

LINKS TO LAKES

The Newsletter of the Arthur Lakes Library

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Colorado School of Mines

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From the Director

by Joanne Lerud

Change continues to be a way of life at the Arthur Lakes Library. This newsletter will provide information on many of the most recent changes regarding the provision of information and information resources and services. For the most current information be sure to check the Library home page (<http://www.mines.edu/library/>).

We are so pleased to have Marilyn Stark in our Reference section again. She is filling a temporary position while we advertise for a third reference librarian. Marilyn is just like family as she had spent nine years at Arthur Lakes Library before moving to the USGS Library at the Denver Federal Center to direct their library operations there.

The journal allocation exercise seems to have worked quite well for the first year. We did have to make some minor adjustments because of unexpected increases in a couple of titles. Preliminary (quite preliminary) indications are for a 12% price increase in journal titles for 1998.

The Library, like every other department, is feeling the stress of a higher than usual number of students. It's supposed to be difficult to complain about being too successful, but I have my moments....



GIS Technology and the Library

by Christopher J.J. Thiry

A majority of government and commercial information may be geographically referenced--the data can be referenced to a physical place. One way to produce coherent results from this data is by using a Geographic Information System (GIS) software package. A GIS is a combination of elements designed to store, manipulate and display geographic data. GIS programs do not automatically produce perfect maps--because of their high learning curve it takes time and knowledge to use them effectively. However, one of the strengths of GIS is that data presentation can be changed, including the colors, font size and style, and location of map symbols. Both powerful and flexible, GIS is currently used in many different areas including surveying, environmental assessment, geologic mapping, and site selection applications.

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GIS Technology and the Library, *cont.*

labs, like Geology or Environmental Sciences, while some will want it in the library. The answer is not clear-cut. Computer expertise and support are certainly one key to GIS success. The necessary computing resources must be available, and the theories behind GIS are important to understand the potential and limits of the software. While knowing how to use the GIS software is vital, it is a means to an end. GIS users must also know what they are trying to accomplish and what data is appropriate for their project. Departments such as Geology or Environmental Sciences often use computer programs such as GIS to do research or teaching. The principles of good geologic mapping or environmental assessment should be applied while using GIS.

Knowing how to both use and apply GIS software and having the computing resources is still not enough. People need data. Giving patrons access to information is one of the priorities of every library. Increasingly, raw, copyright-free geographically-referenced data is being acquired by libraries, particularly through the US Government Depository Program. The private sector is also producing large amounts of data, but this data is copyrighted and can cost a considerable amount of money to use. If one looked at the text of these raw data sets, it would merely be tables of numbers at best, and not particularly usable. To properly view it and make sense of the tabular data, GIS software can be used to turn it into a geographic display. Consequently, many libraries are purchasing GIS software in order to offer their patrons access to the raw data being acquired.

Cooperation is desirable between computer labs, academic departments and libraries when offering GIS, because each provides different areas of expertise. Each can concentrate on its strengths, and at the same time learn about the other aspects of effective GIS use. One strength without either of the others will not make proficient GIS users. There must be shared knowledge in order to produce the best results. The library relies on the computer center and academic departments for their technical expertise and theoretical knowledge, while the computer center and academic departments can work with the library to locate and provide access to information. Ideally, with this partnership in place students and faculty will go to the computer center, academic departments *and* the library to learn about GIS.

The Arthur Lakes Library has made it a goal to use GIS to provide patrons with access to information. To this end, the Library concentrates on teaching patrons the basic concepts of GIS and search strategies for locating information. These lessons translate to both research and the workplace. By providing basic GIS access and maintaining a good understanding of GIS, the library staff concentrates on their area of expertise--locating information and data.

Recently, the Library acquired ArcView, a basic GIS package. It is currently mounted on the public workstations in the Government Publications area. With staff help and tutorials, the CSM community has the opportunity to learn the basics of GIS and become aware of what it can do for them. This software will allow patrons to become familiar with the technology, make simple maps and do basic data manipulation. For an introduction to GIS and ArcView, contact **Christopher JJ Thiry** at 273-3697 or cthiry@mines.edu.



New Databases

Many new electronic databases in a wide variety of subjects are now available from the Library, either on site or through the campus network. These include:

CD-ROMs

Petroleum Abstracts and the **SPE** (Society of Petroleum Engineers) **Image Library** on CD-ROM. Covers information in petroleum engineering, exploration, production and refining, petroleum geology. SPE contains image files of the SPE preprints.

Foreign Broadcast Information Service (FBIS). Copyrighted newspaper articles and news
cont. on next page.

Apart from the classroom, where should GIS be available for students on campus? Some will want it available in a computer center or in departmental

accounts from other countries.

Networked to the Library

Metadex. Five current years of Metals Abstracts online. Literature in metallurgy and metallurgical engineering, materials science.

Pollution Abstracts. Five current years of this database online. Pollution and the environment, remediation and detection.

PAIS (Public Affairs Information Service). National and international public affairs, politics, government policy and political events. *Includes some full-text articles.*

On CARL

Books In Print. Includes price and publication data, searchable by subject.

FirstSearch's new databases (ask for password cards at the Library if you need them), including:

World Almanac

DataTimes Newspaper Index (Covers 90+ national and international newspapers)

New York Times Index, 1994-present.

World Wide Web Access.

Available via Netscape on selected Library PCs. See the librarians for subject-specific WWW resources, or for help searching on your own.

Don't forget the favorites already here, either: **National Trade Data Bank; GeoRef** (geology); **NTIS** (scientific/technical reports); **Energy InfoDisc; Inspec** (electrical engineering and electronics); **Dissertation Abstracts Online; US Census Data; Water Resources Abstracts; Street Atlas USA** to name just a few. For more information on these titles and others, check CARL or contact the Reference Desk (273-3694), Lisa Dunn (x3687, ldunn@mines.edu) or Lisa Stomberg (x3695, lstomber@mines.edu).



GRAND CANYON: A CENTURY OF CHANGE, REPHOTOGRAPHY OF THE 1889-1890 STANTON EXPEDITION. Robert H. Webb. Tucson: University of Arizona Press. 1996. B. Sorgenfrei, reviewer.

In 1889-1890, engineer Robert Stanton led a survey to determine the feasibility of building a railroad through the canyons of the Colorado River to the Pacific Ocean. Such a route would avoid crossing mountain ranges and would be virtually snow free. To save time spent taking notes, photographs were taken on the average every 1.1 miles along the river. Stanton did write a favorable report of the railroad project but few people ever considered the project viable. The expedition passed into history, leaving Stanton's written notes and photographs.

The 2,200 photographs from the Stanton Survey left a visual record of what the Grand Canyon looked like when the Colorado River was still a wild, treacherous river, untamed by dams and seldom visited by man. A century after the Survey, a project was initiated to re-photograph the Grand Canyon as Stanton did. Author Webb and crew painstakingly located the exact spots where Stanton's camera had stood and re-photographed the scene on approximately the same date and time of day it was photographed a century ago. In the book, the photographs a century apart are compared.

Aside from changes to the river and its shoreline caused by the Glen Canyon Dam, above the water's edge surprisingly little change was readily apparent. Some plant communities have increased their range, others have died back. Certain plants like mormon tea, brittle bush and even bunch grass are still thriving exactly where they were photographed a century before. Of all the expeditions down the Colorado River, there is a certain amount of irony in the fact that the Stanton Survey, had it achieved its goal, would have altered the natural environment of the Grand Canyon beyond recognition. Yet it as a lasting legacy has left invaluable documentation on the natural environment which can serve as the basis of scientific study for centuries to come.



Book Review

CARL Tips

CARL can be searched with more advanced features to broaden or narrow your search and improve your results. For example, you can:

Truncate words using an asterisk “*”

dissolve*	for dissolve/dissolved/dissolving
metallurg*	for metallurgy/metallurgical
geolog*	for geology/geological/geologic

Combine terms using Boolean operators

computer OR pc
(design OR construction) AND bridge
colorado AND (park OR recreation) NOT map

For more information, pick up a CARL guide at the Library or contact the Reference Desk at x3694. (Remember, CARL also has a website at <http://www.carl.org/carlweb>.)



Library Notes

New: Renewals for library materials are available, up to a maximum of 6 renewals. After 6 renewals the items must be physically returned to the Library. You can then re-check out your materials if no “Holds” have been placed on them by other patrons.

A TV and VCR are now available in the Library for student use, courtesy of Carol Dahl, Economics & Business Div. First priority will be given to those viewing videotapes on Library Reserve, then for CSM courses. See Circulation for sign-up.

Personal Librarian (PL) is now available on the World Wide Web. PL’s current databases include the Ropeway Center, Society of Mining Engineers (SME) Preprints, and the Tell Ertl Oil Shale Repository. Other databases are in progress. See the Library’s Webpage “Special Collections” at <http://www.mines.edu/library/>.

Gita Passfield started this Fall in the position of Reference Librarian, a position previously held by Jeff Custard. Gita received her MLS from Denver University. Prior to accepting the position here, she was at Hughes Aircraft Company in Los Angeles, California.

Marilyn Stark rejoined us this Fall on a temporary basis. Marilyn has been Assistant Director for Information Services at CSM Library and the Director of the USGS (Denver) Library, in addition to operating her own consulting business. She will be with us through the Spring Semester.

Karen Clough was hired as a Library Technician for Circulation this year. She has had prior experience as an operations manager for the City of Denver.



Library Directory

Director.....	x3690
Circulation.....	x3698
Document Delivery/ILL.....	x3699
Document Delivery/Photocopy.....	x3899
Reference.....	x3694
Government Publications.....	x3695
Maps.....	x3697
Acquisitions.....	x3691
Cataloging.....	x3692

Library Hours (School Term)

Monday-Thursday.....	7:30 AM to 12 Midnight
Friday.....	7:30 AM to 6:00 PM
Saturday.....	9:00 AM to 5:00 PM
Sunday.....	3:00 PM to 12 Midnight