



CONNECT
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CULTIVATE
MINI-COLLEGE

Celebrating Our 45 Year Anniversary ~ 1976 - 2021

Presented by:

oregon
master
gardener™
ASSOCIATION

and



Oregon State University
Extension Service
Master Gardener™

Welcome



to the 2021 Oregon Master Gardener Association Virtual Mini-College!

We are very excited to present our first virtual conference which incorporates many of the traditional activities you would find at the in-person Mini-College. In addition to the outstanding keynote speakers, classes and workshops on a variety of timely topics and you will find the Grass Roots bookstore. There are some new things as well.

Friday will begin with a slide show of pictures of Oregon Gardens taken by our own Master Gardeners. On Saturday the photo slide show will be of pictures from different places in Oregon. This will be a wonderful showcase of our beautiful state.

Here is the best news – normally you must select just a few classes to take, even though there are many more you would like to attend. This year all the classes will be recorded so following the conference you can listen to the other presentations at a time convenient for you. Of course, all of the classes will count for Continuing Education Hours. (Time in class = continuing education credit hour(s), to the nearest half hour).

We look forward to seeing you at our first virtual Mini-College.

If you have questions please contact the Co-Chairs:

Sue Nesbitt (sue.nesbitt1231@gmail.com) or Eric Bosler (ericbosler@hotmail.com).



OMGA 2021 Mini-College Program

Friday, July 16

- 8:15 – 8:45 a.m. Slide Show of Oregon Garden Pictures
- 8:45 – 9:00 a.m. Welcome, Introductions and Housekeeping Items
- 9:00 – 9:45 a.m. **Keynote Speaker**
- Robert Michael Pyle - “People, Plants and Pollinators in the PNW”
- 9:45 – 10:30 a.m. Interactive Discussion
- 10:30 – 11:00 a.m. **Break**
- 11:00 – 12:30 p.m. **Concurrent Sessions**
- **The Oregon Bee Atlas** - Andony Melathopoulos
 - **All About Mason Bees** - Rich Little
 - **Native Garden Plant Considerations for Pollinators** - Jen Hayes
 - **Pests Attacking Field Crops in Oregon: Scouting Identifying and Managing** - Dr. Navneet Kaur
 - **Microbes under your fingernails? An exploration of the garden microbiome and potential transferability to human skin**
- Dr. Gwynne Mhuireach
- Workshops**
- **Hydroponics: Grow Amazing Vegetables Indoors Year Round** - Richard Bertram
 - **OSU Plant ID Program** - Heather Stoven
- 12:30 – 1:00 p.m. **Break**
- 1:00 – 2:00 p.m. Social and Award Presentations

Saturday, July 17

8:15 – 8:45 a.m. Slide show: “The Beauty of Oregon”

8:45 – 9:00 a.m. Welcome and Housekeeping

9:00 – 10:00 a.m. **Keynote Speaker**

Gail Langellotto, State Coordinator, Oregon Master Gardeners
“OSU Master Gardener Annual Report”

10:00 – 10:15 a.m. Zoom Stretch with Chris Rusch

10:15 – 11:00 a.m. Search for Excellence presentations

11:00 – 11:15 a.m. **Break**

11:15 – 12:45 p.m. **Concurrent Sessions**

- **Agricultural adaptations for the urban environment** - Mykl Nelson
- **Organic Vegetable Gardening: Keys for Success** - Weston Miller
- **Invasive Species in Oregon** - Dr. Jessica Rendon
- **Biochar: The promise, pitfalls, and potential of an emerging soil amendment** - Kristin Trippe
- **Year-Round Pollinator Plants** - Janet Magedanz

Workshops

- **Pollinator Garden Design with Native Plants** - Signe Danler
- **Using I-Naturalist for Insect ID** - Gail Langellotto

12:45 - 1:00 p.m. **Break**

1:00 – 1:30 p.m. Closing comments and the Word Search answers posted on website!

Did you find the Word Search?



Friday Keynote Speaker: Robert Pyle

“People, Plants and Pollinators in the PNW”

Description: We all need to become better naturalists. To do this we need to understand our butterflies, bees and other pollinators and how we protect and manage the plants and habitats on which they depend. As changes occur beneath our feet and above our heads, we need to have more concern for the small-scale life which have the biggest roles of all in holding up the fabric of our beloved earth. We need to understand and act on this.

Bio: Robert Michael Pyle is the author of 24 books, including *Chasing Monarchs*, *Where Bigfoot Walks*; *Crossing the Dark Divide* (currently a feature film, *The Dark Divide*, more information at: www.darkdividefilm.com); *Wintergreen* (winner of the John Burroughs Medal) and a flight of butterfly books. A Yale-trained ecologist, Guggenheim Fellow, and founder of the Xerces Society, he is a full-time writer and biologist living in Southwest Washington. 2021 PEN American Literary Award nominee for DIAMONSTEIN-SPIELVOGEL AWARD FOR THE ART OF THE ESSAY: *Nature Matrix: New and Selected Essays*, Robert Michael Pyle (Counterpoint Press).

Saturday Keynote Speaker: Gail Langellotto

“Successes, Challenges and Opportunities of the Oregon Master Gardener Program as the nation and state recover from the Covid-19 Pandemic”

Bio: Gail Langellotto is the Professor of Urban and Community Horticulture Extension and the Statewide Master Gardener Program Coordinator. Gail’s focus today is to help “develop a better research-based understanding of how to design and sustainably manage gardens and parks to maximize ecosystem services.” She is “focused on communicating these and other research-backed management practices to home gardeners, commercial landscapers, and others.” She is the author of numerous research articles and has received many awards.

Friday, July 16 - Descriptions of Concurrent Classes

The Oregon Bee Atlas: *Andony Melathopoulos*, “While it is estimated that there are approximately 500 species of bees in Oregon there has never been a comprehensive survey of them.” The history of this Citizen Science program, the purpose and goals, the importance of this project for all Oregonians and how you can get involved will all be included in this presentation and discussion

All About Mason Bees: *Rich Little*, This comprehensive presentation will include: basic biology, life cycle, identification of desirable nesting sites, nesting system selection for either buying or building, summer management of the bees nesting systems to protect the bees from pests and diseases, cleaning the cocoons in the fall, winter storage of the cocoons, and getting the bees ready for spring.

Native Garden Plant Considerations for Pollinators: *Jen Hayes*, Despite the existence of many pollinator planting lists, it can be difficult to decide exactly what to plant. In this presentation, she will focus on Oregon native plants and identify traits that are attractive to different pollinator groups. She will also discuss the “native vs native cultivar conundrum” and ongoing native cultivar trials in Oregon and across the United States.

Pests Attacking Field Crops in Oregon: Scouting Identifying and Managing: *Dr. Navneet Kaur*, The same pests that attack field crops in Oregon also attack our gardens. Focusing on commonly encountered species of cutworm, armyworm and other insects, methods for detecting an early infestation and options for the management of it will be discussed.

Microbes under your fingernails? An exploration of the garden microbiome and potential transferability to human skin: *Dr. Gwynne Mhuireach*, As we know little about how exposure to soil microbes might affect the health of farmers and gardeners who spend a great deal of time in direct contact with soil, Dr. Mhuireach will introduce the body of research investigating human exposure to environmental microbes, including those associated with soil and plants, and their potential health effects. We will also explore microbial sampling methods and a citizen science project to understand microbial transfer dynamics during gardening.

Friday, July 16 - Descriptions of Concurrent Workshops

Hydroponics, Grow Amazing Vegetables Indoors Year-Round: *Richard Bertram*, New methods make it easy to grow the best tasting green leafy vegetables in your own home. Use shop lights, storage tub(s) and inexpensive nutrients to grow the best tasting greens you will ever eat. Lettuce, kale, Swiss chard, basil and collards are among the vegetables that grow best. Once you make your initial, very modest investment it only costs pennies to produce crop after crop of the best food that you can't buy. In this workshop you will learn how you can build and achieve success with a hydroponic system.

Woody Plant Identification with the OSU Landscape Plant Database: *Heather Stoven*, Being able to identify plants is helpful for variety of reasons, including providing the knowledge to deliver the best environment for a plant's needs, enabling it to thrive in your landscape. This workshop will demonstrate how to use the OSU Landscape Plant Database for identifying woody plants in your yard, neighborhood, or for assisting the community at a Master Gardener Clinic Desk. We will work together through an at-home activity and a Zoom session, so that you feel comfortable using this simple, but effective tool.

Saturday, July 17 - Descriptions of Concurrent Classes

Agricultural adaptations for the urban environment: *Mykl Nelson*, This course focuses on the adaptation of agricultural principles to the urban environment. Topics include: (I) urban environments and infrastructure, (II) urban crop production practices, (III) urban markets and urban farm management.

Organic Vegetable Gardening: Keys for Success: *Weston Miller*, Learn tips for successful organic vegetable gardening. Topics will include organic definitions, soil preparation techniques, organic fertilizer options, as well as organic pest and disease management.

Invasive Species in Oregon: *Dr. Jessica Rendon*, Learn about invasive pests threatening Oregon and a few more looming just on the horizon, including: Japanese beetle, Gypsy moth, Asian giant hornet, Southern pink moth, Spotted lanternfly, Houdini fly, Lily and Viburnum leaf beetles, and the Allium Leafminer! Topics will include their introduction history in the Pacific Northwest, current eradication programs, why they are a threat, how to identify them and look-alikes, and what can be done to help stop their spread.

Biochar: The promise, pitfalls, and potential of an emerging soil amendment:

Kristin Trippe, Biochar, or charcoal that is added to soil, is becoming a widely available soil amendment. We'll discuss the nature of biochar as well as the historical and contemporary uses of biochar. A decision support tool that helps biochar users make decisions about how to use the right biochar at the right time will also be discussed.

Year-Round Pollinator Plants: *Janet Magedanz*, Learn what to grow for a 4-season blooming garden consisting of bulbs, annuals, perennials and shrubs that provide beautiful blooms for your pleasure and the pleasure and nourishment of pollinators such as bees and butterflies.

Saturday, July 17 - Descriptions of Concurrent Workshops

Workshop 3 Title: Insect Identification with iNaturalist: *Gail Langellotto*, Have you ever wondered about the identity of insects in your garden? Traditional methods of insect identification involve the use of taxonomic keys and often require mastery of highly technical skills and vocabulary. For these reasons, insect identification to anything lower than the taxonomic level of Order is beyond the reach of most people. Even with dedicated study, many people may struggle with Family level identifications. But, iNaturalist has made insect identification more accessible to gardeners and other nature lovers. This class will provide an overview of the iNaturalist app, help you engage with the iNaturalist community, connect with other gardeners on our iNaturalist project page, and learn to use the app to identify insects in your garden; Gardeners will be given an assignment in advance of the workshop. During our workshop time, we will critique and identify images, to the lowest taxonomic level, possible

- Workshop Materials: participants will need a smart phone or tablet that can connect to the internet and that has GPS capabilities. To capture better images of small insects, participants may want to consider purchasing an inexpensive macro lens in advance of the workshop.

Title: Growing Pacific Northwest Native Plants for Pollinators: *Signe Danler*: Are you interested in growing PNW native plants in your garden? Are you also interested in attracting native pollinators? This workshop is for you! We'll examine the latest research from OSU and other places on the best native plants for pollinators. You'll discover which are commonly available and will do well in your garden, which are hard to find (but should be more widely grown), and which you should avoid. We'll look at which native pollinators need native plants, and which also make use of non-native plants. Then you'll have an opportunity to select a group of native plants for specific growing conditions



Andony Melathopoulos: As Assistant Professor of Pollinator Health Extension, Dept. of Horticulture at Oregon State University, he is on the steering committee of the Oregon Bee Project where he coordinates pollinator health across state agencies, leads the Oregon Bee Atlas and hosts a weekly podcast called PolliNation.

Rich Little: 2013 Master Gardener of the Year for Linn Co, Rich received his BS in entomology from UC Riverside and retired after a career with the CA Dept of Food & Agriculture in 2010 as a Deputy Agriculture Commissioner.

Jen Hayes: Jen is a graduate student in OSU's Horticulture Department and a member of the Garden Ecology Lab. Passionate about pollinators and native flora, she fell in love with native bees and botany as an undergraduate in the Ricketts Lab at the University of Vermont. Since her first exposure to bee research, she has had the opportunity to work on pollinator studies in Vermont, Ecuador, North Dakota, and Oregon. She's interested in how human-developed landscapes, such as farms and gardens, can achieve the dual goals of pollinator conservation and plant productivity.

Dr. Navneet Kaur: Asst. Professor: Extension Entomologist-Field Crops at OSU. Her research largely focuses on the development and implementation of IPM in diverse cropping systems.

Mykl Nelson: instructor of Urban Agriculture for Oregon State University, his graduate research focused on analyzing urban garden soils and comparing composition between raised beds and in-ground beds. From steering his first tractor above row crops in Wyoming to building his first greenhouse in Colorado, he's subsequently worked on various organic forms in Oregon.

Dr. Jessica Rendon: works for the Oregon Department of Agriculture's Insect Pest Prevention and Management Program. Work alongside fellow entomologists and colleagues, they monitor, identify, and eradicate invasive insect species from Oregon. She has also had worked on the Oregon Bee Project, a cooperative effort between the Oregon Department of Agriculture, the Oregon State University Extension Service, the Oregon Department of Forestry, and a diverse set of stakeholders who are actively engaged in caring for our native and managed bee species. She has a BS degree in Environmental Science from Humboldt State University and a PhD in Entomology from the University of Idaho in 2019.

Kristin Trippe: a Research Soil Microbiologist with the USDA Agricultural Research Service based in Corvallis, Oregon. Her laboratory studies agronomic practices that improve ability soil health, including the addition biochar-based amendments. Kristin serves as a Board Member of the US Biochar Initiative and is the Chair of the Soil Biology and Biochemistry Division of the Soil Science Society of America.

Janet Magedanz: Janet’s interest in gardening began when living in N. Dakota and matured after several garden tours to Great Britain. A plant nerd who loves to talk who about plants, Janet has opened her garden to many tours. As a Master Gardener, she has increased her love of gardening and willingness to share what she has learned.

Richard Bertram: Umatilla County Master Gardener. After a career in elevator construction and industrial automation control systems, Richard retired to Pendleton where he pursued his lifelong passion for hydroponics. He built a successful hydroponic system in his backyard which the bugs most appreciated. He then moved his system to grow vegetables indoors using an easy to build and cost-effective method which continues to produce an abundance of vegetables.

Heather Stoven: Extension Horticulturist with Oregon State University. She is located in Yamhill County and coordinates the county’s Master Gardener and Small Farms programs. Heather teaches plant identification for Master Gardener training and has often taught about the Landscape Plant ID tool in these trainings, as well as during the winter 2021 Elevated MG Skills Training course.

Gail Langellotto: Professor of Horticulture and the statewide coordinator of OSU Extension's Master Gardener Program. She has a M.S. and a Ph.D. in entomology, and is the principle investigator of OSU's Garden Ecology Lab

Signe Danler: A lifelong gardener and plant nerd. She has lived in the PNW for over 40 years, and has spent a fair amount of that time enjoying, studying and learning about native plants. She puts her expertise and training in home horticulture, ecological landscaping and urban forestry to good use teaching the online Extension MG course. She also designs residential and commercial landscapes, specializing in regenerative gardening and landscaping practices. Signe recently authored a new training module for the online MG course on Gardening with PNW Native Plants. She also co-authored an Extension publication, “Protecting and enhancing pollinators in Urban Landscapes”. For this she researched evidence-based documentation of pollinator plant preferences, and created sample landscape designs for pollinator gardens.



The Grass Roots Bookstore has an amazing selection of gardening, cooking and food preservation books as well as other items that you won’t want to miss. You will find the link to their website on the Mini-College website: <https://www.mastergardenerminicollege.org>. Grass Roots is an independent bookstore and is not affiliated with OMGA or Oregon State University. Any purchases made through the bookstore are separate from the conference and will be shipped directly to you.

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ANNUALS

BIOCHAR

BULBS

BUSH

BUTTERFLIES

COLLABORATE

CONNECT

CULTIVATE

ECOLOGICAL

EXTENSION

FLORA

GARDENER

GRASSROOTS

HYDROPONICS

iNATURALIST

INVASIVE

JAPANESE BEETLE

KEYNOTE

MASON BEES

MASTER

MICROBES

MINI COLLEGE

PERENNIALS

PLANT IDENTIFICATION

POLLINATORS

SCIENCED BASED

SHRUBS

SILENT AUCTION

SOIL

TAXONOMIC

VEGETABLE

VOLUNTEER

ZOOM



My Notes: