

**Virginia Cave Board
Natural Bridge State Park, Natural Bridge, Virginia
Saturday, May 13, 2023**

TIME AND PLACE

The meeting of the Virginia Cave Board took place at 11:00 a.m. on Saturday, May 13, 2023, at Natural Bridge State Park in Natural Bridge, Virginia.

VIRGINIA CAVE BOARD MEMBERS PRESENT

Robert K. Denton, Chair
John H.H. Graves
Rick Lambert
Allen L. Louderback
Meredith Hall Weberg

VIRGINIA CAVE BOARD MEMBERS NOT PRESENT

Dr. Daniel H. Doctor, Vice Chair
Jason H. Carter
John T. Haynes
Russell Kohrs
Roger W. Kirchen ex officio
Two Vacancies

DCR STAFF PRESENT

Andrew Smith, Chief Deputy Director
Emi Endo, Senior Public Relations and Marketing Specialist
Michael Fletcher, Board and Constituent Services Liaison
Will Orndorff, Karst Protection Coordinator

OTHERS PRESENT

Amy Edwards
Andrea Futrell
Chris Garber
Craig Hindman
Carol Tideman
Austin Shank, Grand Caverns

ESTABLISHMENT OF A QUORUM

With five members of the Board present, a quorum was established.

CALL TO ORDER

Chairman Denton called the meeting to order at 11:02 a.m.

INTRODUCTIONS AND ANNOUNCEMENTS

Chairman Denton called for introductions.

Chairman Denton reported that the ASTM [American Society for Testing and Materials] “Standard Practice for Karst Surveys for Development” passed overwhelmingly. The standard will be revised and submitted for a final ballot. The hope is that the standard will be issued in late summer.

Mr. Orndorff noted that Karen Kastning, one of the longest serving members of the Virginia Cave Board and a leader in Cave and Karst Conservation, died on Thursday April 6, 2023.

Mr. Graves reminded members that orders are being taken for the Explore Virginia Caves license plate. Forms should be sent to Mr. Fletcher at the DCR Richmond office.

Mr. Graves also reported that Luray Caverns had produced a brochure for Virginia Cave Week and National Cave and Karst Week to be distributed to guests during the event.

TREASURER’S REPORT

Mr. Orndorff gave the treasurer’s report.

There were no changes since the January report. The cash balance stands at \$2,148.

APPROVAL OF MINUTES FROM JANUARY 7, 2023

BOARD ACTION

Ms. Weberg moved that the minutes from the January 7, 2023 meeting of the Virginia Cave Board be approved as submitted. Mr. Graves seconded, and the motion carried.

DCR KARST PROGRAM UPDATE

Mr. Orndorff gave the following DCR Karst Program Update.

DCR Natural Heritage Karst Program: Update to Virginia Cave Board

Earlier this year, TVA scientists reported a suspected violation of the Cave Protection Act at Thomas Cave No. 2 in Washington County. Thomas Cave No. 2 is a small (40’ long) cave along the shore of the South Holston Reservoir associated with a “large” spring. It is considered a significant archaeological site by the Virginia Department of Historic Resources. The cave is under water between 6-9 months of a typical year and is only exposed when water levels are low. Orndorff initiated contact with the landowner, who reported that the site is an attractive landing for fishermen in the summer (when water levels are low enough that the cave is emergent), and that the activity observed near the cave entrance appears to be related to this recreational use, which included a small, floating dock installed without the

landowner's knowledge or permission. The dock has been removed and the property reposted no trespassing. There has been no report of evidence of looting, and the cave is not the site of any active archaeological investigations. During discussions over the response to the report, the issue of what law enforcement agency is responsible for the Cave Protection Act came up. Law enforcement leadership within VDCR stated that local authority having jurisdiction was primary, and that state officers were secondary in such a situation. Any citizen or entity may alert authorities to a suspected violation of the act. Reports of violations are exceedingly rare.

A new, bat-friendly gate was installed on Madison's Saltpeter Cave, and a gate was installed for safety over the entrance to Steger's Fissure. Both lie on the Madison Cave Hill Preserve owned by a subsidiary of the Cave Conservancy of the Virginias and jointly managed by VDCR and CCV. The new gate on Madison's restores natural air flow and may facilitate recolonization of the cave by bat species. Decades old reports describe past use of the cave by social (clustering) bats during winter months. Many thanks to all the volunteers from the caving community who helped with the project. Jim "Crash" Kennedy led gate design and construction assisted by Lydia Hernandez, both of Austin, TX.

The DCR Karst Program will be hosting a regional karst workshop September 7 and 8 near Clifton Forge to reach stakeholders in the Alleghany Highlands karst area (Alleghany, Bath, Botetourt, and Highland counties). The workshop will feature one day of classroom presentations and a field trip on the second day. Cave Board participation is welcome. Please email Katarina Kosič Ficco for details (katarina.kosic@dcr.virginia.gov).

The DCR karst team partnered with cavers from the VPI Cave Club and the Blacksburg community for a cave exploration week from March 4-11 at Natural Tunnel State Park. Over three miles of cave passage were physically surveyed, including in several previously undocumented caves.

Karst Protection Coordinator Wil Orndorff and Dr. Jerry Lewis, both of the Karst Waters Institute, will be leading a cave biology field workshop June 23-25 in Front Royal, immediately prior to the 2023 National Speleological Society Convention. This year's convention is being held in Elkins, West Virginia, and Virginia Cave Board member Meredith Weberg is the convention's co-chair. Thank you, Meredith! As of May 13, 2023 there are still several slots available for the biology workshop, which is a bargain at \$200 which includes 2-3 nights lodging. Scholarships are available to defer a portion of the cost. Email Wil.Orndorff@dcr.virginia.gov for details. The workshop is funded in part by a generous grant from the Cave Conservancy Foundation.

DCR Karst Protection Coordinator Wil Orndorff and Cave Board Chairperson Bob Denton continue to represent Karst and Cave resources on the Virginia Department of Environmental Quality's Stakeholder Advisory Group (SAG) for the development of the new Stormwater Management Handbook. Significant progress has been made in improving how karst issues are addressed in this guidance document, which is relied upon heavily by both the development and regulatory communities whenever land disturbing construction activities occur. This will be discussed in more detail as an agenda item, and input from Board members is welcome and valued.

The Groundwater Isopods of Virginia is slowly moving towards publication. Reviews and revisions have been completed, and the first round of galley proof reviews is nearly finished. Publication is anticipated for later this year, and the authors are hoping to partner with the publisher – the Virginia Museum of Natural History – for a book release event this fall or early winter. This monograph contains numerous new species descriptions, many associated with caves or springs, and provides an analysis of the genetic relationships within the highly diverse assemblage of groundwater isopods known to occur in Virginia and nearby states. The lead author is Dr. Julian “Jerry” Lewis, North America’s leading authority on freshwater isopods, with molecular work being led by Dr. Florian Malard, Universite Lyon, France. Karst Protection staff is working with Virginia Tech and the Department of Wildlife Resources to track Gray Bat movement between summer cave roost sites using the Motus Wildlife Tracking System. Results should help better define how Gray bats use caves during the summer months, and inform conservation decisions and priorities.

A bat-friendly cave gate was installed (5/12/2023) on Calcite Turtle Cave, a newly (2021) discovered significant cave (designated 2023) within the Mountain Valley Pipeline construction limits in Giles County. The gate will allow the owner to control human access while allowing bat access. No other pipeline related news to report. Project remains suspended pending permits.

LAND CONSERVATION UPDATE

Mr. Orndorff reviewed the DCR Natural Heritage Land Protection Report provided by Rob Evans, DCR Natural Areas Protection Manager.

DCR-NATURAL HERITAGE LAND PROTECTION REPORT (May 2023)

Summary:

The DCR-Division of Natural Heritage (DNH) closed on two acquisition projects, additions to existing Natural Area Preserves (NAP), since the last report. Numerous projects are ongoing across the Commonwealth with the help of the DCR-Real Property Office, Office of the Attorney General, Department of General Services, and other land conservation partners. As this report indicates, the Virginia Land Conservation Foundation (VLCF) is a key funding source supporting most active Natural Area Preserve projects. The VLCF Board is meeting May 16 to open the next grant round. Staff are working to develop the next round of prospective projects for grant submissions. For more information on anything in this report, project suggestions, etc. please contact Rob.evans@dcr.virginia.gov or (919)748-0225.

CLOSED PROJECTS

Deep Run Ponds NAP (Rockingham Co): DCR consummated acceptance of a donation of approximately 1 acre parcel adjoining the existing Preserve boundary. The overall Preserve features sinkhole ponds presumably structurally related to the underlying karst. Transactional costs were supported by a Virginia Land Conservation Fund grant.

Chestnut Ridge NAP (Giles and Bland Co): DNH completed acquisition of approximately 770 acres in Bland County, as an addition to the preserve, in one of the region’s largest and least protected

“ecological cores”. Funding was provided by a grant awarded to DNH through the Virginia Outdoors Foundation Forest Core Fund.

ONGOING PROJECTS

The Cedars NAP (Lee Co): DCR continues to work toward fee-simple purchase of an approximately 60-acre parcel adjoining Dry Creek Barrens, with at least one known cave entrance. Funding support from a VLCF grant.

Folly Mills Fen NAP (Augusta Co): DCR continues to work toward fee-simple acquisition of ~58 acres featuring a globally rare calcareous wetland with numerous rare plant species and a purported spring feeding the wetlands. Funding is being provided by DuPont mitigation/settlement funds.

Cowbane Prairie NAP (Augusta Co): DCR remains focused on two additions to this Preserve, ~19.3-acre privately-owned parcel and an additional ~14-acre parcel currently owned by TNC. These tracts support “Shenandoah Valley Prairie Fen”, a globally rare wetland community type related to the underlying karst. Funding is being provided by DuPont mitigation funds.

Lyndhurst Ponds NAP (Augusta Co): DCR continues to work to ~ 54 acres in several adjoining parcels to this Preserve. Two of the parcels support sinkhole ponds/related wetlands. Funding is being provided by DuPont mitigation funds.

Pedlar Hills NAP (Montgomery Co): DCR continues to work toward fee-simple purchase of ~ 203 acres in 3 adjacent co-owned parcels with funding provided by a Virginia Land Conservation Fund grant.

Chestnut Creek Wetlands NAP (Floyd Co): DCR continues to pursue a key adjoining wetland parcel with an existing abandoned farmstead with support of a Virginia Land Conservation Fund grant. Emphasis on possible demolition of one or more existing structures.

Pinnacle NAP (Russell Co): DCR will be accepting donation of 4 contiguous TNC-owned parcels along the north bank of the Clinch River.

Brocks Gap (Rockingham Co): This project will result in establishment of a new NAP along the North Fork Shenandoah River along the North Mountain fault. Negotiations continue with the private landowners supported by an existing VLCF grant.

Camp Branch Wetlands NAP (Floyd Co): DNH will be working to purchase ~ 56-acres adjoining the existing NAP from The Conservation Fund using an existing VLCF grant.

Deep Run Ponds NAP (Rockingham Co): DCR continues to work toward fee-simple acquisition of approximately 110 acres adjoining the existing Preserve boundary that supports at least one intact, high-quality sinkhole pond, using DuPont mitigation/Settlement funds.

Ellets Escarpment (Montgomery Co): DNH continues to target an initial acquisition of ~ 33 acres that will result in establishment of a new NAP designed to protect the Ellett Valley Millipede (*Pseudotremia cavernarum*) and the entrance to the globally significant cave with an existing VLCF grant.

Bull Run Mountain NAP (Prince William Co): DCR is working with the Virginia Outdoors Foundation to dedicate an approximately 10-acre tract that VOF closed on recently.

NEW & PROSPECTIVE PROJECTS

Grassy Hill NAP (Franklin Co): DNH expects to pursue grant funding to purchase 2 tracts at this Preserve. The first is a +/- 48-acre parcel mentioned in the last report. The second is an ~ 235 acre parcel that provide a land connector between the existing Preserve boundary and the above mentioned tract.

Pinnacle NAP (Russell Co): DCR is working with TNC on a prospective project that could add to both the Preserve and the Clinch River SP. TNC is negotiating with the private landowner – if successful, DCR expects to pursue funding at the next available opportunity.

Buffalo Mountain NAP (Floyd Co.): DCR is working with landowners and The Conservation Fund toward a potential ~1,000-acre expansion of this Preserve.

Vickers Cave (Washington Co.): DCR has met the landowner to discuss possible acquisition of this significant cave property.

NEW BUSINESS

Significant Cave List

Chairman Denton noted that there are discrepancies on the significant cave list and noted that some entries do not have sufficient documentation regarding the cave significance.

Mr. Orndorff advised that, since early 2000, the Cave Board has worked with VSS [Virginia Speleological Society] to maintain the list. VSS does the exploration and has the firsthand experience. He noted that VSS is discussing the revision of the criteria and recommended that the Cave Board be involved in the approval of the new criteria.

Chairman Denton commented that each county where significant caves are located historically has a VSS manager. The starting point would be to look at the list within each county for accuracy and sufficient data.

The next VSS meeting is in the fall. Chairman Denton recommended that the Cave Board be represented.

Virginia Stormwater Management Manual

Chairman Denton reminded Board members that comments regarding the “Design Guides for Karst Terrain” in the Virginia Stormwater Management Manual were due to the Department of Environmental Quality (DEQ) on May 31. He asked that Board members review the section and get comments and edits to him by the end of the next week.

Mr. Fletcher agreed to send the draft to Board members again.

Grand Caverns and Cave Week

Mr. Shank spoke on behalf of Grand Caverns, located in the Town of Grottoes. The town has owned the caverns since 2009. Grand Caverns is the oldest continually operating show cave in the United States and began operating tours in 1806. For many years it was managed alongside Natural Chimney.

Beginning in 2010 the Town implemented a bare bones management of the caverns. This was the catalyst for the creation of a parks department.

Mr. Shanks is working on developing a staffing plan pending a council approval of the budget.

Mr. Shanks noted that Grand Caverns is globally significant and is a place where many heritages intersect. The 99-acres of the property contains other significant caves and there may be more to be discovered.

Grand Caverns hopes to work with the United Nations to obtain a UNESCO GEO Heritage Site status for Grand Caverns. This is a relatively new UN designation. There are currently no UNESCO Heritage sites in the United States.

Grand Caverns will be hosting a celebration for Virginia Cave Week, which is June 4-10, 2023. The event at Grand Caverns will be on Saturday, June 10.

OLD BUSINESS

Virginia Cave Owners' Newsletter

Ms. Weberg thanked those who submitted material for the current version of the *Virginia Cave Owners' Newsletter* (VCON). She noted that the newsletter should be in production and would be mailed soon.

Mr. Orndorff noted that there had been a staff change and agreed to follow up regarding the status of the newsletter.

Virginia Cave Week

Ms. Weberg noted that the following events were planned for Virginia Cave Week.

- Ms. Weberg and Janet Tinkham will host an event at Ogden's Cave Natural Area Preserve on June 6. Mr. Orndorff will assist.
- Grand Caverns will host a day-long event on June 10.

Other contacts are being made. Information should be sent to Ms. Weberg. Mr. David Socky will update the Virginia Cave Week website (vacaveweek.com).

Ms. Weberg expressed appreciation to Emi Endo and Betty Saxman for their assistance in providing photos and upgrades to the Cave Board tabletop display.

Mountain Valley Pipeline

Mr. Orndorff reported that final court challenges still need to be resolved. He advised that there were no significant issues with cave and karst since 2018. Monitoring continues.

Disruption of land continues to be a problem as rights-of-way must be maintained.

There is no clear date for the resumption of construction.

Chairman Denton noted that the Atlantic Coast Pipeline is permanently canceled. Inspection continues in karst areas where restoration work is being done. While there was tree cutting, no trenching was done in Virginia.

2023 National Speleological Society Convention, Elkins, WV

Ms. Weberg noted that registration continues.

She noted that CaveSim will be in attendance and referenced the Board's prior interest in bringing CaveSim to Virginia.

On Tuesday, one of the divers from the Thailand cave rescue will give a presentation.

A day of cave exploration in West Virginia is also scheduled.

PUBLIC COMMENT

There was no public comment.

DATE FOR NEXT MEETING

Mr. Fletcher will poll the Board for a preference between September 9 and September 23, 2023, for the next meeting.

Mr. Graves offered to host the meeting at Luray Caverns.

ADJOURN

There was no further business and the meeting adjourned at 1:19 p.m.