

**Virginia Cave Board  
Saturday, February 20, 2016  
James Madison University  
Harrisonburg, VA**

**DRAFT MINUTES**

**TIME AND PLACE**

The meeting of the Virginia Cave Board was convened at 11:02 a.m. in Memorial Hall, James Madison University, Harrisonburg, Virginia.

**MEMBERS PRESENT**

David Ek, Chairman	Steve Lindeman, Vice Chairman
Robert K. Denton, Jr.	Dr. Daniel Doctor
John H.H. Graves	Dr. John Haynes
Marian McConnell, Recording Secretary	Meredith Weberg

**MEMBERS ABSENT**

Michelle Baird  
Roger Kirchen, Department of Historic Resources  
Janet Tinkham

**STAFF PRESENT**

Clyde Cristman, DCR Director  
Rochelle Altholtz, Deputy Director of Administration  
Lisa McGee, Director of Policy and Planning  
Michael Fletcher, Board and Constituent Services Liaison  
Rob Evans, Natural Areas Protection Manager  
Wil Orndorff, Karst Protection Coordinator

**ESTABLISHMENT OF A QUORUM**

With seven (7) members of the Board present a quorum was established.

**INTRODUCTIONS AND ANNOUNCEMENTS**

Chairman Ek opened the meeting and welcomed Board members and staff.

Rob Evans was introduced as the new Natural Area Protections Manager at DCR.

**APPROVAL OF MINUTES FROM DECEMBER 5, 2015**

The minutes of the December 5, 2015 meeting were approved with no changes.

**DCR Karst Program Update** - *Wil Orndorff, Karst Protection Coordinator*

Mr. Orndorff presented the following report:

Installation of two bat-friendly cave gates was performed in coordination with Kennedy Above-Underground, the West Virginia Cave Conservancy, the Mountain Falls Hunt Club, and ~ two dozen caver volunteers from the Virginia's Region of the National Speleological Society. The caves were Haynes Cave in Monroe County, West Virginia and Beans Cave in Frederick County, Virginia. Beans is designated as a significant cave under the Virginia Cave Protection Act, and was gated to facilitate access control by the Mountain Falls Hunt Club, which recently placed Hunt Club lands under a conservation easement with the Virginia Department of Forestry. Haynes Cave, owned by the West Virginia Cave Conservancy, was installed to protect the cave's archaeological resources from vandalism, as well as for the benefit of hibernating bats. This project was funded by a generous grant from the Cave Conservancy of the Virginias. Two additional gating projects remain to be completed under the grant between now and October, 2016.

Staff facilitated exploration by cave diver Jon Lillestollen of Mill Creek Cave, located beneath The Nature Conservancy's Mill Creek Springs Natural Area Preserve in Montgomery County. Exploration by Lillestollen continues, and has to date approximately doubled the surveyed length of the cave through discovery of additional passage beyond the sump.

Staff has collaborated with Cave Board members Ek and Weberg to establish an agenda and obtain speaker commitments for the Building on Karst 2 workshop to be held at Environment Virginia in Lexington (VMI) on April 5.

Staff are working with TNC Abingdon staff to organize a karst conservation planning retreat for April 1-3 at Natural Tunnel State Park in Scott County, Virginia.

DCR Natural Heritage and Radford University scientists are assisting the Department of Game and Inland Fisheries in performance of the biennial counts of tricolored bats (*Perimyotis subflavus*) in reference hibernacula. Although counts are very low (<10% overall) compared to pre-White Nose Syndrome numbers, there appears to be no decline since 2014 and perhaps a slight increase.

A second full-time karst protection position has been approved by DCR and posted on the DCR jobs site. The position will focus on the study, protection, and stewardship of cave and karst resources, and will be based in Christiansburg, VA.

**DCR Website** - *Rob Evans, Natural Areas Protection Manager*

Mr. Evans reported that DCR continues to review the Cave Board website and to update accordingly. He noted that minutes for the Cave Board are available electronically back to 2002. He will work with the chairman to review files and obtain minutes for prior years.

Two new Karst maps, provided by Dr. Doctor, were added to the website, replacing the previous map showing "counties with Karst." Members requested that the maps be linked from the Cave Board page.

Staff will arrange the necessary equipment for the Board to do a live review of the website at the next meeting. Staff will also provide the latest metrics for the website.

**Land Conservation** Update - *Steve Lindeman – The Nature Conservancy*

Mr. Lindeman gave an update regarding the Cedars area in Lee County. The project is centered on the Lee County isopod. TNC has a fish and wildlife service recovery acquisition grant and a grant from the Virginia Land Conservation Foundation for this project.

Appraisals on two of the properties require review for federal appraisal standard. A new review appraiser was hired. TNC recently received the reviews.

Mr. Lindeman is ready to negotiate with the land owners. The purchase agreements may be ready for the next Cave Board meeting. There are significant cave and karst resources on these properties.

The third property, a property that is an old refinery site, contains two sawmills. The Phase 1 and Phase 2 environmental assessments have been completed. Funding is being sought for cleanup from the Department of Health if terms can be negotiated with the owner. Funding for the project came from a DEQ brownfields grant. TNC worked through the Daniel Boone Soil and Water Conservation District for this project.

In March 2015, a meeting was convened with conservation partners working on the Cedars conservation area in Lee County and along the Powell River.

The second meeting will be held before the Upper Tennessee River karst meeting with the same group of partners. Mr. Lindeman noted that Mr. Orndorff referenced the meeting in his report. The first part of the meeting will be reporting on progress made. The participants in the meeting will look at priorities in terms of conservation and stewardship and develop priorities for land conservation.

Mr. Orndorff and others are trying to connect or reconnect folks from the caving community, cave conservancies and other organizations involved in cave conservation. An invitation will be sent to Cave Board members to attend. Other groups invited include Virginia State Parks, Cumberland Gap National Park, and Daniel Boone Wilderness Trail Association.

The meeting is scheduled for April 1-3, 2016. The conservation partner meeting is scheduled for March 30-31, 2016.

**DCR Land Conservation Update** – *Rob Evans, Natural Areas Protection Manager*

Mr. Evans reported that DCR is compiling a comprehensive portfolio of properties that should be protected and the rationale behind the need for conservation. This may include a status survey of significant caves. There are approximately 300 caves currently on the list. Approaching these properties from a conservation perspective will help with prioritization.

**Virginia Cave Board written comments on PHMSA national standards for hazardous liquid pipelines – David Ek, Chairman**

Chairman Ek reported that written comments regarding the Pipeline and Hazardous Materials Safety Administration (PHMSA) national standards for liquid gas pipelines were submitted on January 5, 2015. Mr. Lindeman stated that the comments were well written and presented. A copy of the document is included as Attachment A.

**Follow-up needed on Spotsylvania County sinkhole assistance request – David Ek, Chairman**

Chairman Ek asked about necessary follow up regarding the Spotsylvania request.

Dr. Doctor gave an update regarding a request from the groundwater specialist for Spotsylvania County. Warm water has been observed in wells and some additional sinkholes have been reported. This is not common in the Piedmont area. USGS is coordinating the appropriate response.

**Citizen's Guide to Sinkholes – Wil Orndorff, Karst Protection Coordinator**

Mr. Orndorff noted that at previous board meetings there have been discussions regarding an appropriate response to citizens inquiring about sinkholes. Chairman Ek, Dr. Doctor, and Doctor Haynes have developed a draft citizen's guide to sinkholes. The hope is to review the draft at the next Cave Board meeting.

Mr. Orndorff further commented that the issue of sinkholes spans more than one agency. He recommended that the Cave Board would probably be the best entity to formulate a sinkhole task force. Citizens do not get the information that they need because no one agency collects comprehensive information regarding sinkholes. There is no mechanism to respond to citizen requests.

Citizens do not have sinkhole insurance and most occurrences are not covered under existing policies. The state issues a map that is designed for hazard analysis. Sometimes citizens can get assistance from FEMA. There likely will not be sinkhole insurance until the issue is codified by the legislature.

Mr. Lindeman commented that the legislation would need to come from a legislator who was contacted by a citizen impacted by sinkholes and perhaps two or more individuals could come forward. He added this was also an economic issue and suggested one of the cave conservancies could take the lead on the legislation. Sinkholes are a human safety issue, and are not getting attention.

Dr. Doctor will forward a link to a document entitled [THE COST OF KARST SUBSIDENCE AND SINKHOLE COLLAPSE IN THE UNITED STATES COMPARED WITH OTHER NATURAL HAZARDS.](#)

**DCR update on Natural Gas Pipeline timing, review status, and comment protocols (Dominion ACP, Mountain Valley)**

Mr. Denton and Mr. Lambert recused themselves from discussions regarding the pipelines.

Director Cristman reported that, at the request of FERC, Dominion had announced a rerouting of their pipeline around Shenandoah Mountain. The new proposed site will move to the south of the mountain.

This raises new karst issues and approaches areas where the Cave Board has recognized significant caves. This presents a larger problem for caves and karst.

Director Cristman noted that if the Board would like to express concerns, DCR would forward the information following the preferred protocol.

Regarding the Mountain Valley pipeline, Mr. Orndorff reported that DCR was in the process of preparing an environmental impact statement.

#### **Report on Economic Impact Analysis proposal** – *David Ek, Chairman*

Chairman Ek reminded members that at the December meeting, there was discussion regarding proposals for an economic impact analysis regarding cave and karst resources in Virginia. He noted that a study in West Virginia showed a higher amount of impact on the economy than anticipated.

Ms. McConnell suggested that this could be a project for students. Chairman Ek said that this might not be appropriate and agreed to develop a proposal for the Board's consideration.

#### **Cave Signs**

Cave signs are available from DCR. Signs should be placed at the entrance to caves. The Cave Conservancy of Virginia requested signs to be used as a demonstration model. These were provided. Members needing signs should contact DCR staff.

#### **Board Member Updates** – *Michael Fletcher, Board and Constituent Services Liaison*

Mr. Fletcher advised the Board that terms for Mr. Denton, Chairman Ek, and Mr. Lambert would expire on June 30, 2016. Members seeking reappointment must complete the appropriate application on the Secretary of the Commonwealth's website. Mr. Fletcher will forward the information to eligible members.

#### **Board and Communications Proposals**

Chairman Ek requested that the Board formalize procedures for board communications with regard to establishing agenda items, responding to requests and similar discussions.

Currently information gets sent to DCR and DCR distributes the information to Board members. The intent is to have a cleaner process for disseminating information. Chairman Ek requested that information is approved by the chair before sending to the entire Board.

Ms. McGee advised the Board that these types of issues could be addressed in the Board bylaws.

#### **Cave Board Bylaws**

Ms. McGee presented a draft of proposed revisions to the Cave Board Bylaws. No action had been taken regarding Bylaws since 1999. The proposed revisions include address changes, proper Code citations and inclusion of language regarding FOIA, Cave Board email, and parliamentary procedures.

Cave Board members will review the document and send suggested revisions to Mr. Fletcher. The Board will continue discussion of the bylaws at the next meeting.

### **Board Discussion**

There was a discussion regarding contacting members of the Board. Chairman Ek noted that it seemed cumbersome to have the public contact DCR and then relay the communication to Board members. Dr. Haynes said that he would prefer that the information come through DCR. He noted privacy and releasing information were more of a concern than in previous years.

Chairman Ek commented that he routinely contacts other boards and he appreciates the ability to contact the person directly. His preference would be to have some type of direct contact.

The suggestion was made for members to develop cave board specific emails which could be posted on the DCR website.

Members were reminded that they should copy [vcb@dcr.virginia.gov](mailto:vcb@dcr.virginia.gov) on all emails relating to Cave Board business.

The discussion was tabled and will be included in the agenda for the next meeting along with the website review.

### **Digital File Procedural Review**

Chairman Ek reported that he had reviewed the paperwork files provided to him as Chairman. He proposed that for future reference, all Cave Board documents should be filed with the chairman, secretary, and DCR.

Mr. Evans suggested that items requiring official Cave Board action or approval be incorporated into the meeting minutes.

Chairman Ek noted that he would like to see the development of an official policy regarding this procedure. Ms. McGee advised that this could be incorporated in the Board bylaws.

### **Discussion on VCB's long-term and strategic goals**

Chairman Ek noted that it would be helpful for the Board to develop long term and strategic goals. He suggested that members look at the mission of the board and see if there were necessary changes. At the next meeting the Board can begin the development of a strategic plan to benefit cave and karst.

### **Formal VCB committees/subcommittees**

Chairman Ek reviewed program areas and designated the following individuals as primary contacts for specific areas. The intent is to have a point of contact for decisions to be made without having full Board approval. The program areas and responsible Board members are:

- Education (to include Cave Week and the Virginia Cave Owner's Newsletter) – Ms. Weberg, Ms. Tinkham, Mr. Haynes, Ms. Baird
- Pipeline issues – Dr. Doctor, Chairman Ek.
- Cave and karst trail – Dr. Doctor, Ms. Weberg
- Sinkholes – Dr. Haynes, Chairman Ek, Dr. Doctor
- Website – Ms. Weberg, Ms. McConnell

### **Virginia Cave Owner's Newsletter**

Ms. Weberg reported that the current version of the newsletter is being edited. The deadline for submissions for the next newsletter is September 15. Mr. Lindeman will write an article as a follow up to the cave and karst meeting.

### **Environment Virginia**

Ms. Weberg has been working with Mr. Orndorff to develop the agenda. Discussion followed regarding covering expenses related to travel for speakers. It was suggested that Ms. Weberg contact the organizers of Environment Virginia to see if expenses could be covered from the workshop registration fees.

### **Appalachian Karst Symposium 3**

Dr. Doctor stated that there was no update regarding the Symposium. He hoped to have one for the next meeting.

### **Virginia Cave Week**

Ms. Weberg reported that Ms. Tinkham sent a report regarding Virginia Cave Week. The theme for the week is sinkholes. There are a number of areas where sinkhole cleanups are needed. They do not have to be during the actual week of Cave Week.

### **Cave and Karst Trail and signage**

Mr. Orndorff will report on cave and karst trail signage at the next meeting.

### **PUBLIC COMMENT**

There was no public comment.

### **NEXT MEETING**

The next meeting of the Virginia Cave Board will be Saturday, June 11, 2016 in Richmond. The location is to be determined.

### **ADJOURN**

There was no further business and the meeting was adjourned at 4:00 p.m.

Respectfully submitted,

David Ek, Chairman

Marian McConnell, Recording Secretary



Attachment #A

Molly Joseph Ward  
*Secretary of Natural Resources*

Clyde E. Cristman  
*Director*



COMMONWEALTH of VIRGINIA  
DEPARTMENT OF CONSERVATION AND RECREATION

Joe Elton  
*Deputy Director of Operations*

Rochele Altobelli  
*Deputy Director of  
Administration and Finance*

David Dowling  
*Deputy Director of  
Soil and Water and Dam Safety*

January 5, 2016

U.S. DOT Docket Management System,  
West Building Ground Floor, Room W12-140  
1200 New Jersey Ave. SE  
Washington, DC 20590-0001

Re: Notice of Proposed Rulemaking: Hazardous Liquid Pipelines, Docket No. PHMSA-2010-0229.

Dear Pipeline and Hazardous Material Safety Administration:

I am writing today to transmit comments from the Virginia Cave Board regarding U.S. DOT's *Notice of Proposed Rulemaking, Hazardous Liquid Pipelines, Docket No. PHMSA-2010-0229*. The Virginia Cave Board, is an Advisory Board of the Commonwealth of Virginia under *Code of Virginia* § 10.1-1000 – 1008.

Virginia has significant karst resources. Karst systems supply 75% of the drinking water supply in 27 of our western counties, and these same systems support some 110 globally rare species. It is important to the Commonwealth that these critical resources are considered in economic development and land planning projects. Thank you for your time and effort in this regulatory review and your consideration of the comments from the Virginia Cave Board.

Sincerely,

A handwritten signature in black ink that reads "Clyde E. Cristman".

Clyde E. Cristman  
Director

Cc: Virginia Cave Board  
Enclosure:

600 East Main Street, 24<sup>th</sup> Floor | Richmond, Virginia 23219 | 804-786-6124

*State Parks • Soil and Water Conservation • Outdoor Recreation Planning  
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation*