2021 Awards and Graduation Ceremony

The YCMGA Awards and Graduation Ceremony will be online (on your computer) this year. Don't forget to put it ON YOUR CAENDAR!

* * *

In this Issue

- YCMGA Committee Chairs . . . 1
- MG National Award . . . . . 2
- Share Your Skills . . . . . . 3
- Sedum v. Sempervivum . . . 3
- Chef’s Garden . . . . . . . 4 & 5
- Day in the Park . . . . . 6 & 7
- Polk County Photos . . . 8 & 9
- Dung Beetle . . . . . . . . 10
- Crimes Against Nature . . . 10
- Pesky Profile . . . . . . . 11
- Heather’s Highlights . . . . 11
- Bee Immunity . . . . . . . 12
- Survivor Tree . . . . . . . 12
- Organophosphates . . . . 13
- Mole Facts . . . . . . . . 13
- YCMGA Board Members . . 14

Ox-eye Daisy
(Leucanthemum vulgare) growing in your soil means the soil is acidic, soggy, and has poor fertility.

https://ycmga.org/  Facebook.com/yamhillcountymastergardeners
WASHINGTON – Today, the National Association of Conservation Districts (NACD) and the Pollinator Partnership (P2) announced Dan and Michael O’Loughlin of O’Loughlin Farms as the winners of the 2021 U.S. Farmer-Rancher Pollinator Conservation Award.

The award, which recognizes individuals and families in the farm and ranch community who contribute significantly to pollinator species protection and conservation, was awarded by NACD CEO Jeremy Peters during the 2021 North American Pollinator Protection Campaign International Conference.

Dan and Michael partner with their local Yamhill County Soil and Water Conservation District (SWCD), on a number of endeavors, including establishing a 1/3-mile-long beetle bank and testing seed mixes. Their commitment to pollinators through establishing habitat and conducting natural pest control is a commitment to enhanced biodiversity and, ultimately, better ecosystems within their fields.

O’Loughlin Farms is a 200-acre operation that primarily grows tall fescue seed. In addition to their considerable pollinator-related activities, the brothers conduct community outreach in a barn on their property, which they converted into a classroom that can fit up to 100 people.

“Dan and Michael are committed not only to establishing pollinator habitat, but to conducting pollinator education and outreach,” P2 Executive Director Kelly Rourke said. “From youth to gardeners, SWCDs to growers, the O’Loughlin brothers work to amplify the importance of pollinator conservation.”

The O’Loughlins have participated in the Oregon Bee Atlas, created pollinator habitat at schools through the State School Garden Network, and serve as leaders in the State Pollinator Protection Initiative, the Oregon Bee Project.

For information on how to nominate a pollinator conservation-minded farmer or rancher for the 2022 award, visit www.pollinator.org/awards.
Share Your Energy & Skills!

Share your energy and Skills
Volunteer for one or more of these positions:

>> > Publicity Committee chairperson
>> > “Spring-into-Gardening” chairperson
>> > Assistant website editor
>> > Perennial Propagation chairperson
>> > Annual Propagation chairperson

For descriptions of these jobs and any questions, use the “YCMGA Committee Chairpersons” list on page one of this Grapevine.

All of these positions need to be filled ASAP

Sedum versus Sempervivum

Both sedum and sempervivum plants are hardy succulents (plants which store water in their leaves). Both are noted for being highly drought-tolerant and disease-resistant.

Sempervivum (such as “hens and chicks”) are an extensive group with a rosette-forming type of growth habit. They always grow from the center of the rosette in a spiral pattern.

Sedum, though, are either clumping or creeping. Clumping hybrids grow 1 to 3 feet tall. Creeping types stay low to the ground, spreading a few feet in either direction. Both types feature succulent leaves and small, colorful clusters of flowers.
November is leaf month. Well, we don’t have to handle many tree leaves in the garden, but we do have plenty of fall clean-up to accomplish. Not only is there a plethora of dying stalks of various plant material, but we also have the weeds that in our busyness, we have ignored. Have you noticed that fall rains give weeds a new lease on life?

In the hardworking Chef’s Garden, we grow harvestable crops year-round. We try to not have bare ground, but to have cover crops planted when we can.

The fall/winter crops are planted in soil that is fallow during the spring/summer production months. The spring/summer cover crop is lacy phacelia. The bees (honey, bumble, and native) all love these flowers. The flowers are also beloved by those predatory insects that help keep aphids and cabbage moths in check.

The spring/summer crops are planted in soil that was fallow during fall/winter. The fall/winter cover crop is a blend of rye, vetch, crimson clover, field peas, and buckwheat. The buckwheat never amounts to much since it is a warm season plant, but every few years we’ll have a warm enough fall that we’ll have some buckwheat that germinates and grows until the first frost. It helps cover the soil and provides biomass which rots over winter. But the field peas do germinate in fall and we harvest the pea shoots all winter and into spring.

The first crops to be removed are spent bush beans. I’m always glad to see them go as I get tired of picking them.

Then we hoe out weeds, lightly sow cover crop seed, rake it in and call it good. If we are fortunate, like we were this year, we’ll scramble to get the cover crop sown just before a good soaking rain so we don’t have to worry about watering it in. (It’s always good to look for the positives in rain since it complicates working situations.)

The next to go are the winter squash vines. They are more work to hoe since we haven’t been able to tread the rows for the past couple of months. Depending on where they are in the garden we might have to remove goose grass, purslane, spotted-spurge, mallow, or our nemesis, quack grass! At any rate, we remove the weeds, sow and rake in the cover crop.
And so it goes through all fall clean-up. One old crop followed by the next until we’re finished. What do we do with the plant debris? The ideal situation would be to return all that plant material with its stored nutrients to the garden soil. However, we do not have a hot enough compost pile to kill plant pathogens. So the more problem-prone plants such as members of the Solanaceae family and brassica family go into yard debris bins. The other plants get roughly chopped then added to our towering compost pile.

Autumn is also the time we catch up on turning the compost piles. Some years we are better than others about turning it a couple of times during the warm months, but by November, we have a backlog of material that needs to be chopped and added. The limiting factor is the strength and endurance of the gardeners’ arms for the chopping portion of the project.

The last part of the garden that we clean up is the flower beds. They have perennials in them so we do not plant cover crop there hence no rush for removing dead plants. Remember we are on display all winter, so we tend to keep things fairly tidy along the paths. The flower beds that are across an expanse of wet grass and less likely to be visited can be less tidy, leaving homes for insects intact. These less-tended beds are where we let violas self-seed so we can harvest them all winter since the flowers are edible.

There is always something to do in the chef’s garden. We do like the less-hurried pace of fall/winter. There is no rush on getting plant material chopped for the compost pile. There is a finite amount that can go into the yard debris bins. So we enjoy a breather. It gives us time to think and re-group. Time to assess what worked and what didn’t. It’s a time to make copious notes while we still remember. It’s a time to enjoy.
O
tober 1st was a beautiful fall day to get inspired by Polk County Master Gardeners and their creation of a botanical garden in Independence, Oregon.

This is a 7.3 acre park, owned by the city of Independence, and when this chapter approached the city offering to reclaim the site (which was overgrown with blackberries and invasives), restore the riparian area and to plant demonstration gardens, the city was very enthusiastic.

Since 2012 this chapter has worked extensively clearing the overgrown land, enriching the topsoil, designing the park, installing irrigation and planting. Look at the photo of the layout and you will see the twenty-six themed areas, which are now well-established, healthy and blooming.

Our tour group was overwhelmed by the individual gardens. Trails course around and through them with signage sophisticated, colorful and informative. We had three Master Gardeners from Polk County—Bill, Becky & Lorena—taking time out from their usual gardening duties at the park to accompany us from garden to garden, explaining how this extraordinary park materialized through the work of volunteers. We also visited with Neil Bell, former extension agent for Polk County. He is now a retiree from OSU and is volunteering at this garden!

From the accompanying photos, you can see their multi-use building for classes and demonstrations. The Public Works department of Independence laid an 8-foot-wide concrete walkway from one end of the park to the other. They also have a 20x40 greenhouse, donated by the local Rotary Club.

Donations of cash and hard goods are a main funding source. As the residents of the city have seen the incredible transformation of this area, they want to support its maintenance and all the Master Gardeners have to do is ask for funding and some group or the city provides it. (See the photo of the list of just the major supporters).
The latest installation is the Peace Garden. It was designed around a special ginkgo tree that was grown from seed from a rare gingko that survived the bombing of Hiroshima.

Independence applied to the commission and was one of several cities in Oregon chosen to receive a tree. Every component of the Peace Garden is representative of peace and an end to war, from a display of “war debris” to each plant in the garden.

Thanks again to Polly Blum for giving our tour members a memorable day.

Nancy Woodworth

For more photos and details about the park, go to this website:
https://www.ci.independence.or.us/recreation/mt-fir-park
More Photos from Polk County

Stream & ponds provide varied habitat

Lavish use of hardscaping

MG’s building, meeting room

Yamhill MG’s with Polk guide

Liberal use of QR code on signs

Encouraging approach

8’ wide walkways

Adults in Children’s’ Garden
Pollinator Garden

Recently-planted Peace Garden

"Little Library"

Children’s ‘Touch’ Garden

Greenhouse

Envious Yamhill gardeners at Children's' Garden

One of many specimen trees

Arbor built by H.S. students
You’ve heard of dung beetles, but you might not know their intrinsic value in the environment. Scientists who have studied them refer to that as “dung beetle blindness,” as most people are blind to the importance and distinctiveness of these insects.

Dung beetles are actually effective at suppressing human and livestock pathogens, promoting food safety, reducing fly populations, and improving soil health.

In a three-year project, a professor from the University of Georgia and a researcher from Washington State University studied dung beetle behavior. They did their research in 70 fields in California, Oregon, and Washington on conventional, organic, and integrated livestock-and-produce farms. So how did they do the on-site research?

They spent their time driving a van across the West, with a load of with cooled pig feces. They would visit farms, trap some native dung beetles, and leave blobs of pig manure in fields. Later they would come back and study how much dung had been removed.

To test the ability of the beetles to reduce E. coli bacteria, the scientists fed beetles more pig dung, this time embellished with E. coli. They found that certain species of dung beetles eliminated 90% or more of the E.coli bacteria within several days. This is what makes the beetles valuable for food producers: wild (and domestic) animal feces usually carry the bacterium, and it is often found in food-producing fields. The beetles’ removal of the pathogen is much more effective than washing the produce.

In order to obtain dung beetles, farmers (and gardeners) need only encourage the indigenous beetles. Suggestions are:

- **Create beetle banks**
- **Plant hedgerows**
- **Reduce or avoid the use of insecticides**
- **Leave some areas untilled.**
- **Grow crops in rotation.**

Sierra McClain, Capital Press, 5-21
Fall is the time of the fungus, so we often get mushroom or fungal samples at the MG clinic desk at this time of year. A sample that came in recently, however, took the cake! It was *Pisolithus arhizus* which has many colorful common names such as dyemaker’s puff ball and “dog turd fungus”.

Yep, never thought I would be typing those words for the Grapevine! A landowner found the fungus sticking out of the ground in a field and was curious what sort of creature it was. It was given away as a fungus by the powdery spores on the outside of the organism. When touched, it left brown marks on your hand, which made sense since the fungus can be used for dying fabric.

This fungus is widely distributed in the US and is beneficial. It has a symbiotic relationship with conifers and can provide benefits for reclamation and reforestation projects. I guess the old adage fits here “Don’t judge a book by its cover!”

Hope you are all having a good fall thus far and are sipping a warm cup of cider as you read this! We had a successful fall season at the Mac and Newberg Farmers’ Markets with lots of in-person engagement with the public which was fun.

The harvest season is winding down in the Community Garden and the demo garden is also being put to bed. A few committees are gearing up, however; Spring-into-Gardening (yet to be renamed), Garden-to-Table and the mentor committee are hard at work preparing for the spring. Carla has been burning the midnight oil getting us ready for graduation and awards night which is online on November 17th at 6 pm.

Please check your emails for Zoom invitation info. so we can congratulate our awards winners and graduating trainees. Warm appreciation to Carla for reaching out to everyone for volunteer hour submissions and thank you to all of you who worked with her to get your hours entered for recertification.

Next year should trend closer to normal, especially with MG training starting up in February. Registration is now open. Please encourage your friends and neighbors to sign up. The class will be a hybrid, with lectures online and hands-on activities on Thursday afternoons. We currently have a few participants registered and we are looking forward to a good year ahead!
A new technology could make some bee species immune to many pesticides, which currently cause beekeepers to lose about a third of hives annually.

Studies show that in 98% of hives nationwide, wax and pollen are contaminated with an average of six pesticides, which can kill bees or reduce bee health. The solution: a microparticle sponge that, when fed to honey bees in sugar water or pollen patties, could give them immunity to pesticides.

Tiny micro-sponges made from insect proteins and special absorbent oils are fed to bees in pollen patties or sugar water. Once in the digestive tract, the sponges absorb poisons that the bees eventually excrete naturally, making the bees 100% immune to the pesticides.

But what about wild and native pollinators?

The discovery has stirred widespread excitement, but critics say the invention could have unintended negative consequences, especially for wild bees.

The discovery is bad news for native bees because the products likely can’t be fed to most of North America’s 4,000 wild species. The discovery could inadvertently “give life” to extended use of organophosphates.

Andony Melathopoulos, pollinator health expert at OSU, also expressed concern for bees and other beneficial insects that are not fed the supplement.

There is a danger this invention could give license to more pesticide spraying, though farmers are already not spraying more than they need to because chemicals are expensive.

It’s not clear yet who would pay for the supplement: beekeepers, farmers or both.

Despite his concerns, Melathopoulos, of OSU, said he could see how the product “would open opportunities for growers in Oregon, many of whom have no alternative to using insecticides that are older and generally toxic to bees.”

Sierra Dawn McClain, Capital Press, 6-28-21
Organophosphates are a group of human-made chemicals that poison insects and mammals. Organophosphates are the most widely used insecticides today. They are used in agriculture, the home, gardens, and even veterinary practice.

Organophosphate insecticides (such as malathion, diazinon, chlorpyrifos, sevin, and many others) are a type of pesticide that works by damaging an enzyme in the body, an enzyme which is critical for controlling nerve signals in the body.

The damage to this enzyme kills pests and may cause unwanted side effects in exposed humans. All organophosphates have a common mechanism of toxicity and can cause similar symptoms in humans who have too much exposure. In fact, they work on the same principles as nerve gasses such as sarin.

After organophosphates are applied, they may be present in the soil, surface waters, and on the surface of the plants. Rain can also wash organophosphates which are on soil and plant surfaces into surface waters. They can then move through the soil and contaminate ground water.

Amazing Mole Facts...

- Mole holes aerate the soil and improve drainage.
- A mole can dig 10 feet of tunnel per hour.
- A mole’s powerful front paws and long claws allow it to “swim” through soil.
- Mole fur stands straight up, so the mole can easily and quickly back up in the burrow.
- A male mole is a “boar,” a female is a “sow,” and a group is a “labor.”
- Moles do not hibernate.
- Moles eat earthworms, snails, slugs, grubs, and other insects (but not plants).
- A star-nosed mole can locate, identify, and eat its prey in 2/10ths of a second.
- Its nose is one of the most sensitive or all organs—of all mammals.
- Moles have very poor eyesight, but are not blind.
- They can sense the vibrations and electrical impulses of their prey.
- With 100,000 nerve fibers (compared to our 24!), moles can even smell underwater.
- Mole fur is the softest all-body fur of any mammal.
- Moles have specialized blood cells to survive the oxygen-poor environment of their tunnels.
Yamhill County Extension
2050 NE Lafayette Avenue
McMinnville, OR 97128-9333

http://extension.oregonstate.edu/yamhill

Yamhill County Master Gardener™ Association
Executive Board
President: Susanne Beukema
President-Elect: Rita Canales
Secretary: Donn Callaham
Treasurer: Amy Curtis
OMGA Rep: Polly Blum
OMGA Alt. Rep: Tom Canales
Members at Large: Kelly Moser and Tonia Beebe

The Grapevine is published monthly by the Yamhill County OSU Extension Office in cooperation with the Yamhill County Master Gardener™ Association, 2050 Lafayette Avenue, McMinnville, OR 97128-9333. (503) 434-7517.

For free subscription by email, send request to above address.

General meetings of the Yamhill County Master Gardeners™ Association are announced in this newsletter and are open to the public.

Contributors vary by monthly edition.

Grapevine Editor: Donn Callaham
http://extension.oregonstate.edu/yamhill/