



Seeds For Thought

May 2020 Volume 20, Issue 2

A newsletter of the
Master Gardener
Foundation of
Washington State

From the President

~~Don Enstrom, MGFWS President

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Iris photo by Erin
Landon Grays Harbor
County Master
Gardener



In the normal progression of Master Gardener activities each spring, we take a brief break after our plant sales and then dive into the many other chores that have accumulated on our to-do lists. But this year has been anything but normal. Little did we realize, as we pulled out our germination mats in January, that the coronavirus would soon turn our worlds upside down.

Our work as Master Gardener volunteers involves close and frequent interactions with the public as we deliver gardening education, maintain our demo gardens, raise funds to support the MG program, and organize other activities to promote gardening and increase awareness of the WSU Extension Master Gardener Program. As the virus spread, medical experts, WSU Extension, and state & local government guidance placed many of our 'normal' MG activities on hold. Fortunately, MGs are a resourceful lot, and with some creative planning and leveraging of technology we've found ways to support the public "in spite of". We conduct plant clinics via e-mail & phone. Our frugal budgeting and financial reserves are keeping our programs alive. As plant sales are canceled, we are experimenting with direct marketing and strengthening our relationships with nurseries that will sell our plants. And we have become experts at holding Zoom meetings. As teleconferencing becomes commonplace and geographical limits to working together disappear, our state-wide goal of 'making the whole greater than the sum of the parts' is now closer than ever.

As we shelter-in-place and prepare more of our meals at home, interest in gardening has increased exponentially with many first-time gardeners planting "Pandemic Patches". OSU's on-line Vegetable Gardening short course has historically attracted 20-30 participants per year. In response to increased demand, the course is being offered for free through May 27th and has attracted over 29,000 registrants! Other organizations' programs are also drawing renewed attention. GardenComm's Plant a Row program encourages us to plant an extra row of produce each year and donate the surplus to local food banks and soup kitchens. Are your programs and demo gardens emphasizing food crops this year? NC State Extension shows how to build a portable handwash station and encourages it's MG volunteers to stay in touch with the public & each other through their website, web conferencing, list-serves, social media, and newsletters.

What else can we do? Have you looked at the websites of other counties for ideas, like providing links to free pdf downloads of beginning gardening publications (EM-9027, FS-270, PNW-548, etc.), photos of home gardens, gardening tips and strategies, on-line webinars? There is no doubt in my mind that as you read this article, you are thinking of actions you are taking in your own county that others could easily replicate. Please share *(Continued on page 3)*

WSU Master Gardener Program Update

~~Jennifer Marquis, Statewide Program Leader



Who knew our lives would change this much, on such a global scale since the last time I wrote to each of you? I want to thank you all for your continued leadership and service and for doing everything you can to protect yourself and the health and wellness of Washington residents. The uncertainty created by this Covid-19 pandemic makes everything we do or want to do much more difficult. WSU Extension administration appreciates all you are doing to be leaders in your programs and communities.

As the Governor continues to clarify his “Stay Home, Stay Healthy” order, WSU works to interpret the statements to ensure compliance. On Friday, April 24 we learned the governor released a response to clarify the confusion in the floriculture sector of our agricultural industry. “The Governor’s Office and WSDA reviewed the matter and confirm that floriculture falls within the agricultural sector as identified in the Governor’s “Stay Home, Stay Healthy” proclamation”. Over the weekend, WSU Extension administration interpreted the clarification and determine that the WSU Master Gardener program CAN grow and sell ornamental plants, in addition to food crop plants provided all non-

pharmaceutical interventions can be followed.

However, the spirit of the “Stay Home, Stay Healthy” proclamation requires all Washingtonians to stay home and to go out only for essential activities. The remainder of this message summarizes the current restrictions we are operating under and implores all WSU Extension Master Gardener volunteers to DO THE RIGHT THING.

We can do the right thing by recognizing that the spirit of the “Stay Home, Stay Healthy” order is to keep Washingtonians safe and healthy. Essential activities differ for each person and each group. We must question each of our activities? Is selling plants or working in a garden essential? We must do what is right to serve the spirit of the order. We should not look for loopholes or workarounds to partake in non-essential activities regardless of whether that activity has been deemed essential by the Governor’s Proclamation.

I know this is difficult to navigate and that it may seem nonsensical, but the bottom line is, we Washingtonians are being told to stay home, to go out for essential purposes only. As WSU Master Gardener volunteers and Master Gardener Program Coordinators we are community leaders, we must lead by example. We must DO THE RIGHT THING.

Many people in our communities have lost their jobs. They have lost the ability to earn the money that is essential to their livelihoods, which is essential to put food on their tables. How can we, as community leaders, in good conscience, and in the spirit of the Stay Home; Stay Healthy order go to greenhouses and gardens to do non-essential gardening? We must show support for our communities by doing the right thing.

There are specific activities that WSU Master Gardeners can participate in under the “Stay Home, Stay Healthy” proclamation provided all non-pharmaceutical interventions are followed. Evidence of non-compliance will result in consequences that could include suspension of the volunteer(s) engaged in a non-compliant activity, suspension of all activities, and complete closure of the WSU Master Gardener Program in the offending county for the duration of the pandemic.

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Advanced Education Conference Update

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

The Master Gardener Foundation of Washington State, on behalf of its partners, Washington State University Extension and Master Gardener chapters from all across the State, has come to the difficult decision to reschedule the Advanced Education Conference of 2020 originally scheduled for October 1-3. The unknown length and severity of the global Coronavirus pandemic and its impact on our lives and plans make it prudent for us to make this change.

We will be working over the coming weeks to find new dates in the Fall of 2021 for the event, which will be held in the South Sound region. The planning team is excited about the quality of the design and programming that came together for 2020, and we intend to replicate that as closely as possible. Our hope is that the same excellent instructors and panelists will join us again. Once specific plans are confirmed, we will announce the details. Stay tuned for that news by June 1 at mglearns.org

MGFWS Annual Awards

~~Don Enstrom, Lewis County Master Gardener and President MGFWS

As in 2019, we are not letting the absence of a 2020 state conference stand in the way of recognizing and honoring our most outstanding Master Gardener Volunteers. 2020 nomination forms for the State Master Gardener of the Year, the Media Award, and the Ed LaCrosse Distinguished Service Award are being finalized and will be available by mid-May at <https://mgfws.org/awards/>, while the Ellen A'Key King County Master Gardener Foundation Grant application can be found at <http://www.mgfkc.org/resources/ellen-a-key-grant>. All nominations/applications must be received by July 1st for consideration.

The unsung heroes of the State Awards Program are those of you that dedicate the time and energy required to research and prepare the award nominations and grant applications – thank you for shining a well-deserved light on the wonderful contributions being made by our fellow WSU MG Volunteers!

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these ideas with other counties through your own contacts, the state foundation, or via your county MG coordinator.

As British garden designer, writer, and artist Gertrude Jekyll once said, “The love of gardening is a seed that once sown never dies, but grows to the enduring happiness that the love of gardening gives.” Every effort we make as WSU MG volunteers to deliver gardening education while complying with protective guidance will pay off with increased public awareness of the benefits of gardening, a greater appreciation of the Cooperative Extension System’s offerings, and the awakening of more lifelong gardeners. Let’s not miss this opportunity to support our communities, grow the MG program, and spread enduring happiness!

Managing Moss in Home Lawns

~~Alice Slusher, Cowlitz County Master Gardener

It's a love/hate relationship for many of us. I love the verdant flocking of deciduous trees in deep woods—looks like something from a Dr. Seuss book! But if you are trying to have a well-manicured lawn in the PNW, let's just tell it like it is: moss is a weed!

Moss grows so well over the winter in our lawns because the grass is dormant, exposing more bare earth to moss spores. And it's wet--hey, we live in the PNW--of course it's wet. Not to mention very little winter sunlight, the major enemy of moss. Moss also loves soil that's acidic, and we have that, too. So what can we do about it?

Have you noticed that moss usually appears in areas where grass struggles to grow, but where weeds invite themselves? That's an area where your lawn is "sick," for one reason or another. One of the best ways to deter moss is to have a healthy lawn so the grass can outcompete the moss and weeds. Always try the following cultural methods of controlling moss before escalating to chemical control. In a nutshell, to keep moss at bay: (1) let the sunshine in; (2) mow properly; (3) manage soil moisture properly; and (4) create good soil conditions for healthy grass.



Moss in Grass taken by Brian McDonald
[Oregon Statue University](#)

Sunlight: Believe it or not, the best way to control moss in your lawn is to increase sunlight--prune trees to at least 6 feet from the ground, and perhaps thin the branches to allow more sunlight. If you don't create more light, the moss will come back regardless of what other steps you might take to eradicate it!

Mowing: Don't cut your grass too short. If you cut it shorter than 2 inches, you are inviting moss and other weeds into your lawn. Mow once a week to keep your lawn between 2-3 inches. Longer grass will put down deeper roots, and mowing it frequently will increase the density of the grass. Ultimately, it will be difficult for moss to invade and thrive.

Soil fertility: Moss loves acidic soil. You may need to add lime to maintain the pH around 6.0-6.5. Lime won't kill the moss, but it will help your soil to keep good nutrient values. Have your soil tested in a laboratory. It costs between \$24 and \$36, and the money you spend will save you money in the long run--you won't be buying products that you *hope* will take care of the problem--the report will tell you exactly what you need. Feed your lawn to keep it lush. For established lawns, buy a product that is high in nitrogen (N), low in phosphorus (P), and moderate in potassium (K); for example, NPK-3:1:2 or 4:1:2. Apply 1 pound of actual nitrogen at each application four to six times a year in spring and fall. Lush growth will overcome the mossy areas.

Irrigate properly: Moss loves wet conditions. There are some steps you can take to keep the wet affected areas less hospitable to moss--install French drains or a rain garden to divert rain runoff. When you water, plan on giving it 1/4 inch each time you water, 4 to 6 times a week, totaling 1 to 1 1/2 inches per week, especially during our dry summers. Measure the water with a rain gauge or a tuna can in the watered area.

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Initial Results of Click Beetle – Wireworm Trapping in Washington

~~Mark Amara, Grant-Adams County Master Gardener

Washington State University (WSU) and Washington State Department of Agriculture (WSDA) researchers have been monitoring two species of wireworms in Washington State since 2000. Wireworms are the larval stage of so-called click beetles that can damage a wide range of crops. Click beetles are famous or infamous for the clicking noise they make to get away from or shock a potential predator, and the effort it makes can also be a useful tool in helping to “right” itself if it gets turned upside down. The click beetle study is a collaborative funding effort that officially began in 2017 and is funded through 2021 with help from the U.S. Department of Agriculture’s National Institute of Food and Agriculture, Sustainable Agriculture Research & Education (SARE) program.



Immature stage wireworm (left), pupal stage (center), and adult click beetle (right). Photos by Ivan Milosavljevic – Reference: Milosavljevic et al. 2015: 3

The hosts for the funded study are two species of click beetles (*Agriotes*) that cause significant economic damage to high value (commercial) vegetable crops in western Washington. Wireworms seem to be prolific in pasture and grain rotations, which many (organic) farmers use to build soil organic matter and help maintain soil fertility. There are many species of wireworms. Unfortunately, wireworms can live in the soil up to 3-5 years, they seem to thrive well in sod, their favorite food source is living plant material, and larval activity increases above 50°F; but when soil temperatures warm to above 77°F, they are driven deeper into the soil. The emphasis in the funded study has been for western Washington vegetable growers. Controlling wireworms in lettuce is one of their primary challenges and controls are limited. Unfortunately, wireworms damage a wide range of crops.

One of the two objectives of the current project is to use transplanted lettuce plants as the cash crop of interest and evaluate wheat as the trap crop for the control of click beetles, using baits and placebos in replicated plots. The second objective is to conduct a survey of *Agriotes spp.* distribution throughout Washington State.

To achieve Objective 1: Management trials were set up at ten cooperating farms in Skagit, San Juan, Island and Thurston Counties in 2018-2019 (continuing through 2020) using a series of replicated combination treatments with lettuce transplants. Besides control plots with no wireworm management, an organic- approved Spinosad insecticide bait was applied before and at transplanting. There were also plots with wheat planted as a trap crop before transplanting lettuce, wheat planted between rows of transplanted lettuce, and wheat planted with Spinosad bait applied before and at transplanting lettuce. At each site wireworm density, lettuce biomass and survival, and soil temperature, which can influence wireworm activity, were measured at regular intervals.

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2020 Ellen A'Key Grant Applications: Fund Your Idea

~~Bob Connor, King County Master Gardener

The Master Gardener Foundation of King County (MGFKC) is looking for grant program applicants. We wish to support Master Gardener organizations in all counties of Washington State. MGFKC awards up to \$1500 each year to a Master Gardener program with a great idea for a project. Particular consideration is given to smaller counties where support dollars might be sparse. The deadline is July 1, 2020, and MGFKC welcomes all applications. This grant money is meant to be used! Please apply this year!



Greenhouse - Island County Master Gardeners

Island County Master Gardeners were awarded the 2019 A'Key Grant. In 2005 these Island County Master Gardener established The Educational Garden at Greenback Farm on Whidbey Island. This setting is used to help educate their Master Gardener Trainees. In 2019, those Master Gardeners built a greenhouse. They used their A'Key grant to help outfit their new greenhouse and support further educational opportunities.

There have been many enthusiastic responses in the last few years.

- Pend Oreille Master Gardeners were awarded the 2015 A'Key grant in order to renovate and repair an abandoned garden and greenhouse, which will be used to teach and demonstrate WSU research-based procedures and gardening practices.

- The 2016 A'Key award went to the Master Gardeners of Grant/Adams County. They proposed establishing a Seed Library to be located in the Ephrata Community Library. This will ensure that a diverse seed selection will be available to local gardeners at no cost.

- The 2017 A'Key winner, Skagit County Master Gardeners (SCMG), proposed an outreach program to their Latino communities to ask what their food needs might be. SCMG partnered with other local organizations for help translating WSU-recommended approaches and materials.

- Whatcom County was the 2018 A'Key grant winner. The Master Gardeners proposed a Grow Your Own Groceries pilot project in order to reduce this area's food insecurity problem.

Joint programs with other nonprofits or public agencies are eligible too, provided that all funds are donated to and administered by the respective county's Master Gardener program. Application forms and information are available on the websites of the State Foundation (MGFWS) and MGFKC

(<http://www.mgfk.org/resources/ellen-akey-grant>), through your county program director or from Jennifer Marquis, State Program Coordinator.



Island County Master Gardeners

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We CAN do:

Virtual plant clinics

Virtual education-food crop education is in high demand. Jefferson County is offering weekly short courses on beginning vegetable gardening using Zoom. There are about 50 participants each week!

Plant sales, including ornamentals following all non-pharmaceutical interventions. This means care and maintenance of food crop plants and ornamental plants is permitted in shared gardens and greenhouses if all non-pharmaceutical interventions are followed.

Very limited maintenance in shared demonstration gardens where all non-pharmaceutical interventions can be practiced. Limited maintenance should be performed to mitigate the loss of plant life, fix an irrigation break, harvest food crops, and maintain safe ingress and egress.

There should be at least 2, but not more than 10 volunteers providing maintenance in a garden at any given time (at least two so one can respond in case of an emergency).

All volunteers must be able to maintain at least 6 feet of distance between workers-more is better.

Volunteers should wear respiratory etiquette masks as recommended by the CDC.

Shared surfaces, such as tools, hose spigots, or hose handles must be sanitized using approved cleaners.

Land-owner must be agreeable to the demonstration garden maintenance.

Attend Continuing Education opportunities provided virtually

Engage in curricula development

Other activities that serve the mission of the program and are in compliance with the "Stay Home, Stay Healthy"

Proclamation and are approved by the local Master Gardener Program coordinator.

We CANNOT do:

Events and activities that require us to leave our homes for non-essential reasons. Remember, just because the activity is listed as essential on the Governor's proclamation, does not mean it is essential for us to participate in.

General maintenance in demonstration gardens.

Essential activities without following all non-pharmaceutical interventions.

Farmers markets because they are restricted to produce vendors only.

We MUST DO THE RIGHT THING:

Lead by example

Stay home and stay healthy

Protect the health and wellness of Washington Residents

Because the majority of the WSU Master Gardener volunteers are over the age of 60, many have underlying health conditions, and because leadership knows many will go above and beyond the call of duty, WSU Master Gardener leadership is compelled to say that no volunteer should feel pressured or otherwise required to give during this time. Program coordinators will relax volunteer service hours and continuing education requirements as necessary to accommodate volunteer certification and re-certification.

Thank you all for doing the RIGHT THING and for having our collective best interest at heart.

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If following the above guidelines doesn't work, there are other options. From mid-March through April when moss is actively growing, you can rake or dethatch your lawn in mossy areas to remove the dead grass stems and moss. You will probably need to overseed the dethatched area. First apply fertilizer as directed above, then spread lawn seed over the area. Plant a fine fescue like creeping red fescue in shady areas. If your lawn has shade and sun, plant a combination a perennial ryegrass and fine fescue. After seeding, mulch with a bit of straw, and water daily for at least two weeks.

Chemical products should be used only after using above recommendations. Please be sure to follow all directions on the label!

An environmentally friendly option is to apply products containing ferrous, iron, or ammonium sulfate from mid-March through April. Examples include Lilly Miller Moss-Out! for Lawns and Scotts Turf Builder with Moss Control 22-2-2. Ferrous sulfate will permanently stain concrete and other surfaces, so sweep any scatter from driveways and walkways. Complete fertilizers with iron sulfate will kill moss rapidly, and stimulate health grass growth at the same time. Wait until the moss is dead (usually around 2 weeks), rake it up, and then overseed.

Here's to a lush, green lawn this year—and if you keep a healthy lawn, it won't be *moss* green!

Resources:

Pacific Northwest Plant Disease Management Handbook [Lawn and Turf-Moss](#)

Oregon State University: [Maintaining a Healthy Lawn ec1521](#)

Oregon State University: [Managing Moss in Lawns in Western Oregon EM 9175](#)

Washington State University: [Hortsense : Lawn and Turf Moss Factsheet](#)

University of Alaska Fairbanks: [Moss Control in Lawns HGA-00133](#)

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Preliminary results suggest that trap cropping may help reduce loss of lettuce transplants to wireworm damage. The Spinosad insecticide applied in-furrow between rows did not attract wireworms to it and was not effective in limiting damage. Wireworm density ended up being higher between lettuce rows where wheat was planted, which the researchers found seems to indicate the wireworm larvae is attracted to the wheat. However, though wheat may attract the worms, wherever wireworm frequencies are high, that strategy alone did not seem to deter lettuce loss. Additional strategies are being investigated to come up with ways to reduce wireworms in organic production systems.

For Objective 2: Volunteers from key locations throughout Washington were recruited and trained to monitor click beetle activity statewide using pheromone traps to collect adult male *Agriotes* during their season of activity (including three locations in Grant and Adams Counties monitored by Grant-Adams Master Gardeners).

The target locations were in established grassland near or in agricultural production areas. In spring 2019, pheromone lures, Vernon Pitfall traps and instructions for monitoring *Agriotes lineatus* and *Agriotes obscurus* were passed out to project partners and WSU Master Gardener volunteers in 27 locations covering 12 counties. Monitoring was designed with traps set up in designated/preferred stationary locations with their contents collected weekly. Plastic bags were labeled and frozen. At the conclusion of the monitoring period, samples were sent to WSDA entomologists for identification to determine number and species of adult males attracted to the pheromone lures.

In 2018, of three counties in western Washington sampled, only one county had any wireworm findings. In 2019, results confirmed the presence of *Agriotes* spp in eight western Washington counties and none in eastern Washington counties.

Though this study aims to document the presence and management options for the two target species of click beetles, many more species are also of economic importance throughout the state, so the results from the aforementioned study may not be as indicative as they may seem especially as they relate to (vegetable) crops in eastern Washington. Wireworms may be of concern in all of the following crops: asparagus, beans, peas, beets, broccoli, carrots, chard, collards, kale, corn, cucumber, eggplant, endive, garlic, grass seed, horseradish, kohlrabi, lettuce, melon, mint, mustard greens, onions, pepper, potato, pumpkin and squash, radish, salsify, tomatoes, turnips and rutabaga, and small grain crops (wheat and barley).

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