



Seeds For Thought

August 2021 Volume 21, Issue 3

A newsletter of the
Master Gardener
Foundation of
Washington State

From the President

~~Don Enstrom, MGFWS President

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MGFWS



Iris photo by Erin
Landon Grays Harbor
County Master
Gardener



Living through the COVID-19 pandemic over the last year and a half has certainly been difficult. Focusing on protecting our health and the health of those around us, many of us have struggled to remain engaged as Master Gardener volunteers. After the first few months of hunkering down, however, we began to call and e-mail each other with ideas for how we might continue to meet the educational and advising needs of our

communities within the constraints of the pandemic. We discovered Zoom, YouTube, etc., and learned how to meet & teach remotely. We developed websites and databases that allowed us to continue providing Answer/Plant Clinic services. We refocused our demo garden activities to support our community food banks. We spent time thinking about our desire to increase diversity and inclusiveness in our recruiting. And we even spent time in our own yards practicing our skills on gardens in various stages of neglect. (The cobbler's children have no shoes ...)

I'm proud to say that the changes we have and continue to make to better serve our communities within the program's pandemic constraints were largely developed and implemented by small groups of Master Gardeners across the state. In many cases, these changes allowed us to reach a broader audience, with live and recorded content available free to anyone with an internet connection. As extension offices re-open and MG programs begin to return to "normal", we want to continue to reap the benefits of the methods and technologies we have adopted during the pandemic.

As partners to the county MG programs, our Foundations have faced many of the same operational challenges and have also developed processes and procedures that strengthen our organizations. However, as incorporated organizations, many of us have found that our existing foundation bylaws, policies, and procedures did not support remote meetings and decision-making. Further fundraising, recognition, and traditional social activities were severely curtailed.

In response to these challenges, our county foundations are reviewing their ruling documents and their strategies for supporting the MG program. Many of these organizations are reaching out to others to compare goals, strategies, policies, and procedures to identify and share best practices. Like our MG programs, we do not want our foundations to revert to our (Continued on page 6)

WSU Master Gardener Program Update

~~Jennifer Marquis, Statewide Program Leader



The WSU Extension Master Gardener Program, with financial support from County Government, WSU College of Agricultural, Human, and Natural Resources Sciences (CAHNRS), WSU Extension and local Master Gardener Foundations seeks to address critical issues facing Washington State residents by engaging university trained volunteers to empower and sustain diverse communities with relevant, unbiased, research-based horticulture and environmental stewardship education. WSU Extension Master Gardeners teach horticulture principles and practices for the development of healthy landscapes to protect our natural resources. A critical issue facing Washington residents that WSU Extension Master Gardeners address is access to clean, healthy foods.

Pollinators: Our program teaches way to help native bees and other pollinators thrive in home and community

landscapes. Pollination is an essential ecological survival function. Almost 80% of food producing plants require pollination by animals like bees. Pollination is also required for reproduction of flowering plants that help prevent erosion, filter water, sequester carbon, and add oxygen to the atmosphere.



Bees are the world's primary pollinators. According to the US Food and Drug Administration, honey bees are responsible for pollinating one third of our nation's food supply or one in every three bites of food we eat. It is estimated that honey bees account for \$15 billion in added crop value. Bees are also responsible for pollinating 90% of wild plants, making them an invaluable part of our ecosystems.

Globally, bees are declining at an alarming rate. According to Ohio State Insights, commercial bee keepers in the United States have been reporting bee colony loss rates at 30% each winter since 2006. The Center for Biological Diversity says, more than half of the native bee species are declining; nearly 1 in 4 is imperiled and 40% of insect pollinators are highly threatened.

WSU Master Gardeners are in a unique position to mitigate the decline of pollinators. As such they have increased their educational outreach efforts around pollinator importance and actions people can take to reduce loss.

In a given year, WSU Extension Master Gardeners support pollinator health through the education they provide. For example, in 2018, 4000 adults and youth learned about the importance of pollinators for our ecosystems and food systems via classes and workshops taught by volunteers.



Pierce County Young Gardeners

~~Diane Frey, Pierce County Master Gardener Emeritus

Our Young Gardeners Program is a tenacious group of WSU Pierce County Master Gardeners that like to think outside of the box. Our traditional program revolves around children and their families. Although our outreach includes a Puyallup Spring fair booth and activities in areas like school fairs, our main focus is in the WSU Puyallup Demonstration Garden.

We maintain a whimsical, varied Children's Garden there. We give tours there. We host activities in the summer there. COVID shut us down. We could not reach our families in a traditional manner. We were all so very sad.

Then our Young Gardeners Program's facilitator had a brilliant idea. We could make videos and have some kits made up to distribute to the families! This spring, we put our thinking caps on and came up with some plans that developed into a different form of outreach.

Unable to work on WSU grounds, another MG asked if we could use her church parking lot for kit distribution. We developed our first video and kit based on one of our Spring Fair booth projects. We brainstormed and added kids to the video idea and found an MG in the PCMG that could edit our efforts.

The families were emailed from our vast database of over 400 about our plans. We decided to try *Sign Up Genius* to reserve kits. We learned as we worked and played. We now have 4 short videos completed and 4 more planned for this summer. Our videos are on YouTube and we attached materials lists and other ideas to each one.

The families are planting, learning about seeds, experimenting with owl pellets, and making art from natural objects. We will continue to think outside the box, even after we are able to return to playing in our garden with the families. MGs are so wonderfully creative and giving - aren't we! Contact us at pcmgyouthprogram@gmail.com. Videos can be found on our YouTube playlist: <https://youtube.com/playlist?list=PLRLmOM9ViKABLGT-GjYdvm9Uyz2LunSaR>



Diane Frey and Sandi Bauer handing out kits for the Spirals In Nature program. Photo by Nirmala Deora.

Click Beetles Beware

~~Mark Amara, Grant/Adams County Master Gardener

Last spring-early summer 2020, WSU Grant-Adams Master Gardeners Mark Amara and Duane Pitts participated in a collaborative project to determine if and where either or both of the two species of adult male click beetles are present at different locations throughout the state. Click beetles are the adult forms of wireworms.

The project, funded by a USDA Western SARE (Sustainable Agriculture Research and Education) grant awarded to Washington State University and the Washington State Department of Agriculture, began in 2018 and will run through 2022. In 2018, monitoring took place throughout western Washington, while monitoring efforts were expanded to cover the entire state, even here in eastern Washington, in 2019 and 2020.

Wireworms apparently thrive on pastures and grain rotations commonly used by organic growers to help maintain and improve organic matter. The emphasis in the current study has been to focus on the management of wireworms in western Washington lettuce production, although wireworms are known to be present in many crops and landscapes. Expanding the scope of the study to the entire state is an effort to understand where, why, and in what crops and conditions wireworms are likely to be present and to look at management options. For WSU Master Gardeners, it is an opportunity to participate as citizen scientists in this endeavor and contribute to the data collection process.

WSU Master Gardeners and other project partners from 38 locations in 14 key locations statewide were recruited to set up pheromone traps, collect beetles and maintain samples. Click beetles are famous or infamous for the clicking noise they make to get away from or shock a potential predator. The click can also be attributed to the effort it makes to “right” itself if it is turned upside down. The two click beetles that we were attempting to attract with lures were *Agriotes lineatus* and *Agriotes obscurus*.

Following the instructions and directions provided by WSDA staff, both of us placed our two traps in the soil so the lid was flush with the ground and at least 15 feet apart near a grassy field, lawn, or meadow. A self-contained pheromone lure was placed at the bottom of each collection cup. Click beetles don't climb steep plastic walls, so there was no fear of their climbing out when they found out there was no female present. We used a different pheromone lure for each of the two species being sought.

Traps consisted of an inverted plastic “brimmed hat” base (left picture), a smooth-sided plastic collection cup and pheromone lure (middle picture), and a pronged top lid (left picture). When properly installed in the ground, the traps were flush with the surface but allowed access into the cup through the spokes (right picture). If beetles or other insects entered the smooth-sided interior cup, the slick walls prevented escape.



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Trap photos by Mark Amara

2021 WSU Master Gardener Advanced Education Conference Update

~~ C-J Nielsen, Conference Chair, Island County Master Gardener

There is great news for Master Gardeners and garden enthusiasts across Washington state and beyond. The 26th WSU Master Gardener Advanced Education Conference to be held September 30-October 2 is virtual, saving all those extra costs for travel and hotel and offering access to an expanded selection of classes. The format makes it easy to gather, learn from leading instructors and researchers, and enjoy some wonderful new experiences.

Explore! In addition to an outstanding lineup of 30 classes and sessions to choose from, registrants will enjoy:

- An inspiring keynote by world-renowned garden photographer and visual storyteller, David Perry
- Enjoyable virtual tours of beautiful and unique gardens
- Live Chat Parties and small group discussions on topics you care about
- Special offers from vendors in the virtual Marketplace
- Great items in the online Silent Auction
- Recordings of all classes and tours included in registration and available for another month after the live event closes.

Learn and Grow! Classes are presented by a broad range of topic experts and WSU educators. Registered attendees will earn up to 10 Master Gardener Continuing Education (CE) credits during the live conference and sessions. Classes attended during the conference itself offer the traditional opportunity for live interaction with instructors via Q&A. Registration also includes class recordings for 30 days, so attendees will have the opportunity to review their live classes and attend the ones they missed.

Register! The virtual conference format this year delivers all of the great classes, speakers, tours, and networking opportunities across the region at a much lower cost. Registration is now open, and information can be found on the 2021 WSU Master Gardener Advanced Education Conference website at mglearns.org. The Conference is proudly presented by the Master Gardener Foundation of Washington State and Washington State University Extension.



Conference Ticket Giveaway

~~Patty Dion, Development Director MGFWS and Yakima County Master Gardener

Did you know? As Gold Sponsor the MGFWS Endowment is offering 2 complimentary tickets to the 2021 Advanced Education Conference Thursday, September 30th through Saturday, October 2nd.

The MGFWS Endowment is a WSU-managed endowment fund used to support the Advanced Education Conference. You can find more information about the endowment at <https://mgfws.org/endowment/>

This year our conference is scheduled as a virtual event, featuring continuing education for Certified Master Gardeners through plenary sessions, workshops and breakout sessions. Also offered are virtual garden tours, a marketplace, and an on-line silent auction. You may register for the full event at mglearns.org.

For a chance at these complementary tickets please contact –
 Patty Dion
DevelopmentMGFWS@gmail.com

Winners will be chosen randomly from all entries. Please include your name and your resident county.

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pre-pandemic ways, but to evolve to be stronger and more flexible, and resilient organizations. I look forward to doing my part in implementing these changes and in witnessing the growth and strengthening of our state-wide program and network of foundations.

In the August 2020 Seeds for Thought, I wrote, “I believe the day will come that we look back on this year with pride ...”. Well, here it is a year later and, we’re still in the thick of it but, we’re looking forward and can envision a better future. And when we do look back, we can indeed be proud of how we’ve risen to the challenge and are succeeding!

Warm Regards - Don

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The traps were created by Bob Vernon at Agriculture and Agri-Food Canada, Agassiz, B. C. to trap two species of adult male click beetles and were provided for the effort by Wim Van Herk.

The two collection cups were emptied once a week into separate, labeled Ziploc bags and placed the bags in the freezer. Of course, other insects fell into the traps and were also unable to climb out – ants in particular and predaceous ground beetles seemed like common intruders.

The weekly collection period extended for several weeks from the last week in April through the end of July 2020 (though in our area we terminated collection by the end of June). We did not have to identify which (click beetle) species fell into the traps, as the pheromone lure is not 100% effective. At the conclusion of the monitoring period, traps and sample bags were sent to Christopher Looney at the Washington State Department of Agriculture in Olympia. Looney and Brook Brouwer, WSU Extension, Friday Harbor, identified, analyzed, and provided a summary of findings.



Click beetles Left. *A. lineatus*; Right *A. obscurus* (photos W. Van Herk)

Click beetles are of interest to commercial agriculture and gardeners in the state because of the damage their larvae can cause to crops like beets, corn, wheat, potato, carrot, onion, leek, lettuce, cabbage, peas, beans, radishes, sunflower, alfalfa, melons, and others. However, click beetles also seem to thrive in pasture and grain rotations used by commercial growers to help maintain and increase soil organic matter. Even flowers do not escape the wireworm's wrath. Several herbaceous ornamentals including asters, phlox, gladioli, and dahlias are commonly infested. Wireworms seem to be anywhere especially in old fields or grass pastures. Wireworms don't cause plant damage but these so-called larvae of the adult click beetle feed on seeding and seedlings, roots, and stems. On potatoes, for example, the larvae burrow into the tubers making them unusable; the same happens on other crops.

At the present time, wireworm controls are limited to cultural and mechanical methods as no pesticides are registered for controlling them in home gardens. Extensive rototilling or other tillage will destroy wireworms and their habitat and expose them to predators and birds. Leaving (new) ground in a fallow state or exposed for a year or more while controlling weeds and rotating crops can help reduce their incidence. Also, try to avoid growing vegetables that are known to be susceptible to wireworm damage in areas where they are known to have been a problem in the past. Late planting will often speed up germination leaving plants less likely to be prone to wireworm damage.

Interestingly, multiple samples of the two click beetles of interest in five western Washington Counties and none were reported in eastern Washington counties. Even though there were none of the desired wireworm species appeared in eastern Washington, many other wireworm species are of concern on other crops.

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