"Smithsonian Institution Entomology Library" Review

Skye Hardesty
Georgia State University, skye@gsu.edu

Follow this and additional works at: https://scholarworks.gsu.edu/univ_lib_facpub

Part of the Library and Information Science Commons

Recommended Citation
Hardesty, Skye, ""Smithsonian Institution Entomology Library" Review" (2006). University Library Faculty Publications. 10.
https://scholarworks.gsu.edu/univ_lib_facpub/10

This Review is brought to you for free and open access by the Georgia State University Library at ScholarWorks @ Georgia State University. It has been accepted for inclusion in University Library Faculty Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.
Smithsonian Institution Entomology Library

Reviewed August 2006

Published in Volume 8, Number 2,
October 2006

Product Title
Smithsonian Institution Entomology Library

URL
http://entomology.si.edu/

Reviewer
Skye Hardesty (bio)
University Library
Georgia State University
100 Decatur St., SE
Atlanta, GA 30030
skye@gsu.edu

Scores

Composite: 2.000 ★★
Content: 3.00 ★★★

Searchability: 1.00 ★

The content of these databases is the specimen collections of the Department of Systematic Entomology of the National Museum of Natural History. The information is made available to assist entomologists in identification of certain insects and to assist individuals in searching the holdings of the department.

Search results in this database are frequently unavailable and sometimes the entire site is down. Over a span of three months only twice were error messages not received in all databases.

Price: N/A
Contract: N/A

Pricing Options
N/A

Product Description
The Smithsonian Entomology Library is part of the online home for the Department of Systematic Biology--Entomology at the National Museum of Natural History (NMNH) in Washington, D.C. The site includes, in addition to staff and visitor information, a brief description of the field of entomology (including a history of Smithsonian Entomology), additional resources for entomology research such as links to affiliate organizations, newsletters of the department, and the NMNH Entomology Database Library, a
collection of several single subject databases detailing the departments' research collections.

The databases included on the site are both taxonomy databases listing the specimens in the NMNH or bibliographic databases covering various entomology subjects. The taxonomy databases are: Spiders (Aranea), Aquatic Coleoptera, Mosquito Alcohol Inventory (Diptera), Rhagionidae (Diptera), Fruit Fly (Tephritidae) Literature (Diptera), Ants (Hymenoptera), Butterflies (Lepidoptera), Spodoptera (Lepidoptera), Neuroptera Types, Odonata: The North American collection of dragonflies and damsonflies, Fleas (Siphonaptera), and general topics, such as the Scientific Illustration Archive, Checklist of the Insects of Subsaharan Africa, and World List of Terrestrial Arthropod Families. There appear to be additional databases under revision that will be added to the site.

There are two different types of databases, those containing taxonomic information and descriptions of specimens in the NMNH and bibliographic databases on various topics. Nearly all of the databases seem designed for the professional entomologist with some appeal to the serious amateur entomologist as well. The only database that could contain information for a broader audience is the Scientific Illustration Archive of images of different varieties of insects taken from various books, pamphlets, and articles. Generally, the taxonomy databases are shelf or drawer lists with information to describe the various specimens housed at the NMNH. Descriptions of the content of each of the databases are available on either the main database page (there is a link to the description next to each database) or provided on the individual databases' search pages. There is also a link to a contact person for each database in case a user has questions or comments.

All the taxonomy databases have a similar search interface. The databases offer searching by either family, subfamily, genus, or order. Depending on the insect database, other options can include subgenus, species, subspecies, tribe, or type. Other search fields appearing are author, keyword, location, and biotic region search fields. The taxonomy databases have a drop-down menu with names of either family, subfamily, genus, or type from which to choose, if known. For example, in the Ant Database you can choose from a list of subfamilies and then combine your search with keywords of your choosing in the tribe, genus, subgenus, species, subspecies, author, or type search fields using either "equals," "not equals," "contains," "begins with," or "ends with" to narrow, broaden, or exclude terms from your search. In addition "match all words between fields (AND)" is the default Boolean operator but users can also choose "match any words between fields (OR)". Users can select how their search results are displayed using the Sort function. Users can sort by subfamily, tribe, genus, subgenus, species, author, or types (these may differ depending on the database) in ascending or descending order. Some databases provide searching tips on the main search page. For example, in the Spider Database a tip states "Note, putting an asterisk ( * ) in a field will allow you to browse all records with data in those fields," and in the Butterfly Database another tip notes...
You may enter a portion of a word, such as the first 3 to 4 letters. This field will also find authors, synonyms [sic], and localities. If the locality is in the U.S., use the two letter abbreviation for a state.

Both the search result display and information included in each record vary from database to database. Some are rather limited, such as the Spider Database, which is merely a shelf list with Jar ID, family, genus, species, author, location, and date of update with no links provided to detailed records. The search results display in other databases are more complex. For example, the Odonata database search results are listed by family, genus, species, subspecies, author, state, and country; if you click one of the field names the list of search results will be sorted based on that category. The Ant Database has a similar search result list only it will list, with the total amount of records found, how many specimens there are, how many are workers, how many females, males, and types. At the record level each of the records provides identification information about the insect that you have selected such as family, genus, order, species. Some records, like the Mosquito Alcohol Inventory Database, will provide information about which Smithsonian collection the specimen came from, others will offer binomial information and the preparation of the specimen, e.g., envelope.

The nontaxonomy databases available in the Smithsonian Entomology Library are constructed very differently. A few provide extensive information about the contents of the database and how to use it, such as the Checklist of the Insects of Subsaharan Africa, which provides information on the structure of the project, how to search the database, and a summary of the key literature on identification of Afrotropical insects and spiders. Most are constructed like standard journal article databases with simple keyword searching. The Scientific Illustration Archive is a collection of descriptions of nearly 4,000 cataloged illustrations "created to support the research publications of the departmental research collections." When you are looking for images you have the choice of searching by name (genera and/or species), publication information, author, category (discipline), illustrator, medium; you can also select for records that have scanned images. Currently there are 350 illustrations scanned in the archive, although only 275 images can be displayed.

Critical Evaluation

The Smithsonian Entomology Library is clearly designed for research entomologists and is a good effort at making the research collections in this area available to entomologists outside of the National Museum of Natural History. For individuals who know what they are looking for or know a good amount about entomology this site could be useful. Unfortunately, it is plagued by so many technical problems that it would be hard to recommend to even the professional entomologist. In the three months that I have been looking through the Smithsonian Entomology Library, I have received search results in the databases only twice. Many times the entire site was unavailable. I thought the site may have been down due to maintenance, but since the site had been updated most recently in November of 2005 and most information had been updated as recently as 2001
that didn't seem to be the problem.

At first, I thought the error messages that I received in my searching were because of user error on my part. The error messages read "Your search criteria found no records." So I poured over every entomology taxonomy reference book I could get my hands on and still I received no messages in any of the taxonomy databases (although now I can identify a lot of spiders in my back yard). E-mails to the Web master of the site were unreturned and several attempts to get search results in any of the databases gave the same "found no records" result. Amazingly, one day I was able to do simple searches using the Family or Subfamily drop-down menus in all of the databases successfully. Luckily, I printed out most of the search result and record level displays, because when I sat down to write the review I couldn't access any of the database content again. Unluckily, I didn't do that for the bibliographic databases, so I am recalling them from memory.

In addition to the frustration of not being able to access the content, I began to doubt the usefulness of the database library in some areas. The Scientific Illustration Archive boasts that it has 3,475 records of catalogued illustrations in the archive. That's wonderful but only 350 illustrations have been scanned into the database and of those only 275 will display. Again, these illustrations are from research publications and are for research entomologists, but I couldn't help but think that there would be an easier way to locate an entomological illustration than using this resource.

In fairness, the content of these databases is explicitly the collections of the Department of Systematic Entomology of the NMNH, so there are no problems with the actual data itself, but many of the databases are works in progress and may have misspellings. Users are encouraged to contact the database authors if they see anything erroneous.

As a free service put out by a group of professional entomologists, the Smithsonian Entomology Library is a resource that can help some entomologists looking for information about specific insects, arthropods, and more--once you get past the technical problems. Unfortunately, because it does seem to be a work in progress I would not recommend it as a librarian to patrons seeking taxonomical information on insects that are not Smithsonian-specific. Several texts available for that purpose such as American Insects: A Handbook of ohe Insects of America North of Mexico by Arnett or specific taxonomies such as Bolton's Ant Identification Guide, and the USDA's Catalog of the Diptera of America North of Mexico to name just a few. The objective of making this information freely available is to be commended, but the poor presentation betrays that success.

**Contact Information**

National Museum of Natural History (NMNH)

Department of Entomology

P.O. Box 37012 Smithsonian Inst.
Washington D.C., 20013-7012
Phone: (202) 633-1000
E-mail: info@si.edu
URL: http://entomology.si.edu/

**Contract Provisions**
No contract. The Web site is open to all.

**Authentication**
No authentication is required.

**Author Selected References**


**Advisor Additional References**
No additional references provided.

**Contact Information**
No vendor information provided.

**Selected Users**
No selected users provided.