

**Virginia Cave Board
Thursday, December 4, 2025
James Madison University
Harrisonburg, Virginia**

TIME AND PLACE

The meeting of the Virginia Cave Board took place at 11:30 a.m. on Thursday, December 4, 2025, in the Engineering/Geosciences Building at James Madison University in Harrisonburg, Virginia.

VIRGINIA CAVE BOARD MEMBERS PRESENT

Andrea Futrell, Chair
Angel Garcia
Jacqueline Gooden-Seay
Allen L. Louderback
Carol Tiderman

John H. H. Graves
Andrea Reese
David Hubbard
Austin Shank

VIRGINIA CAVE BOARD MEMBERS NOT PRESENT

Stephanie Lillard

Roger W. Kirchen (ex officio)

DEPARTMENT OF CONSERVATION AND RECREATION (DCR) STAFF PRESENT

Frank Stovall, Deputy Director for Operations
Paul G. Saunders, III, Senior Policy Analyst
Wil Orndorff, Kart Protection Coordinator
Anne Chazal, Chief Biologist
Emi Endo, Senior Public Relations and Marketing Specialist
Katarina Kosic Ficco, Field Cave and Karst Scientist

OTHERS PRESENT

Chad Harrold

ESTABLISHMENT OF A QUORUM

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

CALL TO ORDER

Chair Andrea Futrell called the meeting to order at 12:01 p.m.

INTRODUCTIONS

Chair Futrell called for introductions.

Members of the Board and DCR staff present introduced themselves.

APPROVAL OF MINUTES FROM MAY 30, 2025

BOARD ACTION

Mr. Graves moved that the minutes from the May 30, 2025, meeting of the Virginia Cave Board be approved as presented. Mr. Hubbard seconded, and the motion carried.

TREASURER’S REPORT

Ms. Chazal presented the following financial information:

**DCR - Natural Heritage (Cave Board)
 Summary of Financial Activities
 Fiscal Year 2026 (through October 31, 2025)**

FY26 Beginning Cash Balance	1,141.41
Revenues	Amount
FY26 Revenues	-
Total Revenues	-
Expenses	Amount
FY26 Expenses	-
Total Expenses	-
Total Cash Balance (as of October 31, 2025)	1,141.41

**DCR - Natural Heritage (Cave Board License Plates)
 Summary of Financial Activities
 Fiscal Year 2026 (through October 31, 2025)**

FY26 Beginning Cash Balance	1,480
Revenues	Amount
FY26 Revenues	-
Total Revenues	-
Expenses	Amount
FY26 Expenses	-
Total Expenses	-
Total Cash Balance (as of October 31, 2025)	1,480

Prepared by Jonathan Jackson, Natural Heritage Business Manager

DCR KARST PROGRAM UPDATE

Mr. Orndorff provided the Board with the following update from the DCR Karst Program:

DCR Natural Heritage Karst Team
Update to VA Cave Board
Wil Orndorff, 12/4/2025

Karst resource inventories are in progress (nearly completed except for bat counts) at Natural Bridge State Park. Several previously undocumented small caves were *identified* and surveyed, and dozens of karst features located and described using desktop analysis followed by field based *verification*.

Virginia Cave Week events at Ogdens Cave Natural Area Preserve and at the *Grand Caverns Cave and Karst Expo* were well attended.

OCR staff continues to work cooperatively with VDOT, VDWR, and the US Fish and Wildlife Service to minimize impact on Virginia's largest Gray bat maternity colony from extensive repairs to the 3/8 mile wide Piedmont Avenue Bridge in Bristol, Virginia, which conveys Beaver Creek south beneath downtown Bristol before emerging in Tennessee. As far as the bats are concerned, the bridge is a cave. OCR has been monitoring the cave acoustically for ~8 years, and has documented where, when, and how the bats use different portions of the structure. The Gray bat (*Myotis grisescens*) is listed as endangered under the US Endangered Species Act. No update since last Cave Board meeting.

DCR Karst Team staff completed a 3-D, high accuracy survey of New Dixie Cave in Roanoke County to assist VDOT in preparation to add an additional north bound lane to 1-81 in the median at this location. In addition to the survey data, a cartographic quality map has been produced. Quantitative survey data shows that the explorable extent of cave passages extends to just beneath the drainage ditch on the south side of the highway (1-81), with overburden significant that it is unlikely that planned highway improvements will intersect or destabilize the cave.

Karst Team staff continue to participate in the DEQ Technical Review Committee for the new (2024) Stormwater Management Handbook. The next meeting is Monday, December 15 at the DEQ offices in Richmond and will be attended by Karst Protection Coordinator Wil Orndorff. DEQ still has a backlog of comments on Appendix E (karst provisions) dating back to review of the draft document in the first quarter of 2024. The handbook as it stands now can be viewed here:
<https://online.encodeplus.com/regis/deq-va/docviewer.aspx?secid=1486#secid-1454>.

No incidents to report in regards to the Mountain Valley Pipeline, which is in service and nearing final stabilization (as determined by VDEQ).

The karst team worked with the Army Corps of Engineers and their consultants to preferably avoid but possibly mitigate potential impacts to Young Fugate Cave (Lee County) from construction of a sanitary sewer line. Young-Fugate Cave is home to a single site endemic beetle species as well as other rare invertebrates and the federally endangered Gray bat. The cave has two entrances and conveys a sinking stream beneath US 58. It is also fairly shallow, increasing the potential for undesirable interaction between the sewer line and the cave and associated underground stream. A quantitative survey was completed in September of 2025 and the results were submitted to the Army Corps and its consultants.

We have had no feedback from either agency in terms of proximity of the cave passages to planned excavations. Traffic noise and vibrations were pronounced in portions of the cave beneath the highway during the survey.

Katarina Kosic Ficco and Tom Malabad completed the Level 2 National Cave Rescue Commission Weeklong Seminar in July. Katarina represented the OCR karst team at the 2025 National Speleological Society convention in late June. Wil Orndorff and Zenah Orndorff represented the DCR karst team at the 2025 National Cave and Karst Symposium in Ely, Nevada October 6-10.

As of October 1, 2025 Karst Field Scientist (Katarina Kosic Ficco) and two new wage staff (to be hired) will be spending the majority of their time (80% for salaried and 100% for wage) addressing cave and karst needs of the US Forest Service as part of a ten-year "Good Neighbors Agreement" between the Service and the Virginia OCR Division of Natural Heritage. The work will be performed in karst areas owned by the Forest Service, or down gradient and potentially impacted by management actions on the Forest Service.

Wil Orndorff delivered presentations at:

- the National Caves Association meeting in September (co-hosted in Harrisonburg by Luray Caverns and Melrose Caverns).
- The Central Shenandoah Planning Commission Stormwater Workshop in late October.

Winter bat cave hibernacula counts begin in January and will run through approximately March 1. This year's focus is on known Indiana bat caves. Work is performed in cooperation with and with funding from the Virginia Department of Wildlife Resources.

As reported in the land protection update, Virginia's 68th Natural Area Preserve was established last month near Blacksburg. The Eastern Divide NAP protects at risk caves and karst that are home to the Ellett Millipede (*Pseudotremia cavernarum*).

LAND CONSERVATION REPORT

Ms. Chazal presented the following update:

Selected Natural Area Protection Updates (November 2025)
Submitted to the Virginia Cave Board
Rob Evans, Natural Area Protection Manager
Department of Conservation & Recreation, Division of Natural Heritage (DCR-DNH)

DCR has closed two projects since last report, has active real-estate projects at 12/67 exiting Natural Area Preserves (NAP), and continues work on projects that will result in the establishment of 2 new NAP.

Closed:

- **Eastern Divide NAP (Montgomery Co.): ESTABLISHMENT OF 68TH VIRGINIA NAP** - fee-simple purchase of two adjoining tracts protecting 33.959 acres on 11/07/25. This location was previously referred to as "Ellet Escarpment" in previous reports and listed as Phase 1.

Active Projects (New NAP):

Brocks Gap (Rockingham Co):

- Acquisition of this new NAP is expected by end of the year.

Active Projects (existing NAP):

- **Buffalo Mountain NAP (Floyd Co):** DCR hopes to close this approx. 975-acre expansion in middle December.
- **Eastern Divide (Montgomery Co): several future additions are ongoing; see also New Grant Awards;** Phase II – approximately 43-acre parcel, now owned by TCF, will be a priority for transfer to DCR in the new year. Phase III – approximately 105-acre parcel, approaching closing by TCF. Prospective Phase IV is still TBD, pending landowner negotiations on at least 5 prospective parcels
- **Chestnut Creek Wetlands (Floyd County).** DCR's acquisition progress has ground to a halt, key landowner paperwork appears to be lost due to a fire and death in the family.
- **Mill Creek Springs NAP (Montgomery Co):** Landowner negotiations toward this prospective inclusion of a conservation easement (discussed in last package) are still underway.
- **Cleveland Barrens NAP (Russell County):** DCR continues to make progress with the Town of Cleveland on the addition of approximately 5 acres bordering Tank Hollow Falls. S
- **Crows Nest NAP (Stafford Co):** DCR is working on multiple projects in conjunction with Stafford County and the Northern Virginia Conservation Trust. that will result in additions to this Preserve.
- **Folly Mills Fen NAP (Augusta Co): Progress stalled as reported previously.**
- **The Cedars NAP (Lee Co):** several parcels owned by TNC have been planned for donation to DCR; these have taken a back seat to a host of higher priority projects.
- **Chestnut Ridge NAP (Bland Co.):** DCR is working with TNC to accept donation of ~ 2,300 acres.

New Grant Awards:

DCR-DNH received notification of three grant awards in early November.

South Quay Sandhills NAP (City of Suffolk): awarded \$1,482,454 grant to support fee-simple purchase of ~ 875 acres through partnership with TNC.

Difficult Creek NAP (Halifax Co.): awarded \$120,000 grant to support fee-simple purchase of ~ 23.5 acres.

Eastern Divide (Montgomery Co): awarded \$1,074,781 to support fee-simple purchase of Phase III (listed above).

Projects In need of funding:

Grassy Hill NAP (Franklin Co.): ~ 5.2 acres adjoining the NAP in partnership with private conservation buyer.

Piney Grove Flatwoods NAP (Sussex Co.): ~ 23 acres adjoining the NAP in partnership with TNC.

Lyndhurst Ponds Tract (Augusta Co.): several adjoining parcels are available for purchase.

Mutton Hunk Tract (Accomack Co.): existing DCR-held conservation easement listed on active real-estate market.

Back Creek Tract (Frederick Co.): The Potomac-Appalachian Trail Club (PATC) parcel donation, but due-diligence funds needed.

CAVE BOARD VACANCY

Chair Futrell updated the Board on the process for appointments to the Board and asked Board members to reach out to those they feel would be qualified additions to the Board to encourage them to apply for appointment.

NEW BUSINESS – CAVESIM INITIATIVE

Chair Futrell introduced a new item of business not previously listed on the agenda. She shared information about *CaveSim*, an educational and interactive cave exploration simulator, and expressed interest in bringing the CaveSim trailer to Virginia. She suggested that state parks could serve as an ideal venue for hosting the trailer and proposed showcasing it in Richmond during the legislative session to raise awareness among lawmakers. The Chair brought this to the Board's attention to initiate an open discussion.

Mr. Stovall provided an overview of the current offerings within the state park system and how they might align with or complement the CaveSim initiative.

ADJOURN

The meeting was adjourned at 12:53 p.m. for lunch.

CALL TO ORDER

The meeting was called back to order at 1:33 p.m.

Dr. Garcia mentioned that September 13th was designated as the International Day of Cave and Karst by UNESCO.

VIRGINIA CAVE OWNERS' NEWSLETTER

An update was provided on articles currently being drafted for inclusion in the upcoming Virginia Cave Owners Newsletter. The Cave Conservancy of the Virginias (CCV) has a \$1,200 grant that could be applied for to support production costs. Additional information is available on the CCV website. Mr. Graves announced that Luray Caverns will sponsor both the production and mailing of the newsletter.

VIRGINIA CAVE WEEK

The Chair requested a volunteer to lead and promote *Virginia Cave Week*, which is scheduled for the first week of June. Carol Tideman volunteered to take on this role.

STORMWATER MANAGEMENT HANDBOOK

Board members are encouraged to attend the upcoming subcommittee meeting as private citizens. The meeting will be held at the DEQ office and will focus on the appendix relevant to karst systems.

I-81 EXPANSION AND VDOT REQUEST FOR INPUT FROM CAVE BOARD AND DIXIE CAVERNS

The Board discussed the ongoing I-81 expansion project and VDOT's request for input from the Cave Board and Dixie Caverns. The owner of Dixie Caverns attended the previous meeting. A letter from the Board was sent to a wide list of recipients. Responses were received from the Roanoke County Board of Supervisors and Senator Head.

VIRGINIA CAVE AND KARST TRAIL

No new updates were reported.

THE CAVERNS AT NATURAL BRIDGE

Mr. Orndorff provided an update consistent with the previous meeting. No new developments were noted.

CAVE BOARD BYLAWS

BOARD ACTION

Ms. Reese moved that the Board adopt the Cave Board Bylaws as presented and amended. Dr. Garcia seconded, and the motion carried.

ELECTION OF VICE CHAIRPERSON

The Chair opened the floor for nominations for the position of Vice Chairperson. Carol Tideman nominated John Graves; however, Mr. Graves declined the nomination, as did Mr. Shank. Ms. Gooden Sey volunteered to serve and was elected Vice Chairperson by consensus.

PUBLIC COMMENT

Mr. Chad Harrold addressed the Board.

DATE FOR NEXT MEETING

As is customary, DCR staff will poll the Board for the date of the next meeting which will likely be held in April or May of 2026. The. Mr. Graves volunteered Luray Caverns as the site of the next Board meeting.

ADJOURN

There being no further business, the meeting adjourned at 2:29 p.m.