## **Spelunking in the Ozark Karst**

The Ozark Mountains, within both Arkansas and Missouri, are characterized by karst. According to the US Geological Survey, "Karst is a terrain with distinctive landforms and hydrology created from the dissolution of soluble rocks, principally limestone and dolomite. Karst terrain is characterized by springs, caves, sinkholes, and a unique hydrogeology that results in aquifers that are highly productive but extremely vulnerable to contamination. In the United States, about 40% of the groundwater used for drinking comes from karst aquifers."

As a consequence of its karst formations, the state of Arkansas boasts a variety of limestone caves, subterranean streams, and mazes, with crystals, stalagmites, stalactites, and rare creatures exquisitely adapted to life in the cool, dark, moist underground.

According to <u>Arkansas.com</u>, "Of the nearly 2,000 documented caves in north Arkansas, eight are privately-owned, commercial tour caves open to the public." They are:

Blanchard Springs Caverns
Bull Shoals Caverns
Cosmic Caverns
Hurricane River Cave
Mystic Caverns
Onyx Cave
Old Spanish Treasure Cave
War Eagle Cavern

Some Arkansas caves, such as Hurricane River Cave, Cosmic Caverns, War Eagle Cavern and Blanchard Springs Caverns offer guided public tours. Others offer wild cave tours - not for the faint of heart - and wild caves can also be accessed via private lands in certain areas.

All Arkansas caves are "living" caves in the sense that they are undergoing continual evolution through both deposition and erosion of formations. Many also host unusual or unique fauna.

As noted on <u>Arkansas.com</u>, **cave spelunking** requires special equipment and experience. Those interested in this hobby should consider joining a <u>grotto club</u> or a national organization such as the <u>National Speleological</u> <u>Society</u>. These clubs represent local groups of cavers who share trip reports and also plan caving trips. Find more at <u>www.caves.org</u>.

## **Cave Etiquette and Best Management Practices**

Any cave enthusiast who knows what they're doing cares about the caves and caverns of the world. Caves need the protection of those who admire and use them for the following reasons:

- Caves have unique scientific, recreational, and scenic values
- These values are endangered by both carelessness and intentional vandalism
- These values, once gone, cannot be recovered
- The responsibility for protecting caves must be formed by those who study and enjoy them.
- Bats, which are essential for ecosystem services such as predation of pest insects and plant pollination, are being ravaged in some eastern and southern U.S. caves by a disease called "White Nose Syndrome" [LINK], which can be spread by careless cave visitors.

The National Speleological Society, the Fish and Wildlife Service, wildlife conservation groups, and responsible ecotourists recommend and abide by these commonsense rules for cave protection and conservation:

## If you go caving:

- Leave No Trace. This means caving parties should leave a cave as they
  find it. They should provide means for the removal of waste; limit
  marking to a few, small, and removable signs as are needed for surveys;
  and, especially, exercise extreme care not to accidentally break or soil
  formations, disturb life forms or unnecessarily increase the number of
  disfiguring paths through an area.
- Never cave alone and always tell somebody where you're caving and when you're out.
- Never cave during or after rain.
- Each caver needs at least 3 light sources, spare food and water, warm clothes, and good boots, gloves, and helmet.
- Respect all cave closures whether private gates or notices from wildlife agencies designed to prevent the spread of white nose syndrome [LINK].
- To avoid transmitting White Nose Syndrome fungal spores to new cave sites observe the <u>following cautions</u> after each cave visit: wash dirt from clothing, footwear and gear using Woolite. Then soak for 10 minutes in Lysol Professional All Purpose Cleaner, Formula 409 or a 10 percent solution of household bleach. Rinse well and air-dry.