>
<td>00:00:36</td>
<td>13.34%</td>
<td>68.12%</td>
</tr>
<tr>
<td>10.</td>
<td>4,612</td>
<td>157</td>
<td>00:00:11</td>
<td>20.92%</td>
<td>1.40%</td>
</tr>
</tbody>
</table>

### Q1 Traffic Sources

- **Search Engines**: 134,268.00 (46.58%)
- **Referring Sites**: 109,000.00 (38.09%)
- **Direct Traffic**: 44,198.00 (15.33%)
- **Other**: 1 (>0.00%)


Page 7: Baynes, C.E. Album of Indian Ferns. (1887), pl. 17.
Social Media

Twitter

Our primary goals for Twitter are to promote advocacy, foster dialogue, and promote our resources. Below are the metrics we gather to determine how well we meet these goals and a comparison of this quarter’s metrics to last quarter’s.

Promote Resources

Number of Clicks on Links: 1,164
  Previous Quarter Clicks on Links: 1,693

Total SIL Staff Tweets: 669
  Previous Quarter SIL Staff Tweets: 564

Foster Dialogue

Conversation Reach (CR): .33 or 33%
  (Total @mentions + RTs/# of followers)
  Previous Quarter CR: .45 or 45%

Audience Growth (AG): 181
  (Total new followers)
  Previous Quarter AG: 153

Audience Engagement (AE): 380
  (Total @mentions + RTs)
  Previous Quarter AE: 439

Promote Advocacy

Mentions by Influencers (MI): 221
  Previous Quarter MI: 34

For yet another quarter, our social media outreach activities have continued to be a popular avenue of dissemination and engagement for the BHL project. Our daily Facebook trivia quizzes and the thousands of images in our Flickr account were acknowledged at the Life and Literature conference as favorites among our efforts, and the live tweeting performed at this same conference was highly praised. We continue to explore new opportunities for BHL via social media, such as the possibility of bringing Tumblr into the mix, and are currently examining archiving tools for our activities. We are glad to be able to share our resources more widely through the potential of a connected online environment.
Our primary goals for Facebook are to promote our resources and foster dialogue. This page presents the metrics we gather to determine how well we meet those goals, as well as a comparison of this quarter’s metrics to last quarter’s.

**Promote Resources**

- **Total Post Views**: 245,095
- **Previous Quarter Total Post Views**: 308,972

- **Total SIL Staff Posts**: 201
- **Previous Quarter SIL Staff Posts**: 222

**Foster Dialogue**

- **Conversation Reach (CR)**: .95 or 95%
  - Total Post Interactions/# of people who like our page
  - **Previous Quarter CR**: .79 OR 79%

- **Audience Growth (AG)**: 338
  - Total new people who like our page
  - **Previous Quarter AG**: 304

- **Audience Engagement (AE)**: 1,620
  - Total post interactions for Q1, FY12
  - **Previous Quarter AE**: 1,077

- **Total Monthly Active Users by End of Q1, FY12 (AMU)**: 1,273
  - **Previous Quarter AMU**: 1,382
The primary goal of the blog is to promote our resources. We measure our success by the amount of traffic and unique visitors to the blog.

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Previous Quarter Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits</td>
<td>4,868</td>
<td>5,986</td>
</tr>
<tr>
<td>Unique Visitors</td>
<td>3,540</td>
<td>4,485</td>
</tr>
<tr>
<td>SIL Blog Contributions</td>
<td>25</td>
<td>26</td>
</tr>
</tbody>
</table>

**Book of the Week: Bridging the Gap Between Science and Art**

By this point, if you’ve been following our “Books of the Week” regularly, you know that 18th, 19th, and 20th century taxonomic works weren’t just about the nomenclature they presented, but also the stunning illustrations accompanying these species descriptions. Those books with the most colorful, the most visually dynamic, images are those that we tend to gravitate towards for our posts. So, when we came across a book that has been described as “bridging the gap between science and art,” we simply had to feature it. That book, perhaps one of the most visually-compelling that we’ve yet featured, is Kunstformen der Natur (1904), by Ernst Haeckel.

Over the course of his career, Haeckel, a German biologist, described and named thousands of new species, popularized the work of Charles Darwin in Germany, mapped a genealogical tree relating all life forms, and produced dozens of glorious illustrations. In his lifetime alone, over 1000 prints were made of Haeckel’s sketches, 100 of which are found within Kunstformen der Natur. These 100 prints were translated from sketch to lithograph by artist Adolf Giltsch.

Cnidaria, which include sea anemones, jellyfish, and coral, as well as Radiolarians, which are protozoan zooplankton, are some of the most abundant species illustrated within this work. The book was originally published as ten sets from 1899-1904, and was then re-published as a complete work in 1904. Haeckel scholar Olaf Breidbach eloquently wrote that this title is “not just a book of illustrations but also the summation of [Haeckel’s] view of the world.”

What was to us perhaps the most impressive aspect of the images in Kunstformen der Natur was not simply the radiant colors and depth of realism within the creatures depicted, but the way in which each plate was composed, symmetrically balancing each inch of space and arranging each organism artistically beside or around the others so as to not only catch the viewer’s eye, but dynamically draw him in and keep him constantly engaged. Never before or since has plankton been portrayed with such charm and beauty.

While we cannot feature all 100 of the illustrations within this work in this post, we can at least highlight some of our favorites. And, thanks to the BHL Flickr account, which now has over 13,000 images, you can see all of the remaining illustrations displayed for you on one convenient canvas. We hope that you’ll find this title as richly rewarding as we did.
Social Media

Our primary goals for Flickr are to document BHL visual resources used via other social media platforms, to provide a pool of image content for dissemination & promotional purposes, to promote BHL’s visual resources to Flickr’s user group, thus introducing BHL to a new community of users, & to foster interaction with BHL visual resources in new & innovative ways.

“Thanks for these beautiful illustrations, great source for inspiration and old cultivation methods.”
~ @MagicMushShop, via Twitter

“WOOOW love the latest BHL illustrations!”
~ @ruthbleakley, via Twitter

Flickr

Total Views: 386,744
(Total Views Photos, Photostream, Sets & Collections)
Previous Quarter Total Views: 91,445

Total Followers: 365
Previous Quarter Total Followers: 156

Total New Images Added: 8,904
Previous Quarter New Images: 13,065

Total Audience Engagement (AE): 1,382
(Total # of Comments, Favorites, Notes & Tags, & Added to Galleries)
Previous Quarter AE: 1,066

Motley, James. Contributions to the Natural History of Labuan, and the Adjacent Coasts of Borneo. (1855), pg. 46.

Smithsonian Institution Libraries, BHL Quarterly Report, Q1, FY12
About

The Biodiversity Heritage Library (BHL) is a consortium of 14 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.”

“I really appreciate your work. The Biodiversity Heritage Library is an excellent resource that regularly helps my assistant and I obtain original descriptions for plants during their review and assessment for inclusion/change/deletion in the California Native Plant Society’s Inventory of Rare and Endangered Plants (www.rareplants.cnps.org). I feel so privileged to be working in a day in age when such resources are so readily available and easy to obtain.”

~ Aaron Sims
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 34.5 million pages of taxonomic literature, representing over 47,000 titles and 93,000 volumes (June 2011).

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 recently 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.


Front:
    Left: Opera omnia, seu, Thesaurus locupletissimus botanico-medico-anatomicus.
       (1687), pg. 165.
    Right: A Curious Herbal. (1739), v. 2, pl. 269.