

**FINAL**  
**Minutes of the Virginia Cave Board**  
**Saturday, May 15, 2010**  
**Grottoes Town Hall, Grottoes, Virginia**

Virginia Cave Board Members Present

Mr. Tom Lera, Chairman  
Dr. David Culver  
Dr. Dan Doctor  
Ms. Babs Funkhouser  
Dr. John Holsinger  
Ms. Judy Molnar  
Ms. Barbara Moss  
Mr. Dave Socky

Virginia Cave Board Members Not Present

Mr. Drew Harrison  
Mr. Roger Kirchen, Virginia Department of Historic Resources  
Mr. Jesse Richardson  
Ms. Meredith Weberg

DCR Staff Present

Mr. Wil Orndorff  
Mr. Larry Smith

Guests Present

Mr. David Colatosti, VPI Cave Club  
Mr. Scott Davis  
Mr. Joey Fagan, President, Cave Conservancy of the Virginias  
Ms. Margot Geisler, Richmond Area Speleological Society  
Mr. Rich Geisler, Richmond Area Speleological Society  
Mr. Jeff Good, National Cave Rescue Commission  
Mr. Larry Hart, Richmond Area Speleological Society  
Mr. Craig Hindman, Chairman of the Virginia Region of the National Speleological Society  
Mr. Rick Lambert, President of the Virginia Speleological Survey  
Mr. Gary Moss, National Speleological Society  
Mr. Charles Stickley  
Ms. Lettie Stickley, Grand Caverns Park  
Mr. Bob Thren, Director – Virginia Speleological Survey  
Ms. Carol Tiderman  
Mr. Scott Wahlquist

Call to Order

Mr. Lera called the meeting to order at 10:15 AM.

Introductions and Announcements

Mr. Lera welcomed the guests and asked the board members to introduce themselves.

Mr. Rick Lambert, President of the Virginia Speleological Survey (VSS), stated that a policy continuing to require decontamination would likely not pass a vote of the Directors of the Virginia Speleological Survey citing concerns over the efficacy of decontamination, the economic costs associated with disinfecting agents and replacement of gear damaged by these agents, and the time required to perform decontamination.

Mr. Larry Hart, who introduced himself as a scientist, NSS member, and bat advocate, observed that WNS was tragic but speculated that such epidemics may have recurred in cycles throughout history. After a major outbreak, a few bats survived and reproduced, with some degree of immunity in the rebuilt populations. He questioned philosophically that while WNS is a great issue today, but 20-30 years from now, will it be? Since WNS is moving bat-to-bat, there is little humans can do to stop it, and the disease must run its course. As for caving, he recommended we:

1. Use existing data to categorize geographical areas;
2. Ban recreational caving during the winter in known hibernacula;
3. Cavers using strict decontamination procedures should do observations in hibernacula; and,
4. Recreational caving should be restored if not done in significant bat caves.

Mr. Hart concluded that bats need advocates, and that unjustified restrictions on caving activity risked alienating one of the largest advocacy groups for bats – the caving community.

Mr. Rich Geisler recommended that significant bat caves be off-limits and that certain areas, especially hibernacula, be off-limits. He observed that nothing has stopped WNS despite our best efforts, but that cavers can help limit its spread. He stated that recreational caving should be re-opened. He noted that spokesmen for the Center for Biological Diversity (CBD) have made controversial statements on Cable News Network, and asked what can be done, to which Mr. Lera responded that the Virginia Cave Board had not engaged CBD. Ms. Molnar added that the National Speleological Society (NSS) has published their opinion on the CBD position in their latest spring Conservation issue of NSS News.. Mr. Orndorff commented that a State Board like VCB could write a letter opposing the CBD position. Mr. Fagan suggested that the VCB response not use the CBD name in order to avoid giving them any more publicity.

Mr. Craig Hindman, speaking as the chairman of the Virginia Region of the National Speleological Society (VAR), said that his organization had agreed to support the moratorium when it was unknown if cavers were helping to spread WNS. Now, a year later, he said opinionated VAR members are upset with CBD statements to the effect that scientists are correlating WNS outbreaks to global warming as a causal agent, fearing that they do so in an effort to get their research to find the conclusions they want. He also said that cavers are unhappy with using bleach and Formula 409 and with confining their activities to a region, and that they want to go back to caving. Mr. Hindman also pointed out that cavers are providing scientists with data needed to track the disease, but that they want to agree to a standard we can live by. He posed the question: what is the current policy doing to cavers and to their organizations? He observed that most NSS members are project cavers and do not travel around to other areas.

Mr. Gary Moss commented that the original intent of the policy was, if there was a chance that cavers were spreading WNS, to buy time for more definitive research to be conducted. He stated that we have

Mr. Rich Geisler observed that if cavers do not go into caves, it makes it more difficult for scientists to collect data. He added that just because WNS has not been documented in a particular cave does not necessarily mean it is not there.

Ms. Carol Tiderman stated that cavers in other states are checking cave entrances to observe bats emerging, dying, etc.

Mr. Orndorff stated that the U. S. Fish and Wildlife Service issued its request for a voluntary caving moratorium for political expediency and that other groups acknowledge it but have no legal requirement to follow it. He observed that it was cavers and not Fish and Wildlife Service researchers that discovered WNS had spread into Tennessee in February 2010.

Mr. Lera thanked the Board members and guests for their comments, and reiterated that these comments would be considered during revision of the Virginia caving community's official statement on caving and White Nose Syndrome. Mr. Lera asked for any additional comments, and hearing none, ended the public forum and resumed the VCB business meeting.

#### Approval of Minutes from January 9, 2010, Meeting

With a quorum now present, Mr. Lera asked for a motion.

MOTION: Dr. Dan Doctor moved that the minutes of the meeting of January 9, 2010, be approved with the corrections Ms. Molnar circulated via email to all board members.

SECOND: Ms. Barbara Moss seconded the motion.

DISCUSSION: None

VOTE: Motion carried unanimously.

#### Old Business

##### Education and Outreach Committee Report

Mr. Tom Lera observed that the next Virginia Cave Owners' Newsletter is scheduled to come out in August.

Ms. Judy Molnar reported that visitors to Grand Caverns appreciated the discounted admission rates given during Cave Week, although many visitors were unaware that it was Cave Week until offered the discounts. Governor McConnell issued a Proclamation and several newspapers as well as the Virginia Game and Inland Fisheries' *Outdoor Report* gave Cave Week good coverage.

##### Joint Technical Committee Report

Mr. Orndorff stated that no report was back on the new Stormwater Regulations and that the McDonnell administration was revisiting the regulatory action.

hopefully be made in mid-summer.

Public Comment and Announcement period

Mr. Orndorff reported that the Lee County cave isopod is thriving at sites except Thompson Cedar Cave, where it appears to be doing moderately well. The recovery plan has been very successful; the species' numbers are being monitored at all known locations.

The Nature Conservancy accepted the donation of an approximately 225-acre property near Blacksburg that contains a biologically and hydrologically significant cave. The property will likely be dedicated as a state Natural Area Preserve.

The deadline for submitting articles for the next Cave Owners' Newsletter is July 1, 2010.

The next meeting of the VCB will be August 21, at the Grottoes Town Hall with committee meeting starting at 11:00.

Adjournment

MOTION: Ms. Barbara Moss moved that the meeting adjourn.

SECOND: Mr. Dave Socky seconded the motion.

DISCUSSION: None

VOTE: Motion carried unanimously at 11:55 AM

**Table 1. Virginia caves surveyed for White Nose Syndrome, Jan-May, 2009 (+ indicates WNS present)**

Arbegast Saltpetre (Highland)	Marshalls (Highland)
<b><u>+ Breathing (Bath)</u></b>	Maucks (Page)
Buddy Penleys (entrance area) (Bland)	Mustoe Ulcer (entrance only) (Highland)
Clarks (Bath)	New River (Giles)
<b><u>+ Clover Hollow (Giles)</u></b>	<b><u>+ Newberry-Bane (Bland)</u></b>
Coon (entrance only) (Bland)	Parsonage (Highland)
Crossroads (Bath)	Repass Saltpeter (Bland)
<b><u>+ Endless Caverns (Rockingham)</u></b>	Rocky Hollow (Wise)
Gap (Cudjo's) (Lee)	Rufe Caldwell (Craig)
Grassy Springs (Lee)	Shires (Craig)
Hamilton (Bland)	Starr Chapel (Bath)
<b><u>+ Hancock (Smyth)</u></b>	Stonley's (Tazewell)
Hupmans (entrance only) (Highland)	Tawneys (Giles)
Kelly (Wise)	Varners (Highland)
Links (Giles)	Witheros (Bath)

Biologists and karst staff within the Department of Game and Inland Fisheries and the Virginia Natural Heritage Program, using input from the caving community, are maintaining a list of significant bat caves (see below, Table 2) to be closed year-round in an effort to reduce interactions between humans and high concentrations of bats. Of the 63 caves currently on the list, twenty-one were on the VAR list of closed caves prior to the WNS crisis.

## Actions to reduce the risk of transmission of WNS by humans

*(This applies to both WNS-positive and WNS-free areas.)*

Effective September 15, 2009

### 1. Observation of cave closures:

- **Significant Bat Caves:** The attached list (Table 3) shows sixty-three Virginia caves that have been identified by biologists at the Virginia Department of Game and Inland Fisheries and the Virginia Natural Heritage Program for closure to help slow the spread of WNS. These caves are all significant bat caves, either in terms of numbers of bats, diversity of species, or presence of legally protected (endangered) species. These caves are included on the VAR List of Closed and Limited Access Caves. Individuals knowing of additional potentially significant bat caves should contact Rick.Reynolds@dgif.virginia.gov.
- **WNS Positive Caves:** Breathing Cave (Bath County), Clover Hollow Cave (Giles County), Endless Caverns (Rockingham County), Hancock Cave (Smyth County), Skydusky Hollow Cave System (Newberry-Bane, Buddy Penley, Paul Penley, Baner Spring, Spring Hollow, and Coon caves)

Additional WNS Positive Caves will be added to the list as identified.

- State and Federal landowners are closing caves on their lands - please check on access before entering these caves.

### 2. Geographic isolation of caving activity and/or gear:

Cavers are requested to limit their caving activity to one caving area as defined by a county or group of counties. The designation of caving areas appears at the end of this document, along with a map. We are asking this because sterilization procedures are not likely to be 100% effective, especially since neither the specific causal agent nor mode of transmission has yet been definitively identified. While unlikely, it is possible that the pathogen(s) could be transported not only on gear and clothing, but on or in the human body as well. Therefore we strongly recommend that cavers take the following precautions:

- If possible, please limit your caving activity to one of the caving areas listed below in Table 3.
- Cavers who choose to cave in more than one of the defined caving areas are asked to dedicate a specific set of clothing and caving gear to each respective caving area, including those not in Virginia.
- If you must go caving in multiple areas, complete disinfection of vehicles is recommended between trips to different caving areas, whether they are in or outside of Virginia.
- Special care should be taken to segregate any cave clothing and equipment dedicated for use in a given area from all other sets of clothing and equipment dedicated for use in other caving areas, whether or not these areas are in Virginia.
- Ropes should be dedicated to individual cave systems.

### 3. Strict adherence to decontamination procedures when moving between caves (even within the same geographically designated area and whether or not in the WNS positive area)

After exiting one cave and prior to entering another cave, even within a designated caving area, decontamination practices as outlined by the U.S. Fish and Wildlife Service must be strictly adhered to. **ALL equipment must be cleaned!** These procedures are linked to:

[www.fws.gov/northeast/wnscavers.html](http://www.fws.gov/northeast/wnscavers.html)

Please check this site frequently as updates are made as decontamination procedures are refined.

To reduce the risk of harboring or carrying the disease on their persons, cavers should thoroughly clean and scrub themselves with soap and hot water following each trip to each cave. All clothes worn while traveling to and from the caving area should be laundered as soon as possible following caving trips.

Appendix B – Permit Request from Dr. Daniel Doctor

United States Department of the Interior

U.S. GEOLOGICAL SURVEY  
Reston, Virginia 20192

Letter to the Virginia Cave Board

Re: Sampling speleothems and sediments in Grand Caverns for geologic studies  
May 12, 2010

To Whom It May Concern:

Permission to sample speleothems, sediment, and wall rock from Grand Caverns and nearby caves in Cave Hill at Grottoes, Virginia for a period of one year (May, 2010 to June, 2011) is hereby requested. These samples will be used for geologic study. Specific goals of the study are:

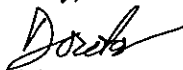
- 1) To determine the ages of speleothem calcite by radiometric dating methods
- 2) To obtain a record of paleoclimate from suitable speleothem specimens through geochemical and isotopic analysis
- 3) To determine the mineralogic content of sediments from the caves
- 4) To examine the sediments for possible preservation of palynomorphs (e.g., pollen) for paleoclimatic interpretation
- 5) To examine the wall rock for evidence of fluid alteration

Types of speleothems to be sampled include broken and intact stalagmites, flowstone shelves, shields, and calcite wall coatings from former pools. Types of sediment to be sampled include banks of clays and fine sediments on the floor of the cave, sediments deposited in recesses, and breakdown blocks.

Sampling of all materials will be conducted in such a manner as to minimally impact the cave environment. For example, an electric drill with a bit less than 1 inch in diameter will be utilized to sample small cores of intact speleothems for initial dating in order to screen samples suitable for paleoclimate study. Such screening is necessary because not all speleothems are amenable to radiometric dating. Care will be taken to select inconspicuous sampling locations along the tour route, and core holes will be filled and sealed after sampling.

For speleothems that are already broken, or for those deemed worthy of further paleoclimatic investigation, we request permission to remove them from the cave. These samples will be sliced, polished, and in most cases consumed for analysis. If part or all of the speleothem is not used for analysis, the remaining portion will be archived at the U.S. Geological Survey in Reston, Virginia. Likewise, samples of sediment, wall rock, or breakdown will be consumed for analysis; any remaining sample material will be archived at the U.S. Geological Survey in Reston, Virginia.

Sincerely,



Daniel H. Doctor, Ph.D.  
Research Geologist  
Eastern Geology and Paleoclimate Science Center