Gardening with Native Plants for Pollinators
Online September 14, 3 pm

Houseplants: Get your Green on...indoors!

This class will cover the basics of indoor houseplant culture, including watering, lighting, and pest problems. A short list of plants that are easy-to-grow for all gardeners will be introduced. As fall transitions into winter, having greenery indoors benefits us in many positive ways!

When: Sep 21, 2021 6:30 to 7:45 PM Pacific Time

Register in advance for this webinar:
https://oregonstate.zoom.us/webinar/register/WN_VTBff_LvQmmnfi4bg_WAA
August! The summer crops are producing. The weeds and I are waging our annual battle. The fall and winter crops are seeded, so let’s explore the flowers which grace the garden. When I started working in the Chef’s garden 8 years ago, there were no flowers in sight. I have changed that dramatically. I am a vegetable gardener not a flower gardener, but there are many reasons for planting flowers in the vegetable garden.

I want the flowers to fulfill more than one purpose though lately, I’ve relaxed that personal rule, as I’ll explain later. They also can’t be fussy. I mean who on earth has time or the inclination to dig dahlias each year? Think “survival of the fittest”. If they survive the winter, great! If not, then go shopping. It’s not like we have to go to outer Mongolia to purchase more dahlia tubers.

**Reason #1:**
My first reason for flowers was to provide food, (nectar and pollen), for our honey bees. Specifically for the honey bees, I’ve planted saffron crocus which blooms in October when little else is available and we harvest for the kitchen. Sunflowers are cheerful, provide nectar and pollen when there is not much else blooming, distract the viewers from looking at propane tanks and fencing, and feed the birds at the end of blooming. I do not harvest the seeds because life is too short for that endeavor! Goldenrod, (*Solidago canadensis*) is supposed to be a great plant for honey bees. Well, they pretty much ignore it. (Apparently they don’t read the same books that we do!) However, the native bees love it. The honey bees swarm over mint, oregano, thyme, and basil flowers. Naturally all of these are also used in the kitchen. We have lavender spread throughout the garden. Not only do the bumblebees love it, but the kitchen and the spa use it as well.

**Reason #2:**
The second reason was to provide edible flowers for the restaurant. I harvest the following edible flowers: violas, gem marigolds, borage, lavender,
chamomile, and bachelor buttons. All of these flowers are beloved by bumblebees and honey bees. And yes, all of them are edible by humans, not just the local caterpillars and aphids (wait, aphids suck juices...).

**Reason #3:**
The third reason was to provide a cutting garden for the spa and the banquets department. It is harder to find two purposes for the cutting flowers, so I decided that flowers being used by two different departments counts. We have several dahlias, which both the spa and banquets use. They bloom to the end of the event season in September and are quite lovely lining the walkway and scattered in other flower beds. A lesser known flower is the Mexican sunflower or *Tithonia rotundifolia*. These are shorter than regular sunflowers and produce massive amounts of orange/red flowers which the bees like, but they are meant for cutting flowers. We also have cosmos and scabiosas for cutting. Bees actually like both of these flowers. I really love that they self-seed. So all I need to do in spring is transplant them to where they are most useful. (This is not in the middle of the lettuce or tomatoes!)

**Reason #4:** The fourth reason was to provide food for beneficial insects beyond honey bees and bumblebees. I want the garden to feed beneficial insects. I want the predators and parasitoids to flourish in the garden. I want them to make life difficult for aphids, and white flies, and leaf miners. I knew that I had read an OSU publication at one point in time which influenced my flower choices. After some digging I found it, (PNW 550 “Encouraging Beneficial Insects in Your Garden”). Now I remember just why I had planted yarrow, chamomile, coreopsis, cosmos, goldenrod, Mexican sunflowers, alyssum, and scabiosa. It turns out that despite appearances to the contrary, I did have a plan those many years ago which I had forgotten about!

I think of all of these flowers, alyssum is my favorite. They are the perfect flower for a busy vegetable gardener. I let it attract and feed the predator hover flies which eat aphids. It also feeds tachinid flies which are a parasitoid which helps control everybody’s favorite, imported cabbage worms! It’s resilient and blooms all summer. I don’t have to deadhead them. In fact I give them a trim using the careful technique of a weed eater. Give them some fertilizer and water and they are good to go for their next round.

So don’t be shy about using some of your valuable ground for flowers to feed other critters or to feed people’s souls with beautiful flower arrangements.

Anna Ashby
Master Gardener
Master Beekeeper
First 2021 Tour (of Tribal Native Plant Material Program)

Confederated Tribes of Grand Ronde

Twenty-two YCMGA members received a most informative tour of the Grand Ronde Native Plant Garden & Nursery on July 24, 2021. Jeremy Ojua, Native Plant Nursery Supervisor and master weed picker, led the tour. Many of us knew him from when he attended our MG training in 2020.

We learned much about the plants the native Americans of this area used for their survival. The “Great Camas” *Camassia leichtlinii* was particularly important to them. Jeremy has a raised bed where he raises and harvests them for the cultural center on the reservation.

He is also reestablishing native plant habitat on the property with the plants he raises.

As a gardener on a large scale, he shares the problems we all have: deer, voles, heat, cold, wind & water issues. Those problems are universal!

Thanks to our tour coordinator, Polly Blum, for never giving up through Covid 19 so this fascinating tour would eventually happen. And we thank Jeremy for taking half of his work day to share his knowledge and enthusiasm with us.

Nancy Woodworth

Led by Jeremy Ojua, a tour of the Grande Ronde eNative Plant Garden and Nursery, where natives are raised for planting throughout the Willamette Valley.
MG Demo Garden

New bubbler

Perennial, Annual Background

Annual Garden

Perennial Garden
We are living through a pandemic; we suffered devastating forest fires with smoke conditions that were hazardous to our health; we had a major ice storm with many mature trees crashing to the ground due to the weight of the ice; and most recently, we endured record-breaking high temperatures. All of these events have emphasized, more than ever, the resilience of plants.

There is no denying that many plants have suffered, and perhaps the extreme heat caused more damage than either the smoke or the ice. The impact of climate change and this extreme heat provide an opportunity to observe our gardens and make some decisions regarding altering the current plant palate.

These are difficult decisions to make because we all have favorite plants that may sometimes even be a focal point in the garden. There are many lessons that we can learn from the recent heat spell. First, we can gain valuable information concerning which plants did well in the heat.

The three olive trees (Olea ‘Arbequina’) in our garden are in an extremely hot, full-sun location and they came through with no trace of leaf burn. However, this was not the case with my neighbor’s street tree, Stewartia pseudocamellia (Japanese stewartia). Several days before the heatwave, I took some photos of the beautiful white flowers against a background of deep, dense green leaves. Several days later, this tree was badly scorched.

With some mature trees and shrubs, it may be some months before we know the extent of possible damage. I have heard from several arborists that we should not discount the stress that trees like Douglas fir, maple, oak, etc., can be under due to our very dry conditions. The symptoms might not be evident for even years in the future. There were certainly many plants in my garden that came through the heatwave with scorched leaves. In spite of my watering them in the morning and spraying them sometimes twice a day, and then watering again in the evening, I could not prevent scorching.

In my garden ferns, hydrangea, rhododendrons, and fuchsias suffered as well as Japanese stewartia. Another neighbor has a row of Ceanothus ‘Victoria’ planted in a location where they receive the hot afternoon sun. They came through the heat looking just as good as ever. Another plant that will tolerate conditions similar to Ceanothus, is Arctostaphylos (Manzanita). These plants make a beautiful statement in the garden with their copper-colored bark and often twisty growth habit. They also have many different cultivars with differing growth habits that vary from ground covers to medium and large shrubs. Some can even be like small trees. Both of these plants deserve increased recognition because if given the right conditions, they will perform very well and are not prone to leaf scorch.

Some garden centers already have special sections for heat-
A New Problem from Wildland Fires

With the continuing devastating wildland fires in Oregon, there is a new problem. Even though tree replacement is required by law, there are not enough seedlings available.

It takes two years for seedlings to grow big enough to plant. If nurseries take the risk of growing on spec, they have to dump seedlings that didn’t sell. After the recession of 2008–2009, many nurseries moved away from growing on spec and now grow only by order.

In 1957, the state mitigated the supply-demand issue by opening Phipps Nursery, which grew forest seedlings for family-owned woodlands on spec. But after 50 years, the nursery closed in 2007. Privately owned nurseries selling by order stepped into the fray, but they aren’t growing enough trees and are ill-equipped for unpredictable events like wildfires.

To make matters worse, appropriate seed must be used — seed that’s adapted to the place where it will be grown. The correct species will grow into a tree with the same needs. To assure the right seed, it must be ordered two-years in advance of when landowners would need trees. Finally, should we be planting trees from Southern climates to account for coming climate changes? There is no answer yet.

Mike Darcy
“Digger Magazine”
Oregon Nursery Association
August 2021

In the Heat of the Garden, continued

tolerant plants, but in most cases these sections should be expanded. Collectively, we can work together to encourage the continuing pursuit of our favorite hobby. It is important that garden centers and gardeners emphasize the enthusiasm of working with the land to improve our environment.

It is vital that we all work to keep gardening at the forefront of this new generation of gardeners. We must be eager to convey that gardening is an enjoyable hobby, not a burden and that the joys are very satisfying.

For a starter list of popular scorch-resistant flowers:

homesteading.com/drought-tolerant-plants/

For a beginner list of scorch-resistant landscaping shrubs:

spruce.com/drought-tolerant-shrubs
If you are looking for a pest-resistant, deer-deterring, disease-resistant plant that requires little care and only occasional watering, look at barberries. New cultivars (and there are dozens) are being introduced regularly, and now there are a lot of dwarf and sterile varieties in addition to the larger traditional bushes. Here is a link to a comprehensive article from the journal of the Oregon Nursery Association, listing many specific cultivars with complete and unbiased descriptions of each.

USE THIS SITE TO PICK THE BARBERRY PRECISELY MATCHED TO YOUR SITE AND NEEDS.

diggermagazine.com/the-impervious-barberry/
A large group of YCMGA members got a special tour of this **unique nursery and garden** on August 18. Located in S.E. Portland, Norm and Deb Jacobs have assembled on half an acre an astounding number of plants not found in your average nursery. They specialize in Japanese maples, dwarf conifers and *Epimedium* and they are all extremely unusual, hard to find, and lovely to look at.

On a small island surrounded by Johnson Creek, their home (accessed by a bridge) is surrounded by the mature garden. This garden showcases plants at their mature stage, so purchasing is pleasantly easy as you can see the form and height of a plant you are interested in. Another plus is that both Norm and Deb know their plants’ likes and dislikes: no consulting with a reference! The Wiser Pavilion demonstration garden rejuvenation committee sent two of their members to purchase plants for their rock garden. Finally plants that are right for the site will be planted and thrive due to Norm and Deb’s recommendations. Since this is their home, an appointment is necessary to visit and shop.

Thanks again to Polly Blum, YCMGA Tour Director

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By Nancy Woodworth
As fall arrives and we start to see rain again, diseases can start to appear in the garden. One of these diseases that can occur in cooler, wet periods is late blight (*Phytophthora infestans*) in tomato.

This fungal-like organism (oomycete) also infects tomato relatives such as potato and eggplant. The disease can infect leaves, stems and fruits, causing water soaked spots which turn into purplish-black lesions. Late blight spreads either by spores blown in wind or by infected potato tubers from the previous year.

To avoid this disease, plant disease-free seedlings, destroy volunteer potatoes or tomatoes, remove infected plants and debris, utilize good plant spacing and avoid overhead watering. Fungicides are also available for gardeners if necessary.

For more information: [Phytophthorainfestanstomatoes.wsu.edu/Search/](http://Phytophthorainfestanstomatoes.wsu.edu/Search/)
Hello everyone, I hope you are all staying safe and enjoying our cooler weather. I would like to give some updates, to the best of my ability, during this incredibly fast-paced and changing time.

As you were notified earlier, our extension office has scaled back the office hours once again and have gone back to remote intakes. I appreciate all your flexibility during these changes due to COVID. I realized this may affect trainees as you work to finish up your hours. At this time we will still have outdoor activities such as demo garden, the community garden, and farmers markets, so hopefully this will allow you to continue moving forward with completion of hours. We hope to be able to offer hands-on activities that complement the lectures. We will also still be working on intakes that come into the office virtually. Please contact Carla or myself as you have questions about completing the 40 hours required for graduation. For certified Master Gardeners, you do not have a volunteer hour requirement, but you must complete 10 hours of continuing education hours to recertify for 2022. One good source of webinars is the Level Up Series which is held the second Tuesday of each month at 3 pm. Webinars are also recorded for later viewing.

https://extension.oregonstate.edu/mg/growing-oregon-gardeners-level-series

We are planning for a 2022 Master Gardener training class at this time. It will be different from other years in that we will be using the OSU online MG training curriculum for the lecture portion of the class which trainees will watch at home. We are hoping to offer in-person hands-on activities for trainees which will complement the online lecture material on Thursdays. The hands-on activities will be for shorter periods of time in small groups and we hope to take advantage of some of our gardens for teaching these classes. We will send additional information as we firm up our schedule, so keep watching your emails for this and other program updates.

Thank you again for all your time and flexibility during these changing times.
Thanks to its plant-based diet, the elephant mosquito has generally flown below our radar. Instead, we have long concerned ourselves with the three percent of mosquito species that infect us with zoonotic diseases like malaria, dengue fever and Zika virus. For humans, mosquitoes are the deadliest animals on Earth. But the long-legged, sugar-sipping elephant mosquito is one of many species that might be doing more good for humanity than bad.

Aside from the 100 or so species that commonly spread disease to humans, there are thousands more with fascinating behaviors and gorgeous bodies that we barely understand, yet we still call for their indiscriminate eradication. Magnificently iridescent mosquitoes whose larvae prey on dangerous species, the ones that pollinate flowers at night, the single species known to risk its life to protect its eggs from harm: all deserve our respect.

As the elephant mosquito buzzes from flower to flower, its sapphire-blue and silver-striped body glints in the sunlight. Brilliant scales along its back and legs reflect the diverse palette of colors mosquitoes have evolved to wear. Some species match hues to blend in with their surroundings while others stand out in shimmering style. Their plumages range from iridescent violets and golden greens to brilliant matte orange and black and white polka dots. Many others, like tiger mosquitoes, don prison stripes which are thought to confuse predators and hosts by making it harder to visually lock on to their form.

One especially fabulous species, *Sabethes cyaneus*, is wrapped in violets and blues from head to toe. They are the Hollywood showgirls of the mosquito world, and include 41 species. Both males and females possess elongated, feather-like scales on their second pair of legs, a look reminiscent of the fringed boots worn by the Dallas Cowboys cheerleaders. It has been found that these decorations attract mates.

Males and females are known to perfectly synchronize the tone of the buzzing within a matter of seconds by matching the frequency of their prospective mate’s wing beats. It’s thought that harmonized flying frequencies makes mating in mid-air easier. For *S. cyaneus*, a mate’s musical skills don’t matter as long as they can dance. They engage in a courtship as elaborate as their feathery physiques — and they almost always do it hanging upside-down. There are also male mosquitoes with enormous fluffy antennae for sniffing out far away females while others form dense swarms and mate as they fall through the air. And in a strangely Lolita-esque style, males of the New Zealand genus *Opifex* are known to patrol water pools, guarding and attending to growing pupae. They wait to impreg-
nate the adult females as soon as, or even before, they completely emerge from their casing.

When a female elephant mosquito is ready to lay her eggs, she will seek out a tree hole to deposit her clutch. In a style bound to make human mothers cringe, she deposits her eggs in mid-air by flinging them from her abdomen, one-by-one, into the water while she hovers outside the hole. This egg-catapulting behavior may serve to protect her from predators or any catty, dive-bombing mosquito moms that have already laid claim to the pool.

Maternal care among mosquitoes is virtually unheard of, but there is at least one mosquito mom that breaks the mold: the hairy-lipped mosquito, *Trichoprosopon digitatum*.

Floating on rainwater cupped by fruit husks left behind by monkeys, hairy-lipped mosquito eggs are susceptible to being splashed onto the ground by a raindrop, or carried away if the husk overflows. The mother mosquito braces herself above her brood and guards them fearlessly until they hatch, edging them away from incoming insects, water and debris.

When the eggs of an elephant mosquito hatch, they can grow far larger than most mosquito larvae, nearly the thickness of a pencil. Most larvae filter-feed the water for algae, detritus and other microorganisms. But elephant mosquito larvae are spiny, insatiable hunters. Fortunately for us, they readily munch on the wriggling young of other mosquitoes. This predatory nature has not gone unnoticed; elephant mosquitoes have been deployed as a bio-control method for disease vector mosquitoes in places like Texas, Vietnam, Uganda and Samoa.

One elephant mosquito larva can eat 30 to 40 of the piddly little ones every day. Their hearty diet as youngsters provides enough protein to last their entire adult life, so they have no need for a blood meal to lay healthy eggs.

*Cypress Hansen, Smithsonian, 8-19-21*
(Sent in by Terry Hart)