

## CAVE OWNERS' NEWSLETTER

## Published by the VIRGINIA CAVE COMMISSION

of the Department of Conservation and Economic Development Commonwealth of Virginia P.O. Box 7017, Richmond, Va. 23221-0017 Phone: (804) 353-6776

## Issue Number 1

August 1981

Dear Cave Owner,

The enclosed informational newsletter is being sent to cave owners across the Commonwealth in recognition of their important role in the conservation of Virginia's unique cave resources. Hopefully you will find the information it contains useful.

As most of you are well aware, caves have attracted increasing numbers of recreational spelunkers in recent years. As the number of "cavers" has grown, so has the inconvenience and property damage suffered by cave owners and the destruction of scientific and historic resources contained in the caves themselves. In recognition of this growing problem, the 1979 General Assembly created the Virginia Cave Commission.

The Virginia Cave Commission is a state agency composed of eleven citizens, appointed by the governor, who are knowledgeable about caves. The purpose of the Cave Commission is to promote the conservation of cave resources and to assist cave owners in protecting their property. The Cave Commission does not regulate the use or development of any privately owned property, and under no circumstances can it condemn property for any reason. The purpose of the Commission is strictly to provide information to the public on cave resources and to assist those cave owners desiring help with their cave management problems.

Enclosed is a short questionnaire designed to help the Commission evaluate how it can be of most assistance to Virginia cave owners. If you would take a few minutes to complete the form, it would be most helpful. A stamped envelope is enclosed to return your response. If you would like to continue receiving informational newsletters free of charge from the Cave Commission, be sure to check the appropriate block at the bottom of the form.

For further information about the Cave Commission and the services it offers, feel free to write us at any time. We look forward to helping you in any way we can.

Thank you for your help and cooperation.

Very truly yours,

The Virginia Cave Commission

## WHAT'S THIS?

This is the first issue of a free informational newsletter for Virginia cave owners. It is published by the Virginia Cave Commission to provide a medium of communication for the more than 2000 Virginia landowners who have caves on their property. Hopefully the exchange of information and ideas in this and future newsletters will prove helpful to you in the management of your cave property.

The cost of printing and mailing this newsletter has been paid for through a grant from the Virginia Cave Conservancy and the Richmond Area Speleological Society. No tax dollars go towards the support of this publication. If you would like to continue receiving the Cave Owners Newsletter, be sure to check the appropriate box at the bottom of the enclosed questionnaire.

Your ideas and comments on how we can improve the Cave Owners Newsletter are always welcome. If you would like to contribute an article or a letter to the editor, we encourage you to do so. After all, it's your newsletter, so feel free to contribute your thoughts and ideas. Address your two cents worth to: Cave Owners Newsletter, c/o Virginia Cave Commission, P.O. Box 7017, Richmond, Va. 23221-0017

## THE VIRGINIA CAVE PROTECTION ACT

The Commonwealth of Virginia, recognizing the importance of caves, added the "Virginia Protection Act" to state law, the Code of Virginia, in 1979.

Why are caves considered to be so important?

They are a part of our nation's non-renewable natural resources. Many caves contain beautiful mineral formations that are irreplaceable if destroyed. Caves also have historic significance as evidenced by the Indian artifacts and relics of Civil War saltpetre mining which have been discovered in some caves. (Saltpetre was used in the manufacture of gunpowder.) Furthermore, caves have scientific value. They are excellent natural laboratories, many of which contain animals that are rare and unique. Caves by their very nature were formed by the action of water beneath the ground and offer unique opportunities for the study of such phenomena as the origin of springs and ground water. Finally, caves have recreational value. Just as many people like to go hiking and boating, some enjoy cave exploring.

How does the Virginia Cave Protection Act affect you as a cave owner?

Trespassers and Vandals

Like the owner of any other type of property, you have the right to forbid others from using your property, and in this case, from going into a cave which is on your land. Like any owner of real property, you have the right to "post" your cave and control access to it.

Anyone who wants to remove or destroy anything in your cave (historical, biological, or geological) must first have your <u>WRITTEN</u> permission. Otherwise they are subject to a fine under Virginia State Law.

## Pollution

You have the right to have your cave free from unnatural pollution, and it is against the law for anyone to dump any litter, garbage, dead animals, sewage or toxic substances in your cave without your prior written permission. It is also against the law to mark on the cave walls or to burn anything which produces smoke or gas which harms any organism in the cave. Anyone violating these laws may be fined up to \$500.

## Scientific Studies

The State sometimes issues permits that allow persons to remove biologic specimens or historic artifacts from caves for scientific or scholarly purposes. If such a person wishes to do so, he must obtain your WRITTEN permission before he can get a permit from the State. He must also carry his permit while doing the work he was authorized to do.

## Liabilities of a Cave Owner

If you give permission to someone to use your cave for recreational or scientific purposes, but do not charge him for the use of the cave, then you are not liable for injuries sustained by that person. If you do charge the person a fee, then you may be liable for his injuries should any occur.

## Sale of Mineral Formations from a Cave

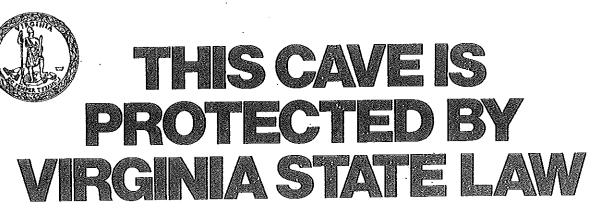
It is against the law to sell any mineral formations from a cave, or to export the formations outside the state for sale, even if you own the cave from which these formations came. Anyone violating this law could be fined up to \$500.

What should a cave owner do if he catches someone vandalizing his cave or trespassing on his property?

Usually the best thing to do is to write down the license number of the culprits' vehicle and call the sheriff. Then, if possible, block the vehicle in with another vehicle so that it can't be moved before the sheriff arrives. When the sheriff arrives, have the offenders arrested and charged with trespassing or violating the Cave Protection Act. In some cases, you may be required to go down to the courthouse and file a formal complaint after the arrests are made.

A five hundred dollar reward is offered by the Virginia Cave Conservancy for the arrest and conviction of any persons violating the Cave Protection Act. about the reward are given on the poster reproduced on page 4. The complete text of the Cave Protection Act is printed on the insert in the back of this newsletter.

## CAVE PROTECTION ACT SIGNS



(CODE OF VIRGINIA 10-150.11 et. seq.)

Caves are unique sensitive environments. Help preserve this cave for future generations to enjoy.

## IN VIRGINIA IT IS ILLEGAL TO:

- Break, deface, or remove any natural material
- or mineral formation.
- Litter or dump spent carbide or other waste materials.
- Write or mark upon the cave walls or surfaces.
   Disturb, harm, or remove any bats or other living organisms in the cave.
  - · Disturb or remove any historic or prehistoric artifacts or bones.

THANK YOU.
THE VIRGINIA CAVE COMMISSION

Handsome 14" x 20" signs like the one pictured above, painted on heavy aluminum, are available free from the Cave Commission for placement in your cave. Hopefully as these signs are placed in caves around the state, cavers will get the message that caves are worth preserving and are protected by law. To obtain a sign for your cave, check the appropriate box on the enclosed questionnaire.

# WANTED CAVE VANDALS \*500 REWARD

FOR INFORMATION LEADING TO THE CONVICTION OF PERSON

OR PERSONS VIOLATING THE CAVE PROTECTION ACT OF VIRGINIA

OR EQUIVALENT ACTS IN ADJACENT STATES

## **CAVES ARE PROTECTED BY LAW**

IN VIRGINIA, MARYLAND, and WEST VIRGINIA CAVES IT IS ILLEGAL TO:

- Write or mark on cave walls
- Disturb bats or other living organisms
- Litter or dump spent carbide
- Remove or disturb historic or prehistoric artifacts or bones
- Break or remove mineral formation Tamper with or damage cave gates

(Code of Virginia 10-150.11 et seq.) (Maryland Natural Resources Code 5-1401 et seq.) (West Virginia Code 20-7A-1 et seq.)

Caves are a unique nonrenewable natural resource. They are protected so that future generations can enjoy them. Help enforce the law by reporting all persons violating the law to the cave owner or nearest law enforcement authority.

## **Editors** Note:

The following article is a case study of the cave resources and management problems of a cave in Augusta County, Virginia. It is printed here to give our readers a feeling for some of the unique resources contained in caves and some of the problems encountered in trying to protect these resources. While few caves have organisms as rare as those in Madison's Saltpetre Cave, the problems encountered in the management of this cave are representative of those experienced by cave owners everywhere.

# MADISON'S SALTPETRE CAVE: A Case Study in Cave Resource Management

One of the basic tools used in conserving cave resources is the limitation and control of access to a cave by the use of a management plan. Operators of show caves (caves open for public tours) find it necessary to carefully control and manage the visitation to their caves. Even those show caves which have been open to the public for many years have received little damage because access and visitation is tightly controlled. Not all caves can withstand the impact of uncontrolled or heavy visitation. Madison Saltpetre Cave is a significant cave that contains a precarious environment for two rare species of animal life and a number of historical artifacts that could be carelessly or unintentionally damaged. Consequently, a management plan is now being developed to help protect Madison Cave.

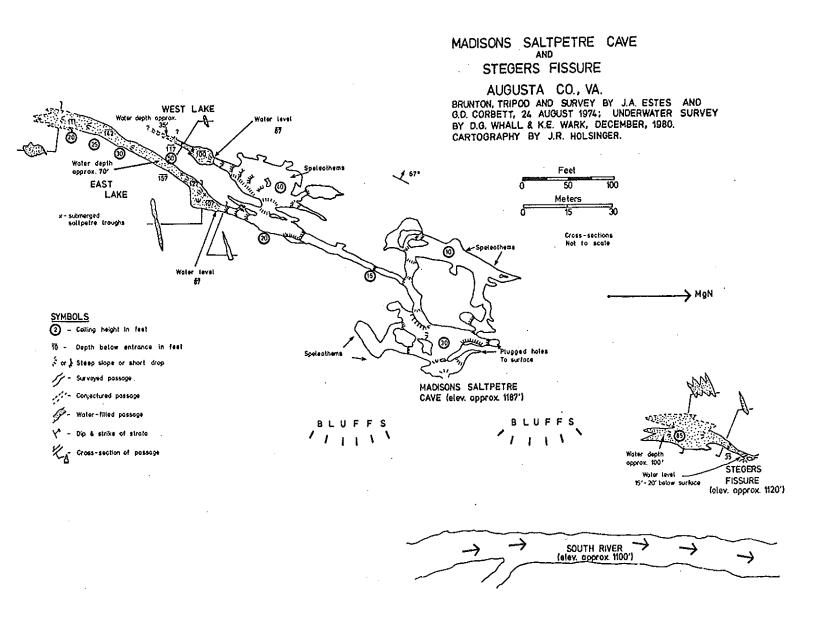
## History

Madison's Saltpetre Cave was probably discovered sometime in the mid to late 1700s, though possibly earlier. It is named for John Madison, cousin of James Madison (fourth U.S. President), who was an early owner of the cave property. After the Revolutionary War, the cave became popular as a tourist attraction. The walls of the cave bear the signatures of three early presidents who visited the cave—George Washington, Thomas Jefferson, and James Madison. (Unfortunately, Jefferson's signature has been obliterated by vandalism and Washington's is nearly lost among all the modern day graffitti.) A 1787 sketch map of the cave by Thomas Jefferson is the earliest known map of a U.S. cave. The cave was a nationally known attraction until the early 1800s when it was eclipsed by the nearby opening of the larger and more beautiful Grand Caverns in 1808.

During the War of 1812 and the Civil War, Madison's Cave was mined for saltpetre (an ingredient of gunpowder). Mattock marks from the digging are still

preserved in the walls of some of the more remote niches in the cave. Until recent years, a small A-shaped ladder used by the saltpetre miners was preserved in the cave, but it has been removed. A reconnaissance by scuba divers of one of the water-filled fissures at the south end of the cave in 1980 uncovered an old saltpetre trough, but no attempt has been made to recover it.

In recent times, plans were made to commercialize Madison's Saltpetre Cave again and preparations for installing electric lights in the cave were made. The plans were subsequently abandoned, but insulators for electric wiring still remain in the cave.



## Scientific Importance

Madison's Saltpetre Cave has a unique and scientifically important biota. Seventeen species of small invertebrates are known from this cave. Nine of these species are troglobites (cave-adapted organisms) that live exclusively in the subterranean environment. The other eight species are troglophiles. Two species of freshwater crustaceans, the Madison Cave Amphipod (Stygobromus stegerorum) and the Madison Cave Isopod (Antrolana lira), are unusually rare. The only places in the world these two organisms are found are in Madison's Saltpetre Cave and in a water-filled fissure nearby. The Madison Cave Isopod is currently being considered by the U.S. Fish and Wildlife Service for inclusion on their list of threatened animal species.

Because the size and diversity of the animal population in Madison's Cave is limited, the cave is a potentially valuable natural laboratory for ecological studies. Also, the individual organisms are important to the study of evolutionary adaptation in an isolated environment.

Geologically, Madison's Saltpetre Cave is an outstanding example of cavern development in a vertically dipping limestone. The water-filled fissures at the south end of the cave provide a unique opportunity to study the movement of ground water in the aquifer under Cave Hill and to observe the influence of water levels in the nearby South River on ground water flow. These attributes add to the cave's potential value as a natural laboratory.

### Cave Vandalism

Since its discovery in the 1700s, Madison's Saltpetre Cave has been repeatedly vandalized. Early visitors such as Washington and Jefferson began the practice of inscribing signatures and dates on the cave's walls. Later, visitors began removing the cave's mineral formations to take home as souvenirs. During the War of 1812 and the Civil War much of the cave was dug up as part of a saltpetre mining operation. More recently some of the historic artifacts left by the saltpetre miners have been stolen and the cave has been occasionally used by local teenagers as a place to party. Modern day graffitti now covers much of the historic graffitti which preceded it.

Recreation has figured prominently in both the development and destruction from which Madison's Saltpetre Cave has both benefitted and suffered. Commercialization opened the cave to the public as a recreational resource and attracted the various important personages throughout history who have given the cave much of its historic

importance. It also, however, attracted a certain number of vandals who have over the years destroyed most of the cave's natural beauty. Fortunately, the unique organisms that inhabit the cave have so far managed to survive man's heavy-handed intrusion. Continued vandalism and dumping of refuse in the cave now threatens this last and most valuable resource.

## Cave Management

In the spring of 1971, the Virginia Region of the National Speleological Society, alarmed by increasing vandalism to the cave, constructed a rock wall with a wooden door in it across the cave entrance. Unfortunately, the lock on the door was repeatedly broken by vandals. Since then, no attempt has been made to keep the cave locked, although the owner, Mr. Lyall Steger, does not grant permission to enter the cave to anyone but qualified speleologists. Vandalism to the cave by trespassers has continued. In the spring of 1980, the Virginia Cave Commission posted a sign about the Cave Protection Act in the cave and removed two twenty-five gallon garbage bags full of trash, a broken portable stereo, and a folding Samsonite chair from the cave.

Recently, Mr. Steger has become concerned about the continual trespass into his cave and has expressed his intention to have a substantial steel gate placed across the cave entrance. The Virginia Cave Conservancy has agreed to install the gate for Mr. Steger sometime this fall. Subsequently, access to the cave will be limited to scientists and participants in carefully controlled field trips. Hopefully, these new measures will put an end to vandalism and dumping in the cave and will finally provide a measure of security for the cave's unique fauna.

## CAVE RESCUE COORDINATION NETWORK

In the unlikely event that there is ever an accident in your cave, you will be comforted to know that there is a network of cave rescue groups in our area—the Cave Rescue Coordination Network (CRCN). CRCN coordinates manpower and equipment in the event of a cave emergency in Virginia, West Virginia, Maryland, North Carolina, or northeastern Tennessee.

The CRCN phone number—(804) 924-7166—is manned twenty-four hours a day, three hundred and sixty-five days a year. In the event of a cave emergency, call the above number and ask for "CRCN." A dispatcher will take down basic information about the problem such as the name of the cave, the specific problem, the number of people involved, and your name and phone number.

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The dispatcher will pass this information on to one of the five CRCN coordinators, who will immediately call you back and obtain more detailed information. The coordinator will then assess the problem and take appropriate action. The coordination of the various rescue personnel and equipment dispatched to the scene or placed on standby will be handled by the CRCN coordinator until the emergency cave problem is over.

CRCN coordinates more than a hundred and twenty people in over twenty cave rescue groups. These people are trained and experienced in cave rescue and operate in Virginia, West Virginia, Maryland, North Carolina, and northeastern Tennessee. In addition, CRCN has working contacts with specialists in scuba diving, explosives, mine rescue, search and rescue, and other related fields. For further information, write to: CRCN, P.O. Box 3063, Charlottesville, Virginia 22903.

In the event of a cave emergency call CRCN at (804) 924-7166.

## COMING ATTRACTIONS

In coming issues of the Cave Owners Newsletter we hope to continue to bring you a wide variety of useful information about caves and cave management. In the next issue there will be articles about proposed changes in the Cave Protection Act, what the Virginia Cave Conservancy is and does, and an article about the management of one of Virginia's largest caves. Also, there will be articles on water pollution in caves and about some ways to screen out potential vandals from among those who ask to go in your cave.

In the meantime, if we here at the Cave Commission can be of help to you, just let us know. We would be happy to assist you in any way we can. Thanks for listening.

The Virginia Cave Commission