

June 22-26, Blacksburg Virginia

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### **From the State Coordinator**

Hello to all!

As the sunlight hours increase and buds swell, we in Blacksburg are excited for the coming months of spring! We hope that you are enjoying the warming weather and are ready to be back in your gardens!

As spring approaches, so too does Extension Master Gardener College! EMG College is our statewide continuing education conference for Master Gardener volunteers. The past two years we have held virtual events, first with virtual Master Gardener College in 2020 and then with the International Master Gardener Conference in 2021. We are truly pleased to announce that we will be back in person and on Virginia Tech's campus for Master Gardener College from June 22 – 26, 2022.

This year, we will offer Land Care Steward Training as the advanced training for those who are interested. We also have a full schedule of speakers, tours, and workshops ready for an exciting and engaging weekend in Blacksburg. You'll hear from some past favorite speakers as well as get to know and hear from a number of new speakers. Take a look in the following program to see what we have in store for you!

Our EMG State Office team cannot wait to bring everyone together again for the first time in over two years. We look forward to the opportunity to network, share ideas, and build new friendships. Additional details for registration will be coming soon. Please let our team know if you have any questions as EMG College fast approaches. You can find all College updates on our website: <a href="https://mastergardener.ext.vt.edu/college/">https://mastergardener.ext.vt.edu/college/</a>

We are so looking forward to College and invite all of you to join us for this full week of learning and engaging with your peers. I hope many of you will be able to join us in Blacksburg this June!

Kathleen Reed

State Coordinator

Extension Master Gardener Program

### **Schedule**

22

#### Wednesday June 22

9:00 am - 5:00 pm Land Care Steward training 1:00 pm - 6:00 pm Check in

23

#### **Thursday June 23**

9:00 am - 5:00 pm 9:00 am - 5:00 pm 6:00 pm - 7:00 pm 7:00 pm - 8:00 pm

Land Care Steward training Tours/Workshops Keynote - Woody Crenshaw Milestone awards

24

#### Friday June 24

8:30 am - 9:00 am
9:00 am - 10:00 am
10:00 am - 10:30 am
10:30 am - 12:00 pm
12:00 pm - 1:30 pm
1:30 pm - 3:00 pm
3:30 pm - 3:30 pm
3:30 pm - 4:30 pm

Welcome
Keynote - Janine Woods
Concurrent 1
Lunch
Concurrent 2
Break
S:30 pm - 4:30 pm
Keynote - Leighton Reid

**25** 

#### Saturday June 25

9:00 am - 10:00 am
10:00 am - 10:30 am
10:30 am - 12:00 pm
12:00 pm - 1:30 pm
1:30 pm - 3:00 pm
3:30 pm - 3:30 pm
3:30 pm - 4:30 pm
5:00 pm - 6:00 pm

Keynote - Ashley Dayer
Concurrent 3
Lunch
Concurrent 4
Break
Keynote - Cole Burrell
VMGA Meeting

**26** 

#### **Sunday June 26**

## **About Extension Master Gardener College**

Extension Master Gardener College (EMGC) is back on Virginia Tech's campus for the first time since 2018! In addition to our lineup of keynotes, concurrents, and tours, we will also be offering advanced EMG Land Steward training.

#### Registering for sessions

Classes are offered on a first come first serve basis, so make sure to register early to make sure that you get the classes you want. Switching schedules is not advised unless you trade spots with someone. All the classes with limited enrollment are filled by pre-registrations, and there will not be enough materials for unregistered attendees. Please be considerate to your peers and do not "crash" a class, tour, or workshop.

#### **COVID-19 information**

Master Gardener College will adhere to state level, Virginia Tech, and VCE guidelines for COVID safety measures during the conference. Individual participants should do whatever is most comfortable for them within the bounds of campus policies and expectations. Please reach out to the conference registrar with additional questions or concerns. Check the current Virginia Tech guidelines here.

#### **Transportation**

The Virginia Tech campus is large and walking is necessary to get from one place to another. Depending on the location of our classes this year, shuttles may be provided. Walking short distances will be necessary.

## **Registration information**

#### Costs (subject to change)

#### Registration fees:

Registration Fee (until May 31): \$200.00 Late Registration Fee (June 1-June 15): \$225.00 Land Care Steward Training: \$100.00

Agent/Coordinators: Complimentary

Milestone Discount Registration:

1,000+ Hour Milestone: \$175.00 5,000+ Hour Milestone: \$150.00

10,000+ Hour Milestone: Complimentary

#### Meals:

A meal plan is required for those staying on campus and will include breakfast, lunch, and dinner at the following rates: \$9.95; Lunch: \$13.75; Dinner: \$14.95

#### On campus housing:

Single room, per night: \$63

Double room, cost per person, per night: \$54 Note: We are not offering a random roommate option this year, to use the roommate option you must arrange to room with a known roommate

#### Milestone discounts

Milestone discounts are available for milestones reached in 2019, 2020, or 2021. Milestones earned in previous years do not qualify for discounts.

#### **VMGA Scholarships**

VMGA seeks to award scholarships to those Extension Master Gardeners who, through their dedicated efforts of volunteerism toward VCE goals, have demonstrated exceptional leadership potential or significant contributions in their respective units. <u>More information available here.</u>

## **Land Care Steward Training**

Land Steward training is open to any EMG interested in pursuing advanced education in the area of land-care. Land Stewards are specially trained to focus on EMG projects related to firewise landscaping, wildlife, and land conservation.

Land Stewards will arrive at EMGC early for training beginning Wednesday, June 22. Wednesday and Thursday will be spent in steward classes with a few off-campus tours. Land Stewards will choose from Land Steward options for concurrent sessions, and will complete their steward training through hands-on projects when they return to their home units.

This year's Land Steward Training includes the following sessions:

Conservation Landscaping: An Introduction to Land Care

Forest Care for Landowners Ins and Outs of Extension Programming Invasive Species Management

Tour - Stadium Woods

Composting

Land Care Stewards in the Community

Intro to Living with Wildlife & Wildlife Conflict Management

Tour - Firewise



2022 EMGC also features special concurrent sessions that count towards Land Steward training including replacing non-natives, conservation landscaping, and sustainable landscaping.

Join a special group of EMGs with advanced training who work to care for our natural resources by becoming an EMG Land Steward!

## **Keynote Descriptions**

# THURSDAY 6 PM - Developing a Local Food Economy in Rural Virginia - William "Woody" Crenshaw

Join local small town entrepreneur and advocate Woody Crenshaw as he reports on his efforts to bolster sustainable agriculture and develop a local food economy in Floyd, Virginia.



**About Woody:** Born in New York, raised in Vermont and North Carolina, Woody has spent most of his adult life in Southwest Virginia. During his 33 years in Floyd he also engaged himself to projects related to the arts, environmental protection and sustainable agriculture. Some of those projects include the Floyd Center for the Arts, the SustainFloyd Foundation, The Crooked Road Heritage Music Trail and Riverstone Organic Farm. He was part of a group that renovated the town center, an effort that resulted in an award of Excellence from the Virginia Mainstreet program in 2010. He and his wife Jackie restored and operated the Floyd Country Store for 10 years beginning in 2005. He

also created Riverstone Organic Farm, one of the region's largest certified organic vegetable farms which is now in the hands of young farmers. In recent years he has focused on developing an integrated local food economy for Floyd County. A lifelong gardener, he and his wife Jackie live in a passive solar cabin they built 30 years ago in Floyd County near the Blue Ridge Parkway.

#### FRIDAY 9 AM - The Role of Urban Agriculture in Virginia - Janine Parker Woods

Urban agriculture plays an important part in building community, increasing food security, and building diverse landscapes in urban corridors. Join VSU's Associate Administrator for Cooperative Extension, Janine Woods, as she discusses the role urban agriculture is playing in building resilient food systems in Virgina.



**About Janine:** Dr. Janine Parker Woods serves as the Associate Administrator For Programs In Cooperative Extension at VSU. Woods previously served as interim program leader for the Agriculture and Natural Resources Unit with Cooperative Extension at North Carolina Agricultural and Technical State University (NC A&T SU), and developed and led regional, statewide small farm production workshops. She also served as co-chair for the North Carolina Cooperative Extension Local Foods Program Team's Economic Impacts Work Group; president elect for the North Carolina Association of Extension Specialists; and president for the Joint Council of Extension Professionals.

# FRIDAY 3:30 PM - Restoring Virginia's Native Grasslands: Where, Why, and How - Leighton Reid

Virginia is graced with a diversity of natural ecosystems, including many types of grassland. Virginia's grasslands are widespread, from the mountains to the coast, and they host endangered and endemic plants and animals, but they are also small, shrinking, and too often neglected by conservationists. These habitats are worth conserving for their biodiversity, their stabilizing climate effects, their cultural significance, and their profound beauty. Understanding our native grasslands requires us to think about their origins in deep time as well as their maintenance under human management over thousands of years. By replicating the selection and dispersal processes that supported grasslands in the past, we are learning how to restore them in the present. Grassland restoration in Virginia is nascent and growing. There are many roles to play, including for gardeners.



**About Leighton:** J. Leighton Reid is an Assistant Professor in the School of Plant and Environmental Sciences at Virginia Tech. He has written extensively on ecological restoration and biodiversity conservation and is among the most well-cited experts in the subfield of spatially-patterned restoration. His current research focuses on improving the outcomes of ecological restoration in temperate and tropical terrestrial ecosystems. He teaches courses on ecological restoration and advises restoration projects in Virginia and internationally.

# SATURDAY 9 AM - The Connection between Gardening and Virginia's Ten-Year Wildlife Viewing Plan - Ashley Dayer

Wildlife viewing and gardening have a strong connection as wildlife can be attracted to native plant gardens. These gardens not only support the wildlife but provide opportunities for people to observe them up-close, which provides extensive well-being benefits to people. Yet, according to recent research our team conducted, nearly 60% of wildlife viewers nationally feed wild birds, but only 30% maintain plantings for wildlife. Programs like the Master Gardeners have the potential to contribute to addressing this disconnect. Within the Commonwealth of Virginia, Virginia Department of Wildlife Resources recently committed to engaging and supporting wildlife viewers with a Ten-Year Wildlife Viewing Plan. This plan even calls out the importance of partnering with Master Gardeners to support the public is establishing backyard habitat. Come learn more about wildlife viewers, their interests in gardening and other ways to engage them, and opportunities that the Master Gardeners might tap to connect with them, in collaboration with the state's wildlife agency.



**About Ashley:** Ashley is an Assistant Professor of Human Dimensions in the Department of Fish and Wildlife Conservation at Virginia Tech and Affiliated Faculty with the Global Change Center. Her conservation social science research focuses on conservation behavior of wildlife recreationists, habitat conservation by private landowners, human disturbance of shorebirds, and science application by land and wildlife managers. She and her family enjoy wildlife viewing, hiking, gardening, and other outdoor activities.

# SATURDAY 3:30 PM - Nature as Gardener: Working with Natural Process for Beauty and Reduced Maintenance - Cole Burrell

Picture-perfect plant combinations make for beautiful gardens, yet keeping every plant in its place is a lot of work. If you grow native and site adapted plants, and long to lower your maintenance time and budget, this lecture is for you. Join Cole Burrell to learn tips and techniques for working with Mother Nature to create a beautiful, reduced maintenance garden by augmenting and editing. Using layering, under planting, free seeing perennials and annuals, and a little benign neglect, you can reduce the amount of time spent working in your garden.



**About Cole:** Cole Burrell is an acclaimed lecturer, garden designer, awardwinning author, and photographer. A certified chlorophyll addict, Cole is an avid and lifelong plantsman, gardener, and naturalist. Cole is principal of Native Landscape Design and Restoration, which specializes in blending nature and culture through artistic design. He is a lecturer in the College of Architecture and Landscape Architecture at the University of Virginia, where he teaches about plants and their ecological connections to natural systems and cultural landscapes.

#### SUNDAY 9:30 AM - Ethnobotany and Folklore of Plants - Alonso Abugattas

Ethnobotany is the study of how people relate to and use plants in their lives, be it food, medicine, tools, and so many other ways. Learn all about plant folklore, how people used locally native and commonly available plants in their lives and historically. The natural history of various plants will be discussed, along with some additional references to finding more about the various native plants.



**About Alonso:** Alonso Abugattas is a well-known naturalist, environmental educator, and storyteller in the Washington, DC area. He is the Natural Resources Manager for Arlington County Parks, VA and the long-time Co-Chair for the Beltway Chapter of Region 2 of the National Association for Interpretation, the professional association for naturalists, historians, and docents. With numerous mentions and appearances on television, radio, podcasts and the press, he invites you to check out his NAI Interpretive Section Thomas Say Media Award winning FaceBook Group "Capital Naturalist", his Capital Naturalist Blog, @ CapNaturalist on Twitter, and the Capital Naturalist YouTube Channel.

#### SUNDAY 11 AM - Eat From Your Garden Year Round - Barbara Pleasant

Wouldn't it be great to eat from your garden every day of the year? Learn proven strategies for stocking your own homegrown pantry, from the ground up. Start by choosing easy-to-grow crops that store themselves, and then learn simple ways to preserve vegetables and fruits so they are welcome in the winter kitchen. Award-winning garden writer Barbara Pleasant, author of *Homegrown Pantry*, will share dozens of tips for enjoying your garden's bounty in every season.



**About Barbara:** Barbara Pleasant is an award-winning garden writer, as well as a sought-after speaker, who cultivates an intensive organic food garden in the Blue Ridge Mountains of Virginia. In addition to numerous books, including the The Complete Houseplant Survival Manual and Homegrown Pantry, Barbara provides a wealth of gardening info on her website at barbarapleasant.com. Singled out as "one of America's most trusted garden writers" by Chery Long of Mother Earth News magazine, Barbara relishes every opportunity to connect people with the green world.

## **Concurrent descriptions**

\* Indicates Land Care Steward option

#### FRIDAY 10:30 AM - Concurrent session #1

#### Fancying the Ferns - Jordan Metzgar

Ferns are an elegant addition to any garden but their biology and identification can be confusing. See what makes a fern a fern and learn about the different methods ferns use to survive and reproduce. We'll also highlight a variety of the amazing adaptations possessed by ferns around the world. We will cover the basic terms that are crucial to fern identification and examine an assortment of Virginia's native fern species.

## IPM for Gardeners: History, Concepts, and Strategies - Stephanie Blevins & Daniel Frank

Preventing damage from pests can be a challenge for the beginner and seasoned gardener alike. Implementing an appropriate Integrated Pest Management (IPM) plan is the best way to prevent infestations from taking root, and to deal with any pest problems in a safe and effective manner. This presentation will provide a basic introduction to IPM, and how it might be applied for control of pests in gardens.

#### Reaching Underserved Groups & Reducing Food Insecurity Through Community Garden Partner Projects -Ralph Morini & Fern Campbell

The session will begin with a presentation describing four different community garden projects that the Piedmont Master Gardener Association has initiated with partner organizations. They will describe project goals, successes, challenges and lessons learned, inviting questions and comments. The second part of the session will be a roundtable where attendees discuss their EMG community garden experiences and ideas, generating a discussion that we hope will be enlightening and motivating for everyone.



#### Everything you need to know about soil testing - Rory Maguire

Soil testing forms the basis for nutrient management, and provides recommendations for fertilizer and lime additions. This session will first provide information on how nutrients behave in soil and how to take a good soil sample. It will then explain how recommendations are made and how to interpret those recommendations for efficient nutrient management and healthy plants.

# Invasive species ecology, impacts, and identification\* - Jacob Barney & Prashasti Agarwal

In this session we will broadly explore the histories, ecology, and impacts of locally important invasive species – with coverage of a few notable examples from elsewhere. We will also learn to identify some of the more common local invasive flora. Bring your invasive species questions as well.

#### Vegetable Grafting - Josh Kardos

Grafting is for more than fruit trees! Many common vegetables can benefit from grafting. Learn the ins and outs of vegetable grafting at home.

#### EMG Program Accessibility: Diversity Initiatives at the Local Level - Blane Harding

In this session, we'll dive into EMG Program accessibility at the state and local level. We will discuss how individual units can begin working toward accessibility and diversity goals based on their local needs and priorities. The State EMG Office Task Force on Accessibility and Connection will be used as a potential model for this work, with ideas shared for how to facilitate conversations about diversity and accessibility with your EMG peers. Come prepared to ask questions, share ideas, and discuss this topic with your fellow EMGs.

#### Spotted Lanternfly Biology and Distribution\* - Eric Day & Theresa (Tree) Dellinger

Spotted lanternfly continues to spread across Virginia and we learn more about its biology and impact. The pilot program for the Citizen Scientist Detection Program for Spotted Lanternfly in Virginia began in 2018, soon after spotted lanternfly was first detected in Winchester, Virginia. Virginia Cooperative Extension envisioned a program where people who owned property with Ailanthus (also known as tree-of-heaven) in northern Virginia could help determine where spotted lanternfly was found and where it hadn't arrived yet.



Since then, spotted lanternflies have spread into broader areas of Virginia and we are expanding the Citizen Scientist Detection Program accordingly in 2022. Participants in our Citizen Scientist Detection Program use circle traps on Ailanthus trees on their personally-owned property to trap spotted lanternfly. In particular, we seek participants in counties or localities surrounding the known infested areas to determine the leading edge of the spread of this pest.

#### Conservation Paleobiology: Using the Past to Plan for the Future - Rachel Reid

Conservation paleobiology is an emerging discipline that uses historical, archaeological, and paleontological data to inform present-day conservation, restoration, and management. In this session, I will introduce the discipline and highlight some examples of how paleontological records have already provided important insights to present-day challenges. I will then share preliminary results from an ongoing project seeking to understand how the Appalachian landscape may have changed over the last several thousand years.

#### Irrigation 101 - Shawn Jadrnicek

As growers we're at the mercy of the heat and cold but we can control the water using irrigation systems. Properly installed and operated irrigation systems also increase yields and help prevent weeds and disease problems. Learn the basic components of automated drip and overhead irrigation systems and installation tricks. This class will also cover irrigation scheduling to prevent wasting water and nutrients.

# Dahlia Culture: Growing, Harvesting, Storing, Propagating - Curt Laub

We will follow a 'year in the life' of dahlias, through tuber preparation, planting, spacing, and supporting plants as they grow; mulching and pests to watch out for; harvesting and the use of fresh cut as well as dried dahlias in arrangements and wreaths; and digging and storage of tuber clumps.

## Bees in the Garden; Growing Forage and Adding Pollinators into the Mix - James Wilson

Dr. Wilson, Extension Apiculturist at Virginia Tech, Blacksburg, will be talking about bees in our gardens. What kinds of plants can attract or support bees, and what kinds of bees can we expect to come visit our gardens. Dr. Wilson will also provide some introduction to getting started with adding pollinators to your garden and keeping honey bees in Virginia. Digital resources to be shared during and after, as well as a brief honey tasting.

#### SATURDAY 10:30 AM - Concurrent session #3

#### HOPE from the Garden: Helping our Planet Endure - Kate Bracken

The keen focus on environmental concerns among the speakers and panelists at the 2021 International Master Gardeners Conference was palpable and inspiring. In response, the President of GPMGA decided it was time for our EMG unit to do something significant about it. She called together a team of eight volunteers who came up with HOPE from the Garden (Helping Our Planet Endure) as our unifying slogan. This session will share our works-in-progress – revisions to our own projects/programs, creation of new materials, exhibits, presentations – as well our aspirations for the future.

## Roots and Wings: How to Raise a Happy Orchid - Cyndy Unwin

Are you a member of the "I can't keep an orchid alive" club? Does your orchid sit in its pot year after year and refuse to rebloom? Orchids, like children, need roots and wings. The key is a healthy connection to water and nutrients, and the right conditions to thrive and bloom. This workshop will introduce you to this incredible family of plants and their unique needs. It will focus on practical strategies to keep your orchid healthy and encourage blooming. A hands-on demonstration of how to repot an orchid is included.

# **Design to Solve Landscape Challenges\*** - Laurie Fox, Kristi McCullough

Explore how smart design can solve landscape challenges. Review multiple design solutions for 3 common landscape scenarios. Based on a Chesterfield MG training exercise.



# Water Wisely: Improved Best Management Practices and New Smart Technologies or Enhancing Water Conservation in Your Lawn - Dan Sandor

In this session we'll discuss best management practices for reducing irrigation in the lawn. We'll examine water requirements of turfgrass species for Virginia and how cultural practices like mowing, fertilization, and cultivation impact these requirements. We'll also review some challenges and issues with lawn-rebate programs and "alternative" lawns; and we'll discuss new smart controllers and sensor technologies that can be incorporated into existing sprinkler systems, and learn which tools are most optimal for your lawn.

#### Communications Updates & Best Practices for EMG groups - Devon Johnson

This session will cover updates to communications policies, including the new Virginia Cooperative Extension brand, updated social media guidance, and recommendations for recruitment and marketing.

#### SATURDAY 1:30 PM - Concurrent session #4

#### 4theSoil: Building Healthy Soil for the Garden, Lawn and Landscape - Thomas Bolles

Healthier soils reduce storm water runoff, erosion and nutrient loss, while improving plant health, carbon sequestration and clean water. Join us for a look at how to improve our soils at the homeowner level.

#### Happy EMG Volunteers and Thriving EMG Units - Pat Lust

During the past two and a half years we have been conducting an "Appreciative Inquiry" research project within the VA EMG program. The outcomes of eight focus groups provided the basis for the survey that was distributed to all VA EMG volunteers in August of 2021. The goal of this research has been to identify what makes volunteers happy and productive and what makes thriving EMG units. This session will include a summary of the process and a report on the initial findings.

#### A Holistic Approach to the Natural World - Leaf Myczack

This presentation offers an indigenous perspective of our inherent, but mostly forgotten relationship with the totality of the natural world, and examines the conflict between earth ecology and human ecology.

#### Resilient & Sustainable Landscapes\* - Laurie Fox

How to have the beautiful landscape you want without an aching back and empty wallet. Dr. Laurie Fox shares tips from 30 years of gardening experiences.

## The Human to Houseplant Connection - Barbara Pleasant

Ever since glass windows were invented, people have tried to grow plants indoors. From fragrance to feng shui, this session explores the obvious and subtle ways houseplants enhance our lives. Barbara Pleasant, author of the best-selling *Complete Houseplant Survival Manual*, will also share her top tips for keeping popular houseplants happy.



## **Tours and Workshops**

All tours and workshops occur on Thursday, June 23. All tours are half day, AM/PM, final schedule subject to change.

# New River Valley Garden Tour 1 & 2 - Delbert Jones, EMG NRV (AM and/or PM, \$10 additional charge)

Join us as we visit private gardens in beautiful Blacksburg! You will meet the owners, have an exclusive tour and learn how they developed their home garden. You will be able to bring back some wonderful ideas that you can use in your own home gardens.

#### Nematode, Nematode Quite Contrary, How Does My Garden Grow - Jon Eisenback (AM, no additional charge)

Nematode, Nematode Quite Contrary, How Does My Garden Grow? Nematodes are quite contrary because some of them are harmful to the growth of plants, but on the other hand, some are beneficial because they kill insect pests, but most



of all, they are all indicators of soil health and are useful predictors of how well your garden will grow. By sampling nematodes in the fall, the kinds and numbers of nematodes can monitor the health of your soil. Plants need lots of bacteria and fungi to have a healthy environment because the bacteria breakdown the nutrients in the soil and the fungi transport those nutrients to the plants. Their numbers can be monitored by the numbers of bacterivores and fungivores that are present in the soil. The feeding types of nematodes are easily identified from the morphology of their mouthparts. On the other hand, if the number of plant-parasites are high, the soil is very unhealthy and the predators and omnivores need to be encouraged. Learn the four tactics that improve the health of your soil.

# **Insects, Diseases, and Abiotic Plant Problems: Campus Walk** - Eric Day & Elizabeth Bush (AM, no additional charge)

Bring your walking shoes and join us as we walk around campus and look at trees and plants and discuss insect, mite, and plant diseases. We will look at actual symptoms and pests and talk about things to look for as the season develops. Limited to 25 people

#### Tree Tour of Virginia Tech - Jamie King (AM, no additional charge)

You are invited for a tree tour at Virginia Tech! Please join Jamie King, Urban Forest Manager and University Arborist, for a 3 mile walk to see how public land use has been shaped by American conservation efforts and how our decisions today support that legacy. This outdoor walk will include stairs and transitions from pavement to turf and other uneven surfaces.

# **Judging Fairs** – Jeannie Layton-Dudding & Wendy Silverman (PM, \$25 additional charge)

Judging horticultural contests at local fairs is a common project for many EMG groups. In this session, become a confident, trained fair judger so that you too can serve as a fair judge!

#### **Gardening with Moss** - Pat Reilly (PM, \$20 additional charge)

While sometimes not invited, moss can add beauty to our landscapes. For those homeowners who bring turf troubles to us as EMG volunteers, moss may well be a viable option. This workshop seeks to combine knowledge about growing moss with the activities of identifying mosses and creating a moss garden of your own to take home. Attendees will learn moss botany and taxonomy, incorporating moss into the landscape design, and establishing and maintaining moss. Samples will be provided for the identification activity.

# **Not Your Momma's Floral Design Workshop** - Sara Rutherford (PM, \$35 additional charge)

This workshop will not focus on the traditional floral designs of yesteryear, but the relaxed, more modern designs currently being used. In this workshop, you will learn how to take the basic elements of floral design and use them to create something you will enjoy. You will create a modest-sized design of your choosing and use it to brighten up your space at Master Gardener College! Sara Rutherford, extension agent, and floral designer in another life, will guide you as you create your personalized design piece. Join us as we create floral music together in this hands-on, creative workshop!



#### Fire Wise Tour - Russell Proctor (PM, limited to Land Care Steward trainees)

This special tour for Land Care Stewards will provide a hands-on experience evaluating sites for fire safety.

#### Catawba Sustainability Center - Adam Taylor (PM, \$10 additional charge)

Tour will be an overview of the Catawba Sustainability Center, showcasing our environmentally sustainable agriculture and land use practices that include agroforestry (silvopasture, riparian buffers, nutrient credit trading, and non-timber forest product), organic vegetable production, and regenerative grazing practices. An extensive tour takes 2 hours, and we will be walking the entire time.

#### Drones 101 - VT Faculty (PM, no additional charge)

Drones have many uses in agriculture including identifying disease problems and informing plant nutrient applications. In this tour, learn how drones can be used to grow food in a way that is smart and sustainable.

## **Concurrent Session Speaker Bios**

**Dr. Jacob Barney** is an Associate Professor of Invasive Plant Ecology in the School of Plant and Environmental Sciences. He studies the causes, consequences, epidemiology, and management of invasive species. Prashasti is an Indian-origin aspiring agroecologist. Her research interests lie at the interface of plant-microbe-soil interactions. Currently, she is working on understanding the relationships between plant functional traits and their associated soil microbiomes.

**Kate Bracken** joined Goochland Powhatan Master Gardener Association in 2015 and Master Food Volunteer in 2017. Currently she is serving as President of GPMGA. Kate enjoys time spent with her grandchildren; they inspire her to be a better steward of our planet.

**Fern Campbell** became an Extension Master Gardener in 2013 after retiring from a fulfilling career as a Pediatric Nurse Practitioner, caring for children and families with chronic kidney disease and bladder issues. She went from nurturing kids and families to nurturing nature and all things horticulture! She grew up on a farm in the Midwest, helping to weed, harvest and preserve food at a very young age and has been vegetable gardening ever since. She was President of the Piedmont Master Gardeners in 2017 and chaired the PMG Associations' 30th Anniversary community educational event at The Paramount Theater, "The Future of Our Landscapes in a Changing Environment" with over 500 attendees. Fern has been Chair of the Volunteer Projects committee for the past 3 years and involved in the development of our "Share Your Harvest" campaign and work with both the Community Garden Partners as well as helping to develop recent changes in our School Garden programs. Her motto is "So much to do...so little time!

**Eric Day** is a faculty member in the Entomology Department at Virginia Tech. He is Manager of the Insect ID Lab located on the main campus in Blacksburg, VA. The lab handles over a thousand samples per year from all over the state. Samples are from public, private and commercial clients and samples can include and mites insects on vegetables, turf, fruit, trees and ornamentals, greenhouses, household and recreational areas, and livestock. Eric specializes in Insect Identification and Invasive Pest Surveys and has authored numerous Virginia Cooperative Extension publications.

**Dr. Theresa (Tree) Dellinger** is a diagnostician in the Insect Identification Lab in the Department of Entomology at Virginia Tech, where she identifies insects and other arthropods and provides management suggestions for insect-related problems. Her education and work background includes experience in medical/veterinary entomology, field crops integrated pest management, forest entomology, and insect taxonomy.

**Laurie Fox** is the Horticulture Associate at Virginia Tech's Hampton Roads Agricultural Research & Extension Center (AREC). She currently works in the areas of water quality and sustainable landscapes, and she is responsible for overseeing eight demonstration gardens and is the author and publisher of the book Best Plants for Hampton Roads: A Landscape and Garden Companion. Fox is a native of Richmond, VA and received her PhD in Horticulture from Wageningen University, The Netherlands where she focused on phytoremediation.

**Daniel Frank** is Director of Virginia Tech Pesticide Programs where he provides leadership to carry out Extension programming in pesticide safety education, IPM, and youth entomology education and outreach. Daniel received his B.S. in biology from Utah State University, M.S. in entomology from the University of Florida, and Ph.D in entomology from Virginia Tech.

**Blane Harding** is the former Director of Diversity Engagement for the Office of Inclusion and Diversity at Virginia Tech University and currently serves as a national consultant. He also served as the Director of Advising, Recruitment, and Retention for the College of Science at the University of Nevada, Reno from 2017-2020 as well as the Director of The Cultural Center at the University of Nevada Reno from 2015-2017. He retired from Colorado State University, after 24 years of service, in 2012 where he served as the Director of Advising, Recruitment, and Retention for the College of Liberal Arts as well as a professor in the Ethnic Studies Department. Mr. Harding served as a retention faculty member with the Council for Opportunity in Education which oversees the national TRIO programs as well as a faculty member, for 16 years, and past Chair of the Summer Institute Advisory Board for the National Academic Advising Association and Chair of their Multicultural Concerns Commission. In 2018 he was recognized as the Leading Light Award Winner presented to a NACADA member in recognition of significant contributions to diversity within NACADA.

**Shawn Jadrnicek** has nourished his interest in agriculture through his work as a farmer, nurseryman, extension agent, arborist, landscaper, manager of Clemson University's Student Organic Farm, manager of Wild Hope Farm and now serves as the ANR agent for Roanoke and Botetourt Counties. From his earliest experiments with no-till farming in the Santa Cruz Mountains of California to his highly functional bio-integrated designs in the Southeast, Shawn has learned how to cultivate food in a variety of climates and landscapes over 24 years of working with the land. A snapshot of his knowledge is available in his book The Bio-Integrated Farm.

**Devon Johnson** is the communications project coordinator for the EMG State Office. In addition to helping EMG programs, she is interested in community resilience in a changing climate, permaculture, and fruit gardening. She has a MAs in communications and the public humanities from Virginia Tech.

**Dr. Josh Kardos** is an instructor with the School for Plant and Environmental Sciences. He has extensive experience in production horticulture and teaches Plant Propagation Production Horticulture, and Plant Materials for SPES.

**Curt Laub** is retired from the Virginia Tech Entomology Department, and is now focused on steel drum playing, yoga, and gardening. He has been growing dahlias since 2004, and sold them as cut flowers at the Blacksburg Farmers Market for 12 years

**Pat Lust,** retired Longwood University faculty member and long-time Master Gardener volunteer, is currently spending a lot of time growing native plants and talking about then. Her backyard nursery focuses mostly on perennials and bushes but includes a few other types of plants as well. She says that, if you get to know her, you will probably be adopting more native plants for your own garden.

**Ralph Morini** is a lifelong gardener who retired from full time work in business in 2015 and became an EMG in 2017. He was President of the Piedmont Master Gardeners in 2021, during which time the organization strengthened its emphasis on projects dealing with environmental sustainability, horticulture related social issues including food insecurity and building a more diverse audience and membership. As an EMG he has participated in several school and community garden and conservation landscaping projects while doing community presentations on composting, natural soil building and minimum chemical gardening. He is a regular writer for PMG's The Garden Shed Newsletter.

**Dr. Rory Maguire** is a Professor and Extension Specialist in the School of Plant and Environmental Sciences. He conducts research on sustainable nutrient management for healthy soils, and also supervises the Soil Testing Laboratory at Virginia Tech.

As a child, **Leaf Myczack** recognized his deep connection to our nearest elemental relatives, and throughout his long active outdoor life, he has been dedicated to understanding the holistic nature of the natural world. Autodidactic, he comes from a diverse experiential background that spans three quarters of a century. Navy veteran, anti-war activist, single parent, subsistence farmer, hunter-gatherer, boatbuilder, sailor, RiverKeeper, and teacher are some of the fields of endeavor he has engaged in to further both his awareness and the responsibility of his caretaker role as a temporary occupant of planet earth. Currently, Mr. Myczack is the primary instructor at the Broadened Horizons Teaching Farm, which he co-founded in 2004, and which is dedicated to the learning and the teaching of sustainable agricultural practices. The working demonstration farm is located in NW Floyd County, Virginia.

**Dr. Rachel Reid** is a paleoecologist interested in how climate and environmental change impact ecosystems and species interactions over a range of timescales. She incorporates viewpoints, tools, and data from geology, ecology, and archaeology in her research, using stable isotope geochemistry as a central methodological tool. She completed her MS and PhD in Earth Sciences at the University of California Santa Cruz and came to Virginia Tech in 2019 after conducting postdoctoral research at Washington University in St. Louis.

**Cyndy Unwin** acquired (and soon killed) her first orchid over 20 years ago. She now raises over 100 of them and manages to keep most of them alive and blooming. Cyndy is an eight-year veteran of the Roanoke Master Gardener Association and is the newsletter editor for the Blue Ridge Orchid Society. She also helps curate the orchid collection at the Virginia Western Community Arboretum. When she's not tinkering with orchids and playing in her garden, she teaches reading and writes children's books.

**Dr. James Wilson** joined the Virginia Tech faculty in January 2017 as the new Extension Apiculturist. His focus includes many Extension efforts throughout the Commonwealth of Virginia, teaching the Bees and Beekeeping class, Insects in Human Society class on campus, and serves as the faculty advisor to the student club the Beekeepers at Virginia Tech. In his Extension efforts he works with growers, gardeners, naturalists, beekeepers, educators, and Extension Agents throughout the Commonwealth. Dr. Wilson also maintains Virginia Tech's research and teaching apiaries.