

# Virginia Cave Owners



NEWSLETTER

Issue #36, April 2024

## Exploring Falling Springs Valley

By Dr. John Haynes and Rick Lambert

For over a year, there has been active and ongoing cave exploration and mapping in Alleghany County — in the Falling Springs Valley at the southern end of the Warm Springs Valley. An excellent relationship between cavers and cave owners has made this possible. We give much credit to Keith Sweeney, who is both a caver and a landowner who lives in the Falling Springs Valley. Because of this, there are exploration efforts happening almost every week on several properties in the area. All these properties have extensive exposure of Ordovician-age limestones in which many caves and other karst features are being systematically mapped and described.

Virginia Cave Board members Rick Lambert and John Haynes are active in these mapping efforts, as well as former board member Mark Hodge. (See photo page 4) In addition to the surveying and mapping of the many caves, these efforts also include the preparation of a bedrock geologic map.

This area is named for the Falling Spring, which is the source of the water at Falling Spring Falls, a well-known natural feature of this area visible to all who drive along U.S. Route 220 between Covington and Hot Springs. (It's also on the Virginia Cave and Karst Trail.) Falling Spring is the resurgence of thermal waters that have passed through some of the caves in this area that have been known to cavers for decades, including Warm River Cave and Mudpot.

With this ramping up of efforts to locate and map caves in the Falling Springs Valley, we have found several new caves by ridgewalking efforts, and then opened, explored, surveyed and mapped them. We provide each new map to the cave owner. Everyone involved in these efforts very much appreciates each cave owner who has been willing to permit cavers to survey and explore the many cave and karst features on their land; the cave owners have likewise appreciated the expansion of information about these features on their property. It's a real "win-win" situation. ■

## A Message From the Chair

This past year, the Virginia Cave Board has had some significant achievements including expansion of the Virginia Cave and Karst Trail; hosting of Virginia Cave Week; and displays presented at the National Speleological Society Convention in June and at the National Cave and Karst Management Symposium in November. We also have submitted three board nominees to Secretary of the Commonwealth Kelley Gee, who was appointed by the governor in August. We are hoping to have our nominees appointed by the governor's office soon.

The board also participated in the Stakeholders Advisory Group in collaboration with the Virginia Department of Conservation and Recreation and the Virginia Department of Environmental Quality for the development of the new combined *Stormwater Management/Erosion and Sediment Control Handbook*, which includes detailed information about requirements in karst terrains. The handbook has not been updated since DEQ took over stormwater permitting from DCR in 2013 and will go far to help protect the valuable cave and karst resources of Virginia. This publication will "live" online and be updated as needed, hopefully way sooner than 11 years!

I'd like to close by ensuring our cave owners that the board's goal continues to be the protection and conservation of our precious and unique caves and karst. If any cave owners across the state have concerns or questions, please contact me directly and I will bring your concerns to the board.

Robert K. Denton Jr., Virginia Cave Board

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### A Publication of the Virginia Cave Board

Due to generous grants from the Cave Conservancy of the Virginias, the Virginia Cave Board is pleased to continue offering a printed version of the *Virginia Cave Owners Newsletter*. We hope you enjoy reading it. We'd love to hear from you regarding this issue and ideas for future issues.



For more information, please contact the Virginia Department of Conservation and Recreation, Virginia Natural Heritage Program, 600 E. Main St., 24th Fl., Richmond, VA 23219, or one of the members of the Virginia Cave Board: Robert K. Denton Jr., chair; Dr. Daniel H. Doctor, vice chair; Jason H. Carter; John H.H. Graves; Dr. John T. Haynes; Russell Kohrs; Richard Lambert; Allen L. Louderback; Meredith Hall Weberg.

# My Well Water Tastes Funny

By Carol Tideman

Back in the days before landfills, it was commonplace to burn household trash, dump refuse in a river or stream, or dump it in a convenient sinkhole. Over the years people put not only trash, but they dumped appliances, vehicles, farm equipment and other materials in these sinkholes. Out of sight, out of mind. No one back then knew that the sinkholes were an access route to the water table. Rainwater runoff helped to move all the toxins from the materials in the sinkholes and helped to move them down to the water table. Some of these sinkholes were covered over, but that would not stop the process. The water in the water table could well be your drinking water!

The Virginia Cave Board highly recommends that people stop putting materials into sinkholes to prevent further pollution of the water table. It is also prohibited by state law (Code of Virginia, Title 10, chapter 12.2 section 10-150-14).

## What else can be done?

Removing materials from sinkholes would be the next step.

Over time the trash may have settled, rusted or become intermingled to a degree that requires using equipment to remove it. You also need a way to properly dispose of the material removed.

Metal recycling companies will pay you for the metals removed.

The state has some programs that will match in-kind services. There are programs that will provide funds if there are livestock on the property. These funds can help to cover dumpster and tipping fees at the local landfill. There are also volunteers that may be available to provide in-kind service at no charge. (See next story.) ■

# What's Involved in a Sinkhole Cleanout?

By Meredith Weberg

Let's say you're a landowner with a cave on your property (and you most likely are if you're reading this!). You have a sinkhole or five on your property and they're full of trash and old appliances. In the "old days," people didn't necessarily have access to landfills and had nowhere else to dump their trash. What they didn't realize is that old appliances and some trash can leach toxic chemicals and pathogens into the groundwater below and that could degrade your drinking water. Gross! I'm writing to let you know about some resources available to you if you've been thinking about how to get your sinkholes cleaned out. This would not only benefit the environment, but, equally importantly, cleaning out your sinkhole could increase your land value and beautify your property.



Ken Walsh at a sinkhole before a cleanout.

What if you could have your sinkhole cleaned out? For free, by cavers? Well, you can. Virginia has a lot of caves and a lot of cavers, and sinkholes are connected to the caves below. Most cavers belong to the Virginia Region, or VAR, a subgroup of the National Speleological Society. Cavers like volunteering, and

sinkhole cleanouts provide a way for us to socialize while using our hands. I happen to be a Virginia Cave Board member and a member of the VAR Conservation Committee. We are glad to come out and help.

And this is where the headline comes in—"What's Involved in a Sinkhole Cleanout?" First, contact me at [merecaver@yahoo.com](mailto:merecaver@yahoo.com).

# Cave Experts Contribute to New Stormwater Guide

By Robert K. Denton Jr.

It was a long time coming, but the Virginia Department of Environmental Quality made the decision in early 2022 to finally update the *Virginia Stormwater Management Handbook*. This was an important decision with direct bearing on Virginia's caves and karst terrain, as the existing handbook (2011) did not contain any section specifically referring to karst. A draft handbook was prepared in 2013 that did contain a karst appendix, but this version languished in draft form and was never approved or finalized. To make matters worse, if someone did an online search for "VA Stormwater Handbook," it was the draft that came up first, which caused considerable confusion.

To address this situation, DEQ decided to assemble the Stakeholders Advisory Group (SAG) to provide input on the revision of the draft and create a new handbook that would cover not only stormwater management, but also erosion and sediment control during construction. The group was composed primarily of civil engineers, county engineers and planners, equipment manufacturers and designers, and representatives of the Virginia Natural Heritage Program. Karst Protection Coordinator Wil Orndorff represented the DCR karst program, and provided

invaluable input of the new handbook, in particular Appendix E, which directly addresses karst issues and is a major revision of the appendix that appeared in the 2013 draft.

I was invited to participate in the group in late 2022, not as a member of the Virginia Cave Board, but as a representative of my employer (Terracon Consultants Inc.). However, as a Certified Professional Geologist, karst subject matter expert, and a Licensed Professional Soil Scientist, I was able to provide input on both karst and soil issues, always with the Cave Board in mind. The group met in Richmond monthly starting in July 2022 and continuing through 2023. Wil and I gave the VCB updates on the progress at each meeting of the board.

After a great deal of editing and commenting, the new draft was readied for public comment in late February 2024, including the new and improved Karst Appendix E. What is even more exciting is that the new handbook will be a "living document" and will be updated and edited on a regular basis, something that was not done on previous stormwater handbooks. Hopefully, the new handbook will help to further conserve and protect the karst resources of our state. ■



Volunteers working to clean out a sinkhole.

We send someone out to assess the sinkhole, which includes taking lots of photos. After the cavers give us their report, we schedule a cleanout. Then the real work starts.

Volunteers are a valuable resource. In addition to providing manual labor, they provide use of tools and equipment. In some situations, use of a landowner's tractor(s) would be appreciated. For a typical sinkhole cleanup, we'll provide lunch and water for volunteers, will rent portable toilets, and may rent a dumpster (or two) for trash and/or metal. After the cleanout, we will provide fencing if any risk of farm animals being hurt. The committee gets grants to pay for the cleanup and does not charge landowners. We provide many hours of labor, and let me tell you, it can be tiring to pull things out of a sinkhole. Did you know that a plastic tarp will disintegrate into a zillion smaller pieces of plastic and they all have to be dug out by hand from the heavy mud that inevitably has covered them?

Another resource may be of use for more extensive cleanouts. Virginia's Soil and Water Conservation Districts have a program to help landowners with the costs of cleaning out their sinkholes. Go to <https://www.dcr.virginia.gov/soil-and-water/swcds> to see which district you're in. The Virginia Agricultural Cost Share Manual is at <https://consapps.dcr.virginia.gov/htdocs/agbpmpan/agbmptoc.htm>. See Section III: VACS Best Management Practices and WQ-11 for specifics on agricultural sinkhole protection. You can get eligibility info on the self-certification form at [https://consapps.dcr.virginia.gov/htdocs/agbpmpan/Glossary/Glossary\\_2024.pdf#page=7](https://consapps.dcr.virginia.gov/htdocs/agbpmpan/Glossary/Glossary_2024.pdf#page=7).

You can use this program if you have livestock and/or grow crops. However, there is the possibility of someone from the state inspecting your sinkhole periodically to make sure you are not throwing more trash into it. (But honestly, why would you? You wanted to clean it out, right?) The program also covers the cost of fencing to exclude livestock from the sinkhole.

For more information about sinkholes, you can read *A Resident's Guide to Sinkholes* at <https://www.dcr.virginia.gov/natural-heritage/vcbsinkholes>.

We look forward to hearing from you about your proposed sinkhole cleanout project. Tell us the appropriate dimensions of the sinkhole, and what you can see in it — trees, old refrigerators, wire fencing, etc. If there is a lot of metal, we might have to rent a dumpster for recycling. Also let us know whether livestock (in particular, cows) might be in danger of falling in after we clean it out.

Thank you for protecting the caves and karst in Virginia.

*Janet Tinkham, Mary Sue Socky, Carol Tiderman and Ken Walsh of VAR; and Wil Orndorff, Virginia Natural Heritage Program, contributed to this article. Photos by Meredith Weberg. ■*

## RIP, Andy Reeder

Andy Reeder was a visionary; the Virginia Cave and Karst Trail was his brainchild. He worked on this driving tour of Virginia's karst regions for years before giving it to the Virginia Cave Board to finalize into reality. He spent his life promoting wildlife and nature and the conservation of both. He was also involved in the discovery and survey of several previously undocumented caves and understood the role that good information plays in effective conservation.

Andy died on Oct. 13, 2023. The Virginia Cave Board appreciates all he did for Virginia's caves and karst. His obituary can be read at <https://www.robinsonfuneral.com/obituary/andrew-reeder>. ■

## CaveSim to Visit Virginia

CaveSim, a cave simulator built on a trailer so it can be transported anywhere in the country, is coming to Virginia this summer! If you live near Richmond, Harrisonburg, Blacksburg or Bristol, you will be able to check it out. It's like a real cave, but you don't get muddy. You have to watch out for cave critters and speleothems — don't break off a stalactite by bumping your helmet against it! A computer monitors your progress and you can go through the cave more than once to better your score. The CaveSim program also features a climbing tower to learn about ropework and various other hands-on activities. CaveSim will be available to tour from 10 a.m.-4 p.m. (please check for updates as extended times may be offered at some locations). The dates and locations are:

### Saturday, July 6:

Sugar Hollow Park, Bristol

### Tuesday-Wednesday, July 9-10:

The Children's Museum of Richmond, Richmond

### Thursday, July 11:

Grand Caverns, Grottoes

### Friday, July 12:

Washington Park, Roanoke

### Saturday, July 13:

Wasena Park, Roanoke

### Sunday, July 14:

Location TBD, Blacksburg

Funding for these events was provided by the Cave Conservancy of the Virginias, with additional support from the U.S. Forest Service, VPI Cave Club, Blacksburg Volunteer Rescue Squad and private citizens. Learn more at <https://www.cavesim.com/>. ■



## Virginia Celebrates Cave Week 2024!

Virginia Cave Week is June 2-8 this year. See <https://vacaveweek.com> for details.

Events include:

**Luray Caverns** will have educational handouts and signage during Cave Week.

**Ogdens Cave Natural Area Preserve tours** will be offered on Tuesday, June 4. Contact Meredith Weberg ([merecaver@yahoo.com](mailto:merecaver@yahoo.com)) to get on the list. Last year we took 78 people into the cave. There is a limit, so act fast.

**Grand Caverns** finishes off the week with its second Cave and Karst Expo on Saturday, June 8. Last year more than 400 people came to see exhibits on all things cave- and karst-related.



*Rick Lambert taking geologic measurements at the entrance to Ware's Cave, or Tukes Cave. Photo by Dr. John Haynes.*

*(See story page 1)*