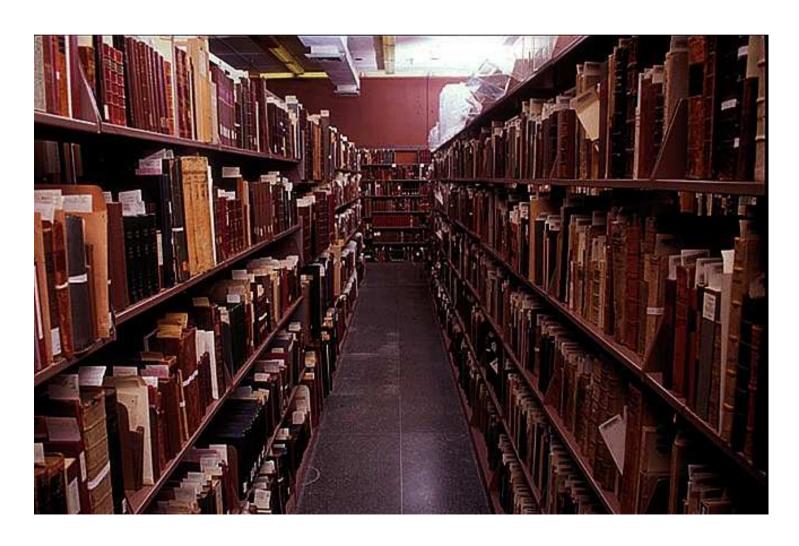


Library

How to make THIS into 0's and 1's



Traditional Digital Library

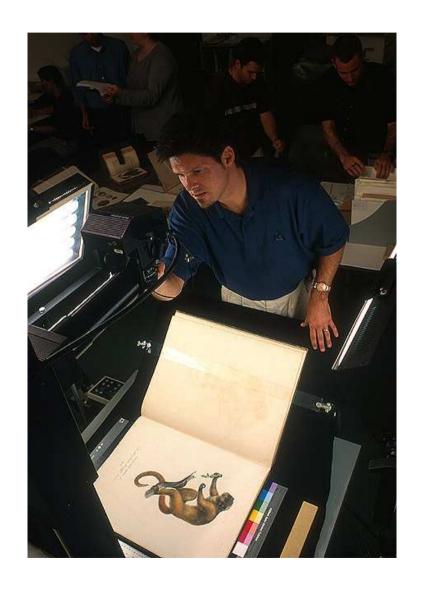
Electronic Journals & Databases

Digital Editions

Online Exhibitions

Online Catalog

Digital Reference

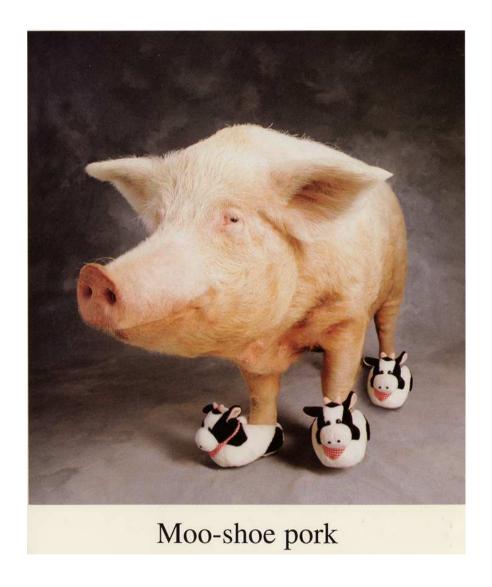




If you digitize it ...

Will they find it?

Search Gone BAD!



Metadata – failure to serve

```
TX
603
             Appert, Nicolas, 1750-1841.
A64
                The book for all households; or, The art of preserving animal
E1920
             and vegetable substances for many years, by Appert, tr. by
              K. G. Bitting ... Chicago, Ill., 1920.
c. l(photo- 18, 12, 17,-xv, 113 p. illus. (incl. port.) 191em.
 copy) MAT
                A translation of the first edition, including t.-p.: The art of preserving
              animal and vegetable substances for many years ... By Appert ... (Paris)
              Patris & co., printers-booksellers, 1810.
                "Nicolas Appert": p. 6-13 of the preliminary matter.
                1. Canning and preserving.
                                             I. Bitting, Mrs. Katherine Golden, 1860-
              tr. II. Title.
                                                                       21 - 1244
                                                                       Provisional
                Library of Congress
                                                TX603.A6
bss
5-10-72
                                                (41c1)
```



6. AGATEA, Nov. Gen.

Calyx pentaphyllus subæqualis, basi haud productus, deciduus. Corollæ petala 5, hypogyna, erecta, inaqualia; postica lateralibus paullo minora; anticum majus, labelliforme, spathulatum, basi dilatatum

> alia margiintrorsum o in appen-, placentis bcurvatus: sus; foliis lis minimis

> > icellis 2-3-

nta brevia,

infra apicem articulatis; floribus parvis viridulis.

1. AGATEA VIOLARIS, Sp. Nov. (Tab. 7.)

Var. a. foliis oblongo-lanceolatis integerrimis vel obsolete repandis pani-

Var. B. foliis majoribus ovato-oblongis nunc repando-subdentatis pani-

HAB. Feejee Islands: the var. α. from Naloa Bay. Var. β. Ovolau.

A shrubby, sarmentose, or somewhat climbing plant, entirely glabrous, except the inflorescence. Branches slender, leafy to the top. Leaves alternate, thin, chartaceous in texture, smooth, in the specimen from Naloa Bay (var. a.) oblong-lanceolate, 3 or 4 inches in



5. CLEYERA.

Cleyera, DC. Prodr. i. p. 524; Benth. et Hook. Gen. Plant. i. p. 183. Shrubs and trees. Six species – two Asiatic (Japan and India), the others Mexican and West-Indian.

1. Cleyera integrifolia, Pl. MSS. in Hb. Kew.

Frezeriera integrifolia, Benth. Pl. Hartw. 6.

NORTH MEXICO, Zacatecas and Bolaños (Hartweg). Hb. Kew.

2. Cleyera mexicana, Pl. MSS. in Hb. Kew.

Tristylium mexicanum, Turcz. in Bull. Soc. Nat. Mosc. 1858, p. 249. SOUTH MEXICO, Sierra San Pedro Nolasco &c. (Jurgensen, 604). Hb. Kew.

6 FREZIERA

About eight shrubby species, all restricted to Tropical America.

1. Freziera sericea, Humb. et Bonpl. Pl. Æquin. p. 29, t. 8.

Freziera chrysophylla, Humb. et Bonpl. loc. cit. t.7.

Freziera hirsuta, Seem., non Smith.

PANAMA, Boquete, Veraguas (Seemann, 1153). - COLOMBIA. Hb. Kew.

2. Freziera theoides, Sw. Fl. Ind. occ. ii. p. 972.

SOUTH MEXICO, Cuesta Grande de Jalacingo (Scheide & Deppe), near Chiconquiaco (Schiede);



2003. Telluride. Encyclopedia of Life meeting

February 2005. London. Library and Laboratory: the Marriage of Research, Data and Taxonomic Literature

May 2005. Washington. Ground work for the Biodiversity Heritage Library

June 2006. Washington. Organizational and Technical meeting

August 2006. New York Botanical Garden. BHL Director's Meeting.

October 2006. St. Louis/San Francisco. Technical meetings

February 2007. Museum of Comparative Zoology. Organizational meeting

May 2007. Encyclopedia of Life and BHL Portal Launch. Washington DC.



American Museum of Natural History (New York)

Field Museum (Chicago)

Natural History Museum (London)

Smithsonian Institution Libraries (Washington)

Missouri Botanical Garden (St. Louis)

New York Botanical Garden (New York)

Royal Botanic Garden, Kew

Botany Libraries, Harvard University

Ernst Mayr Library of the Museum of Comparative Zoology, Harvard University

Marine Biological Laboratory / Woods Hole Oceanographic Institution

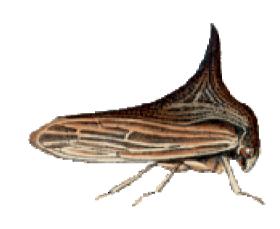


University of Illinois,
Urbana-Champaign
(contributing member)

BHL - Europe

Additional categories of membership under consideration (China)

Partner: Internet Archive



Initial grant from the MacArthur and Sloan Foundations (as part of the Encyclopedia of Life grant)

Additional support from parent institutions

Additional grants being actively pursued by Individual Member Institutions and BHL



Guestimates:

Core literature pre-1923: 100 million pages (?)

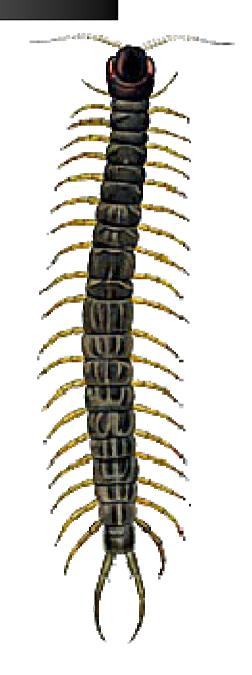
All pre-1923: 120-150 million pages

All literature: 280-320 million pages





- 1.3 million catalogue records
- 73% are monographs (remainder are serials at title-level)
- 63% is English language material
- The next most popular language (9%) is German
- About 30% of material was published before 1923



Initial Metadata Analysis:

We have 1.3 million catalogue records

73% are monographs (remainder are serials at title-level)

63% is English language material. The next most popular language (9%) is German.

About 30% of material was published before 1923.



Who has what?

What should we scan and when?

Monographs vs Serials

Series treated as separates

Can it be found and used once scanned?



Selection Tools:

Combined Serial list for selection of title to scan to avoid duplication of effort



Monographic "de-duping" algorithm OCLC Collection Analysis



Marine Biological Laboratory/WHOI

Marine monographs

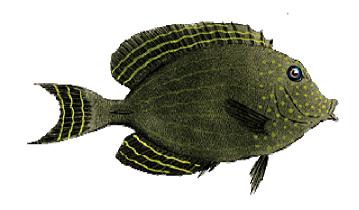
General Science

Museum of Comparative Zoology

MCZ publications

Herpetology monographs and serials

Ichthyology monographs and serials





University of Illinois

Fieldiana

Natural history of Illinois

American Museum of Natural History

AMNH publications

Ornithology

Natural History Museum

NHM publications

Major natural history general serials



Botany Collections

Missouri Botanical Garden,
New York Botanical Garden,
Harvard Botany Libraries, and
Royal Botanic Garden, Kew
will cooperatively develop a
methodology for botanical
publications



Smithsonian Institution Libraries

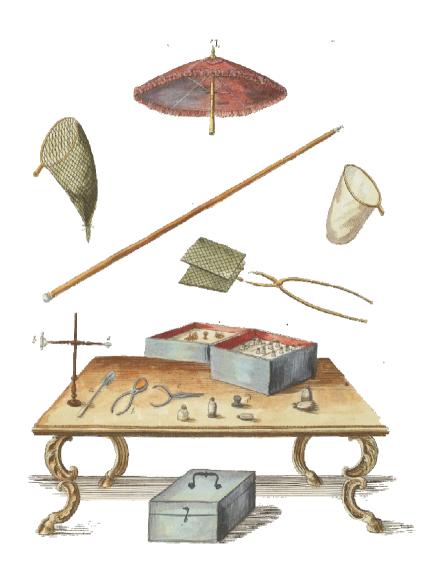
Smithsonian publications

Entomology collection

Marine mammals

Fishes

Selected special collections materials



Collections Coordinator on board in February 2009.

Bianca Lipscomb, based at the Smithsonian, will coordinate material selection across the BHL and contributing partners



Martin R. Kalfatovic :: Smithsonian Libraries :: Council on Botanical and Horticultural Libraries :: 12 May 2009



Internet Archive

501(c)(3) organization
Dedicated to "Universal
Access to Human Knowledge"
Founder of the Open Content
Alliance

Provides:

Mass scanning
Archival storage of files
Image processing
Technology development



Single Scribe Machine
Custom built by the
Internet Archive
Human operated
3,500 page per shift per
day



Northeast Regional Scanning Center

10 Scribe machines

MBL/WHOI

Harvard

Jersey City

10 Scribe machines

AMNH

NYBG



University of Illinois

2 Scribe machines

Natural History Museum, London

1 Scribe machine

Missouri Botanical Garden

Non-Scribe operation



Washington, DC

1 Scribe machine at Smithsonian Libraries

10 Scribe facility at Library of Congress with Fedlink (operational May 2008)



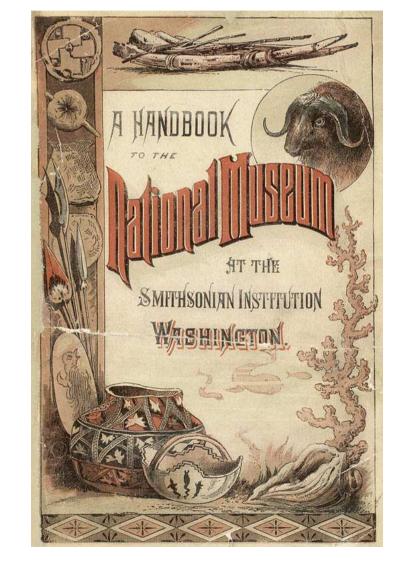
Mass Scanning Workflow

Serial management Bid Lists

Monograph Management Dedupper

Pick Lists

Packing Lists



Ernest Ingersoll Hand-book to the National Museum ... Smithsonian Institution, 1886

Mass Scanning Workflow

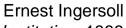
Local data flow

Vendor data flow
WonderFetch tm

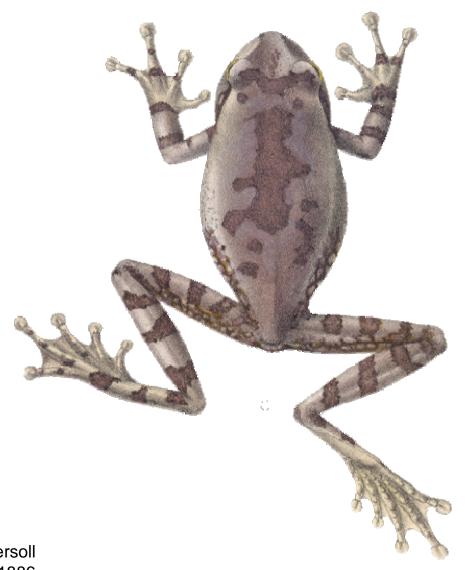
Return of data

Return of material

Billing



Hand-book to the National Museum ... Smithsonian Institution, 1886



Flow of the Process

- Select Book ~Pull from Shelf
- Review Physically and Metadata
- Establish viability and create Wonderfetch tm
- Send to IA scanning center





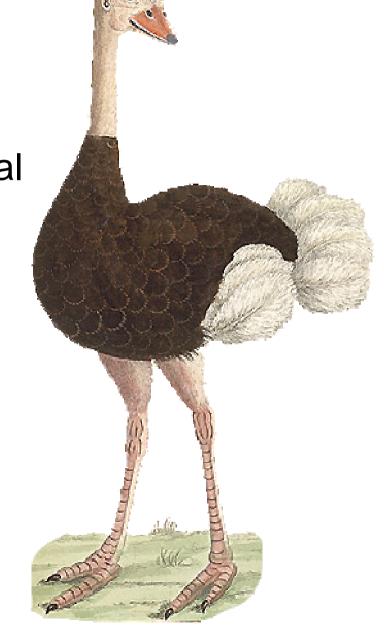
Flow of the Process

- Book is scanned & QA
- Page images loaded to IA
- Derivatives created
- Book returned
- QA on returned book against images
- Book returned to library



Flow of the Process

- Metadata files harvested from IA portal to BHL
- Taxonomic Intelligence Added
- Available through BHL



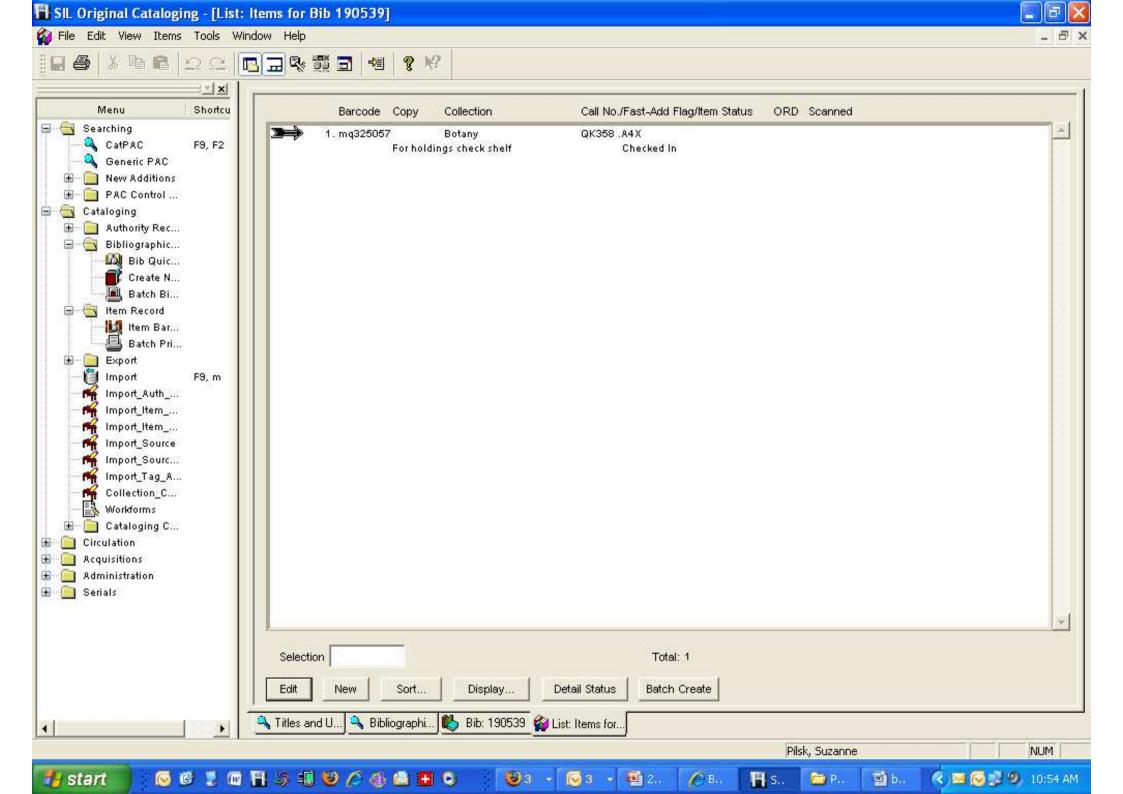
2007:

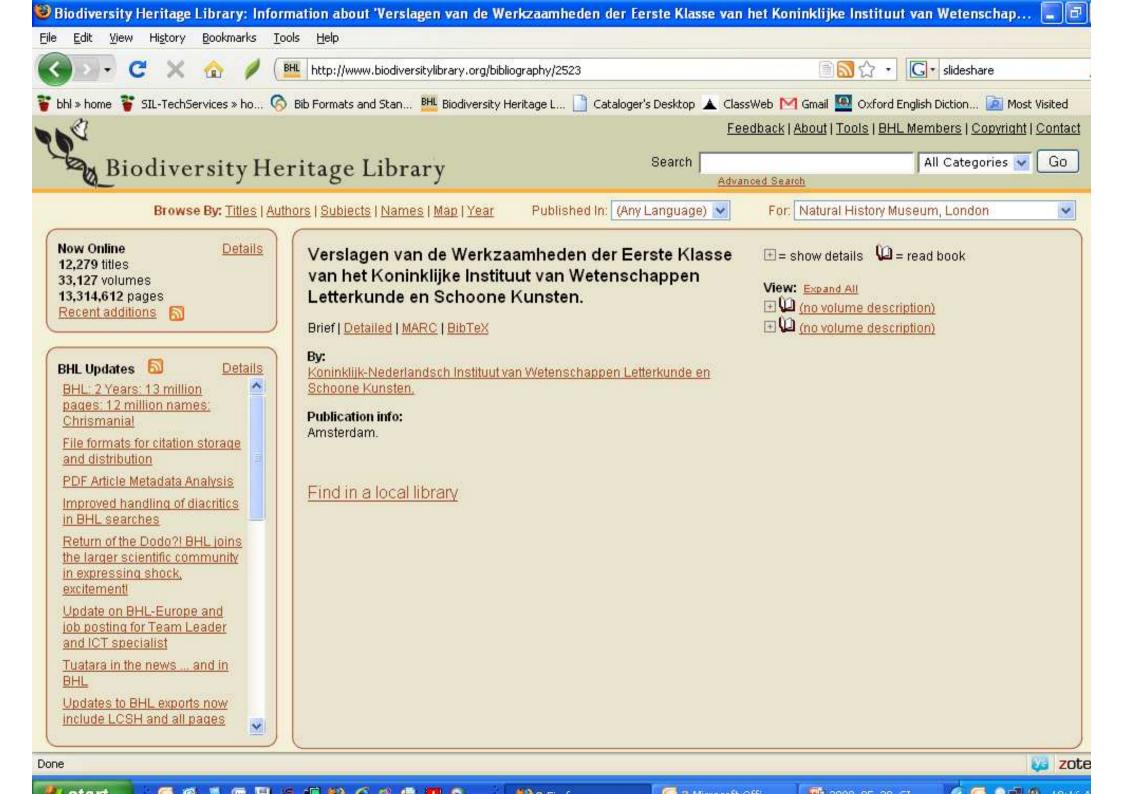
Cataloged, barcoded, inventoried and created summary holdings for 1,738 serial titles and created 60,830 item records in SIRIS for BHL

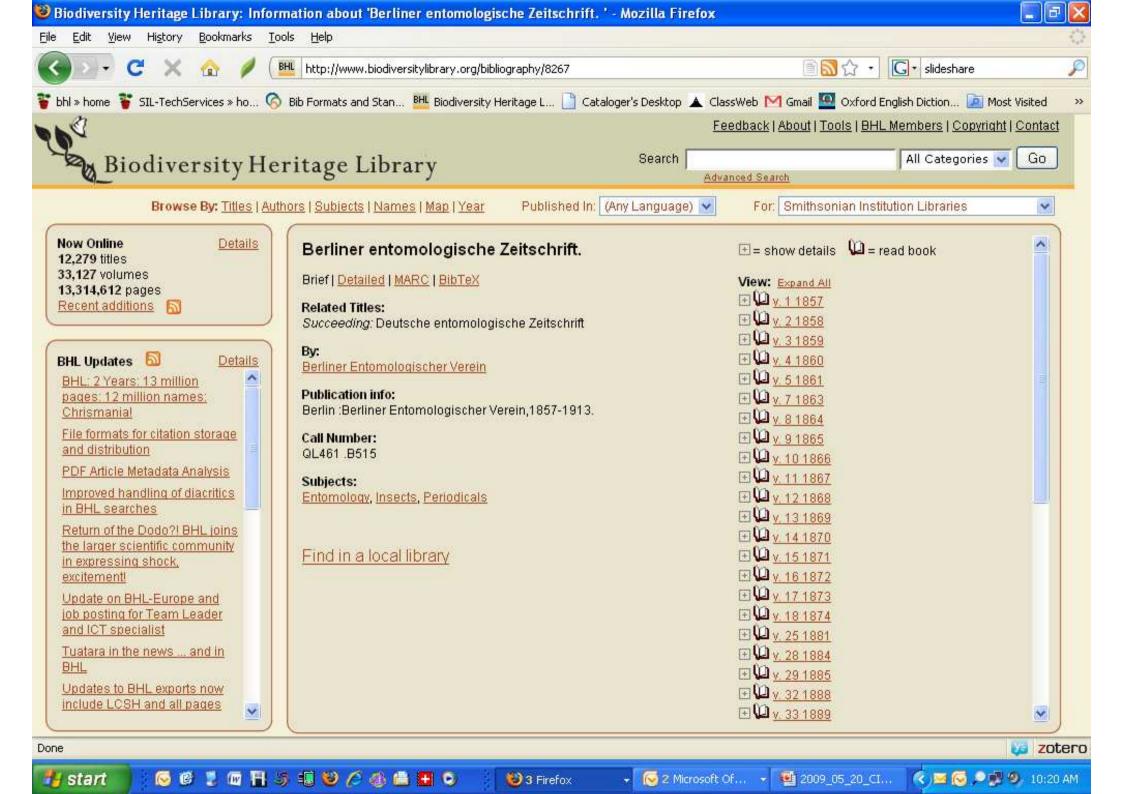
2008:

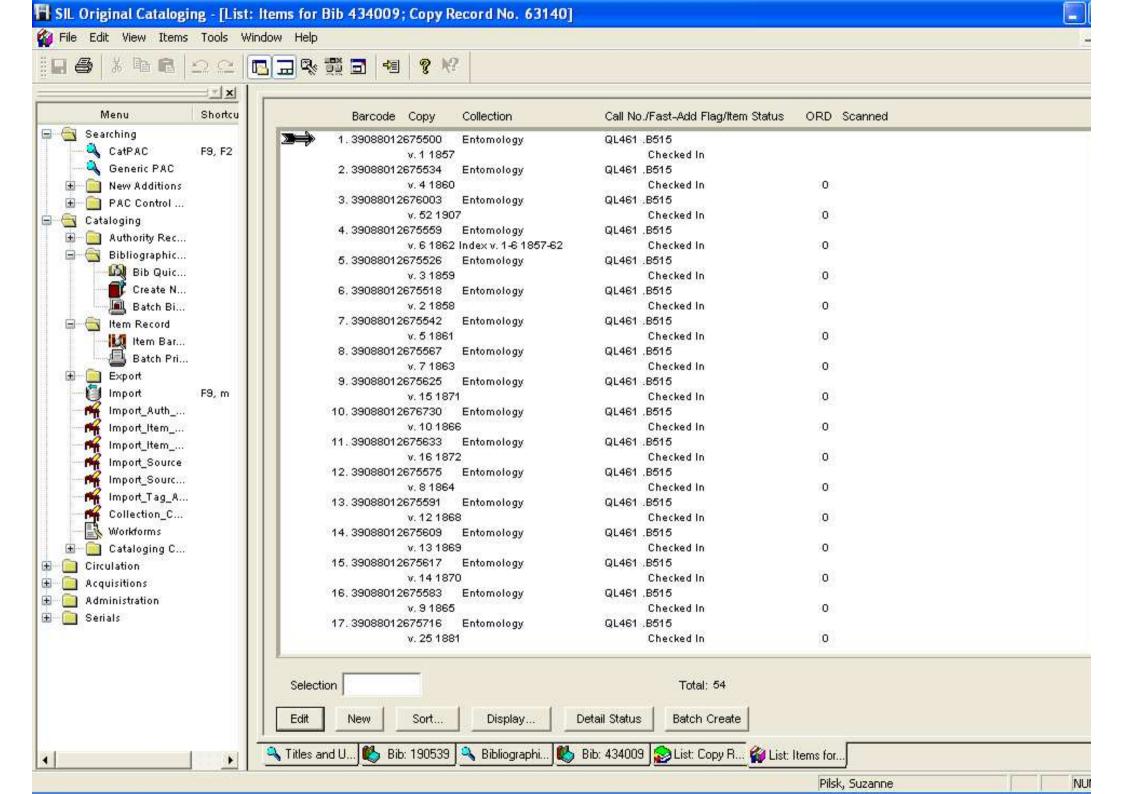
Cataloged, barcoded, inventoried, and created summary holdings for 1,311 serial/journal titles and created 46,140 item records in SIRIS for the Biodiversity Heritage Library (BHL).













http://www.bhl.si.edu/wonderfetch.cfm?date1=4/23/2009&date2=4/23/2009

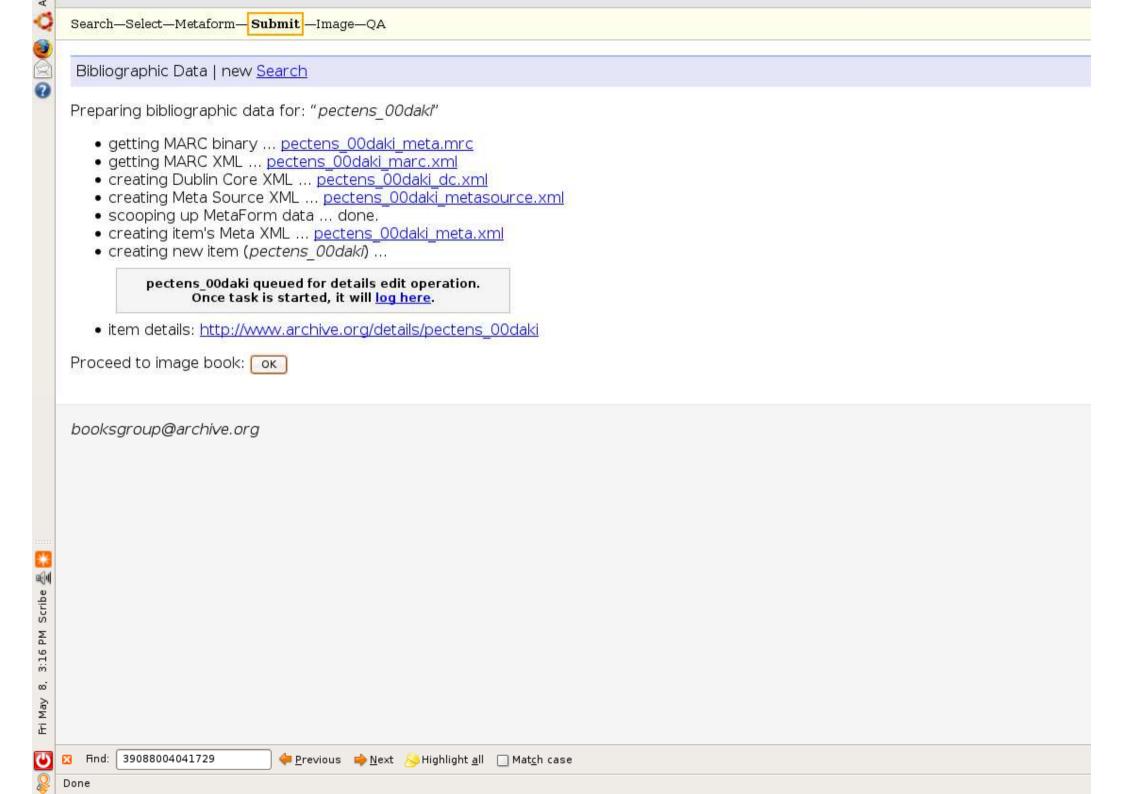
http://www.bhl.si.edu/wonderfetch.cfm?date1=5/14/2009&date2=5/14/2009

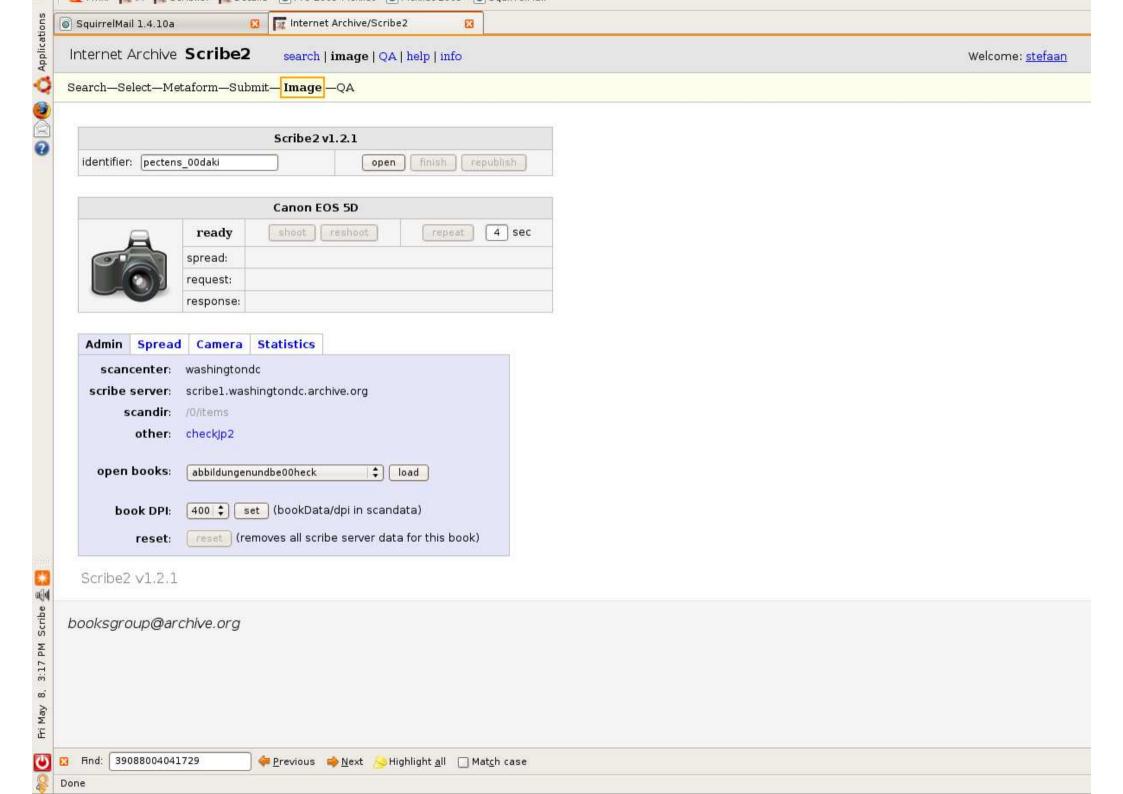
200. Title, beltrage zur kenntnis von Muskulatur und Skeiett des Kiples des Hales Stegostoria tig... Author Lutrier, Alexander Ferdinand, på 1077- Fear 1909

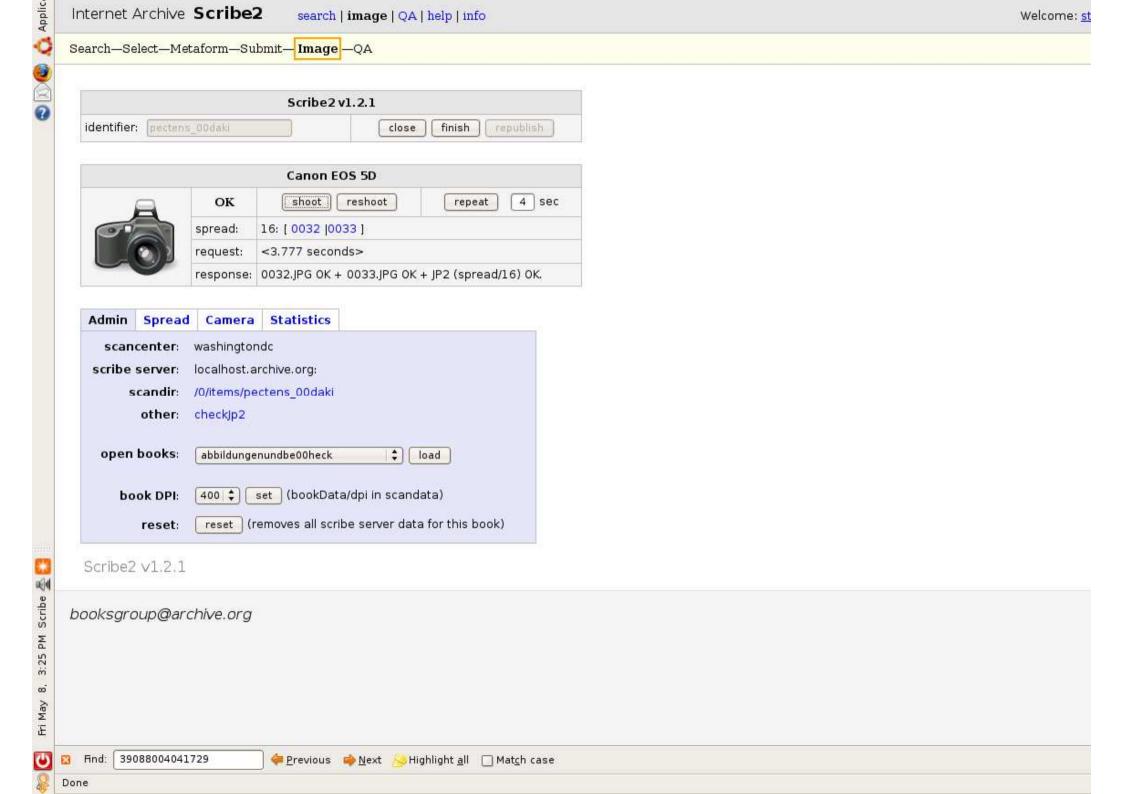
<metadata></metadata>	Values
IDENTIFIER	pectens_00daki
TITLE	Pectens
VOLUME	
CREATOR	
0:	
1:	Liverpool Marine Biology Committee
SUBJECT	Scallops
DESCRIPTION	
0:	
1:	N 105 /
2:	extracted picklist
PUBLISHER	London : Williams & Norgate
DATE	1909
LANGUAGE	eng
POSSIBLE-COPYRIGHT-STATUS	NOT_IN_COPYRIGHT
TITLE_ID	240445
SPONSOR	Smithsonian
CONTRIBUTOR	Smithsonian Institution Libraries
SCANNINGCENTER	WashingtonDC
MEDIATYPE	texts
COLLECTION	
0:	biodiversity
CALL_NUMBER	39088004041729
COLLECTION-LIBRARY	
IDENTIFIER-BIB	39088004041729
IDENTIFIER-ACCESS	http://www.archive.org/details/pectens_00daki

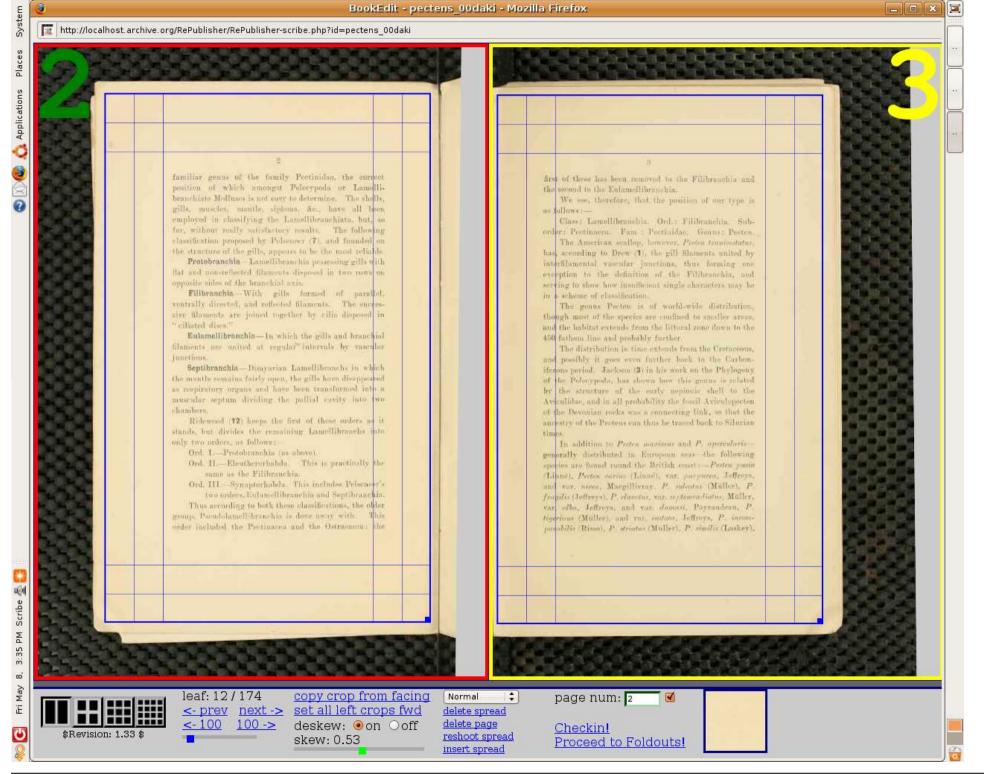
1. selected values derived from Dublin Core, inspect dcXml

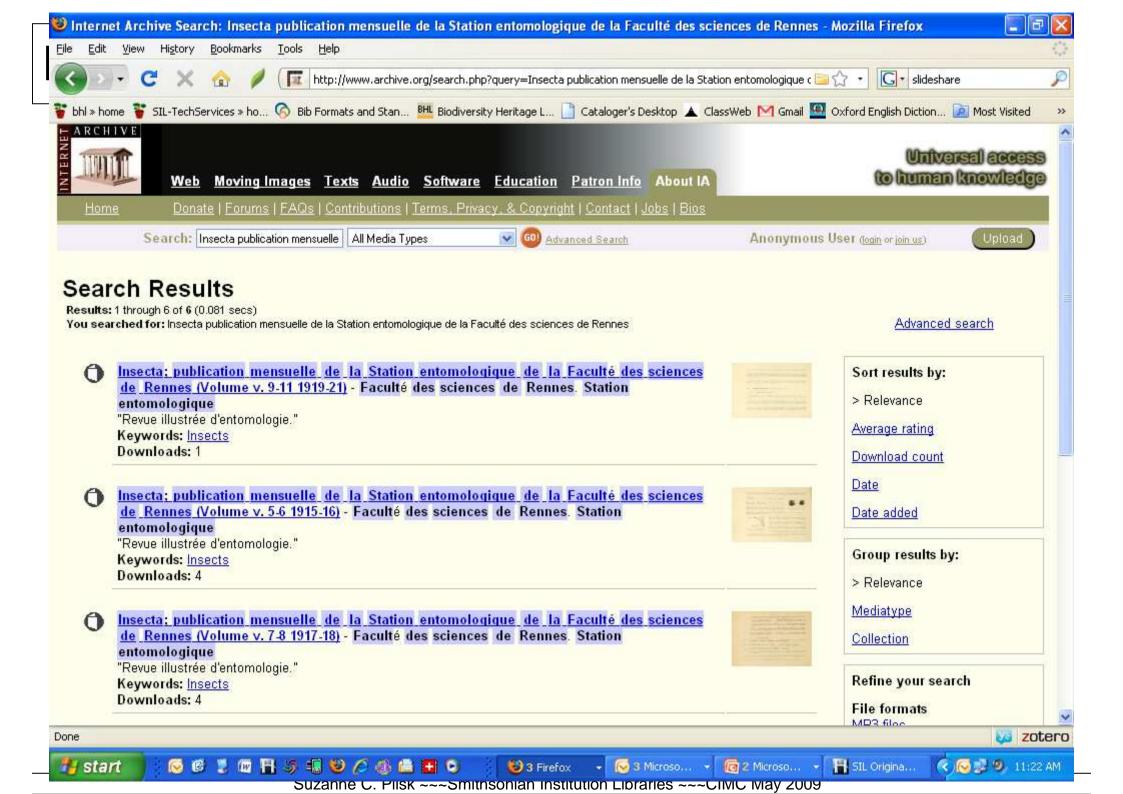
Fri May 8, 3:16 PM Scribe 🙅 booksgroup@archive.org Find: 39088004041729 Previous ➡Next New Highlight all ☐ Match case Done

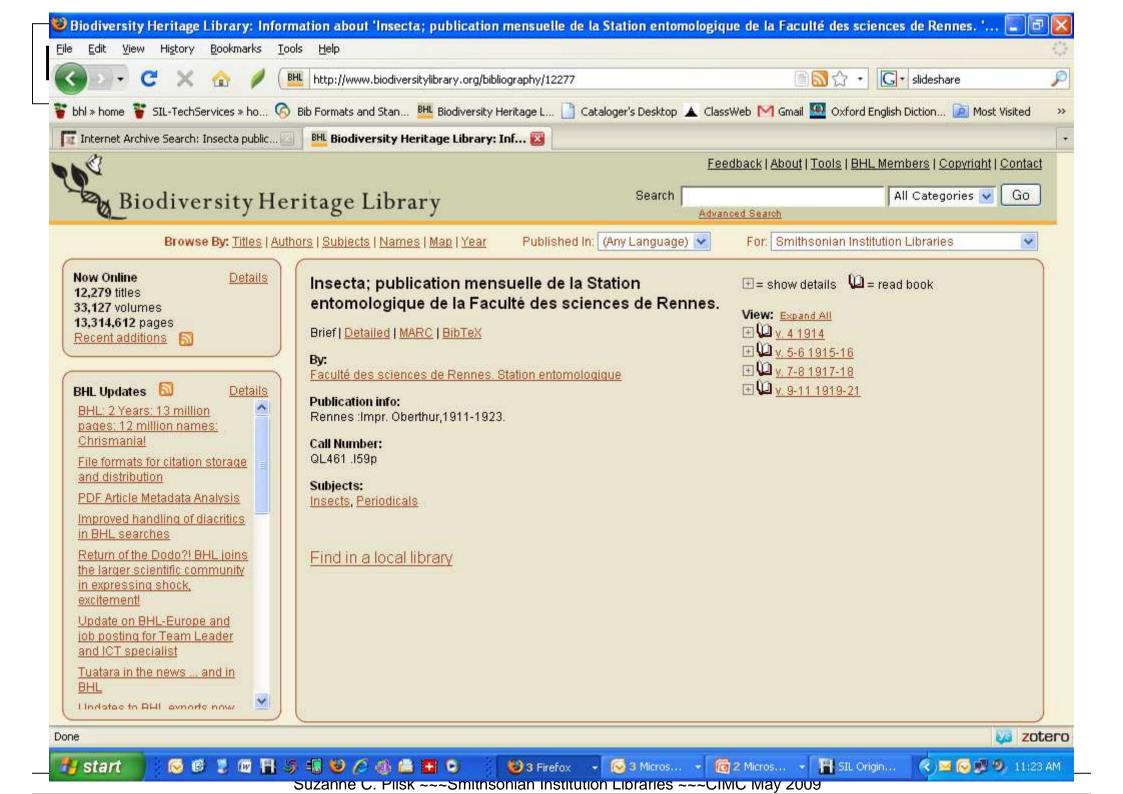












Seach:

IA; BHL: Insecta; publication

mensuelle

Search:

IA; BHL; Google: As nature

shows them



The cataloging and adding of holdings information to the Libraries' biodiversity literature is the first step toward making the content of this significant and rare collection of material available to researchers and scholars globally on the World Wide Web.

This project is also important for inventory control, accurate tracking of materials, and linking volume specific information to the physical volumes.

Having barcoded, item-level records of SIL's serials holdings expedites the scanning and digitization process SIL is undertaking as part of the Biodiversity Heritage Library (BHL) project.

It is my pleasure to inform you that Smithsonian Institution Libraries (SIL) has been awarded funding in the amount of \$50,000 from the CIS IRM Pool for the project "Catalog and make accessible in SIRIS SIL serial holdings for the Biodiversity Heritage Library (BHL)."

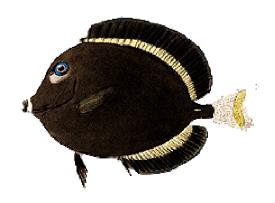


Staffing:

- Administration
- Metadata
- Collections support
- Database/Systems
- Conservator
- Technicians for pulling
- Technicians for Quality Review

Other things:

- Travel
- Equipment
- Transportation



Items

- "Cardboard to Cardboard"
- A barcoded "book"
- Estimated just over 6,000 in a year

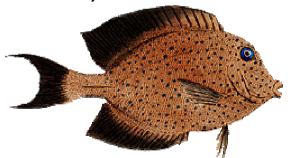
Pages

- Approximated just over 300 pages in an "item"
- Estimated just under 1,900,000 in a year

- Cost: \$70.26 - Cost per page: 0.23

SI Contributions:

- Pulling Materials
- Quality review post scanning
- Other (travel, equipment, transportation)



SI Libraries Contributions:

- Admin
- Collection support
- Systems
- Metadata review
- Conservation review

External Grant Funded: Funders requests for directly to Internet Archive for scanning

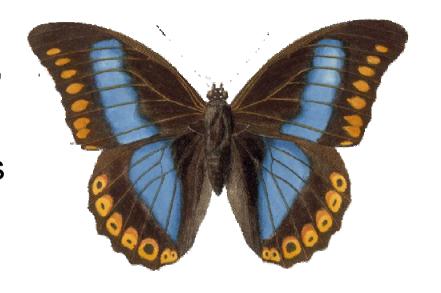
The Encyclopedia Life Serine Molecule

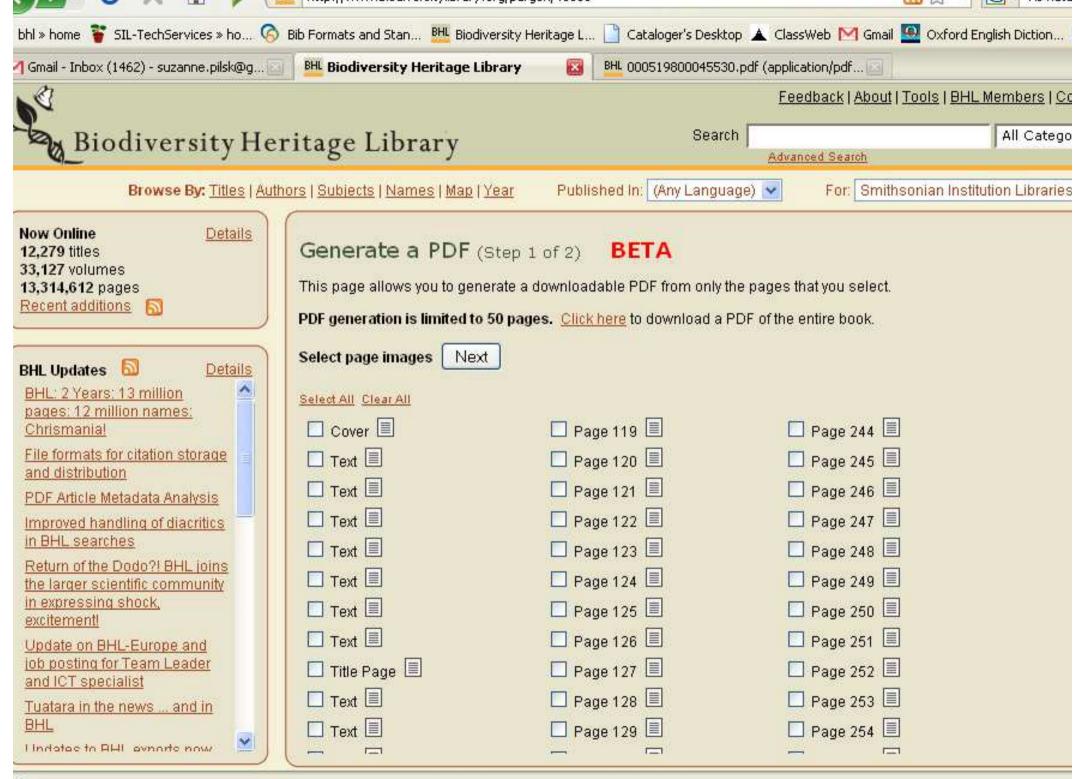
Quick ramp-up high early costs – development, mass scanning, etc.

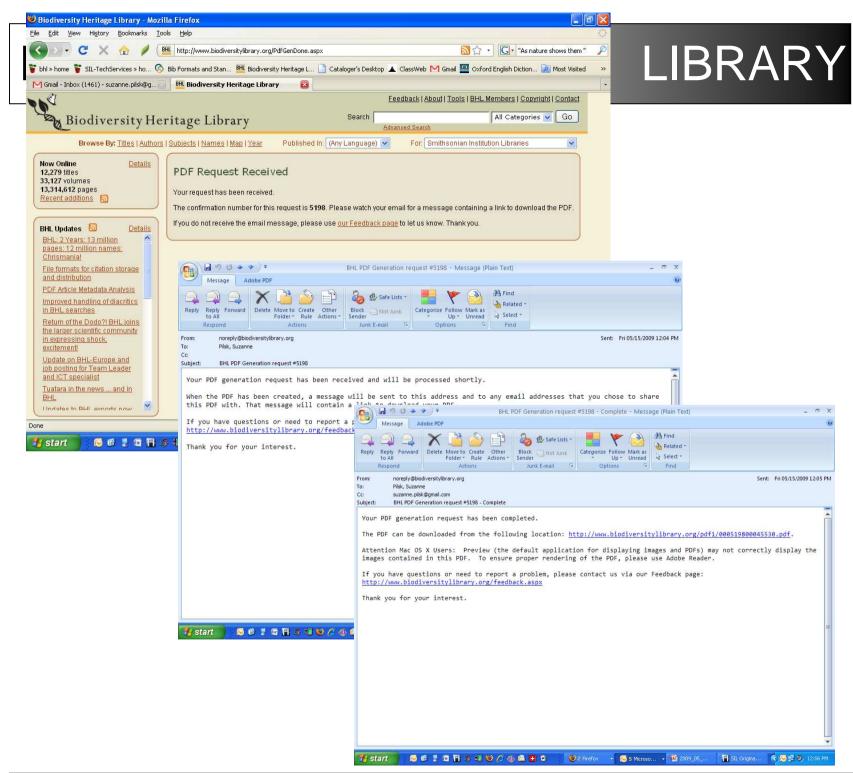
Social experiment in more ways than a technical development

Human and Machine interfaces to the data

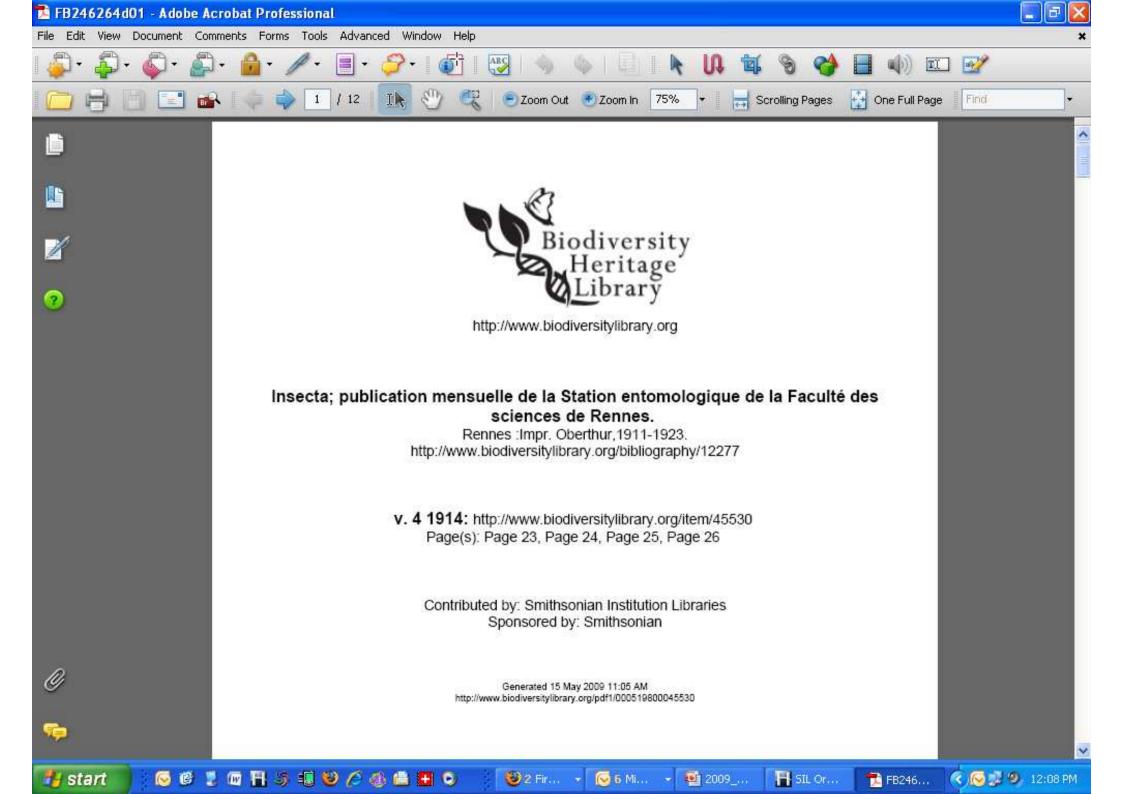
Quick roll out development style allows for changes, feedback loops that work, effective delivery







Suzanne C. Pilsk ~~~Smithsonian Institution Libraries ~~~CIMC May 2009



24 April 2009

The following came from a public librarian in Falmouth, Massachusetts:

"We recently were asked the question: who discovered the zebra fish? In searching the Encyclopedia of Life I kept seeing the phrase "Hamilton, 1822" next to the "danio rerio". Wondering who Hamilton was, I searched WorldCat and discovered that Hamilton was Francis Hamilton who had published in 1822 *An account of the fishes found in the river Ganges and its branches*. I looked at the EOL record and clicked on the Biodiversity Heritage Library link. One of the links was to a Hamilton book! In 1878 the book *The Fishes of India* was published which included a description and a image of the danio rerio. Links were provided to the exact place in the text where the fish was mentioned, as well as to the plate with the fish itself illustrated. Not only that, but I could send the patron the exact link to both pages which described her fish. How remarkable it was to find this Harvard University book available so easily through the Biodiversity Heritage Library. A great success for our patron, and we looked like magicians bringing the book to her."

Professor Emeritus at the University of Southern Mississippi. He used to make an annual trip to our stacks to xerox hundreds of articles at a time.

The Biodiversity Heritage Library is a valuable resource for acquiring crustacean literature. At present, a search there (http://www.biodiversitylibrary.org/Search.aspx? searchTerm=pycnogonid&searchC at=) will turn up 5 publications (one of which was not contributed by the Smithsonian). Also note that the BHL has scanned these and additional literature at the site for taxonomic terms, and provides links to those documents. There are 1592 "hits" for Pycnogonida. It is likely that you could turn up a lot of additional articles within larger works that way. Alternatively, you could perform searches for volumes of interest (if you know of specific references), to home in on the papers you want. There will be A LOT of additional material becoming available at that site.

Yesterday whilst reading the latest edition of *The Entomologist's Record* I was pleased to find that early editions of this invaluable publication, edited by the seminal entomologist James Tutt (no relation to Elvis's drummer as far as I am aware) are available digitised [...]

So I went there, and was amazed at what I found.

They even have a blog. What a fantastic project!!!

From the blog:

http://forteanzoology.blogspot.com/2009/03/fantastic-resource.html

[...]Michael, an colleague researching wasps was excited that he had discovered in the Biodiversity Heritage Library a copy of an obscure 1860s book:

Saussure, H. de & Sichel, J. (1864). Catalogue des espèces de l'ancien genre Scolia, contenant les diagnoses, les descriptions et la synonymie des espèces, avec des remarques explicatives er critiques. Genève & Paris : Henri Georg & V. Masson et Fils pp. 1–350

This book was not in our library, probably not in Australia, and almost impossible to get hold of without travelling to the northern hemisphere. Thanks to the BHL for their work in providing access to works of importance. Michael is now able to use detailed content of this book in his work.

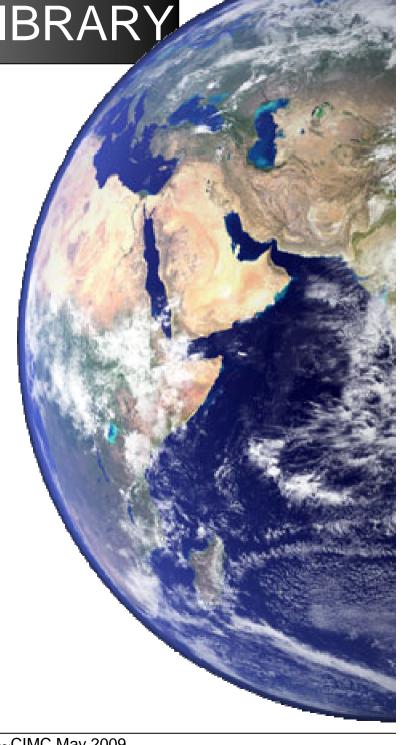
John Tann **Australian Museum**

Thanks to:

- Chris Freeland, Missouri Botanical Garden
- Martin Kalfatovic, Smithsonian Institution Libraries
- Cathy Norton, MBL WHOI
- Smithsonian Institution Libraries Galaxy of Images

http://www.sil.si.edu/imagegalaxy/

Creating a Digital Library
 http://www.youtube.com/watch?v=WztO6f
 SsxCA



BHL Portal

www.biodiversitylibrary.org

Cite

http://cite.biodiversitylibrary.org/

Internet Archive

http://www.archive.org/index.php

Serial Mash up

http://www.nhm.ac.uk/library/bhlseriallist/

EOL

http://www.eol.org/

