Biological Sciences
Information Access Policy

Biological Sciences Reference Librarian: Lois Sill
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I. The Clemson University Libraries support the mission of the Department of Biological Sciences. The following text is from the Department’s webpage.

“This program offers undergraduate programs leading to the B.S. and B.A. degrees in Biological Sciences and a B.S. in Microbiology. The graduate programs include MS and PhD degrees in Biological Sciences and Microbiology. There is also a 5-year BS/MS program in Biological Sciences and Bioengineering. In addition, faculty members in Biological Sciences also participate in the interdepartmental MS and PhD programs in Plant and Environmental Sciences and Environmental Toxicology. There is a new online Master's of BIOlogical SCiences (BIOSC ONLINE) that is provided by this department.”

A. Purpose/Objectives
The following is from the 2011-2012 Clemson Undergraduate Announcements:

“Biology encompasses the broad spectrum of the modern life sciences, including the study of all aspects of life from the structure and function of the whole organism down to the subcellular levels and up through the interactions of organisms to the integrated existence of life on the entire planet. Descriptive, structural, functional, and evolutionary questions are explored through the hierarchy of the organization of life. Applications of current advances to the health and well-being of man and society, to nature and the continuation of earth as a balanced ecosystem, and to an appreciation of the place of natural science in our cultural heritage receive emphasis.

Majors in Biological Sciences receive classroom, laboratory, and field training in biology with an emphasis on chemistry, mathematics, and physics as necessary tools. The Bachelor of Science in Biological Sciences curriculum prepares students for graduate study in any of the life science areas (such as agricultural sciences, biochemistry, botany, cell and molecular biology, conservation, ecology and environmental science, entomology, forestry, genetics, industrial and regulatory biology, microbiology, morphology, physiology, wildlife biology, and zoology; for the health professions (medicine, dentistry, etc.), veterinary medicine; and for science teaching.”

B. Biological Sciences Faculty Link

C. Primary Users
The primary users are undergraduates from the College of Agriculture, Forestry and Life Sciences who are majoring in biology or a biological science, non-majors who are taking a science requisite or elective course and the users from the departments of Bioengineering, Biochemistry and Molecular Biology, Genetics, Health Science, Biotechnology, Nursing, Natural Resources, and those enrolled in preprofessional pharmacy, health studies, veterinary medicine, and rehabilitation sciences.
D. Secondary Users

Undergraduates not majoring in the sciences often choose topics from the life sciences for their freshman papers. Many biology topics are now “hot news” – cloning, stem cells, super-bug strains, – materials are purchased that cover these topics in a general way and that are written for the undergraduate who is not a science major.

Also, much of the material in the life sciences is interdisciplinary. Materials bought for one department are used by faculty, students, and staff in many other departments.

Community residents also use the biological science materials especially in the areas of natural history.

E. Curriculum

[Link to the Biological Sciences Department degree curricula in the Clemson University 2011-2012 Clemson Undergraduate Announcements, page 46.]

II. Scope of the In House Collection

The biology collection in the Clemson University Libraries primarily supports the teaching and research needs of the Department of Biological Sciences faculty, graduate students, and undergraduate majors. The collection is also used by a number of Clemson faculty and students outside Biological Sciences; many undergraduates use this material in writing freshman term papers covering such topics as global warming, endangered species, animals used as test subjects, etc.

In addition, the biology collection contributes substantially to the teaching and research work of the Department of Public Health Sciences and the School of Nursing. Collecting efforts are aimed at maintaining a well-rounded biology collection, with special strengths in areas of present research interests at Clemson and areas where advanced degrees are given, but which also provides materials for the undergraduates in all areas of the biological sciences, and which, will in the future, provide an adequate basic collection as research interests change.

A. Library of Congress subject areas. In bold are those covered at both the undergraduate and research levels.

Biochemistry, genetics, and microbiology have separate Information Access Policies.

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L.C. Class Description

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QH 1-74 Natural History – General
QH 75-81 Nature Conservation
QH 84-199 Geographical Distribution - Biogeographical Ecology
QH 204-27 Microscopy
QH 305-42 Biology, incl. population biology and evolution
QH 423-499 Genetics (a separate Information Access Policy exists for this subject)
QH 505 Biophysics
QH 506-529 Molecular Biology
QH 540-559 Ecology
QH 573-671 Cytology
QK 15-599 Botany, incl. plant geography, seed plants and cryptograms
QK 600-638 Fungi, including arctic regions
QK 641-899 Plant Anatomy and physiology
QK 900-939 Plant Ecology
QL 5-345 Zoology – General
QL 101-221 Zoology, North America, incl. Canada and Polar Regions
B. Core Biology Journals

Many of these journals fall outside the typical QH to QR Library of Congress call number range for the life sciences and that helps illustrate how interdisciplinary the subject areas are becoming. Access to the present core collection of journals will be maintained if possible, and, as funds allow, new journals from the list below and others not owned by the Libraries and requested by faculty or graduate students will be considered. Online access will be purchased if available and affordable.

ACS CHEM BIOL  ANNU REV ECOL ECOL S
ADV IMMUNOL  ANNU REV ENV RESOUR
ADV INSECT PHYSIOL  ANNU REV GENET
ADV MICROB PHYSIOL  ANNU REV GENOM HUM G
ADV PROTEIN CHEM  ANNU REV IMMUNOL
AGING CELL  ANNU REV MICROBIOI
AM J HUM GENET  ANNU REV PHYSIOL
AM NAT  ANNU REV PHYTOPATHOL
ANNU REV BIOCHEM  ANNU REV PLANT BIOL
ANNU REV CELL DEV BI  ANNU REV PLANT BIOL
C. Other Resources Available

1. R.M. Cooper Library also provides free interlibrary loan service (ILL) to students, faculty, and staff. Also, the Libraries will use commercial document suppliers if there is no other option.

2. Important Indexes and Abstracts to be retained if financially possible.

| Aquatic Science & Fisheries Abstracts (ASFA) 3: Aquatic Pollution & Environmental Quality | MEDLINE (in Web of Knowledge) |
| Bacteriology Abstracts (Microbiology B) | Sustainability Science Abstracts |
| COS Conference Papers Index | Toxicology Abstracts |
| Ecology Abstracts | Medline (in Web of Knowledge) |
| Environment Abstracts (ProQuest) | AGRICOLA (in Web of Knowledge) |
| Environmental Engineering Abstracts | Web of Science (in Web of Knowledge) |
| Environmental Impact Statements: Digests | Environmental Science and Pollution Management |
| Health & Safety Science Abstracts | MEDLINE |
| Industrial and Applied Microbiology Abstracts (Microbiology A) | BioOne Abstracts & Indexes |
| Pollution Abstracts | TOXLINE |
| ProQuest Deep Indexing: Environmental Sciences | Biological & Agricultural Index |
| | SciFinder Scholar |
| | Web of Knowledge |

II. Collection Management and Parameters

A. Languages
English is the predominant language. If materials in other languages are collected they must generally contain information not readily available in English.

B. Geographic Areas
Much of the material in biology describes subjects, which are independent of geography. Descriptions of most of the world's geographic/ecological areas are included in the collection, with more depth being provided in descriptions of the South or Southeast or other areas where Clemson has programs or interest. Some degree of comprehensive coverage is attempted in local (North Carolina, South Carolina, Georgia) biology, especially in natural history.

C. Chronological Boundaries
Most books considered for purchase are quite current; materials published prior to the most recent five years are purchased very selectively. The emphasis on recent materials does not extend to descriptions of biological and ecological regions, descriptions of species, and field guides.

D. Format of Materials Collected
Monographic material purchased will primarily be English language print sources and electronic format. Journals, handbooks, manuals, and encyclopedias will be in electronic format, if available. Materials in languages other than English will be collected only upon specific request. Scholarly, technical and professional treatments are emphasized. DVDs will be purchased as requested by faculty.
E. The following materials will be excluded unless there is an extraordinary need. These materials are made available in the learning resources center and personalized assistance lab available to biology students in Long Hall.
1. Workbooks
2. Computer software
3. Rare materials

F. Weeding Guidelines
Monographic material, with an imprint of 1995 or earlier, which has not circulated for the last ten years, will be reviewed for weeding. Statistical reports are available for review of these titles. If a book has not circulated and is historically important, Special Collections will be asked to house it. If Special Collections does not take the item, storage will be considered if the item is rare or unique to Clemson.

III. Selection Tools and Review Sources

A. Major Life Science Journals
B. Publishers Websites and Catalogs
C. Biology Society Websites and Catalogs
D. GOBI service from YBP if funds are available

E. The students and faculty are most helpful in suggesting resources to purchase. While working with undergraduates at the reference desk or through class contacts, one learns what topics are of interest. Also, by reading current journals and professional magazines in biology, the topics of current interest are apparent. Co-workers are also extremely helpful in suggesting areas that may need more coverage. Looking at the ILLs requested also helps in the selection process.

F. If faculty members fail to recommend material, the librarian will encourage them to take a more active part in selection. If this encouragement fails, the librarian will make the selections.

G. The librarian is also responsible for the selection of general materials not specifically related to the curriculum and for maintaining a balance between the various subject areas and between standard and current works.

IV. Evaluation Tools

A. “Use studies” involving circulation and browsing data from our online catalog, databases, and journal vendors will show the areas of highest use.

B. Journal Citation Reports purport to pinpoint the most influential journals in any science discipline in several quantitative methods.

C. Interlibrary Loan -- if the students, staff, and faculty are frequently requesting articles from specific journals or books that we do not have access to, this is a clue that these materials may need to be ordered or electronic access gained. By communicating with faculty and students, especially grad students, one can determine if the material needed is available in a timely manner.
V. Assessment and Planning

A. Qualitative Measures
   1. The information access policy for this department will be reviewed every five years.
   2. Appropriate bibliographies will be checked against our holdings.
   3. Benchmarking projects, to be determined.

B. Quantitative Measures
   1. Interlibrary Loan Activities will be monitored to see what subject areas are lacking and what type of materials are being requested most.
   2. Circulation Statistics, both for print and electronic resources, will be reviewed to see which areas of the collection are most heavily used.
   3. Keeping track of the new research grants undertaken and the new courses taught in the Biological Sciences Department can also help determine what materials to purchase and helps in the planning.