Creating the *Sudden Selector's Guide to Biology Resources*

Flora Shrode

ALCTS Webinar, August 15, 2012
Flora Shrode
Subject Librarian for Biology, Chemistry, & Geology
Head, Reference & Instruction Services
Librarianship or Science?

- Majored in zoology
- Worked as lab technician for a year (mammalian male fertility studies = a lot of dead mice)
- Took a reference course and decided to pursue an MLS degree
Welcome & Who’s Participating?

- **POLL 1.** What type of library do you work in?
  - Options: 1) academic, 2) public, 3) school, 4) other/special

- **POLL 2.** What is your job?
  - Options: 1) professional librarian, 2) paraprofessional, 3) MLS student, 4) other

- **POLL 3:** Do you currently work with biology or a related field?
  - Options: 1) yes, 2) no, 3) anticipate having such a role
Working as a Science Librarian

- I’ve been fortunate to have a healthy budget for books and journals
- Professors and students enjoy talking about their work, and we can listen and learn
- Research group websites report on projects
- My library can’t always afford everything our patrons want, but interlibrary loan comes through for us
Learning about Biology

- Read to become familiar with the field and terminology
- New books often mentioned or reviewed in the news, especially those about hot topics
- Follow science news sources on the web, often written for average adult audience
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Suggested Reading

- Developmental Biology: A Very Short Introduction
- Evolution: A Very Short Introduction
- The Immortal Life of Henrietta Lacks
### Subdisciplines in Biology

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<th>Subdiscipline</th>
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<tbody>
<tr>
<td>Biochemistry &amp; biophysics</td>
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<tr>
<td>Biodiversity &amp; conservation</td>
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<tr>
<td>Biological classification</td>
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<tr>
<td>Botany</td>
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<td>Cell &amp; molecular biology</td>
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<td>Developmental biology</td>
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<td>Ecology</td>
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<td>Evolution</td>
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<td>Genetics &amp; heredity</td>
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<td>Microbiology</td>
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<td>Physiology</td>
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<td>Zoology</td>
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Today's Top Science News

Florida State Record 87 Eggs in Largest Python from Everglades
Researchers curating a 17-foot-7-inch Burmese python, the largest found in Florida, discovered 87 eggs in the snake, also a state record. ... > full story

Roll over headlines to view top news summaries:
- Largest Python from Florida Everglades
- How Computation Can Predict Group Conflict
- Generating Electricity from Wastewater Advance
- Human-Neanderthal Interbreeding Challenged
- Milky Way Gamma Rays: Dark Matter Evidence?
- New System Could Predict Solar Flares
- Eating Egg Yolks as Bed as Smoking?
- Fresh Water Breathes Fresh Life Into Hurricanes
- New Insight Into Matter of Primordial Universe
- Closer To Using Spintronics In Computing
- New Bacteria-Resistant Materials Discovered
- Full Color Images at 100,000 Dots Per Inch

> more top science stories

more on:  Wild Animals; Exotic Species; Invasive Species; Frogs and Reptiles; Nature; Animals
Biology News (in plants & animals category)

A New Energy Source: Major Advance Made in Generating Electricity from Wastewater
Engineers have made a breakthrough in the performance of microbial fuel cells that can produce electricity directly from wastewater. ... > full story

A New Energy Source: Major Advance Made in Generating Electricity from Wastewater
Florida State Record 87 Eggs in Largest Python from Everglades
Research Raises Doubts About Whether Modern Humans and Neanderthals Interbred
How Computation Can Predict Group Conflict: Fighting Among Captive Pigtailed Macaques Provides Clues

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Monday, August 13, 2012

Health & Medicine
Mind & Brain
Plants & Animals
Agriculture & Food
• Agriculture and Food
• Beer and Wine
• Bird Flu
• Cloning
• Drought
• Fisheries
• Food
• Genetically Modified
• Organic
• Pests and Parasites
• Seeds
• Soil Types
Animals

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News story lead

Fish Are Warmer, Faster, Stronger: Unexpected Benefits of Living in a Changing Climate, Biologists Find

Biologists suggest that growing up at warmer temperatures helps some aquatic animals cope with climate change, raising ...

> full story
question of how far the temperature can rise before the advantage becomes a liability, as inevitably it will, Scott says.

"What limits are there to their coping abilities? That's what we're really trying to understand," says Scott, a specialist in animals' adaptation to challenging environments. "If we want to appreciate how the natural world is affected by climate change, that's what we need to know."

The research appears in the Proceedings of the National Academy of Sciences.

Zebrafish are native to freshwater habitats of Southern Asia, and over their lives can experience a range of temperatures from almost 40°C to nearly freezing. The fish under study were raised across the range of temperatures they would normally experience in their natural breeding season (22°C to 32°C).

The biology of zebrafish -- especially their short gestation period -- makes them ideal research subjects.
http://www.sciencenews.org
Learning about Biology Collections

- Local libraries’ collections in biology
- Subject or research guides online
- Published guides to the literature
- Other science librarians
- Authors at your institution
Example of USU Authors

- Woody Plants of Utah

- A Field Guide with Identification Keys to Native and Naturalized Trees, Shrubs, Cacti, and Vines

- Renée Van Buren
  Janet G. Cooper
  Leila M. Shultz
  and Kimball T. Harper

- Utah State University Press, 2011
Guides to the Literature


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Poll about e-book collecting

POLL 4: What percentage of books your library purchases are electronic books?

OPTIONS: 1) 0%, 2) 20%, 3) 75%, 4) other
RCL: Resources for College Libraries

The Birth of Comedy: Texts, Documents, and Art from Athenian Comic Competitions, 486-280
by Jeffrey S. Rusten
in: Drama, Ancient Greek Drama and Theater

Rarely can a scholarly publication be described as both transformative and indispensable. This volume not only merits such a designation but also ...More

Don't Get above Your Raisin': Country Music and the Southern Working Class
by Bill C. Malone
in: Pop, Rock, Rhythm and Blues, Hip Hop, Country, and Related Popular Genres, Music In the United States and Canada

Combining a high-spirited history of country music's roots with vivid portraits of its primary performers, Don't Get above Your Raisin' examines the ...More

Global Warming: Understanding the Forecast
by David Archer
in: Climate Change

On the Shelf / Out of Print

On Playing the Flute
by Edward R. Reilly
in: Historical Performance Practices
978-1-55553-473-8
University Press of New England
June 2008

Editors

Utah State University

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Browsing RCL for Biology (~2600 total titles)

1. *Honnier's Structure and Function of the Human Body*
   - Authors: Barbara Janson Cohen
   - Publication Date: Jan 2012 - Apr 2012
   - LC Class #: QP35.M54 2012
   - 1 edition

2. *Biology of Sharks and Their Relatives*
   - Authors: Jeffrey C. Carrier (editor) et al.
   - Publication Date: Apr 2012 - May 2012
   - LC Class #: Q.638.B.S6 2012
   - 1 edition

3. *Chemical Genomics*
   - Authors: Ferenc Darvay (editor) et al.
Choice: Reviews for Online

Editorial
Jim E. Rockwood

Taking a Longer View
When was the last time you stepped back from your PC, turned off your smart phone, and let your mind wander for a bit? If you’re like me, that probably doesn’t happen very often. There are all those deadlines to meet, reports and e-mails to write, and meetings to prepare for, attend, and act upon.

>>Read More
Choice: Advanced Search

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Display: Bib citation
Display: 25 results per page

Primary Sort: Publication Year (descending)
Secondary Sort: Title (ascending)

Choice Subject Headings: (use ctrl key to multi select)
- Astronautics & Astronomy
- Biology
- General
- Botany
- Zoology
- Chemistry
- Earth Science

Readership Level:
- [ ] General Readers
- [ ] Lower-division Undergraduates
- [ ] Upper-division Undergraduates
- [ ] Graduate Students
Journals in Biology

- Journal literature is crucial to support research programs
- Serials prices in biology are among the highest (*Library Journal* annual periodicals price survey)
- Core list in the *Sudden Selector’s Guide to Biology Resources* has about 250 titles
Public Library of Science: PLoS
BioMed Central: 241 peer-reviewed, open access titles
Analyzing Journals
Collections & Needs


## Major Literature Databases

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<tr>
<th>Database</th>
<th>Provider/Publisher</th>
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<tbody>
<tr>
<td>BIOSIS Previews</td>
<td>Thomson Reuters</td>
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<tr>
<td>Web of Science</td>
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<tr>
<td>Scopus</td>
<td>Elsevier</td>
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<tr>
<td>PubMed</td>
<td>National Library of Medicine</td>
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<tr>
<td>Cambridge Scientific Abstracts: Natural Sciences</td>
<td>ProQuest</td>
</tr>
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Specialized Sources

- Data repositories like those from the National Center for Biotechnology Information
- GenBank (NCBI) genetic sequence data repository with multiple analytical tools
- Whole genome sequences – human, mouse, rat, Arabidopsis (thale cress), drosophila, honey bee – model organisms that lend themselves to experimentation
- Analytical tools like BLAST
- ITIS – Integrated Taxonomic Information System
- LTER or other large scale ecological db
Current Awareness – staying up-to-date with science news and research…

- Blogs – from scientists, publishers, and biology professional associations (blogs.Nature.com, the-scientist.com, discovermagazine.com)

- Setting up profiles for alerts about new books from CHOICE and other sources

- NCBI’s “My NCBI” free account where you can save searches and opt to receive email when new publications are available, also receive alerts to NCBI’s newsletters
Current Awareness – staying up-to-date with biology librarianship

- E-mail discussion lists from professional groups like ACRL’s Science and Technology Section (STS-L)
- Continuing education opportunities from professional associations (ALA, ACRL, SLA)
- Science Boot Camps like those organized by librarians in Massachusetts
Questions…

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