

**Virginia Cave Board Meeting**

**June 6, 2015  
Natural Bridge Hotel  
Natural Bridge, Virginia**

**MINUTES**

**Virginia Cave Board Members Present**

Robert Denton, Jr.  
Dr. Daniel Doctor  
David Ek  
Rick Lambert  
Marian McConnell  
Janet Tinkham  
Meredith Weberg, Chairman

**Virginia Cave Board Members Not Present**

Michelle Baird  
John Graves  
Dr. John Haynes  
Roger Kirchen, Department of Historic Resources, ex officio member  
Steve Lindeman, Vice Chairman

**Department of Conservation and Recreation Staff Present**

Rochelle Altholtz  
Michael Fletcher  
Wil Orndorff  
Larry Smith  
Tom Smith

**Others Present**

Anne Adams, *The Recorder*, Monterey  
Nancy Sorrells, Augusta County

**Virginia Cave Board Meeting**

Ms. Meredith Weberg called the meeting to order at 2:00 p.m. and declared a quorum present. She thanked members and guests for coming and asked for introductions.

Ms. Weberg reviewed the discussions of the morning work session. These discussions included a recent Freedom of Information Act (FOIA) request and the need and means for board members to assist Department of Conservation and Recreation (DCR) staff in responding to the request. It was noted that

the requestor was in attendance. Mr. Tom Smith addressed roles and responsibilities of board members as gubernatorial appointees. Mr. Fletcher reviewed the requirements of FOIA. At a future Cave Board meeting, DCR staff will include a full FOIA training segment for Cave Board members.

### **Approval of the Minutes from the April 11, 2015 Cave Board Meeting**

There were no recommended changes and the minutes were approved as submitted.

### **Treasurer's Report**

Mr. Larry Smith gave the treasurer's report.

Mr. Larry Smith noted that as of May 31, the Cave Board account had a balance of \$1873 after receiving \$1600 in grants from the Cave Conservancy of the Virginias (CCV) and the Virginia Region (VAR) of the National Speleological Society for *Virginia Cave Owner's Newsletter* expenses. Printing cost \$217 for the latest newsletter, which will be paid from the Cave Board account.

Mr. David Ek asked what was the best method to document, into the official record, the Cave Conservancy of Virginia's donation to the Building on Karst Workshop. Mr. Larry Smith's answer was that this meeting's official notes would be the best way to document the donation.

Ms. Weberg will send a note of thanks to the CCV for their gracious support.

### **DCR Karst Program Update**

Karst Protection Specialist Mr. Wil Orndorff provided an update regarding the DCR Natural Heritage Karst Program.

Mr. Orndorff worked with Mr. Bob Bisha of Dominion Energy to prepare an agenda and set up a meeting between Virginia Cave Board members David Ek and Dr. Dan Doctor, DCR staff, and Dominion staff and contractors to discuss comments from the Cave Board and DCR Natural Heritage staff regarding karst resources along the proposed Dominion Atlantic Coast Pipeline corridor. This meeting took place on May 26, 2015 at Dominion's Innsbrook, VA headquarters. The meeting was congenial with all parties agreeing to work together to avoid or minimize effects to karst resources through a combination of avoidance of sensitive features and implementation of best management practices in karst areas. Dr. Doctor of the Cave Board has prepared a meeting summary.

Work began in late May on a Cooperative Project between DCR and the US Fish and Wildlife Service for status updates on 17 extremely rare cave beetle species within the genus *Pseudanophthalmus*. To date, Natural Bridge Caverns in Rockbridge County and Giant Caverns in Giles County have been visited, with *Pseudanophthalmus* species documented in both. Specimens will be determined to species level by collaborator Dr. Karen Ober, entomologist at Holy Cross University.

Work is commencing on a Madison Cave Isopod Habitat Monitoring project in which 10 documented Madison Cave isopod localities will be equipped with automated logging instruments to develop near

continuous time series records (1-hour intervals) for temperature, water level, and specific conductivity (a surrogate for total dissolve solids). The goal of the project is to better characterize the range of environmental conditions that the species tolerates, and to investigate the potential relationship between present and antecedent environmental conditions and site occupancy.

Department of Natural Heritage (DNH) karst staff will be bidding on a contract to update the status of the Rye Cove Cave isopod (*Lirceus culveri*), a globally rare cave-adapted crustacean species known only from a small area in Scott County, VA.

DNH Karst staff is assisting Virginia Department of Game and Inland Fisheries (DGIF) and university partners in summer studies of bat populations in Western Virginia, including a handful of Little Brown bat (*Myotis lucifugus*) maternity colonies and forested habitat for the Northern Long-eared bat (*Myotis septentrionalis*). Both species have suffered over 95% population decline since 2009 due to White Nose Syndrome. This decline is documented in an upcoming article in the *Journal of Ecology and the Natural Environment* by lead author Dr. Karen Powers of Radford University, on which Natural Heritage staff Wil Orndorff and Chris Hobson are co-authors, with collaborating authors Rick Reynolds of DGIF and Mark Ford of Virginia Tech. Another paper is in the works documenting biometric characteristics of Gray bats in Virginia from 2009 through present.

The James Cave (Pulaski County) epikarst drip study continues, investigating the relationship of speleothem drip rates, stream flow, and water chemistry to precipitation. A paper summarizing broad seasonal relationships and providing a conceptual model to explain these relationships is in press and will appear in an issue of the *Geological Society of America Bulletin* later this year. Both the research and publication were funded in part by the Cave Conservancy of the Virginias.

Karst staff is working the Stewardship Section of DNH to complete documentation of karst resources in the Cedars Natural Area Preserve in Lee County, VA.

### **Land Conservation Update**

Mr. Larry Smith reported that Mr. Steve Lindeman continues to work on the acquisition of three tracts of land in The Cedars area of Lee County.

The Virginia General Assembly may be considering a new bond referendum for parks and natural areas in the next Session. DCR staff have identified statewide natural area preserve priorities that include the establishment of 10 new natural area preserves and additions at 36 existing natural area preserves.

The Virginia Land Conservation Foundation Board of Trustees will announce a new grant round at its June 16, 2015 meeting.

Mr. Orndorff asked us to let cavers know to contact DCR if they know of any areas that might be possible preserves.

### **Update on Board Appointments and Vacancies**

Terms of three Board members expire on June 30: Ms. Weberg, Dr. Doctor, and Mr. John Graves. At the time of the meeting no information regarding reappointments had been received.

### ***Virginia Cave Owners' Newsletter***

The *Virginia Cave Owners' Newsletter* was recently published and distributed. The next deadline was set for September 15 for a November publication. Previous issues of the newsletter are available via the Virginia Cave Board page on the DCR website.

Ms. Weberg noted that the newsletter included an update regarding the Environment Virginia Workshop and recognition of support from the CCV.

### **Update on Meeting with Dominion Resources regarding the Dominion Atlantic Coast Pipeline**

Dr. Doctor noted that he and Mr. Ek met with DCR staff and representatives from Dominion regarding the Atlantic Coast Pipeline. Among those attending the meeting were: Dr. Doctor, Mr. Ek, Mr. Clyde Cristman, Mr. Tom Smith, Mr. Larry Smith, and Mr. Orndorff. From Dominion: Mr. Bill Scarpinato, Mr. Bob Bisha, Mr. Bill Murray, Mr. Brian Wilson, Ms. Sandra Williams and other Dominion employees and contractors.

Dr. Doctor said that Dominion was receptive to Cave Board comments and recommendations. Among those recommendations were adapting recommended protocols for karst assessment. The final karst management litigation plan will be available for review.

Dominion gave an overview of the need for the pipeline. A description of the pipeline project is available on the Dominion website.

Dr. Doctor said that he did not have the timeline for the karst assessment. He said that Dominion intends to have the pipeline in service by 2018.

Mr. Robert Denton noted that the karst mitigation and monitoring program is not a summary of findings, but a summary of methods and procedures to be used. He said that there were still issues of property permissions and access rights to be settled before the study could be completed.

Mr. Orndorff said that DCR staff was still in the process of developing materials to submit to Dominion regarding karst and cave issues. He recommended that a Cave Board representative be appointed to serve as liaison regarding the project.

Ms. Weberg appointed Mr. Ek to serve in that capacity.

### **Virginia Cave Week**

Ms. Janet Tinkham gave an update regarding Virginia Cave Week. She said that the events were very successful and that there were several activities designed to promote awareness. She noted that the events did garner some media coverage.

Ms. Tinkham said that regarding 2016 Virginia Cave Week there were already discussions regarding projects and events. She welcomed suggestions for a theme.

Mr. Orndorff said that Virginia Cave Week is a great opportunity for education and outreach.

Mr. Larry Smith recommended that DCR arrange someone from DCR's Environmental Education section to attend the next meeting of the Cave Board and to assist with future Cave Week planning.

Mr. Orndorff will contact Environment Virginia regarding another session on karst issues in 2016.

### **State response to citizen inquiries about sinkholes**

The issue regarding sinkholes has been discussed but there has been no resolution. A frequently asked questions (FAQ) page will be added to the website. Dr. John Haynes is taking the lead on developing this information.

Mr. Rick Lambert asked what information was needed in addition to what is on the brochures.

It was noted that not all sinkholes are related to karst. Those with questions should be sent to a qualified professional for answers. DCR staff is not equipped to answer these questions.

### **Virginia Karst Map**

The Virginia Karst Map will be posted on the DCR website with an overlay from Google earth maps for ease of identifying locations. Where possible, photos will be included.

### **Virginia State License Plates with Virginia Cave and Karst Trail logo**

A minimum of 450 prepaid applications are needed for the license plate to proceed. As of the meeting date, there had been 19 applications. Consideration was given to changing the graphic to the Virginia state bat instead of the logo.

### **Cave and Karst Trail Brochure**

The committee for the Cave and Karst Trail Brochure are Ms. Weberg and Mr. Graves. It was noted that it would be better to wait for the website to be updated with the map before proceeding.

Mr. Larry Smith compared the Cave and Karst Trail to the Wildlife and Birding Trail. He asked who would be the champion of the trail and whether the Cave Board would be the best sponsor to provide the longevity and continuity necessary to make this effort a success.

### **New Business**

#### *Cave Collection Permit Request from Dr. John Tinsley, USGS*

Mr. Larry Smith said that the request had been received to allow Dr. Tinsley to collect samples from Virginia caves for the purposes of research.

Dr. Doctor said that the intent of the research is to study areas that have likely been affected by earthquakes. He said that the study would give some idea of the return intervals between earthquakes. A similar study has been conducted in Missouri.

Dr. Doctor said that the features in caves would be study with as minimal an impact as possible.

The Cave Board raised concern regarding the methodology and said that more information was needed regarding the process for collecting samples.

Mr. Larry Smith noted that Mr. Roger Kirchen provided feedback that DHR had concern that the samples not affect formations with historic significance.

It was suggested that a letter of response be prepared listing conditions and concerns.

### **Announcements**

Dr. Doctor made the following announcements:

- A new book on the caves of Burnsville Cove has been published.
- LIDAR data is available for all of Page County.
- Dr. Doctor will lead a 3-day cave trip during November's Geological Society of America's annual meeting.

### **Public Comment**

There was no public comment.

### **Next Meeting**

The possibility of a Cave Board retreat in Southwest Virginia with a visit to The Cedars Natural Area was discussed. The tentative date is October 3.

DCR staff explained that resources and availability would have to be considered.

### **Adjourn**

There was no further business and the meeting was adjourned at 4:10 p.m.

*Submitted by Michael Fletcher, DCR.*