#### Spring 2000



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### News Bits

# LTER Site Description Directory Update

- Karen Baker (PAL)

The availability of basic information about site characteristics for the LTER network of sites is addressed by the LTER Site Description Directory module (SiteDB). General site descriptive information includes specifics such as history, classification type, latitude, longitude, area, elevation, and site contacts. The database, originally developed as a single form relational database (MiniSQL) with web access (Lite) on unix, is being redesigned and ported by the Palmer site in coordination with the LTER Network Office. The new schema involves a multiple table relational database (access) with plans for use of web portable interface software (cgi/perl) on a PC/NT. Development includes consideration of interfaces with other site directories. The LTER Site Description Directory is organized into general, site-specific and themed views. Entries are to be maintained by the individual LTER sites through web forms and input is moderated to ensure security. The directory, planned as part of the LTER network information system module, will support single or multiple site searches for information retrieval and comparison.

# LTER Site Information System Elements Survey

- Karen Baker (PAL)

At their August 1999 summer meeting, the LTER information managers gathered information about their existing individual site information system designs in preparation for KDI and metadata activities. Categories of inquiry include data, metadata, personnel and bibliography. Survey results have been transcribed from paper to digital form and posted online at <u>http://frazil.icess.ucsb.edu/im</u>. The survey has been implemented as a relational database with web interface

permitting 1) sites to update their site information management system descriptions annually and 2) data to be viewed by site or by subject. The production survey implemented on a PC/NT with IIS4.0 a web server includes the database management system Access using web interface software CGI/Perl.

### **BioQuest Education Materials**

- Karen Baker (PAL)

The LTER Education Committee held a workshop at the Kellogg Biological Station in November of 1999. Representatives of BioQuest/Beloit College gave an introduction to their digital libraries and database developments, ie BIRDD and Biology Workbench. The BioQuest Curriculum Consortium is a community of bioscience educators and researchers established in 1986 to focus on undergraduate biology education and science curricula reform. The Consortium goal is to provide opportunities for students to learn about science by participating in science by having the opportunity to consider complex problems using scientific data and methods. The philosophical framework includes problem-posing, problem-solving, and persuasion of peers. The group gathers databases, creates software interfaces and develops curriculum in order to make data available on CD for use in the classroom. Information is on the web for ordering existing educational materials and CDs (http://bioguest.org/). The group solicits new module contributions and looks for partners with databases that BioQuest could augment with curriculum design and could include in their distributions via Academic Press. Contacts: bioquest@beloit.edu; 608-363-2743.

# Virtual Tour Using Quicktime Authoring

- Karen Baker (PAL)

Quicktime Authoring (QTVR) software supports production of a virtual tour in the form of scenes via an online window with 360-degree panorama views and hotspots linked to other panoramas or web pages. The method requires a digital camera with special tripod mount and the QTVR software application package (cost ~\$300) for the Macintosh computer. The QuickTime Player is available free for viewers (www.apple.com/quicktime).

Examples of specific equipment and software ordered include: 1) the camera with increased memory for field photo storage and with cable for download (www.cameraworld.com; Nikon Coolpix 950 digital camera ~\$800; compact flash 64meg fast RAM card ~\$200; AA 4 charger w/4 aa recharg/gold bat ~\$40; Cool Pix AC ADAT.EH-30 F/CP-900/900S ~\$50), 2) the tripod accessories and

software (<u>http://www.kaidan.com/</u>; Kaidan-Quick Tilt leveler-auto leveling QPXL-1 \$120; Kaidan-Panoramic VR tripod head \$250 Kiwi+ KW2-disk type 18; Kaidan Apple QuickTime VR Authoring Studio ~\$275) and 3) the tripod (<u>http://www.simacorp.com/</u>; Sima tripod ST23c \$45.) With this equipment 18 pictures are taken giving a 360-degree view and the software provides the technique for stitching the jpg files together.

References about the method include the book "The Quicktime VR book" by Susan Kitchens and the web sites <u>http://www.quicktvr.com/</u>) and <u>http://intranet.lternet.edu/archives/documents/Newsletters/DataBits/www.apple.c</u> <u>om/quicktime/qtvr</u>.