

**Virginia Cave Board  
Saturday September 7, 2024  
Melrose Caverns  
Harrisonburg, Virginia**

**TIME AND PLACE**

The meeting of the Virginia Cave Board took place at 11:00 a.m. on Saturday, September 7, 2024, at Melrose Caverns in Harrisonburg, VA.

**VIRGINIA CAVE BOARD MEMBERS PRESENT**

Steve Ahn  
Jason H. Carter, Vice Chair  
Andrea Futrell, Chair  
Jacqueline Gooden-Seay

John H.H. Graves  
Stephanie Lillard  
Allen L. Louderback

**VIRGINIA CAVE BOARD MEMBERS NOT PRESENT**

Russell Kohrs  
Austin Shanks

Roger W. Kirchen (ex officio)  
TWO VACANCIES

**DEPARTMENT OF CONSERVATION AND RECREATION (DCR) STAFF PRESENT**

Andrew Smith, Chief Deputy Director  
Paul Saunders, Senior Policy Analyst  
Jason Bulluck, Director, Natural Heritage Program  
Wil Orndorff, Kart Protection Coordinator  
Katarina Kosic Ficco, Field Cave and Karst Scientist

**OTHERS PRESENT**

Carol Tiderman  
Robert Denton  
Craig Hindman  
Jack Yancey, Melrose Caverns  
Jim Yancey, Melrose Caverns  
Dick Yancey, Melrose Caverns  
Debbi Miller, Melrose Caverns  
Ariana Grimm, Melrose Caverns

**ESTABLISHMENT OF A QUORUM**

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

**CALL TO ORDER**

Andrew Smith, DCR Chief Deputy Director, called the meeting to order at 11:04 a.m.

**INTRODUCTIONS**

Chief Deputy Smith called for introductions.

Members of the Board and DCR staff present introduced themselves.

**ELECTION OF OFFICERS**

Chief Deputy Smith called for nominations from the Board for Chairman of the Virginia Cave Board.

Mr. Graves was nominated by Mr. Carter. Mrs. Futrell nominated herself.

Mr. Graves conceded his nomination to Mrs. Futrell. Mrs. Futrell's nomination was unanimously approved and she was elected Chair.

Chair Futrell asked for nominations for Vice Chair. Mrs. Gooden-Seay nominated Jason Carter.

Mr. Carter accepted the nomination, and the Board unanimously approved his nomination, electing Mr. Carter Vice Chair.

**TREASURER'S REPORT**

Mr. Bulluck presented the following financial information:

**DCR - Natural Heritage (Cave Board)  
Summary of Financial Activities  
Fiscal Year 2025 (July 1, 2024 through August 31, 2024)**

<b>FY25 Beginning Cash Balance</b>	<b><u>2,621</u></b>
<b>Revenues</b>	<b>Amount</b>
FY25 Revenues	-
<b>Total Revenues</b>	<b><u>-</u></b>
<b>Expenses</b>	<b>Amount</b>
FY25 Expenses	-
<b>Total Expenses</b>	<b><u>-</u></b>
<b>Total Cash Balance (as of August 31, 2024)</b>	<b><u>2,621</u></b>

Mr. Smith advised that the Cave Board License Plate revenue does not reflect available funds. These are in held in escrow until the license plates are approved or canceled.

**APPROVAL OF MINUTES FROM May 11, 2024**

Ms. Graves moved that the minutes from the May 11, 2024, meeting of the Virginia Cave Board be approved as submitted and the motion carried.

### **DCR KARST PROGRAM UPDATE**

Mr. Orndorff presented the following:

Update to the Virginia Cave Board, May 11 - September 7, 2024  
Virginia Karst Program, Division of Natural Heritage  
Department of Conservation and Recreation

Wil Orndorff, Karst Protection Coordinator  
Wil.Orndorff@dcr.virginia.gov

**9/6/2024**

#### **Environmental Project Review**

Approximately 80 projects occurring in karst areas were screened by staff for potential impacts to cave and karst resources. Projects included VDOT projects, utility construction and upgrades, and private developments including residential and energy infrastructure. Staff also reviewed properties on karst with proposed conservation easements to ensure that karst protection provisions were incorporated appropriately into conservation easements.

#### **Biological Monitoring**

Staff continued to work in cooperation with the Department of Wildlife Resources to monitor bat activity at subterranean summer roosts (mostly caves) across western Virginia, and under a cooperative agreement with the US Forest Service to assess karst resources on the forest and to screen proposed federal management actions for potential impacts to state karst resources.

Staff continues to perform biological inventories of numerous caves in Western Virginia as part of an agency wide data update focused on verification of old records of rare organisms. Many of these records are decades old, and verification of a population's persistence is a core function of the agency's conservation data efforts. This core agency mission is related to the documentation, conservation, and protection of Virginia's globally significant biodiversity resources which include rare plants, animals, and natural communities. The cave component of Virginia's biodiversity is highly significant, with over two hundred cave-limited and adapted species documented in Virginia caves west of the Blue Ridge. The majority of these species are very restricted geographically, with many known from only one or a handful of closely spaced caves.

#### **Education and outreach**

Staff participated in the Appalachian Regional Karst Workshop in May, a meeting of state and federal agency staff from the Appalachian region for exchange of ideas on karst data acquisition, analysis, sharing, and security;

In June, staff presented and served on an expert panel at the Shenandoah Valley Soil and Water Conservation District Symposium: Our Karst Landscape and Water Quality. Issues discussed included karst management and protection during development, karst and agriculture, and the biodiversity significance of Virginia's karst. Also in June, staff worked with the Virginia Cave Board and the Virginia Region of the National Speleological Society to host a field day at Ogdens Cave Natural Area Preserve as part of Virginia Cave Week. Nearly 1-00 citizens attended-the event at the preserve and learned about cave and karst resources and Virginia's natural heritage, with the majority of them participating in a guided tour of the entrance area of the cave and getting to observe subterranean animals in their natural habitat.

In July, staff members attended the annual convention of the National Speleological Society in Sewanee, Tennessee, and presented on data representation methodology for cave limited animal and about cave exploration efforts performed on the National Forest under a cooperative state-federal memorandum of understanding.

Also in July, staff assisted the Virginia Region of the National Speleological Society (VAR) in hosting a statewide tour by CaveSim, an internationally recognized cave and karst conservation education program\_ This was CaveSim's first visit to the Commonwealth. CaveSim consists of a simulated cave housed in an air-conditioned trailer and equipped with sensors that allow participants to realize their potential impacts on sensitive cave features, including cave formations, cave life, and archaeological resources. Seven sites were visited over nine days, with over 1,200 participants, mostly K-12 students, touring the CaveSim in Bristol, Richmond, Grottoes, Roanoke, and Blacksburg. The tour was funded by a grant from the Cave Conservancy of the Virginias (CCV) as well as smaller donations from individuals and groups, including the Virginia Cave Board. Dr. Zenah Orndorff wrote the grant proposal to CCV on behalf of VAR. CaveSim will return from its base in Colorado to Virginia in October for Roanoke's Go Fest and Natural Tunnel State Park. For more info, see [www.cavesim.com](http://www.cavesim.com).

Staff also led or co-led outreach events at New River Trail State Park and the Cedars Natural Area Preserve.

### **Interagency assistance**

Staff developed and shared a geographic coverage With the Department of Energy depicting alt areas in the state known to overlie cave passages. This map product allows DOE to develop products that alert stakeholders to the presence of caves in an area without compromising the location of cave entrances, ownership information, or data on resources associated with individual caves. This more detailed information is owned by the Virginia Speleological Survey, and available for OCR/Cave Board use under a data sharing agreement which allows appropriate use of the information on a case-by-case basis. This particular product covers geological maps along the 181 corridor: Eventually; a statewide coverage will be developed by VDCR and snared with VDOE.

OCR continues to provide technical assistance to VDEQ in terms of monitoring the completion of the Mountain Valley Pipeline, and in the development and updating of karst provisions in the Virginia Stormwater Management Handbook, which was released 1 July 2024 and may be viewed online. Former Cave Board Chair Bob Denton worked with Karst Program staff to develop guidance on stormwater management in karst that is included as Appendix E of the new handbook. Staff also responded to several small, DEQ related inquiries from localities. Finally, staff assisted VDEQ in identifying the source of extreme water quality impairments to Lick Creek, a tributary to the Clinch River in Russell County, VA. Staff analyzed the topography and geology, leading to identification of a likely source of the impairment, leachate from agricultural storage of spent brewer's grains and other byproducts flowing into a sinkhole less than a mile east of the impacted section of the river. DEQ is working with the landowner to mitigate the situation.

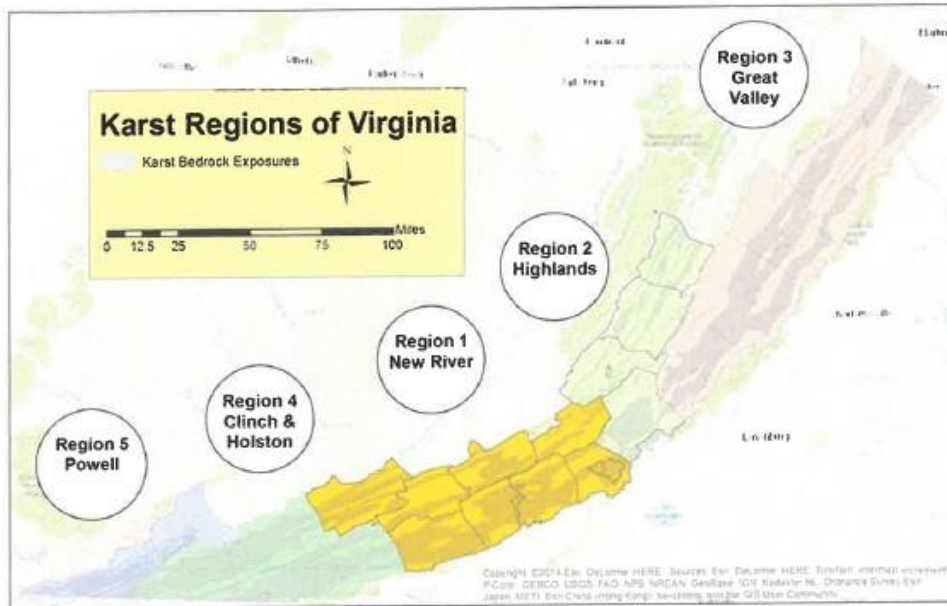
**Appalachian Karst Symposium (November 7-10, Lewisburg, West Virginia)**

Staff is helping to organize and participating in the 4<sup>th</sup> Appalachian Karst Symposium, which brings together scientists, cavers, and students from around the region to learn about recent developments in our understanding of the globally significant Appalachian karst. Symposium sponsors from Virginia include CCV, the Cave Conservancy Foundation, Luray Caverns, Terracon, and TRC.

Robert Denton spoke on the Virginia Stormwater Management handbook and the improvements made to it.

Mr. Orndorff presented the Board with the following graphic, indicating where the significant caves and karsts are located in Virginia:

## Where are Virginia's Significant Caves and Karst?



Natural Heritage Cave Resources	Karst Region				
	New River (1)	Highlands (2)	Great Valley (3)	Clinch and Holston (4)	Powell (5)
Significant Caves	82	71	57	90	70
Other Element Occurrences	121	93	81	73	121

Note that this data is accurate as of 2018. A couple of hundred additional biological records have been added since then, but the pattern above holds. If you consider this strictly on a watershed basis, and normalize by area, the Upper Tennessee River Basin (Powell, Clinch and Holston) has the highest biodiversity significance among the state's five major karst watersheds. However, all of Virginia's karst areas are very significant in terms of cave and karst resources, on both national and international scales.

### LAND CONSERVATION UPDATE

Mr. Bulluck provided the Board with some background information on the Natural Heritage Program and presented the following update:

The last specifically relevant real-estate closing was the so-called "**Vehrs tract**" (**Lee County**), which closed on 5-20-24. It included 2 adjoining parcels totaling 55.725 acres & includes at least one cave entrance and overlies the underground footprint of **Kinzer Hollow Cave**. Purchase was supported by a grant from the Virginia Land Conservation Foundation (VLCF).

DNH Protection staff have been working to untangle the potential availability of a parcel adjoining existing ownership at **Unthanks Cave NAP (Lee County)**. The parcel is subject of a Lee County Circuit

Court case entitled: Ingle, et al v. All Unknown Persons, etc, Case # CL24020031-00. We have been in contact with the **court appointed Special Commissioner** in this case, who has completed her evidentiary hearing recently. She agreed to include DCR's interest in purchasing this property in her report filed with the Circuit Court Judge, who will ultimately decide whether they will entertain a direct purchase offer from DCR or whether the tract will be auctioned. If so, DCR will need to seek a **conservation buyer** as well as grant funds to support purchase.

DCR continues work toward possible acquisitions near **Brocks Gap (Rockingham Co)**. Landowner negotiations are still underway. If successful, this project will result in establishment of a new NAP bordering the North Fork Shenandoah River and the **geologically significant North Mountain fault**.

DCR continues to work toward several fee-simple acquisitions along the **Ellets Escarpment (Montgomery Co)**. Purchase agreements are in place with 2 landowners (~ 33 acres) that include the entrance to "**Dave's Cave**" and some surrounding upland buffer. We will be seeking additional supporting funds from VLFC later this month to have sufficient funds to close these adjoining parcels. When acquired, these will constitute a new NAP designed, primarily, to protect the **Ellett Valley Millipede (*Pseudotremia cavernarum*)**.

DNH Protection staff have been working with several other nearby landowners to both expand the contiguous upland buffer and protect nearby cave entrances and footprints. Thus far, owners of 3 key parcels have expressed willingness to work with DCR toward eventual purchase. These tracts include the entrances to both **Mice's Hole** and **Salamander Cave**. DCR will require significant grant funds to acquire these parcels (+/- \$3,000,000) and is currently exploring funding options.

#### **CONSIDERATION OF RESOLUTION FOR SERVICE FOR MIKE FLETCHER**

Mr. Smith presented the following resolution for service for Mike Fletcher, former Board and Constituent Services Liaison:

***Honoring  
Michael Fletcher  
On His Retirement***

WHEREAS, Michael Fletcher has dedicated 30 years of service to the Commonwealth of Virginia, with 27 years specifically at the Department of Conservation and Recreation (DCR); and

WHEREAS, Michael Fletcher began his career with the Commonwealth of Virginia in 1994 during the Administration of Governor George Allen; and

WHEREAS, in 1997, he began his tenure at DCR as the Director of Development, showcasing his leadership and dedication to the Department; and

WHEREAS, Michael Fletcher has served as the Freedom of Information Officer for DCR, ensuring transparency and accountability within the Department; and

WHEREAS, since 1998, he has been the DCR Board Liaison, overseeing various Boards and Special

Committees, including the Virginia Board of Conservation and Recreation, Virginia Cave Board, Virginia Land Conservation Foundation, Virginia Soil and Water Conservation Board, and numerous ad hoc committees; and

WHEREAS, on September 1, 2024, Michael Fletcher retired as the Board and Constituent Services Liaison, as well as the FOIA Officer for the Department of Conservation and Recreation, leaving behind a legacy of dedication and service to the Commonwealth of Virginia.

NOW, THEREFORE, BE IT RESOLVED, that we, the chairs of each Board, and the Director of the Department of Conservation and Recreation, commend Michael Fletcher for his outstanding service, leadership, and commitment to the Commonwealth of Virginia and the Department of Conservation and Recreation.

BE IT FURTHER RESOLVED that this resolution be presented to Michael Fletcher in recognition of his contributions and achievements during his esteemed career with the Commonwealth of Virginia.

The Board adopted the resolution by acclamation.

The Board adjourned the meeting for lunch at 12:05 p.m.

Chair Futrell called the meeting back to order at 12:44 p.m.

Chair Futrell introduced Mr. Yancey, owner of Melrose Caverns. Mr. Yancey provided the Board with some background information and history of the property and then took questions from Board members.

Mr. Bulluck provided an update on a Virginia Department of Transportation project to widen Interstate 81.

#### **OLD BUSINESS**

- a. *Virginia Cave Owners Newsletter* – The Board was presented with a report from Meredith Weberg. Background on the newsletter and the possibility of making the newsletter digital was discussed. The following document was presented to the Board, as submitted by Chair Futrell on behalf of Mrs. Weberg:

#### **Reports for the Virginia Cave Board**

September 7, 2024

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

The *Virginia Cave Owners Newsletter* (VCON) should be **ready for publication and mailing in early to mid-May**—so it will be in mailboxes before the annual Virginia Cave Week. The copy edited submissions must be **sent to DCR no later than February 1**. I have worked with DCR employee Emi Endo to get the layout done in recent years. There is already a template, so the process is fairly streamlined, but still takes time.



It takes 8 to 10 weeks for the back and forth of DCR staff doing the layout and the editor doing a final proofread or two and for the VCON to get printed, labeled, and mailed. DCR employee Jason Bulluck has info on this.

Discussion needs to start early, like at this meeting for what the editor wants to go into the next year's issue. Mostly, it's Virginia Cave Board (VCB) members who do the writing, but it's entirely up to the editor as to what to accept.

Because of the high cost of postage, the VCON is limited to 4 pages. Well, 3 ½ really because one half a page is used for the mailing label and USPS info.

One thing I've done in the past is to write grant proposals to pay for the VCON. The Cave Conservancy of the Virginias (CCV) has been a major donor and should continue to be thanked in the VCON because for many years, VCB did not adhere to the requirements of the grant, one of which was to publicly acknowledge CCV's contribution.

---

### Virginia Cave Week

Each year this weeklong celebration is the **week surrounding National Cave and Karst Day** (June 6). So, it changes slightly each year. Whoever heads up this effort cajoles VCB members to lead trips or give talks during this week. The dates for 2025 are June 1–7.

A very successful event the past few years has been **public tours of the Ogdens Cave Natural Area Preserve** in Middletown, Virginia. DCR employee Wil Orndorff has been instrumental in this event's success. You must coordinate with him to make sure the area gets mowed in the few days before the event. You may need to ask volunteers to bring weedwhackers too. You will also need to recruit a good number of caver volunteers who can guide the public into the cave as well as answer questions. There is a great deal of interest in this event and you must also work with DCR to advertise it locally.

Whoever heads up this event must keep good records as to who from the public has RSVP'd so they can send directions out a few days ahead of time. In 2023 we had a limit of 100 attendees and ended up with 78. In 2024, we reduced the number to 75 because it was a more manageable number for the caver volunteers. It's a good idea to supply water\* along with the helmets and headlamps (borrowed from a local grotto).

Other events can be **geology talks** at local show caves or springs or sites along the Virginia Cave and Karst Trail.

Grand Caverns has held a **Cave and Karst Expo** the past 2 years. VCB has had a display at both of these, which conveniently occur during Virginia Cave Week.

You should try to get more than the Ogdens and Grand Caverns events though and try to spread them throughout the state so more citizens can participate and learn about the importance of caves and karst.

Former VCB member Dave Socky hosts a website for this event: [vacaveweek.com](http://vacaveweek.com). He will need to be notified of what the theme is (if you have one—we used to but did not in 2024) and events with dates, times, locations, and descriptions.

---

## Virginia Cave and Karst Trail

There are **currently 26 sites** along the driving trail that is the Virginia Cave and Karst Trail (VCKT). One is not listed in the brochure.

There are a good number of **boxes of VCKT brochures stored at Luray Caverns**, which was gracious enough to pay for the printing of the brochures. Each box contains 2,100 brochures and weighs 30 pounds. You can ask John Graves to bring some boxes to a VCB meeting if you give him enough time to go get them.

Ideally, **each VCB member will take a box** or three to distribute to sites near where they live or travel. Someone should periodically check with sites to see if they need more. You can place brochures in visitor centers and other public places where brochures are often found. For example, I have placed brochures at the Jon Henry General Store in New Market, Virginia. (They probably need more.)

I have a list of sites where VCKT brochures have been placed. I suggest someone take on the project of getting them placed at all Virginia Welcome Centers.

VCB produced 55 large signs for placement at VCKT sites. Most sites have at least one sign. I believe there are two or three signs remaining. I gave those to then-VCB Chair Bob Denton during Virginia Cave Week. At some point someone will need to write a grant request for more VCKT signs to be made.

---

## Education and Outreach

VCB has two **tabletop displays** (thanks, CCV!) and a couple of brochure holders. I have taken one of the displays to the NSS Convention, the National Cave and Karst Management Symposium, WildFest, Virginia Cave Week events, and Grand Caverns' Cave and Karst Expo. Sometimes the display is unattended, but sometimes I've spent hours standing nearby to answer questions, though this is usually at non-caver-attended events.

One of the displays resides with DCR employee Wil Orndorff. The other display was given to then-VCB Chair Bob Denton during Virginia Cave Week.

VCB also has a **Facebook page**: [Virginia Cave Board](#). I started it years ago and admittedly don't keep it up well. But if ALL members would pitch in, it could be a good resource. Because VCB does not have a logo, I used the VCKT logo as the "photo."

**All members of VCB should be doing education and outreach.** I believe it is a major reason for the Board's existence.

---

Finally, I will offer my services to answer questions about any of these projects. I sincerely hope that VCB will not let any of these important projects fall by the wayside. It's truly time for other members to help out.

*Submitted by former VCB member Meredith Hall Weberg  
September 6, 2024*

- b. *Explore Virginia Caves License Plate* – Mr. Smith provided an update and background on the Virginia Cave License Plate and described the process for approval of the license plate and the number of received applications. Mr. Smith suggested the Board consider setting a deadline for applications because current applicants fees are being held in escrow. The Board considered ways in which to promote the license plate and suggested the creation of a QR code which would link to the application.
- c. *Stormwater Management Guidelines* – Mr. Orndorff re-emphasized the importance of the guidelines and how they provide opportunity for oversight. Chair Futrell provided some more background and mentioned the opportunity for each Board member to comment on the guidelines individually.
- d. *Cave Board Bylaws* – Mr. Smith suggested moving this item to the following Board meeting in order for the Board to be presented with the Bylaws for review. This item was passed to the next meeting.

Chair Futrell asked if there were any new business items or announcements that Board members needed to address.

Mr. Orndorff made some comments about Cave and Karst Trail information and provided the Board with a brochure.

Chair Futrell noted that Roanoke County has organized GoFest in October and they have requested participation from Cave Board members.

#### **PUBLIC COMMENT**

There was no public comment.

#### **DATE FOR NEXT MEETING**

Staff will poll the Board regarding dates for a meeting in January of 2025.

It was suggested that the Board meet at Natural Bridge, if available.

#### **ADJOURN**

There was no further business and the meeting adjourned at 1:47 p.m.