



Cave Owner's Newsletter

A publication of the Virginia Cave Board, Department of Conservation and Recreation

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Cave Stewardship Rejuvenated

by William Keith

Virginia Cave Board

Approximately twenty years ago, Danny and Laura McGlothlin purchased the property that contained the entrance to Grays Cave in Russell County, Virginia. In those first few years, they explored the cave and removed some trash, but eventually the cave became somewhat forgotten. That changed in the spring of 2001 when I met with the McGlothlins about installing a conservation buffer around the cave entrance to help filter out potential pollutants. Being an avid caver, my conversation with Danny immediately focused on the cave. I had driven by the entrance twice a day but had never met the owner to get permission to visit the cave. I explained to Danny how significant the cave was in relation to the local hydrogeology. He noted my excitement and we started planning our first cave trip together.

In addition, my wife Sharon, who is also an avid caver, had not had an opportunity to go caving since the birth of our daughter in March 2001. The trip to Grays Cave provided an excellent opportunity to visit a cave that I had much interest in, to establish a relationship with the owners and to get Sharon underground again. On a Saturday in June, Danny and Laura McGlothlin, Sharon, and I went on our first trip to Grays Cave.

The fifteen-foot wide, eight-foot tall entrance is located in the bottom of sinkhole and gives way to nice passage of walking height. A low crawl is encountered approximately two hundred and fifty feet from the entrance. Once we were beyond the crawl, we were standing at an intersection with a stream passage and an upper-level passage. The stream that appears in the cave is a "sinking creek", a

surface stream that sinks nearly two miles away upstream.

We decided to go downstream first, so we made the climb into the upper level where we encountered a well casing that passes through the passage. This gave us even more opportunity to talk about the hydrogeology. We proceeded toward the back of the cave where we encountered the "other" low point. At what appears to be a terminal room, a low crawlway through mud and standing water gives access to the far downstream section. This immediately became the highlight of the trip!! A thin layer of mud and water that creates a perfect hydroplane surface covers the firm sub-layer of the crawl. A person can move through the passage very quickly by using only two fingers. When we reached the terminal siphon, we noticed the only severe graffiti in the cave. We discussed management and the pros and cons of installing cave gates.

The only mishap of the day was when Laura made a significant discovery in the upstream stream passage. There is a least one place where the depth of the stream exceeds normal body height. We agreed that a non-swimming caver should NOT make these types of discoveries! The cave trip was a success and the desire of the owners to take care of the cave was reborn.

The next year was filled with a flurry of activity. The first project was to clean all of the old debris and junk from the steep sinkhole entrance. This would have been a worthy project for a scout troop. It was a tremendous undertaking considering the couple did all of the work themselves. Their next step involved

the installation of conservation measures. The spring was developed and a water-trough system was installed in order to keep the livestock from standing in the small pond that drains into the cave. The couple also installed the woven wire fence and planted trees. Now any potential contaminated runoff will flow through the buffer and will likely be attenuated before entering the cave.

The graffiti in the cave was still a concern, so the couple turned their attention to constructing a cave gate. I met with the McGlothlins after the gate was partially installed. We discussed bats, bat flights and possible modifications to the gate. Once again, Danny took on the problem at full speed. He used a different pattern for the bars in the door, which created a window in the gate that was more “bat

friendly”. The couple built the cave gate (Figure 1) without any assistance nor previous experience.

Equally impressive is the cost (or lack thereof) of the gate. Danny is a world-class scrounger and acquired most of the materials at no cost so that the “cost” of the gate was limited to their significant amount of labor.

The next project will be to re-survey the cave and produce a high quality cave map. Danny and Laura have truly enjoyed their hard work and their ideas of stewardship have certainly been rejuvenated. They extend an invitation to other cavers to come enjoy their cave and share some stories. Just beware, I have the first option to buy the cave if they ever decide to pass the stewardship on to someone else.



Figure 1: Entrance to Grays Cave, Russell County, Virginia. This gate was constructed by Danny and Laura McGlothlin. It is designed to thwart trespassers yet it allows easy access for bats that inhabit the cave.

Virginia's Cave Appreciation Week

Experience the Wonder Underground

October 13-19, 2002 is Cave Appreciation Week in the Commonwealth of Virginia as proclaimed by the Governor. This is the third annual event. It is sponsored by the Virginia Cave Board and the Virginia Department of Conservation and Recreation and supported by the Cave Conservancy of the Virginias and the Show Caves of Virginia.

Virginia has some of the most beautiful and biologically interesting caves in the United States. Cave Appreciation Week is a special time to enjoy these rare and valuable natural resources. Group, educational, and cave week discounts and reservations are made available at some of the caverns.

Virginia's caves are found in areas called karst, where the bedrock is limestone. Because limestone is soluble in slightly acidic water, rainwater and

surface runoff dissolve it, leaving sinkholes, caves, springs, and similar geologic features. These features are often interconnected, carrying groundwater through them for considerable distances - even miles away.

Animals living in isolated caves may be rare. They are typically sensitive to environmental change and may be endangered. When a cave is disturbed, such as by vandals or by pollution, entire species may become extinct, even before people know that they exist. Additionally, over centuries people have left evidence of their presence in caves. These significant historic resources also need protection.

For further information, contact the *Virginia Karst Program, Virginia Department of Conservation and Recreation, 7502 Lee Highway - 2nd Floor, Radford, VA 24141 (phone: 540-831-4057).*



Figure 2: *Third-grade class from Stickleyville Elementary School (Lee County) at the entrance to Panel Cave, Natural Tunnel State Park, Scott County, Virginia during Cave Appreciation Week 2000. Teacher Todd Light of Stickleyville Elementary School and Karen M. Kastning of the Virginia Cave Board (both at the upper left in the photograph) also participated. Photograph by Karen M. Kastning.*

Members of the Virginia Cave Board

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Note:

The Virginia Cave Board consists of eleven appointed members. As this issue of the newsletter was going to press, one vacancy remains to be filled on the Board.

Newsletter Editors:

Karen M. Kastning (Virginia Department of Environmental Quality and Virginia Cave Board)
and **Ernst H. Kastning Ph.D.** (Department of Geology, Radford University)

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Landowner Assistance for Best Management Practices for Sinkholes on Agricultural Land

by Joseph Fagan

Virginia Karst Program, Division of Natural Heritage
Virginia Department of Conservation and Recreation

The Commonwealth of Virginia sponsors cost-share and tax-credit programs to assist landowners with conservation practices such as cleaning trash from sinkholes. On July 1, 2002, the Virginia Agricultural Best Management Practices (BMPs) Cost-Share Program, administered by the Virginia Department of Conservation and Recreation, adopted a Sinkhole Protection BMP. The Virginia Sinkhole Protection BMP (WQ-11) can pay up to 75% of the cost for trash removal from a sinkhole with a maximum contribution by the state of \$2500.

Landowners in Virginia may apply for financial assistance for conservation efforts through their local Soil and Water Conservation District Office. Other agencies assisting landowners are the United States Department of Agriculture Farm Service Agency (FSA) and Natural Resources Conservation Service (NRCS). The website for the Virginia Association of Soil and Water Conservation Districts may be found on line at:

<http://www.vaswcd.org/districts.htm>

Conserving Land and Protecting Natural Areas: The 2002 State Parks and Natural Areas Bond

Vote November 5th 2002

On Election Day November 5, Virginians will have the chance to vote on a \$119 million State Parks and Natural Areas bond referendum. The Parks and Natural Area Bond funds will be used to purchase significant natural lands across the state. If passed, the bond will guarantee the conservation of critical land and the preservation of natural habitats through the purchase of 10 new Natural Areas Preserves and additions to 8 existing Natural Areas Preserves, three new Virginia State Parks as well as adding land for 11 existing State Parks.

The conservation of Virginia's natural heritage requires active land protection and sound conservation management. Habitat loss and conversion of natural lands to other uses is the leading cause in the loss of our biological heritage. Virginia remains among the fastest growing states.

Bond funds will provide vital financial resources to protect some of the most irreplaceable examples of our natural heritage and provide safe habitats for birds, wildlife and plants. Virginia biologists have identified nearly 1,500 critical natural areas, however, only a small fraction of these areas are dedicated as Natural Area Preserves. Bond funds will help protect new Natural Area Preserves and create additions to existing Preserves.

Virginia's citizens have consistently ranked protection of open spaces, land and water resources as a priority for future generations. Virginia's leaders have responded by overwhelming endorsing the State Parks and Natural Areas Bond. The majority of Virginians who will vote on November 5 will determine if this vital opportunity to conserve Virginia's natural resources is seized or lost.