



The VMGA Report

The Voice for Virginia Master Gardeners

<https://vmga.net/wordpress/>

March/April 2024

Volume 29, Number 5

From the President

Georgi Hall, Loudoun County, President@VMGA.net

President's Letter

Spring is in the air, and we are looking forward to warmer weather and working in our gardens. My daffodils are blooming, and the trees are budding. It is great seeing more color in our landscape.

Thank you for supporting the successful VT Giving Day on February 21-22. VMGA not only unlocked the VMGA \$1,000 challenge to raise funds for mini grants or the endowment, VMGA was the 5th in the VCE Beat-your-best Leaderboard and won \$500 prize bonus leaderboard funds (beat your best). We had 122 donors, which was 144% above our 50 donors for 2023. The \$500 bonus funds come from a challenge donor and will be directed to the program for mini grants, but the \$1000 for the VMGA challenge will be transferred to the endowment.

As we approach April 13th and our next VMGA meeting, I encourage you to attend our April Board meeting in person. The New River Valley Master Gardener Association will be hosting the meeting. It will be held at St. Paul's United Methodist Church, 220 W. Main Street, Christiansburg, Virginia. VMGA merchandise will be available for purchase. Being together in person for the first time since October will be nice. More information about the meeting, continuing education opportunities, and ordering lunch are included in this newsletter.

As we start planning unit events, consider taking pictures and writing an article about the event for our VMGA Report. These articles provide other units with ideas for their events.

Since Virginia Extension Master Gardeners must complete eight hours of continuing education each year, consider attending our Master Gardener College June 5-9. This year's event will be held via Zoom Events, an easy-to-use conference platform that works like regular Zoom meetings. There will be four keynotes, more than 12 concurrent sessions, round-table sessions to network with other volunteers, virtual tours, and optional add-on in-person tours.

Numerous other educational opportunities across the state and region are available during the year. So that we can brainstorm and offer additional events, our VMGA education committee would love to have additional members and ideas from around the state. Please email Tom Baughn at education@vmga.net to share your ideas or volunteer for the committee.

Hope to see you at our VMGA meeting on Saturday, April 13! Happy Spring!

Thank You,

Georgi Hall

VMGA President – President@VMGA.net

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2024/2025 VMGA BI-MONTHLY BOARD MEETINGS

VMGA Officers

President

Georgianna Hall
Loudoun County

Vice President

Nelda Purcell
Franklin County

Secretary

Deb Straw
Hill City MGA

Treasurer

Stacey Morgan-Smith
City of Suffolk

Past President

Leslie Paulson
Prince William County

2024

April 13—Hosted by New River Valley MGA- Location St. Paul United Methodist, 220 West Main St Christiansburg, VA 24073

June 15—Annual Meeting—Brent & Becky's Bulbs, Gloucester

August 10—Hosted by Henrico County Unit

October 12—Hosted by Hill City Master Gardeners Association at Poplar Forest

December 14—Zoom

2025

February 8—Zoom

April 12—TBA

August 9—Lexington

October 11 0 TBA

December 13—Zoom

Bring VMGA members to your area for the bi-monthly meeting. Contact Vice President Nelda Purcell at purcelln@hughes.net for more information.

Focus Questions for February 10 and April 13 Bi-monthly VMGA Board Meetings

Focus Question for February 10 Bimonthly Board Meeting from Ed Olsen:

If you could expand your knowledge in horticulture, what area would you focus on and what's one volunteer development skill the EMG program could help you sharpen to be even more helpful?

Focus Questions for April 13 Bimonthly Board Meeting from the Executive Board:

How do you effectively communicate with your unit's volunteers to take advantage of their individual skills and expertise? For example, how do you learn who can make videos or talk about invasive plants and then put out a call for help? How do you do that with regional units or across the state?

What methods and sources do you use for finding help for committee chairs and Board officers?

It isn't too late to respond to the February 10 Focus Question.

Please send your response for February and April Focus Questions to VMGA Secretary, Deb Straw debstraw@aol.com

VMGA Membership has its advantages:

- ◆ Unit Support
- ◆ Scholarships
- ◆ Newsletter
- ◆ Advanced Training
- ◆ Discount Event Fees
- ◆ Membership Directory
- ◆ Statewide Networking

From the Editor

Deadline for issue: May/June
April 23

We would love to feature your unit's announcements, events or articles in the next issue. Articles can be about a favorite plant, tree, project, book review, or other topic of interest. This will encourage involvement around the state, getting more involved.

Please send to:

VMGA Newsletter Editor
newsletter@vmga.net

CALENDAR

March 7, 2024—7pm—Too Many Deer by Bernd Blossley, Chari, Cornell Deer, Management Committee. **VCE Loudoun Master Gardeners Lectures** are held online and in person at the Rust Library in Leesburg: <http://loudouncountymastergardeners.org/>

March 8, 2024—11am—Invasive Plants in Southside Virginia – South Boston Halifax County Museum 1540 Wilborn Ave. South Boston, VA 24592. Natalie Walker will discuss common invasive plants in Southside Virginia and their negative impact on our environment.

March 11, 2024—7pm—VIRGINIA BEACH MASTER GARDENERS PRESENT GARDENING TALKS: 7:00 pm via ZOOM Plant This, Not That with Stacie McGraw, VB Master Gardener. Looking for reliable, easy to grow perennials and shrubs? Thinking about planting natives, but worried that your garden will look weedy? This talk will explore tried and true native alternatives to common landscape plants with a focus on natives that behave and perform well in a variety of growing conditions and garden styles. Gardening Talks is presented via Zoom and is FREE and OPEN TO THE PUBLIC. No registration is required. Gardening Talks are one hour. Go to VBMG.org and click on the Zoom link! Check out upcoming Gardening Talks for 2024 as you explore our website!

March 18, 2024—11am—EMG Webinar Series 2024—Piedmont EMGs and Habitat for Humanity Partnership webinar.

March 19, 2024—6pm—small Fruit Class – Lexington– Learn about blackberry and raspberry production! Dinner provided, class fee \$25/person or \$30/couple. [Learn more](#)

April 4, 2024—7pm—Growing a Better Garden by Jennifer Lumley, Loudoun Wildlife Conservancy. **VCE Loudoun Master Gardeners Lectures** are held online and in person at the Rust Library in Leesburg: <http://loudouncountymastergardeners.org/>

April 4, 2024—12pm—Bring your lunch and join us for a session on Saving & Starting Seeds. Heart of Virginia Lunch & Learn Series Prince Edward Extension Office, 100 Dominion Dr., Farmville, VA

April 8, 2024—7pm—Epic Tomatoes from YOUR Garden—Online—Zoom. VIRGINIA BEACH MASTER GARDENERS PRESENT GARDENING TALKS: a Gardening Talks presentation on: Epic Tomatoes from YOUR Garden Speaker: Craig LeHoullier, Author, Storey Publishing; Advisor for tomatoes, Seed Savers Exchange This colorful, fast paced, info packed workshop takes participants deep into Craig’s world of tomatoes (based on 40 years of gardening), from planning and seed selection through seed saving. The first part of the talk focuses on stories, history and varieties, and the second on all cultural aspects of successfully growing tomatoes in the audience’s growing conditions. The objective is to help the audience members successfully navigate the diverse world of tomatoes so that they are happy with their tomato growing results Gardening Talks is presented via Zoom and is FREE and OPEN TO THE PUBLIC. No registration is required. Gardening Talks are one hour. Go to VBMG.org and click on the Zoom link! Check out upcoming Gardening Talks for 2024 as you explore our website!

April 20, 2024—10am—Suffolk EMG Plant Sale at the Earth & Arts Festival –Downtown Suffolk – 10:00 am – 4:00 pm. Suffolk EMGs are again participating in the City’s Earth & Arts Festival, which includes the Master Gardeners’ Plant Sale. The event has moved to take over historic Downtown Suffolk on Main Street. Attendance is free, and the plant sale proceeds support VCE MG programming. EMGs will also hold a rain barrel workshop (registration/fee applies), planned native tree seedling giveaway, and children’s gardening booth. More detail, including plant list, to come in early April at <https://www.suffolkmastergardener.org/plant-sale/>

May 2, 2024—7pm—Managing Trees and Public Spaces for Wildlife by Marne Titchenell, Extension Wildlife Program Specialist, OSU. **VCE Loudoun Master Gardeners Lectures** are held online and in person at the Rust Library in Leesburg: <http://loudouncountymastergardeners.org/>

May 4, 2024—12pm—Bring your lunch and join us for a session on Rain Barrels. Heart of Virginia Lunch & Learn Series Prince Edward Extension Office, 100 Dominion Dr., Farmville, VA

May 18, 2024—9:30am—Spring VMGA Education Event—9:30am to 12 noon Virtual

June 5-9, 2024—Master Gardener College

June 8, 2024—9am—Henrico Master Gardener Association Plant Sale and Pollinator Festival. Over 3000 plants and tables full of “gardening treasures” were available for sale with proceeds funding HMGA programs and two scholarships for horticulture students at J. Sargent Reynolds Community College. Over 80% of the HMGA membership participated in some way, providing education and camaraderie to the members.

June 15, 2024—Annual Meeting at Brent and Becky’s Bulbs, 7900 Daffodil Lane, Gloucester, VA 23061

August 8, 2024—12pm—Bring your lunch and join us for a session on Lawn Renovation. Heart of Virginia Lunch & Learn Series Prince Edward Extension Office, 100 Dominion Dr., Farmville, VA

October 3, 2024—12pm—Bring your lunch and join us for a session on Mushrooms. Heart of Virginia Lunch & Learn Series Prince Edward Extension Office, 100 Dominion Dr., Farmville, VA

NEWS AND NOTES FROM VCE LIAISON

Devon Johnson State EMG Office

For updates, be sure to check out the Bi-weekly Update at <https://mastergardener.ext.vt.edu/biweekly-update/>



NEWSWORTHY NOTES FROM NOTABLE NEWSLETTERS

The VMGA Report is always looking for submissions from EMGs, Unit Representatives, VMGA Committee Chairs, VCE Agents, and VCE Program Associates. The next deadline for the VMGA Newsletter is **April 23**. What can you submit? All the news that's fit to print! Here are a few suggestions to get you started:

Training recaps. Tell us your takeaways!

Highlights of your successes in programming, lessons learned, photos of volunteers in action

Upcoming events offered by your unit

Book reviews

Plant or garden spotlights.

Photos of your plants

Recipes using produce from your garden or a farmer's market

Garden-related poems and other creative writing

Be sure to include your name and unit name. Submit your content by email to newsletter@vmga.net.

Virginia Master Gardener Association Bi-Monthly Meeting April 13, 2024

Hosted by the **New River Valley Master Gardeners Association**
Held at St. Paul's United Methodist Church, 220 W. Main Street, Christiansburg, VA

Earn up to THREE Continuing Education Credit Hours
Complimentary Coffee, Tea, Water & Breakfast Snacks
Optional Catered Buffet Lunch by Mission Barbecue
Guided Tours of THREE NRVMG Projects in the downtown Christiansburg area

Schedule of Events

- 8:30 - 10:00 a.m. Park/Check-In/Breakfast
FREE parking in St. Paul's lot. Follow the signs to check-in, meet with friends old and new while enjoying complimentary breakfast snacks and beverages.
- 9:00 - 9:50 a.m. Continuing Education Opportunity #1
Flower Arrangement Class with Ashley Johnson, NRVMG vice-president
Take home your very own creation!
**Pre-registration is required and all materials are supplied for a fee of \$15. Please see the attached registration form.*
1 Continuing Education (CE) Credit hour with approval of your unit coordinator.
- 10:00 - 11:30 a.m. Virginia Master Gardener Association Bi-Monthly Meeting
Meeting will be hybrid. Link will be sent prior to the meeting.
- 11:30 - 11:45 a.m. Break
- 11:45 - 12:45 p.m. Lunch
Enjoy a catered, hot buffet lunch from regional favorite restaurant, Mission Barbecue.
**Pre-registration is required, \$15 fee. Please see the attached registration form.*
Or, Bring your own sack lunch (water, tea, lemonade provided),
Or, dine at Burger King located across the road or El Bronco next door.
- 12:45 - 3:00 p.m. Continuing Education Opportunity #2
Tour THREE NRVMG projects in the downtown Christiansburg area
Join the New River Valley Master Gardeners for tours of the following:
The Montgomery Museum Garden led by Beth Umberger;
The Christiansburg Presbyterian Church Adopt A Plot Program led by Gwen Ewing; and
The Great Little Park on Main led by Ashley Johnson.
Drive yourself; or,
**There will be shuttle/car pool options available. Please see the attached registration form.*
****Be sure to dress for the weather!!!*
2 Continuing Education (CE) credit hours with approval of your unit coordinator.

REGISTRATION FORM

Virginia Master Gardener Association Bi-Monthly Meeting April 13, 2024

Hosted by the **New River Valley Master Gardeners Association**
Held at St. Paul's United Methodist Church, 220 W. Main Street, Christiansburg, VA

Name _____

Phone Number _____

E-mail _____

Unit _____

	NO	YES	AMOUNT
I plan to attend the Business Meeting in person.	_____	_____	<u>No Fee</u>
I would like to take the shuttle/carpool to visit the gardens in the afternoon session.	_____	_____	<u>No Fee</u>
I will be attending the Flower Arrangement Class for the fee of \$15.	_____	_____	_____
I will be enjoying the Mission Barbecue lunch for the fee of \$15. <i>Hot buffet lunch includes slow smoked, hand pulled pork or pulled chicken on slider rolls, a special selection of homemade sauces, Maggie's mac-n-cheese, green beans with bacon, cole slaw, dessert and choice of beverage (water, lemonade, tea).</i>	_____	_____	_____

Registration and/or payment(s) deadline is March 22, 2024.

Checks should be payable to NRVMGGA.

Send Registration Form and payments to:

New River Valley Master Gardener Program
% Virginia Cooperative Extension, Montgomery County Office
755 Roanoke Street, Suite 1G
Christiansburg, VA 24073

**Questions? Contact Karen Parker. Call or text: (703) 989-0991; or,
e-mail: tippyio@aol.com*

Map of Downtown Christiansburg, Virginia



*We have found that different GPS systems give different locations for 220 West Main Street.
Please refer to the map above.
To help guide you, we will have signs at the driveways into St. Paul's parking lot.*

Accommodations

Comfort Inn and Suites
2331 Tyler Road, Christiansburg, VA 24073
Exit 109 off I-81 (540) 744-3496 \$141

Tru by Hilton
2300 Tyler Road, Christiansburg, VA 24073
Exit 109 off I-81 (540) 744-1400 \$229

Holiday Inn Express
2725 Roanoke Street, Christiansburg, VA 24073
Exit 118C off I-81 (540) 382-6500 \$255

******Due to local activities, the motels/hotels are expected to be full for Friday and Saturday nights.
We suggest if you need a room, reserve it early. Don't forget to ask for AAA, AARP, etc. discounts.***

Suffolk Earth & Arts Festival (and EMG Plant Sale), April 20, 2024

By Stacey Morgan Smith



It's master gardener plant sale time!

City of Suffolk EMGs are participating again this year in the City's Earth & Arts Festival, which has moved to historic Downtown Suffolk on Main Street, from 10 - 4, April 20, 2024. Attendance is free, with plenty of on-street and community parking in the area.

(See a [draft parking list and map.](#))

This event includes the Extension Master Gardeners' Plant Sale! Volunteers are bringing plant divisions from their own gardens along with some special nursery-grown plants in bloom for you to take home. Native and pollinator plants, including trees, shrubs, and herbaceous perennials, are getting potted up now (yes, things are already growing in zone 8a), and annuals are already up in volunteer greenhouses. In addition to hundreds of EMG-grown tomato plants (pictured), you can pick up other vegetables and herbs to get a head start growing summer salads. Plant sale proceeds support VCE MG programming in the area.

EMGs will also hold a rain barrel workshop (registration/fee applies), planned native tree seedling giveaway (pictured), children's gardening booth, and a tool recycling sale to give old gardening stuff new life.

More detail, including plant list, to come in early April at [Suffolk Master Gardeners website](#) or at [Suffolk EMG Facebook](#).



Earth & Arts Festival 2024

DRAFT Downtown Suffolk Parking

- Both City Hall lots (on Market St)
- Both large lots behind the Courthouse (between Bank St, Commerce St, Franklin St, and E Washington St)
- Lot behind the Suffolk Center for Cultural Arts (off of Finney St and Clay S)
- Lot behind Bank of America (on Saratoga St)
- Some roadside parking on Washington St, Saratoga St, and Market St.
- A little further north, the public lot at the Seaboard Station Railroad Museum (intersection of Prentis St and Main St)

View unofficial parking info provided for VCE Master Gardeners at [Unofficial Suffolk Earth & Arts Festival Map](#)

More parking information and an interactive map from the City of Suffolk should be available by mid April.

Pictured:
Tomato shopping,
VMGA Treasurer Stacey,
Suffolk EMG Volunteers
at the 2023 Earth and Arts Festival.



VMGA Spring Continuing Education Event

Conservation Landscaping

The Science and Practical Application to Create or Restore Bio-Diversity in the Home Garden

Soil Ecology ∞ Biodiversity ∞ Keystone Species

Saturday May 18, 2024 9:30am – 12:00pm

Watch the Bi-Weekly Update for a registration link

Restore Biodiversity with Keystone Plants—Krista De Cooke Innovation Project Manager for Homegrown National Park.

How the homeowner can improve biodiversity that supports the birds, and the insects on which they rely. M.S. in Ecology and Evolutionary Biology at the University of Tennessee; MBA in Entrepreneurship and Innovation from Haslam College of Business.



Restore Biodiversity with Keystone Plants—Krista De Cooke Innovation Project Manager for Homegrown National Park.

How the homeowner can improve biodiversity that supports the birds, and the insects on which they rely. M.S. in Ecology and Evolutionary Biology at the University of Tennessee; MBA in Entrepreneurship and Innovation from Haslam College of Business.



Plan now to Join VCE's 2024

Virtual Master Gardener College June 5 - 9

EMGC 2024 is coming! This year's virtual event will keep the education and fun of an on-campus conference while improving accessibility for the 5,000+ volunteers in the VCE MG program.

This year you can...

learn from **interesting keynote speakers:**

- Doug Tallamy** talks about **restoring ecosystem function** at home, work, and play;
- Debra Freeman** explores **traditional African-American crops** that you can find today; and
- Heather Holm** discusses some of the **specialist bees** that visit our native plants.

- participate in more than **a dozen concurrent sessions** on a range of topics, including:
 - Trees and shrubs in small gardens;
 - Indoor vegetable gardening; and
 - Gardening as we age.

-and enjoy **optional add-on tours and social time** with fellow volunteers at locations throughout the state, like:

- Some of Virginia Tech's Agricultural Research Centers,
- Oak Spring Garden,
- Maymont's Gardens, or
- Enjoy a "Virtual Tour" from home at the National Arboretum, Desopo House, and other spots.

- You'll even have the opportunity to **network and learn from one another** by joining round-table discussions and visit social spaces to
 - View unit brag boards;
 - Talk about projects, like seed libraries, garden tours, or public workshops; or
 - Learn more about the Advanced EMG Steward programs.

For those new to hybrid continuing-ed events, they have unique benefits, like keeping costs lower, saving hours on the road, and removing some of the accessibility concerns that come with setting up on campus for a few days. They also give you increased continuing-education opportunities; in addition to the 3+ hours of online sessions per day and optional tours in June, you can see any breakout sessions you missed (or rewatch a favorite) because you'll have access to recordings for six months. Prior Zoom educational conferences allowed more volunteers to attend than the traditional in-person format, but if hybrid learning isn't for you, EMGC will be back on campus at a future conference.

More information on keynotes, breakouts, and tours will follow soon, with early registration beginning mid April. You'll also have the opportunity before June to see this Zoom conference platform in action through a short training webinar.

VMGA's mission is to foster communication, education, and fellowship among VCE MG volunteers. It is happy to support EMGC and the state program office in this year's conference as part of that mission. If you have questions, you can reach the state office at emgoffice@vt.edu or VMGA at Treasurer@VMGA.net.

See you in June!

Stacey Morgan Smith
Treasurer, VMGA

VCE Master Gardener College



June 5 - 9, 2024
virtual conference



Keynote speakers, breakout sessions, program round-table discussions, networking, plus virtual tours and add-on in-person tours.

See mastergardener.ext.vt.edu/college for more info as it's available



*Planned Cost

Early registration: \$40
begins mid April

Regular registration: \$60
begins May 8

both include 6 months' access
to recorded sessions.

*Cost subject to change.

Save the date June 15, 2024 - VMGA Annual Meeting and Conference



VMGA's annual meeting will be held on Saturday, June 15, 2024. The Gloucester Master Gardeners are hosting the event at Brent and Becky's Bulbs, 7900 Daffodil Ln, Gloucester, VA 23061, from 9AM to 4PM. The meeting will feature at least one tour and several speakers and have plenty of time for catching up with Master Gardener friends from across the state and to share program, project, and gardening ideas.

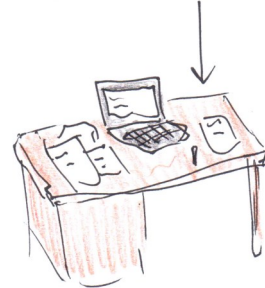
In addition to fulfilling the bylaws requirement to hold an annual meeting, the event supports the attempt by VCE to provide the social interaction missing from a virtual College through regional tours. We will have a tour of the gardens at Brent and Becky's and possibly one other location in the Ware Neck area. As many of you know Brent loves to tell great stories so his tours of Brent & Becky's Gardens are both beautiful and fun.

It was felt that including an educational component would give the event more of a traditional College feel. We are excited to announce that Joseph Tyconievich and Brent Heath will speak. While we can't provide the D2 food court experience, a catered lunch will be available. Other activities in the plans are an informal gathering the night before in a local hotel, a plant give-away, and our VMGA merchandise sales.

We welcome other ideas and offers of help. Contact Georgi Hall at president@VMGA.net.

The problem with working from home in the spring:

My actual job



Me running off to garden



Joseph Tyconievich

Me, five minutes after sowing some seeds:



Joseph Tyconievich



Common Chickweed in the Garden

By Patricia Lust, Professor Emerita, Longwood University

Common chickweed, *Stellaria media*, is not native to Virginia and probably arrived here in the 18th century as a hitchhiker in seed brought by settlers. It has spread throughout North America, except for the far west, and is classified by VA DCR as an invasive plant of medium concern.

As it creeps along the ground, forming mats up to 16 inches across, it puts down roots at many nodes. It can withstand harsh winter weather, and if you can bear to have it in your garden during the winter, it makes a good winter ground cover. But, since it is an annual and is invasive, you will want to remove it before it goes to seed.

The tiny white flowers (getting ready to bloom very soon) provide an early food source for insects. Each flower has five petals that look like ten because of the deep divides in each.

As its name suggests, chickens love it. Adventurous people love it, too - raw in salads or cooked like spinach. "Wildman Steve Brill," says that raw chickweed tastes like corn silk. Try it. I think you'll agree.

And last, chickweed makes a delicious pesto. I like to use walnuts instead of pine nuts, but either will work. Harvest it before it blooms, and then destroy most of the rest of it before the blooms go to seed.

Chickweed Pesto

Chickweed pesto holds its beautiful green color when mixed with pasta.

INGREDIENTS

2 cups fresh, clean chickweed, packed

½ cup extra virgin olive oil

3 cloves garlic, minced

1 tsp honey (optional)

½ cup walnuts toasted

½ cup grated Parmesan cheese

Salt and pepper to taste

Purée all ingredients. Serve as any other pesto.



Common Chickweed – University of Minnesota Extension

Further information about chickweed:

Clemson University - <https://hgic.clemson.edu/common-chick-weed-stellaria-media/>

Chickweed pesto - <https://www.growforagecookferment.com/chickweed-pesto/>

Road Warriors for Wildlife

by Nancy Lawson – February 11, 2024

WHAT HAPPENS TO ANIMALS WHO VENTURE BEYOND OUR GARDENS? IT'S A DANGEROUS WORLD OUT THERE, BUT ROAD ECOLOGISTS ARE WORKING TO RECONNECT BROKEN HABITATS. BEN GOLDFARB'S CAPTIVATING NEW BOOK EXPLAINS HOW.

“We inhabit a world as angular and broken as a corn maze, all edge and no heart.”—Ben Goldfarb, *Crossings: How Road Ecology is Shaping the Future of Our Planet*



A box turtle leaves the pond in my habitat. (Photo by Nancy Lawson) Featured image, top: One of many turtles rescued from the bulldozers. (Photo by Michelle Riley/The

On one of my bookshelves sits a bleached box turtle shell, about the size of the palm of my hand with a chunk torn from the side. The life story of the animal who once walked underneath this mangled armor is a mystery. I imagine she snacked on slugs and wild strawberries, spending her summers ambling through patches of urban forest and her winters deep in the ground under a warm layer of oak leaves. Maybe she narrowly avoided an encounter with a raccoon or fox during her first decade before her shell fully hardened.

But those are just guesses, as are any thoughts about how she died. Her ghostly remains were a gift from wildlife biologist Susan Hagood, who thought our turtle friend likely met her end by tractor, mower, or car. In the years since Susan gave me the shell in 2009, I've wanted to ask her more about it, but I can't; two years later she also died, far too young, from cancer.

I've kept the shell to honor both Susan and the turtle I never knew, and as a reminder of all that we've lost and all that we still can save. Like the turtle's death, Susan's passing was untimely; at the age of 54 (only a year older than I am now), she had more plans to pursue. And like the turtle, she had a thick shell. She was kind and thoughtful, but she was also tough in a way that enabled her to take on formidable cultural and political barriers, testifying against everything from captive hunting of penned foxes to killing of coyotes under the guise of senseless “predator control.”



Susan Hagood was a tireless advocate for wildlife and pioneered mitigation strategies for turtles doomed by impending highway destruction in Maryland. (Photo by Michelle Riley/The HSUS)

In her later years, Susan confronted more tangible barriers in the form of asphalt and concrete that sliced through the heart of wildlife habitat. Her devotion to saving animals from under vehicle wheels culminated in a PhD thesis about the impact of roads on genetic diversity. It also manifested in hands-on campaigns. In a rural pocket of Montgomery County, Maryland, where a park ranger had observed turtles hit repeatedly in the same small patch of road, Susan helped lead a crew of dozens of volunteers to erect silt fencing that diverted animals safely through an underground culvert. It worked, drastically reducing turtle mortality and also becoming a popular crossing for everyone from skunks to birds to chipmunks.

In another part of the county, Susan rescued turtles who had the misfortune of living in a forest doomed by an impending highway project. With the help of her turtle-tracking chocolate Lab, Drew, she and a team of field assistants scooped up hundreds of vulnerable animals and tagged and relocated them. The work was painstaking, and Susan knew their long-term survival was far from guaranteed; box turtles are wedded to their home ranges and may not survive in new environments, even when initially confined in large pens for long periods to acclimate to their new surroundings. But she also knew the turtles didn't stand a chance once the bulldozers arrived.

“People ask me, ‘Why box turtles?’—and I have yet to come up with something that is satisfying to them and to me,” Susan told me as we drove to the site one day. “They're so vulnerable, and they face such challenges in the world we've created, yet require so little of us to survive.”

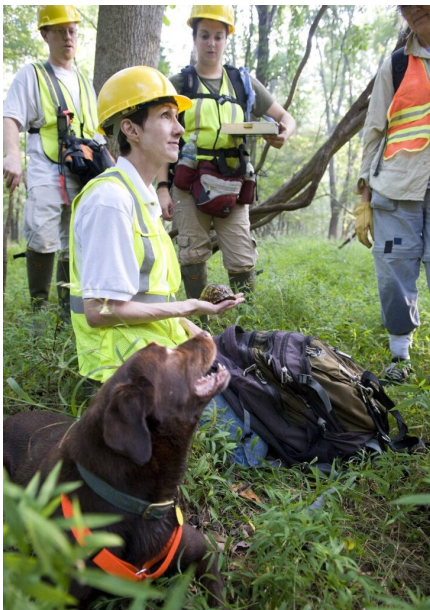


Susan Hagood's dog, Drew, was a fellow rescuer, sniffing out turtles and gently delivering them unharmed to the team. (Photo by Michelle Riley/The HSUS)

I first got to know Susan while writing her story, "[Turtle Trackers](#)," for the membership magazine of our employer at the time, the Humane Society of the United States. We discovered we had much in common including the fact that both our fathers had been plant pathologists, a rare job we'd spent our lives fruitlessly trying to explain to others. Susan was now pursuing an arcane profession of her own and explaining it to me. Even the phrase "road ecology" was a recent invention, entering the U.S. vernacular just 15 years before. The pioneering wildlife overpass in Canada's Banff National Park—the most famous ever built—was only a decade old.

For years I'd been well aware of the heartbreakingly high mortality rates caused by roads, forcing myself not to look away as the body counts of dead foxes, raccoons, squirrels and turtles accumulated where too many drivers raced along the rural roads guiding me to work. But thanks to Susan, I was inspired to learn more about population-level impacts. I read about how roads were inhibiting salamanders from returning to their natal ponds to breed. I spoke with researchers in southern California studying the dwindling genetic diversity of increasingly isolated populations of mountain lions who couldn't or wouldn't cross highways. I interviewed an ecologist in Florida who had managed to save more than 9,000 turtles from the crush of trucks and other vehicles before finally securing federal funding for a permanent tunnel system.

Fifteen years later, my six-inch-deep pile of notes, articles and studies from that research project still sits in a cabinet next to the shelves holding my broken turtle shell. Road ecology is underappreciated and critically important to curbing habitat loss and fragmentation, and I thought it deserved its own book. I was hoping one day to write it.



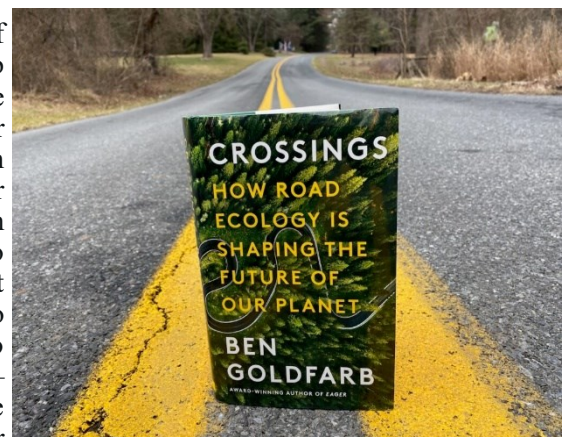
Susan, Drew and a team of field assistants tracked, relocated and monitored hundreds of turtles from the path of highway construction. (Photo by Michelle Riley/The HSUS)

Last fall, Ben Goldfarb beat me to it, and I'm both relieved and grateful. His 2023 book, [Crossings: How Road Ecology is Shaping the Future of Our Planet](#), is a gorgeously written, intricately reported masterpiece. I don't know Goldfarb, but I came to love his poignant, perceptive writing when I read his first book, [Eager: The Surprising Secret Life of Beavers and Why They Matter](#). He navigates complex worlds with compassion, insight, and imagination without ever getting in his own way.

In *Crossings*, Goldfarb makes the case that roads are "not merely a symptom of civilization but a distinct disease" with far-reaching consequences, halting animal migrations while spreading everything from invasive species to pandemic-causing pathogens: "Name an environmental problem, and it's exacerbated by the access that roads provide and the incentives they create." The killing fields of roads, Goldfarb writes, are "an overlooked culprit in our planet's current mass die-off, the sixth major extinction in its history."

Through Goldfarb's research, we learn of salmon in the Pacific Roads, Goldfarb explains, undo age-old behaviors that are integral to survival: "Whereas other ungulates stray widely, mule deer remain faithful to their inherited pathways. Deer migration isn't merely a movement pattern but a form of culture, transmitted from doe to fawn like family lore. And when roads thwart

their treks, the loss is as thorough as the erasure of a language." Northwest who are unable to pass through a seemingly endless tangle of culverts that are too small, too jammed with debris and sediment, or too filled with rushing water—and of the successful legal efforts of Native tribes to dismantle or replace these structures and make way for a "Salmon Superhighway" in Oregon. We discover



Crossings is a must-read for anyone who cares about wildlife. (Photo by Nancy Lawson)

why the navigational abilities of mule deer, “unsurpassed cartographic geniuses,” stopped short at the roadside along I-80 in Montana until the state installed wide, inviting underpasses along with fencing to guide the deer to safety. Without such help, deer were often either hit or deciding not to brave the wall of traffic at all—a slow death sentence for a species that evolved to eat in the mountains in the warm season and spend winters foraging in the valleys.



Roads, Goldfarb explains, undo age-old behaviors that are integral to survival: “Whereas other ungulates stray widely, mule deer remain faithful to their inherited pathways. Deer migration isn’t merely a movement pattern but a form of culture, transmitted from doe to fawn like family lore. And when roads thwart their treks, the loss is as thorough as the erasure of a language.”

Exploring the rise of roads as a dominating force in modern society, Goldfarb travels through time and across lands, tracing the racial injustices of 20th-century highway development as well as the U.S. Forest Service’s labyrinthine roads that still scar many remote ecosystems even as they crumble. He introduces readers to road ecologists, transportation planners, wildlife rehabbers, and advocates trying to mitigate the losses across the American West, Florida, New York, Alaska, Wales, Brazil, Costa Rica, and Tasmania. Tallying the destruction that ripples out beyond our usual sightlines as we cruise down the highway, Goldfarb writes: “The essential insight of road ecology is this: roads warp the earth in every way and at every scale, from the polluted soils that line their shoulders to the skies they besmog. They taint rivers, invite poachers, tweak genes. They manipulate life’s fundamental processes: pollination, scavenging, sex, death.”

Warning signs like this albatross crossing alert in Kauai might slow some drivers, but many become inured to them, Goldfarb writes. More intensive solutions are needed to truly reconnect habitats the world over. (Photo by Nancy Lawson)

perhaps the “most vexing.” Roads have hard edges, but their effects can be borderless, with noise acting like “a toxic plume that drifts from its source like sewage” and emptying the landscape of wildlife even miles deep into adjacent lands. As I also wrote in my own book *Wildscape*, even (and maybe especially?) the smallest and least mobile creatures like monarch caterpillars are stressed by road noise.



One of the many tragedies of roads is that they can encourage attractive early-successional habitat for wildlife while also killing those animals in large numbers, and Goldfarb wrestles with the popular idea of planting wildflowers for monarchs along the very highways that may further imperil them. Larger animals like hawks, vultures, and coyotes are also at risk of succumbing to an ecological trap: though they benefit in the short term from scavenging killed animals, they might not make it off the shoulder alive. This roadside “necrobiome” has another consequence: complacency. Removal of carrion by animal cleanup crews “airbrushes our roadsides,” Goldfarb writes, “camouflaging a crisis by devouring it.” We humans rarely see the full accounting of the messes we’ve made.

As Goldfarb and I both noted in our books, traffic noise affects everyone; University of Georgia researcher Andy Davis found that it even stresses out monarch caterpillars. (Photo by Nancy Lawson)

Sometimes collisions with animals are unavoidable for even the most careful driver, but as Goldfarb notes, reduced speeds could avert many more accidents. That’s not too much to ask, especially on my street, where a couple of neighbors and their visitors routinely drive twice the 25-miles-per-hour speed limit and have hit squirrels, turtles, rabbits, owls and deer—without even bothering to

stop.

Years ago, as Susan Hagood described a recent rescue of dozens of turtles from an area where forest was being cleared for new soccer fields, she told me how much it wore on her to find dead hatchlings, shell fragments and carcasses of turtles mauled by construction equipment: “They keep me up at night, these turtles. You’re just haunted by the ones you couldn’t find.”

I’m haunted, too, by the splayed animals I’ve come across and tried to help—too late, after they’ve already been crushed by the relentless churn of humanity. Just last night I found a hit and eviscerated squirrel in the road right in front of our house,

with only her tail left. Though so many of us are working hard to create habitat within our own patches of lands, the animals know no borders. I hope as many as people as possible will read *Crossings*, take it to heart, slow down, spread the word, and advocate for a world where our own freedom of movement doesn't subsume that of all the other organisms in our path.



Related Articles:

"Roadside Assistance": Millions of animals die in the road, and many suffer serious injuries after colliding with cars. How can we help? [Read the tips.](#)

"Slow Down for Owls": Daylight Savings Time had ended a few days before. But there was just one problem: This little screech owl living on our road didn't know how to turn the clocks back and adjust her timing for increased traffic. [Read the story.](#)

"Turtle Trackers": When I interviewed Susan Hagood for this *All Animals* magazine article 15 years ago, she sparked my interest in the then-nascent field of road ecology. [Read the story.](#)

Much attention is paid to collisions with larger wildlife because of the dangers to humans and their cars. But how many smaller animals die in the road unseen and unknown? (Photo by Nancy Lawson)



Oatmeal Pancakes—Recipe from Erica Jones, NRVMGA

Oatmeal Pancakes - serves 3 (ish)

3/4 C rolled oats soaked in

2/3 C yogurt (plain) . Soak for at least an hour; overnight would work too.

3/4 C white flour

2 eggs well beaten

2 t butter added to eggs

Pinch of salt

1 grated apple (small grates)

Milk if too thick,

Thickened fruit

2 C fruit - blueberries, blackberries, cherries (cooked) , etc etc

1/2 C fruit juice; unfortunately not lemon juice (see below);

1/3 t Xanthan Gum



The gum requires no cooking but either very vigorous beating or better, put the fruit juice and gum in the blender (using a tiny container). You can do it by hand; a whisk works better than a fork. You can also presoak the gum and store it in the refrigerator and use chunks but you still have to stir vigorously. If too thick add fluid. The gum does not add any flavor that I can tell. Xanthan gum does not thicken straight lemon juice although I think lemon peel is OK.