

**Virginia Cave Board
Saturday, June 11, 2016
University of Richmond Downtown, Richmond, Virginia**

MINUTES

PLACE AND TIME

The meeting of the Virginia Cave Board was held at 11:00 a.m. on Saturday, June 11, 2016 at the University of Richmond Downtown in Richmond, Virginia.

MEMBERS PRESENT

David Ek, Chairman
Steve Lindeman, Vice Chairman
Dr. Daniel H. Doctor
Roger W. Kirchen, Department of Historic Resources
Janet Tinkham
Meredith Hall Weberg
Marian McConnell

MEMBERS ABSENT

Michele Baird
Robert K. Denton, Jr.
John H.H. Graves
John T. Haynes
Rick Lambert

DCR STAFF PRESENT

Jason Bulluck, Director, Division of Natural Heritage
Michael Fletcher, Board and Constituent Services Liaison
Lisa McGee, Director of Policy and Planning
Julie Buchanan, Senior Public Relations and Marketing Specialist
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.

TREASURER'S REPORT- *Jason Bulluck, DCR*

Mr. Bulluck reported that the Cave Board account had a balance of \$739 after the printing of the latest newsletter. DCR staff is clarifying the process for managing Cave Board funds.

APPROVAL OF MINUTES FROM FEBRUARY 20, 2016

Staff noted that Mr. Lambert's name was omitted from the draft minutes.

Mr. Lindeman moved that the minutes of the February 20, 2016 meeting of the Virginia Cave Board be approved as amended. Ms. Weberg seconded and the motion carried.

DCR KARST PROGRAM UPDATE – *Wil Orndorff, DCR*

Mr. Orndorff presented the following report [text inserted as presented].

- The Upper Tennessee River Basin Karst Protection Symposium was held April 1-3 at Natural Tunnel State Park, hosted cooperatively by VA-DCR and The Nature Conservancy. Representatives from the Appalachian Cave Conservancy, TNC, the Virginia Speleological Survey, the Cave Conservancy of the Virginias, the Virginia Cave Board, the West Virginia State Parks, VA State Parks, Lincoln Memorial University, and University of Virginia at Wise. The meeting consisted of exchanging information about conservation activities, priorities and capacity in the region. The symposium included field excursions to conservation properties with caves: Gilley Cave (Appalachian Cave Conservancy), the Powell Mountain Karst Preserve (Cave Conservancy of the Virginias) and Unthanks Cave (DCR Natural Area Preserve.)
- The second Building on Karst workshop was held in conjunction with Environment Virginia at VMI in Lexington on April 5. In addition to 6 presenters and organizers, there were 30 attendees, including representatives from industry, local government, regulatory agencies, and citizen stakeholders.
- Karst Protection Coordinator Wil Orndorff attended the Weeklong National Cave Rescue Commission Seminar in Mentone, Alabama May 7-14. Orndorff completed Instructor Qualification Training, which will enable him, once approved by the NCRC Board of Regional Coordinators, to teach cave rescue classes to VA DCR staff and volunteers.
- Karst protection staff performed significant field work in Upper Tennessee River Basin, which included survey of a newly discovered Gray Bat cave summer roost near Gate City along the Clinch River; collection of *Lirceus sp.* aquatic isopods pursuant to possible taxonomic revision within the genus, which includes several troglomorphic and troglophilic populations; collections of live individuals from several other common crustacean taxa for study by Dan Fong of American University, and collection of type specimens of the Lee County cave amphipod (*Stygobromus leeinsis*) from the type locality – Litton Cave #1 in Lee County.
- Staff continued to consult on and review revisions in proposed routes for the Dominion Atlantic Coast Pipeline and the Mountain Valley Pipeline, two high pressure gas transmission lines proposed to cross Virginia's karst lands.
- Staff presented a talk on karst hydrology and biodiversity at a New River Land Trust event held at Thundercroft Farm near Blacksburg, VA.

- Staff complete installation of water quality logging apparatus at 10 known locations for the Madison Cave isopod (*Antrilana lira*) in the Shenandoah Valley and immediately adjacent watersheds.
- Staff continues to work collaboratively with the Department of Game and Inland Fisheries and Radford University to monitor summer colonies of the little brown bat (*Myotis lucifugus*), a cave associated species decimated by White Nose Syndrome (WNS.) In efforts to protect this species, VA-DCR and DGIF are also working to install a bat friendly gate on Peery Saltpetre Cave in Botetourt County.
- Virginia DCR Natural Heritage staff Wil Orndorff and Chris Hobson will be attending the International Congress on Subterranean biology from June 13-17 in Fayetteville, Arkansas. Former long-term cave board member Dr. David Culver is organizing the meeting. Orndorff will present on “Conserving cave invertebrate fauna in Virginia (USA).”
- The new Karst Protection Specialist Position, approved in October of 2015, has finally been filled. Tom Malabad of Blacksburg, Virginia, a long-time caver, cave conservationist, and bat biologist will start in this capacity on June 27, 2016. DCR welcomes Mr. Malabad to this role.

[end inserted text]

LAND CONSERVATION UPDATE

Department of Conservation and Recreation – Jason Bulluck

Mr. Bulluck reported that DCR is currently working with properties attached to the Cedars Natural Area Preserve in Lee County. Funds include a grant from the Virginia Land Conservation Foundation from the 2015 grant round. Two of the properties have verbal agreements.

Since Mr. Evans joined DCR as Natural Areas Protection Manager DCR has been in the process of developing a plan to prioritize Natural Heritage’s land conservation work where the highest priority is given to those parcels that expand existing natural area preserves.

The Nature Conservancy – Steve Lindeman

Mr. Lindeman noted that The Nature Conservancy is also working with properties in the Cedars area with a focus on protection of the Lee County Cave Isopod. DCR staff completed a three week field inventory of the area to identify and map rare and endangered species.

Conservation partners in the area met prior to the Upper Tennessee Karst Symposium to discuss coordination of efforts in the Southwest Virginia area. Participating partners included The Nature Conservancy, Soil and Water Conservation Districts, the U.S. Department of Agriculture, the Natural Resources Conservation Service, and the Department of Conservation and Recreation.

NEW BUSINESS

Appalachian Karst Symposium 3 – Wil Orndorff, DCR

Mr. Orndorff reported that the Appalachian Karst Symposium had been held in Radford in 1990 and in Johnson City, Tennessee in 2008. The Symposium addresses a variety of karst related disciplines. He noted that in 2018 there will be a Sinkhole Conference in the Appalachians. This conference is held every two years. Mr. Orndorff suggested that the two conferences be combined.

Dr. Doctor reported that the date for the 2018 Sinkhole Conference will be April 2-6, 2018. The conference will be held at the National Conservation Training site in Shepherdstown, West Virginia. He suggested that the Virginia Cave Board could be a supporting partner for the conference or that perhaps the Cave Board could participate with the Cave Conservancy of the Virginias. Assistance will be needed in graphic design and programming as well as onsite registration for the conference.

Dr. Doctor will research the possibility of the Virginia Cave Board being a sponsor for the conference.

The Board discussed what sponsorship would mean and how the Board could identify sponsorship partners. The Board will discuss the matter further at the next meeting.

Chairman Ek raised the issue of sinkhole insurance and agreed to research the issue and report back to the Board at the next meeting.

OLD BUSINESS

Virginia Cave Owner's Newsletter – Meredith Weberg

Ms. Weberg offered copies of the most recent newsletter. Several copies were returned as undeliverable. Ms. Buchanan noted that the names have been moved to a non-active list until staff can verify if names should be removed or addresses need to be updated.

Ms. Weberg will provide a copy of the letter to the Cave Conservancy of the Virginias as noted in the grant bequest.

The next newsletter will be published in the November time frame. Articles should be submitted to Ms. Weberg not later than October 1.

Ms. Weberg will continue to edit the copy for the newsletter. DCR's graphic design artist will assist with the layout which Ms. Weberg may then review.

Environment Virginia 2017 – Will Orndorff

Board consensus was that the Board not host a special karst session at Environment Virginia 2017. Materials regarding karst and cave issues will be available through the DCR display.

Mr. Lindeman reported that he had been requested to give a presentation to the Walker Mountain Grotto in Washington and Smyth Counties. He asked if there was a prepared presentation regarding the Cave Board. There is a document entitled *The Virginia Cave Board: The First Fifty Years (1966 – 2015)* on

the DCR website. Staff agreed to work with Mr. Lindeman and other members regarding a presentation that would be available for Board use.

Virginia Cave Week – Janet Tinkham

Virginia Cave Week was held April 17-26, 2016. The theme was "The HOLE Truth about Sinkholes."

Ms. Tinkham reported that Cave Board members worked with VAR (Virginia Region of the National Speleological Society) to organize a sinkhole cleanout during Cave Week. The hope is to identify sinkhole cleanout projects on an ongoing basis.

Virginia Cave Week 2017 will focus on karst springs and the connections between caves and surface waters.

DRAFT Citizen’s Guide to Sinkholes – David Ek

Chairman Ek noted that he had worked with Dr. Doctor and Mr. Haynes regarding the draft Citizen’s Guide to Sinkholes which had been distributed to the Board. He requested that suggested edits and changes be sent to him by July 1. The intent will be to incorporate those changes and release the guide

Virginia Karst Trail and Signage – Wil Orndorff

Discussion of Karst Trail and Signage was tabled to the next meeting.

Virginia Karst Map – Jason Bulluck

Following the last meeting DCR staff updated the karst map on the DCR website with maps that show karst geology with and without sinkholes.

Cave Board Website – Julie Buchanan

Ms. Buchanan reviewed the following statistics regarding cave and karst issues on the DCR website.

Page	Pageviews	Avg. Time on Page (in seconds)	Bounce Rate
cavehome	1,265	65.73	53.37%
karst-bats	2,546	141.13	75.89%
karsthome	5,241	132.52	70.46%
karst-stbat	697	130.94	82.53%
livingonkarst	364	51.49	44.07%
lokcavehints	367	138.95	85.47%
loksinkhole	638	145.80	71.65%
vacavetrail	3,668	168.08	82.32%
vcbintro	103	66.64	51.85%

vcbmembers	155	52.54	56.25%
vcbminutes	134	144.71	16.67%
vcbnewsletter	113	85.15	38.46%
vcbprotact	335	208.78	84.83%
vcbquestions	385	177.98	88.94%
vcbSinkholes	1,702	301.92	89.20%
vcbSurvival	304	203.73	87.74%
Year total	18,017	138.50	67.48%
Monthly average	1,607		
Daily average	53		

Covers the past 365 days ending 20160610.

Ms. Weberg noted that there were broken links on the website and that the Cave Board listing was dated 2014.

Board Specific Emails – Michael Fletcher

Mr. Fletcher informed the Board that DCR would be activating Board emails on the DCR website. He advised the Board that the current contact information would be used unless members provide a Board specific email.

Strategic goals for the Cave Board – David Ek, Chairman

Chairman Ek noted that he would like to schedule time at a future Board meeting for discussion of strategic goals for the Cave Board. This discussion would take a look at the Cave Protection Act to consider whether updates or changes should be recommended, and how the Board could effectively interface with citizens regarding cave and karst issues.

Mr. Bulluck advised that DCR might help in this initiative through the Environmental Education office.

Dr. Doctor asked whether the Board might have influence regarding the establishment of an area as a groundwater management issue.

These items will be included in the strategic discussion.

Proposed Bylaws for VCB – Lisa McGee, DCR

Discussion of proposed Bylaws was postponed for the next meeting.

Natural Gas Pipeline (Dominion ACP, Mountain Valley) comment protocols – Jason Bulluck, DCR

Mr. Bulluck reported that DCR daily deals with questions and concerns regarding the pipeline with regard to cave and karst issues. The latest DCR comments on the ACP were provided to FERC on late March. The extensive comments looked at the impact of the latest pipeline route by quad.

Where possible draft comments will be sent to the Board for comment, however Mr. Orndorff noted that the turnaround time often prevents such review. DCR staff will continue to seek input from the Cave Board when possible.

The Cave Board will continue to handle the Karst Mitigation Plan matters re: the pipeline(s), seeking input from Mr. Orndorff.

The Cave Board and DCR will coordinate comments on the Draft Environmental Impact Statement(s) for the pipeline(s).

DCR also provided comments regarding the Mountain Valley Pipeline in May.

These comments are available to the public on the DCR website.

PUBLIC COMMENT

There was no public comment.

NEXT MEETING

Staff will poll members regarding the best date for meeting in September or October.

ADJOURN

There was no further business and the meeting was adjourned at 3:15 p.m.

Respectfully submitted,

David Ek, Chairman

Marian McConnell, Recording Secretary