CAVE RESEARCH FOUNDATION
Ozarks Operation Area
by Scott House

The Cave Research Foundation (CRF) is a 501(c)(3) organization founded in Kentucky in 1957 for the purpose of facilitating cave research. Today it continues its mission with operations across the country and in expeditions around the world. The CRF is administered by officers, a board and an operations council. An operations manager is appointed by the CRF board to coordinate and oversee activities within an operation. Other individuals within the operation may head specific projects or act as functionaries of one sort or another. Following is a brief description of various CRF Ozarks Operation projects.

Mark Twain National Forest:

CRF works with Mark Twain National Forest (USFS) through a series of cooperative agreements and modifications. These cooperative agreements superseded challenge cost-share agreements and volunteer agreements.

Cave Mapping and Biological Inventory:

This has been our largest and longest running project. It originated in 1990 with a management concern centered on an application by the Doe Run Company for mineral prospecting within the Eleven Point and Current River watersheds. The aim was to document all caves within the 250 square kilometer mineral lease area by detailed mapping, biological inventory and comprehensive descriptions. More than 120 caves were visited and documented over the 6 year course of the study.

Following on from that initial phase, MTNF has continued to provide funding, through one vehicle or another, for an expanded project which is gradually documenting caves throughout the Mark Twain National Forest. Approximately 450 caves have been documented during this ongoing study. In addition, restoration trips are occasionally organized for needy caves.

Archaeology and Gating:

Gating projects include bat caves, sensitive caves, and a number of mines and mined caves. Archaeological survey and monitoring is performed at a variety of sites. Generally, FS biologists do not monitor known arch sites and FS archaeologists do not monitor caves, so CRF fills both of those roles at certain caves. All gating projects must have an archaeological component, so the two facets work together.

Ozark National Scenic Riverways:

CRF work in the Ozark National Scenic Riverways (NPS) is accomplished today through a funded cooperative agreement. This superseded previous contracts, challenge cost-share agreements, and volunteer agreements. CRF helps the park maintain the Powder Mill Research Center where volunteers and researchers are housed; the park provides computer equipment, cave gear, office and storage space, decontamination facilities, and a vehicle.

Present projects are grouped together under one master cooperative agreement which includes the following:

Cave Management:

CRF helps the park manage caves by maintaining databases, monitoring caves, tracking species, providing information for environmental review and doing specific problem-solving activities such as installing signs and maintaining locks and gates. CRF personnel occasionally aid law enforcement rangers with specific vandalism or illegal usage issues.

Biological Survey:
Funding is provided for the CRF ecologist to study a group of active stream caves that have never had a consistent, baseline biological survey.

Restoration:
CRF works to restore caves where such action is required. This may include repairing speleothems, eradicating graffiti, trash removal, or restoring cave floors.

Locating and Mapping:
Most of the park's known caves have now been surveyed. Currently several long stream caves are being actively surveyed. At least one of these has passed the one-mile mark, despite a body-sized spring entrance. New caves continue to be identified and surveyed. CRF practices a survey-as-you-go philosophy.

Interpretation:
Currently CRF is working with park interpretive staff on a number of cave-related projects. These include a virtual tour of Round Spring Cave and other non-public caves; a series of bookmarks and posters related to bat status and WNS are in the works.

Gating:
In cooperation with NPS, CRF maintains a cache of gating equipment in the park. This equipment is used on NPS and other agency projects. Park caves are gated only for reasons of resource protection or endangered bats. CRF designs and builds these gates.

Past projects at Ozark National Scenic Riverways included:
-Data synthesis and database development.
-Photography of Round Spring Cave.
-Detailed biological survey of Public Use Caves (this project resulted in the discovery of a new species of troglobitic carabid beetle, a group previously unknown from the Ozarks.
-Baseline biological surveys of certain stream caves. In 1997-1998 a number of caves within ONSR received aquatic fauna inventories as part of a project to gain baseline data in an area which has the potential to be impacted by mineral prospecting within the Current River watershed.

Missouri Department of Conservation:
Several large and not so large MDC owned caves continue to be the subject of mapping and inventory trips. These are done under restrictions dictated by the state's WNS plans. Permits are given for specific activities. However, the MDC, like other agencies, understands the importance of maps as being critical to managing cave resources. Notably, cartography is nearly completed on the multi-year survey of Powder Mill Creek Cave, the longest cave on MDC property at more than 8 miles long. Another cave in Shannon County is being mapped now and has exceeded the one-mile length. Caves elsewhere in the state are also being mapped based on priority lists provided by the MDC. In the past, MDC has helped fund a number of biological survey initiatives, including the search for additional cave snail locales in southwest Missouri. MDC has also provided some funding for work on private caves in Perry County, particularly a biological survey of the state's longest cave. Lastly, they have cooperated in funding the mapping of a large limestone mine, home to numerous endangered bats.

Missouri State Parks:
CRF has long cooperated with the Missouri Department of Natural Resources, Division of State Parks. Three grants over the last few years have helped fund efforts to inventory and map caves in the state park system with a special emphasis on WNS progression. Several caves within Missouri's State Park system have been mapped; present emphasis is on areas that have not previously been surveyed or inventoried.

Pioneer Forest:
CRF assists the state's largest private forest in managing its 100+ known caves. By providing both cave management recommendations and data archival services, CRF aids the Pioneer in understanding and protecting its numerous cave resources. In addition, CRF helps to facilitate the volunteer activities of cavers who work at finding and surveying both new and known caves in the remote reaches of the forest.

Buffalo National River:
Buffalo National River (NPS) in Arkansas protects hundreds of known caves and karst features. CRF has been involved at the park for more than thirty years and currently operates under a funded cooperative agreement. Surveys of Fitton Cave continue but in recent times the emphasis has been on the need for surveys, inventories and monitoring of smaller caves in the park. Most of these have no formal survey and many have only rudimentary inventories. In the last few years, probably 70 smaller caves have been surveyed. The park provides housing, decontamination equipment, and dedicated cave gear. An enthusiastic and vigorous group of Arkansas cavers have self-recruited themselves to do much of this work.

US Fish and Wildlife Service:
CRF works closely with the USF&WS on a number of projects. The agency has provided funding for CRF to map a large limestone mine, an important bat site. They have also provided funding for the improvement and qualification of Missouri cave data through the Missouri Cave Database, a project of the Missouri Speleological Survey. The agency also consults with CRF on matters of karst concern. As the lead federal agency for WNS issues, the Missouri office has been very supportive in stressing the need for cooperative cave surveys, both biological and cartographic, in caves managed by various agencies.

Privately-owned caves:
Although CRF efforts are generally focused on publicly owned caves, there are occasional forays into the documentation of privately owned caves, usually on lands adjacent to some agency. Normally such activities are at the request of a landowner and many are related to the need for documenting endangered species sites.

Perry County Projects:
Lumped together, this includes the improvement and synthesis of Perry County cave location data and cave surveys. Perry County has more caves than any other county (Shannon is a close second) and also houses four of the state's five longest caves. Working with the Missouri Speleological Survey, CRF continues to refine this data. Another ongoing project is the mapping of the Moore Cave System, owned by a combination of the Missouri Caves and Karst Conservancy, plus private landowners. Approximately five miles of cave have been resurveyed in this long-term unfunded effort. Most recently CRF and MSS are cooperating with the City of Perryville in identifying and refining data, including biota, on caves within (under) the city. This project is already resulting in new cave and biological data.

For more information on projects of the Ozarks Operation of Cave Research Foundation contact:

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