CAVE SCIENCE NEWS

ENCYCLOPEDIA OF CAVE AND KARST SCIENCE PLANNED

Book publishers Fitzroy Dearborn plan to release the *Encyclopedia of Cave and Karst Science*, edited by John Gunn, in December 2002. The Encyclopedia will be a one-volume work of about 1000 large-format pages, and will contain about 350 entries arranged alphabetically. The major topics are archaeology and rock art, biospeleology, conservation and management, history, geosciences and resources, though the largest number of entries will be on world cave and karst sites or regions. The Encyclopedia will also be illustrated with photographs, tables, maps and diagrams, and will have a comprehensive index.

Editor John Gunn is an active caver and cave scientist who is Professor of Geographical & Environmental Sciences and Director of the Limestone Research Group at the University of Huddersfield, UK. He is Joint Editor of the journal *Cave and Karst Science* and Chairman of the International Geographical Union's Karst Commission. Publisher Fitzroy Dearborn, which has offices in Chicago and London, was founded in 1994 to commission and produce high-quality reference books. Previous Fitzroy Dearborn publications, a number of which have gained awards, include the *Encyclopedia of Paleontology* (edited by Ronald Singer, 1999) and the *Encyclopedia of Genetics* (edited by Eric C.R. Reeve, April 2001).

CAVES SYMBOL STYLE NOW INCLUDED IN ARCGIS

A new Caves symbol style, developed from standard symbols in use by caving organizations and the National Park Service, is now included as part of the standard symbols that deliver with ArcGIS, Environmental Systems Research Institute's new Geographic Information System. These symbols have been based on standard symbols in use by the National Speleological Society, Association for Mexican Cave Studies, Proyecto Espeleologia Purificacion, Wind Cave National Park, Hawaii Volcanoes National Park, and Sequoia/Kings Canyon National Park.

The Caves style can be opened by clicking More Symbols in the Symbol Selector dialog, or by opening the Style Manager. To suggest enhancements to the Caves style, or to submit additional symbols, contact Bernie Szukalski at: bszukalski@esri.com.

LIVING WITH KARST - A FRAGILE FOUNDATION Now Available

Living With Karst - A Fragile Foundation is now available. It has been published by the American Geological Institute (AGI) in cooperation with the National Speleological Society, American Cave Conservation Association, Bureau of Land Management, Illinois Basin consortium, National Park Service, USDA Forest Service, U.S. Fish and Wildlife Service, and the U.S. Geological Survey.

The publication is 4th in the AGI Environmental Awareness Series, and illustrates what karst is and why karst areas are important. The booklet also discusses karst-related environmental and engineering concerns, guidelines for living with karst, and sources of additional information.

The publication is available from AGI at:

http://www.agiweb.org/pubs/pubdetail.html?item=630601

The publication is also available from the NSS bookstore: http://www.caves.org/service/bookstore/

JOURNAL OF CAVE AND KARST STUDIES SPECIAL GIS ISSUE.

The *Journal of Cave and Karst Studies* is planning a special GIS issue, scheduled for publication in Spring 2002. Submissions are now being solicited, and authors may indicate interest via email to:

Bernie Szukalski, Special Issue Guest Editor: bszukalski@esri.com

RESEARCH IN NATIONAL PARKS FROM GEOTIMES, APRIL 2001

Recognizing that the parks are a magnificent set of natural laboratories, the National Park Service is working to facilitate scientific research in parks. The Park Service welcomes proposals for studies designed to increase our understanding of the human and ecological processes and resources in parks, as well as proposals that seek to use the unique values of parks to develop scientific understanding for public benefit.

A scientific research and collecting permit is required for most scientific activities pertaining to natural resources in National Park System areas that involve field work and specimen collection or that have the potential to disturb resources or visitors.

Recently, the Park Service initiated an automated research permitting and reporting system, accessible at science.nature.nps.gov/research. The site, still under development, will make it easier for potential investigators to apply for permits to conduct field work within units of the National Park System, review permit requirements and restrictions, review the objectives and findings of previous studies, easily provide annual accomplishment reports, and to search and review the research activities park managers are most interested in attracting.

The time and effort required to review the permit application and accompanying study proposal will be proportional to the type and magnitude of the proposed research. For example, a single visit for a non-manipulative research project will often require a relatively simple proposal and the permitting decision should be relatively fast. A highly manipulative or intrusive investigation, however, with the potential to affect nonrenewable, rare, or delicate resources, needing detailed planning or logistics, would receive more extensive review. Park managers will work with applicants to arrive at a mutually acceptable research design. However, there may be activities where no acceptable mitigating measures are possible and the application may be denied. The Web site provides additional information on the factors that influence permitting decisions.

Applications for permits must include a research proposal and should normally be submitted at least 90 days in advance of planned field activities. Each proposal will be reviewed for compliance with National Environmental Policy Act requirements and other laws, regulations and policies. The park superintendent may also require internal or external scientific review, depending on the complexity and sensitivity of the work being proposed and other factors.

Applicants can expedite the review by providing photocopies of existing peer reviews, or by providing names, mailing addresses and e-mail addresses of people who could review a proposal.

Researchers working in parks are required to complete an NPS Investigators Annual Report form for each year of the permit, including the final year. These reports are used to document accomplishments of research conducted in parks. Park research coordinators may request copies of field notes, data, reports, publications or other materials resulting from studies conducted in parks.

Individuals may obtain materials via the Internet or by contacting the park in which the work will be conducted. Visit www.nps.gov for individual park addresses.

All application materials must be submitted to the park in which you plan to work, via Internet or mail.

ANDREA HUNTER RECEIVES EXPLORATION SCHOLARSHIP

The Rocky Mountain Chapter of The Explorers Club has presented an Exploration Scholarship to Andrea Hunter. Ms. Hunter's research project is titled "Environmental Disturbance of Bacteria and Effects on Water Quality in a Karstic Setting." Her work will address some critical issues regarding the protection and preservation of cave ecosystems and she will be working in Carlsbad Cavern National Park. Hunter is a student at the University of New Mexico in Albuquerque.

The Exploration Scholarship program of the Rocky Mountain Chapter of The Explorers Club provides small grants to assist students with their field research. Applications for these scholarships should include a one-page description of the proposed field research, a curriculum vita, and a letter of reference from the applicant's advisor. Send application materials to: Dr. James Pisarowicz; Exploration Scholarship Chairperson; Wind Cave National Park; RR 1 Box 190; Hot Springs, SD 57747.

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