



**Virginia Master
Naturalists**
Rivanna Chapter



September 2026 Newsletter

Nature Notes

Sherri Fitzgerald '22, President

Devil's Dice

A glittering cube hiding a billion-year story — pyrite, limonite, and the chemistry of the Appalachians

"Devil's dice is a crystalline cube of pyrite (FeS_2) coated with a layer of limonite — iron's way of rusting in slow motion."

A neighbor of mine creates art from items she finds on her property in Wingina. She showed me some of her work recently and, among her treasures, she held up a glittering cube and asked if I knew anything about it — a devil's dice. I didn't have an answer on the spot, so I did what any self-respecting naturalist would do, I looked it up. Here's what I found out:



A sculpture by a Wingina neighbor, crafted from devil's dice and other found objects.

Born from Ancient Mountains

During the mid- to late Proterozoic era — roughly 600 million to 1 billion years ago — the Appalachian mountain range was taking shape. That uplift pushed iron-rich igneous and metamorphic rocks to the surface, including the dark-colored mafic rocks that would eventually become the source material for pyrite.

Mafic igneous rocks include basalt, gabbro, and olivine. Their metamorphic counterparts — amphibolite and green schist — completed the iron-rich toolkit that nature needed for the next chapter.

Iron Meets Sulfide

By the Paleozoic era (540–250 million years ago), conditions were right for the key reaction. Weathering oxidized iron into soluble ferrous iron, which washed into ancient seas. On the seafloor, decaying organic matter — aided by bacteria — converted soluble sulfate salts into sulfide. When ferrous iron and sulfide met, they crystallized into pyrite (FeS_2), locking the mineral into the distinctive cubic form we recognize today.

The Rusty Coat: Limonite

The brownish-orange coating that gives devil's dice their distinctive tarnished look is limonite ($\text{Fe}(\text{OH}) \cdot n\text{H}_2\text{O}$), a hydrated iron oxide. When pyrite is exposed to oxygen and moisture, an oxidation reaction releases sulfuric acid — which then creates a tarnishing film over the pyrite cube's surface. It's essentially rust, written in geological time.

Volunteering

Take Initiative!

New class graduates and certified members alike: We encourage you to stay connected to the many active groups in our area if you need ideas for volunteer activities. Sign up with them to receive notices. We're talking about groups like:

- Albemarle County Parks & Rec
- Rivanna Conservation Alliance
- James River Association
- Chesapeake Bay Foundation
- Ivy Creek Natural Area
- Piedmont Discovery Center/Quarry Gardens
- Biscuit Run
- ReLEAF
- Blue Ridge PRISM
- VA Native Plant Society
- Montpelier
- and oh so many more. There is a wealth of volunteer opportunity out there...and too much for us to gather and recycle to you!

Note that even if a volunteer task is not specifically listed on the Better Impact roster, it is still valid if it fits our Stewardship, Education, Outreach, Citizen Science and admin/organization objectives. Plus, our committees are always looking for more helpers—particular Curriculum/Class, Continuing Education, and Outreach. Write RMNProjectsChair@gmail.com with questions.



Everyone, and every hour, counts!

Volunteer Milestone Recognition: Midyear 2026 Honorees

Recognizing our milestone recipients and newly certified Master Naturalists!

★ 1,000 Hours of Service ★

Catherine Buck '22

Ruth Stornetta '22

Kim Swartz '19

These folks have made a special impact on our chapter and community!

◆ 500 Hours of Service ◆

Janelle Catlett '16

Nancy Cohen '21

Sherri Fitzgerald '22

Daria Kiselica '23

Proof positive that “volunteer” and “work” aren’t mutually exclusive terms!

◆ 250 Hours of Service ◆

Carol Baber '23

Lucy Hartley '21

Jennifer Jarrett '24

A great accomplishment to hit the first milestone...and hurry on to the next one!

◆ New Certifications Earned ◆

Chris Baca '25

Ann Craddock '23

Beth Evans '26

Kathryn Hanks '26

Kendra Jacomo '25

Traci Kelsey '25

Jeff Pacelli '25

Tom Rapp '25

Congratulations! After all, you only get your initial certification one time! If you are on the list, you will receive a certificate or milestone pin. (Karen Mulder, the RMN Corresponding Secretary, will distribute these after she receives them from the state office.)

Community



Fall Picnic

Saturday, October 3

1:30 – 4:00 pm

Picnic Shelter by the Dog Park at Darden Towe Park

Join us at noon for a pre-picnic naturalist walk with Jessie Wingo from Albemarle County Parks & Rec.

Don't miss Nature Trivia: The Return!

Needed: Volunteers! We need you to bring drinks and help with set-up and take-down. Contact Megan Buetow '24:

megan.brun.bt@gmail.com

In Memory of Ruth Douglas, Class of 2006

Marilyn ('11) and Dave ('14) Smith, Michelle Prysby ('06), Mary Jane and Mary Lee Epps ('06) joined a large group of RMNs to celebrate Ruth Douglas' contribution to our knowledge of nature. Michelle, Mary Lee, John Holden ('12), Rowena Zimmerman ('24), and Jenny Gaden ('17) addressed the congregation about their high regard for Ruth. The phenomenon of meeting at Key West for an ephemerals walk but getting caught up in the parking lot, looking at flora, for the first half hour came up, as well.



Continuing Education

Mary Oliver: Saved by the Beauty of the World

Karen Mulder ('15), Corresponding Secretary

Before our Continuing Ed at 7 pm on September 24, RMNs are encouraged to watch the new documentary about Mary Oliver on [YouTube](#) or [PBS](#).

We'll then discuss the following questions and considerations on the [Zoom URL](#)



Questions to consider based on the documentary:

1. If you have a favorite Mary Oliver poem, what is it? Select a line that particularly strikes you to share with the group.
2. Which two poets are named as early and continuing influences on Oliver's work? Do you see any connection in the way each poet expresses themselves?
3. From the section about the book *Primary Sources*, where does Oliver "go with her questions?" What is the main component of her daily practice during this action?
4. How is a clam like us?
5. What is the link between love, nature, and paying attention, as Oliver puts it?
6. Oliver and others allude to the necessity of sacrifice, discipline, suffering, and ecstasy that are part of the poet or writer's toolchest. How do each of these influence the crafting of poetry, or for that matter, art in general?
7. Stephen Colbert addresses a tension between goodness and beauty—can you explain it in your own words?
9. How does "When Death Comes" strike you in Oliver's considerations about the end of life?

10. Prepare a descriptive line no longer than a sentence to share with us all about some aspect of taking a walk in the woods that captured your delight or surprise. We'll put these in the chat and write a poem that reflects our shared love of nature. For inspiration, check out "Sleeping in the Forest," which was recently read at Ruth Douglas' memorial service.

These questions will also be sent to everyone on the RMN Listserv before the event.

Guided Hikes

with Steve Gaines

Heyward Community Forest

Join this hiking tour with Parks and Recreation staff and get an introduction to new trails on the Heyward Forest property adjacent to Ragged Mountain Natural Area. Learn about the natural history of this relatively new addition to the park system while learning to identify vegetation and wildlife habitat. The hike takes place on natural surface trails and will cover about 2 miles with some hilly climbs.

Dates: October 7 and November 4

Time: 5:00 pm

Location: Heyward Community Forest parking lot, 1730 Reservoir Road

The parking area has a red city sign reading "Heyward Community Forest." Gravel parking lot, right-hand side of the road. If you find yourself on top of a big gravel hill overlooking the reservoir, you missed the turn to the parking lot. The lot is crowded due to construction along Reservoir Road and interest from local bike clubs; strongly suggest arriving early.

Naturalist Reflections

Pathways to Hope and Connection

Ann Regn '22

I was impressed by a recent talk by Ethan Tapper, a forester, ecologist, storyteller, and author of *How to Love a Forest: The Bittersweet Work of Tending a Changing World*.

During his Blue Ridge PRISM presentation, Tapper moved beyond discussing the restoration of his property in New England and the management of invasive species to wax poetic about Merlin, the bird-identification app.

Around the same time, I received Garth Robinson's beautiful essay, "[Known and Loved](#)," which begins, "Last year, when we were hiking in the Dolly Sods Wilderness in West Virginia, Marta started using an app called Merlin." Robinson explores how learning to identify birds with Merlin transformed his relationship with the natural world. He weaves in literary references—from *Frankenstein* and *The Odyssey* to *Romeo and Juliet*—to explore how paying attention to birds, learning their songs, and noticing their behavior can transform indifference into caring and deepen our connection to the natural world.

Knowing the world makes it more meaningful and creates the possibility of feeling known and loved ourselves. While these conclusions may be familiar to us, it's inspiring to see the different pathways that can lead to a deeper connection.

For anyone pondering the role of technology and AI in our lives, looking for ways to engage younger generations, seeking tips for cultivating a stewardship ethic, or simply wanting a hopeful perspective, check out the work of these young authors. You'll come away feeling as refreshed as after a morning bird walk.

With grateful thanks to my brother Pete, Jenny Gaden, and Virginia Matterson for their guidance on best practices for using the app.

Nature's Bounty: Common Roadside Plants

Steve Pullinger '15

When driving down the road this time of year, you cannot help but see red clover, chicory, and Queen Anne's lace. These three plants are pleasing to see, they are edible, and they have medicinal properties.



Red clover is almost entirely edible. The roots, although tough, can be cut up into small pieces and cooked in soups. The tender young leaves can be used in salads or cooked and the large red blooms make excellent fritters.

Red clover has isoflavones that mimic estrogen. It can be used for hot flashes and sweats. A salve made with the flowers is an excellent way to soothe skin issues and nourish your skin.



Chicory is also edible and medicinal. The young leaves, flowers, and flower buds are edible. The roots can be cut up for stews and the roots are said to be a coffee substitute. I have not tried this as I don't believe there is such a thing! The plant has a chemical called inulin that is a probiotic and supports a healthy gut.



Queen Anne's lace is the original carrot. The first-year roots can be eaten raw or used like carrots in recipes. The young leaves can be used but they are quite strong in taste. The white flower heads can be used in salads or battered/deep fried into fritters. The seeds can be used for seasonings. A tea made from the root or seeds is a diuretic; it stimulates kidney function and is said to help prevent kidney stones. Queen Anne's lace has several "look a likes" so make sure you do a positive ID. Remember this saying: "The Queen has hairy legs." The stalk of Queen Anne's lace is covered in tiny white hairs while its "look a likes" do not.

It is amazing to me how many cool edible plants are around us that are not being appreciated or utilized.

Repurposing...with a purpose!

Tim Weber '15

A recent issue of the UVAToday newsletter featured a heartwarming story that gave a prominent mention of our very own Frances Lee-Vandell '06. The article describes the Autism Sanctuary for adults, sponsored by Frances on her farm west of Charlottesville. Read the full article to learn more about the founding of the Autism Sanctuary, hear from some of the adults who get to experience nature's beauty while working parts of the farm, and enjoy the leading picture of some beautiful cows sharing a little love! The full story is [here](#).



[Click here](#) to LOG IN YOUR HOURS

Questions? Contact Debbie Luzynski-Weber '15, RMN Membership Chair/Timekeeper (hoosdeb@gmail.com)

[Click here](#) for detailed instructions

RMN Listserv

To post announcements, mention projects, and pass on information of interest to RMN members, please contact rivannamn.info@gmail.com.



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