Yellowstone Master Gardener

NEWSLETTER Volume 16, Issue 1 • January/February 2026

IN THIS ISSUE

We want to hear from you!
Send your submissions for the newsletter to
ymastergardener@gmail.com
by February 1st for the next issue.

Introducing MG Therese Bertrand

by Laura Estes

Left: Therese Bertrand
Above: One of Patricia's roses

Therese was born and raised in Billings but lived out of state for many years. She returned to Billings in 2020 and lives in her childhood home. Her mother Patricia kept a beautiful yard with something blooming all summer. But after her death in 2018, the lot was neglected. It was overgrown with baby trees sprouting everywhere and edging defining the beds had disappeared. Only trees, shrubs and a few hardy perennials remained.

It was a far cry from Therese's fond memories, so she decided to bring it back to its former beauty. She'd always liked digging in the dirt and she started digging. She soon realized there was a lot of gardening knowledge that she didn't have so she signed up for every presentation or class she could find. Early in 2025 she jumped in with both feet and took the Master Gardener course. She passed the test and volunteered at the MG Farmer's Market booth last summer and is using her new knowledge for her massive renovation projects.

She is both restoring existing gardens and trying new things. The 60+ year old crabapple tree was an iconic family photo spot (imagine spring graduation with masses of white blossoms in the background). The tree stays of course and a friendly neighborhood deer is cleaning up fallen apples adding fall interest. She's not as pleased with the little purple flowers coming up everywhere but the neighbor wants some. A friend who was moving gave her some daylilies and she's waiting for some reconstruction to be finished so she can establish them in a new home. Her mother tended fantastic rose beds with more than 20 varieties. Many are still alive but there are few tags identifying the variety. She would like to find a good class on roses. There is also a Japanese-style garden area she wants to restore.

A garage sits on what used to be the vegetable plot so she's looking for hard-to-find sunny spots to incorporate more edibles. Summer 2025 yielded tomatoes, volunteer (!) cucumbers, peppers, spaghetti squash, rosemary and basil in pots, and of course zucchini. She says that's one of her favorites because it's so versatile; it was part of breakfast most mornings. She has some strawberries and hopes to establish raspberries next year. One of the workshops she really enjoyed was on honeyberries (a.k.a. haskap, *Lonicera*

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The Houseplant Solution

by Ann McKean

I love plants. I especially love the natives in my garden and how easy they are to live with. But Montana summers are short. Very short. The solution to get your gardening fix all year is houseplants, and I have become a little bit of a junkie.

If you are new to houseplants, some good starter plants that are easy to live with include *Pothos*, *Sansevieria* (snake plant), *Monstera*, *Philodendron* and *Chlorophytum comosum* (spider plant). I've also tried and failed to kill succulents and their cousins, orchid cactus. Phalaenopsis orchids are the most forgiving if you adore orchids. All of these will tolerate varying degrees of light and neglect: my kind of plant.

Generally, many houseplants prefer to be tight in the pot and to get a little dry between watering. If the leaves show crunchy brown tips and/or wilting, they probably need a little more water. If they yellow and wilt (or drop), they are likely too wet. The fastest way to kill a houseplant is with too much water. However, if they get too dry (or too tight) the soil can become hydrophobic and fail to absorb water properly. If this happens, they must be repeatedly soaked until they are moist all the way through again. It's usually best to allow your plants to get dry a few inches down, then give them deep drinks to make sure that all the roots are receiving water. If the soil seems hard and watering doesn't help, it could be time for repotting. Gently removing the soil and trimming the roots may be sufficient, allowing them to go back into the same pot with new soil, but eventually you may need to divide or move to a larger size container.

Although many houseplants should never go outside, if you do take them out for the summer, show them sun gradually in the spring to avoid burning. In the fall, make sure you wash them well and coat their leaves on both sides with neem oil before you bring them inside to reduce hitchhikers. Trust me, this is worth the effort. Allowing the top few inches of soil to dry out and using nematodes can help with fungus gnats. Nematodes will reproduce for months as long as the soil doesn't completely dry out all the way through the pot.

Some of the plants I have not killed

Your plants will show their gratitude for a consistent low dose of fertilizer. This winter I easily incorporated a liquid concentrate into my weekly routine, and my plants look fabulous. If they develop a white coating or crust on the soil surface, it may be time to flush the soil to remove salts buildup. This is most easily performed in the shower if they are portable. They will also appreciate a good rinse on their leaves. If you have very hard water or city water, you may find they prefer filtered water. Although I let my tap water sit overnight in the jug, I haven't spoiled my plants with filtered water yet.

If you love your summer garden, try some houseplants. Not as difficult as exotics appear, many of these tropicals are forgiving and easy to grow, bringing lush green life to dreary winter days and all year long!

For a deeper dive and some helpful links, check out the great webinar called 'Houseplant Diagnostics' from the IPM webinar 'Cultivating Healthy Plants' series: https://www.cultivatinghealthyplants.org/webinars/houseplants

MASTER GARDENER THERESE BERTRAND

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caerulea). She is excited to get them going.

Therese describes herself as semi-retired. She was a teacher in the various states where she's lived and currently gives private music lessons from her home. She's also a member of the Billings Symphony Chorale. Her favorite time of day is sunrise when you can find her happily digging in the dirt while it's cool. The plants near her piano studio look good; the digging has helped, of course, but maybe it's also the music!

BOOK REVIEW *by Ann Guthals*

Rewild Your Garden

Create A Haven for Birds, Bees and Butterflies

By Frances Tophill

Note: This is a book from England and hence the word "garden" in the book's title refers to what we call a yard.

Where humans live (and there are a lot of humans), the land is rarely wild. We have not molded the Earth to our purposes with the plan of allowing the rest of life on Earth plenty of places to live. There are so many species threatened or going extinct because of loss of habitat and other forces that people are calling this time the sixth great extinction.

There is a growing interest in the practice of rewilding, especially in Great Britain. For an in-depth description of rewilding a farm, consider reading *Rewilding* by Isabella Tree. For a simpler, more concise read on this subject, take a look at *Rewild Your Garden* by Frances Tophill.

Why are people starting to rewild their yards, gardens and farms or portions thereof? Here are the author's main reasons:

1. To create a natural and unspoilt haven for wildlife
2. To reduce chemical use
3. To cherish undervalued plant species
4. To balance the ecosystem in our gardens
5. To protect our planet's future

The purest form of rewilding is to basically let your yard and garden go wild and let nature take its course. Unfortunately this takes many years and the area will look pretty untidy in the meantime (neighbors might complain). A different approach is to let some areas go wild naturally and other areas be molded to better invite wildlife by practicing wildlife gardening wherein the gardener selects plants and constructs yards in a way to provide for the needs of multiple wild species. Ms. Tophill attempts to guide the reader on finding the balance between letting things go and having a guiding hand that works for each gardener.

The first portion of the book explains 3 options for each layer in the garden ecosystem: soil, ground, understory, shrub, canopy, and climbing layers. The 3 options are: traditional approach, wildlife gardening approach, and full rewilding approach. For each layer Ms. Tophill explains what each approach entails, then leaves the choice of approach up to the reader.

Two accompanying chapters are on weeds ("Let weeds be a part of the process and even use them, but remove the most pernicious, the ones that outcompete everything else." P. 41) and native plants (she leans towards natives but says the research also supports what she calls near-natives that come from a larger region – except for trees, where she says using natives provides much more habitat for local species).

The remainder of the book delves into how to provide more resources for wildlife, starting with water. There is a fairly extensive description of how to build and maintain a pond. Then Ms. Tophill discusses lawns and how to add more diversity to what in most cases is a monoculture of one or two species of grass. She explains how to add other plant species to an existing lawn and how to plant and maintain a wildlife meadow. Then she explains the great variety of homes and food that trees provide in a contained space and how to select and plant trees. Note: This is a book from England and hence some plant and animal species (like hedgehogs and some plants) are not found naturally here, but the difference is not great and we can substitute with little trouble.

Finishing out ways to increase diversity and habitat availability, there are descriptions on planting and building hedges, pathways, flower beds, night gardens, and kitchen gardens. I was particularly interested in how to build a "dead hedge," which I had not heard of before and how to provide plants to attract night animals like moths, which I had not considered in my garden planning before.

Scattered throughout the book are simple one-page paeans to "unsung heroes" – plants and animals that are important components of yard and garden ecosystems but which we may not know much about or may actively dislike and try to eradicate, such as fungi, lacewings, plantain, chickweed, pill bugs, toads, and earwigs.

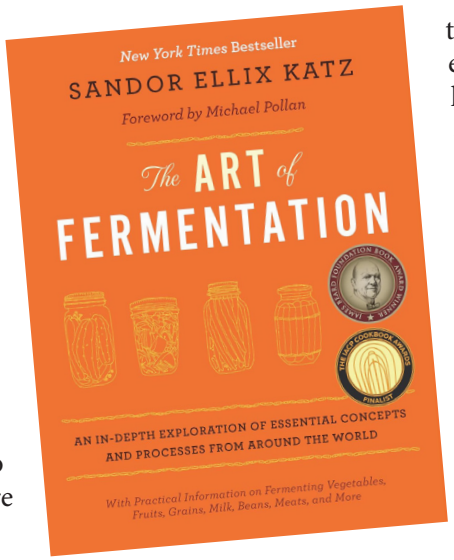
This is a readable and beautifully illustrated little book on how to make each of our garden and yard spaces better homes for wildlife in ways that also fit with our needs for our land. Our yards alone may be small areas, but if many people practice rewilding and it spreads to civic spaces and eventually parks, roadsides and farms, the impact could add up and make a real difference.

Lactic Acid Fermentation For Winter Vegetables

by Ann McKean

Lactic acid fermentation, also known as lacto-fermentation, is a simple way to preserve any fruit or vegetable that can be eaten raw. It is often used at the end of summer harvest to preserve the bumper crops that are too large to consume fresh but is just as easily used to preserve and enhance winter vegetables.

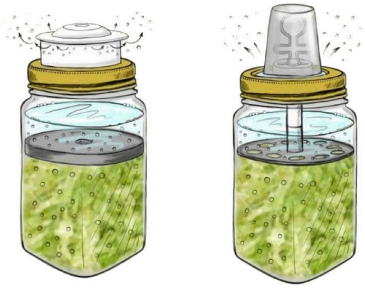
Lacto-fermentation not only preserves foods so they last longer, but it also enhances and increases their nutritional value. Fermented vegetables are easier to digest, have a higher nutrient value, more bioavailability and are good for our gut because of the enzymes and probiotics they contain. They are also delicious!



Above: This is the classic book on fermentation

Right: Different varieties of airlocks and weights

Below: A typical fermentation crock with glass weights



Lacto-fermentation is incredibly easy and only requires a few items, many of which you probably already have. Fermentation containers can range from a quart jar to a huge crock. Make sure they are clean or even sterile to be safe. The ingredients are fresh fruit or veggies, kosher salt and chlorine free water. That's it. The three items that you will need to buy are an airlock, which keeps destructive oxygen out of your ferment, weights, which keep your items submerged in the briny liquid, and a scale for accurate and safe measuring. The last thing you need is time. A typical fermentation takes a minimum of a week but can continue for more than a year!

Most recipes use a 2–3% salt to vegetables ratio. Simply weigh your prepared veggies, multiply that weight by .02 or .03 and weigh your salt to that weight. I prefer to weigh in grams; the math is much easier. Different salt brands and varieties have different densities, so weighing is a safer and more accurate method than measuring by volume. Your vegetables will release water when you salt them, which could be enough to keep them submerged in liquid, but if you need to add brine to fully submerge the vegetables, make sure that you maintain the salinity by measuring the water and salt to go with it. An example would be 2 grams of salt to 100 grams of water to make a 2% solution. Put your salted veggies into your fermenter, cover with a weight, ensuring they are submerged in liquid, and seal under an airlock.

A great starter vegetable is cabbage for sauerkraut or kimchi, but once you have successfully made it through your first ferment, the world is your oyster. Experiment with other winter veggies for all sorts of healthy pickled possibilities. Tired of bland winter veggies? Explore the world of lacto-fermentation!

Sources:

Our wonderful new Master Food Preserver and Family & Consumer Sciences Agent in Yellowstone County can answer all your questions!
https://www.montana.edu/extension/yellowstone/

https://www.makesauerkraut.com/fermentation-lids/

Wishing all Master Gardeners a Happy New Year and a bountiful growing season!

WATCH THIS SPACE FOR SOMETHING EXCITING IN MARCH 2026.

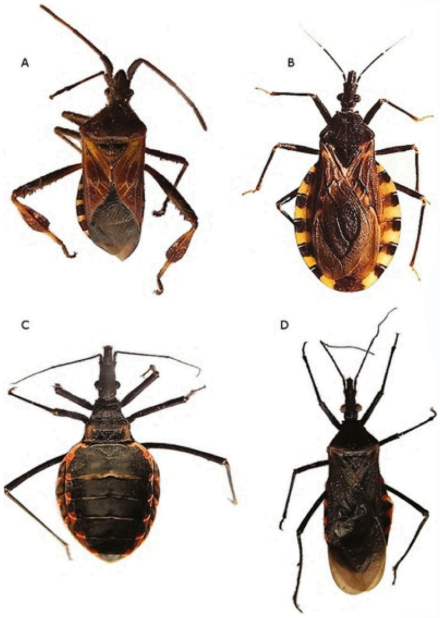
Kissing Bugs

by Ann McKean

I have always been a bug freak. When I was a child, I could easily spend hours not just watching but playing with spiders and crickets and whatever else presented itself. You can still find me in my garden marveling at the fascinating array of insect life.

In addition to the new invading brown marmorated stink bugs, I noticed another insect persistently hanging by my back door this fall. Using Google Lense, I was alarmed that it was identified as a kissing bug. Kissing bugs (an insect in the assassin family) are known to spread Chagas disease, a protozoan parasite which can cause fever, aching, swelling, heart disease and digestive issues. Once infected, it stays with you for life. Alarmed after a friend noticed the same insect, I did further research and was relieved to learn that the particular species of kissing bug which spreads the parasite is found in southern states and has not been found in Montana. We do have several look-alikes, including the frequently seen western conifer seed bugs. This, I determined, was the insect we had seen.

If you find an insect and need help with identification, contact your extension agent or Schutter Lab. *Please remember that without insects, life on earth would be drastically different and they are vital to our survival. To that end, please don't kill them just because they seem yucky or scary. Like most wild animals, if we give them their space, most insects will leave us alone. Instead, when you see an insect, marvel at its intricate beauty and the miracle of the web of life.



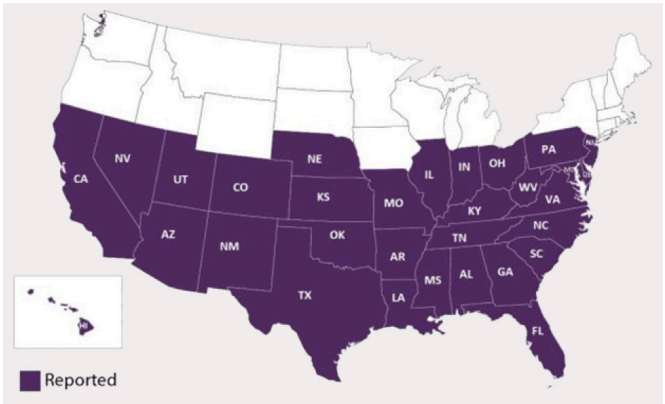
A case of look-alikes: Leptoglossus occidentalis, *the western conifer-seed bug (A), bears a resemblance to kissing bugs.* Triatoma infestans *(B) and* Mepraia gajardoi *(C, female; and D, male). The western conifer-seed bug is a plant eater, harmless to humans, while kissing bugs are vectors of the pathogen that causes Chagas disease. (Image originally published in Faundez et al 2019,* Journal of Medical Entomology*)*

Sources:

https://apps.msuextension.org/magazine/articles/5487#:~:text=Western%20Conifer%20Seed%20Bugs%20(A,don't%20have%20in%20Montana

https://msdh.ms.gov/msdhsite//_static/14,0,194,1086.html#:~:text=Chagas%20disease%20is%20a%20potentially%20serious%20disease%20spread%20by%20triatomine%20bugs%20(%22kissing%22%20bugs)

https://entomologytoday.org/2019/08/07/not-kissing-bug-invasive-western-conifer-seed-bug-causes-undue-alarm/western-conifer-seed-bug-and-kissing-bugs-comparison-2/



Reported range of kissing bugs in the U.S.

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MASTER GARDENER • MONTANA

Yellowstone County Extension Office
2320 3rd Avenue North
Billings, MT 59101
Office hours: 8am–5pm

Schutter Diagnostic Laboratory

by Anthony Sammartano

In the last two years in the role of a Horticulture Extension Agent, I have learned a great many things, but I continue to be humbled by all that I don't know. To better myself in this role, I sought out resources to help fill in the gaps in my horticulture knowledge, and one of the greatest resources that I have been introduced to is the Schutter Diagnostic Lab.

This lab is located on campus at Montana State University in Bozeman, and is manned by disease, insect, and plant identification diagnosticians. Its mission is "to safeguard Montana agriculture, landscapes and public spaces from pests by providing identification services, management advice and education." The hope is to minimize pesticide use by accurately identifying pests and providing science-based options for management, while also helping to detect new and invasive pests that could pose a risk to agriculture in Montana.

The services provided by this laboratory are free for Montana residents, but if you have an out-of-state family member dying of curiosity over something they found in their garden, or need a more complicated test run, then one only needs to pay a fee to Schutter for the desired service. Out-of-state submissions are only accepted on a case-by-case basis, and if accepted, will cost $50. Please see the attached chart for a further breakdown of the lab's pricing (Figure 1).

When submitting samples to the lab, it is important to note as much about the problem and the surrounding area as possible. The more information you can provide to the laboratory, the better the diagnosis they can produce.

To help with understanding what sort of information is important to note, I have attached a blank "Plant Disease and General Diagnostic Form" at the end of this newsletter. Please print out or save this form, as you may need it for future growing seasons. I am available to assist in filling out this form if you have questions.

Schutter lab diagnosticians hard at work

Testing service	In-State Fee	Out of State Fee***
Routine Diagnosis*	none	$50.00
Routine Diagnosis + ELISA**	$60.00	$110.00
Routine Diagnosis + Culturing	$50.00	$100.00
Routine Diagnosis + Lateral Flow	$10.00	$60.00
Routine Diagnosis + PCR	$120.00	$170.00
DON-Mycotoxin Testing	$10.00	$60.00
Phytosanitary Testing	$60.00	$110.00

Figure 1

If there is a sample that you wish to send to the lab for diagnosis, please bring the sample in question along with a filled-out form to our office at 2320 3rd Avenue N, Billings, MT 59101. We can assist with packaging and shipping samples to the lab, and you can expect to get your results back in one to two weeks, depending on the volume of samples the lab is receiving. If you have questions about sample submissions, you are free to contact Schutter Lab at 406.994.5150 or at diagnostics@montana.edu.

IMPORTANT LINKS

Yellowstone MG Newsletter Submissions
ymastergardener@gmail.com

Montana Master Gardener Program
https://www.montana.edu/extension/mastergardener/index.html

Montana State Master Gardener Facebook
http://www.facebook.com/MTMastergardener

Master Gardener links and resources
https://mtmastergardener.org/linksandresources/index.html

Schutter Diagnostic Lab *(plant diseases, insect damage, and environmental plant problem, how to send samples)*
https://diagnostics.montana.edu/

Montana Frost/Freeze/Precipitation Data by County
https://mtmastergardener.org/linksandresources/frostfreezedata.html

Yard and Garden MontGuides
https://apps.msuextension.org/montguide/index.html

Yellowstone MG Newsletter Archive
http://www.ycmgamt.com/newsltrpage.php

We've Moved!

by Anthony Sammartano

After a long stay in the historical Chamber of Commerce Building off North 27th Street, the Yellowstone County MSU Extension office has moved. You can now find all your favorite Extension services across from the sheriff's office at 2320 3rd Avenue North, Billings, MT, 59101. Both sides of the building on 3rd Avenue have large MSU Extension signs, hopefully making our new location easier to spot.

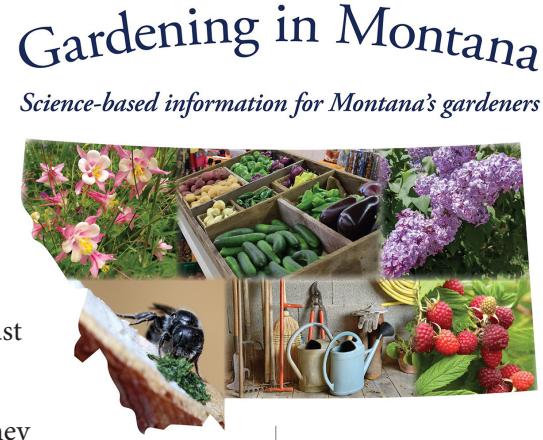
The new office has two parking lots that are free to use, and our building is on its way to becoming ADA certified, which we hope will allow more of the public to easily access our office and our services. There is still some remodeling to be done, but as of now, the new office comes with a small classroom that holds around six people that will be used to teach Master Gardener classes this winter/spring. Once the remodeling is finished, that small classroom will become a large classroom, and it will be used for teaching Master Gardener, FCS programs, and any other Extension related programs and workshops.

We invite you all to our open house on January 12th to visit us at our new space, where warm drinks and brunch snacks will be provided. The open house will last from 11am to 2pm, and it will be a great chance to tour the space, mingle with Extension staff, and learn about upcoming classes and workshops. We hope that you will visit us soon.

Montana Master Gardener Program: At A Glance

by Sarah Eilers

The Montana Master Gardener Program is an educational and volunteer service initiative through Montana State University Extension. Its purpose is to provide research-based horticultural information and support to communities across Montana using trained volunteers.



Becoming a master gardener is not just about taking a course. An individual becomes a master gardener after completion of multiple steps. First, they must complete the core Gardening in Montana/ Master Gardener course. Then they need to pass the open book test with an 80%. Finally, they need to complete 20 hours of volunteer service in their community. Once an individual has completed all these steps, they will be considered a certified Master Gardener.

Advanced Master Gardener designation is for those individuals who completed courses in the past level system and for those who meet the following criteria. Individuals who have been active master gardener volunteers for at least two full years will be eligible for the Advanced Master Gardener program. To become an Advanced Master Gardener, participants will be required to accumulate at least 100 hours of volunteer service hours or 2–5 years of continued service. 25 hours of continuing education over 2–5 years is also required. Acceptance into the program will be at the discretion of the local county agent and coordinator.

To maintain one's status as a certified master gardener or an advanced master gardener, individuals must acquire 20 or more hours of volunteer service along with four plus hours of continuing education annually. They also need to update their volunteer profile in the

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Garden Clubs Of Billings

by Ann Guthals

THUMB-R-GREEN GARDEN CLUB

The Thumb-R-Green Garden Club was started in 1960 by Alice Hamliton, Myrtle Hubley, and Doris Clayton. The original name was Thumb-R-Green (and thumb aren't), but is usually referred to as just Thumb-R-Green. From the beginning, the club has been a member of the state and national garden clubs.

The club has participated in many activities over the years. Every year they put on a beautiful flower show downtown during the Farmer's Market. Last year there were over 800 people walking through the show. The members decorate a Christmas tree at the Moss Mansion, maintain two flower beds at Metra Park as a fund-raiser (Metra pays for this maintenance), and care for and develop the Blue and Gold Star Memorials at Veteran's Park. They collect change at meetings to help fund a Montana reforestation project and in the summer they have garden tours for club members. For twenty years, they sponsored a junior Thumb-R-Green Club.

The group meets monthly on the fourth Monday at the First Baptist Church with different programs at each meeting. There are currently 34 members with one original member – any interested person may join. Contact President Bob Wicks for more information at 406.670.6146.

SOW AND GROW GARDEN CLUB

Back in 1961, some spouses of School District 2 faculty members started several clubs. One of these was the Sow and Grow Garden Club with a motto of "Dig and Do It" and a purpose of gardening education and civic improvement.

Sow and Grow Metra flower beds

Activities over the years have included planting irises on the cliff above the Airport Road, volunteering at the ZooMontana Sensory Garden, running the Geranium Fest at the Zoo, decorating a Moss Mansion Christmas tree, and caring for gardens at the Metra Fairgrounds. One of the gardens at the Metra was built in honor of the club to thank them for their work there.

The group meets at Marketplace 3301 the fourth Wednesday of the month from January to May with program speakers from January to April. In May work at the Metra begins and during the summer months the club also participates in garden tours.

There are currently 10 members with three original members. The club would like to add new members. For further information, contact President Katz Gillstrom at 406.670.9521.

BIG SKY IRIS CLUB

Big Sky Iris Club started over 50 years ago. Their motto is "Come grow with us." Members grow many varieties of irises, then sell them at the Farmer's Market to share the beauty at reasonable prices. Funds raised by iris sales and the low $5 annual dues go to active members to purchase more varieties of irises as well as to charitable donations.

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GARDEN CLUBS OF BILLINGS *continued from page 8*

In addition to the Farmer's Market sales, other activities have included adding to the Airport Road irises, helping maintain the iris bed and floating irises at ZooMontana, and donating irises to Billings Parks and Recreation and St. John's campus.

The Big Sky Iris Club organized the 2025 National American Iris Society Convention in Billings

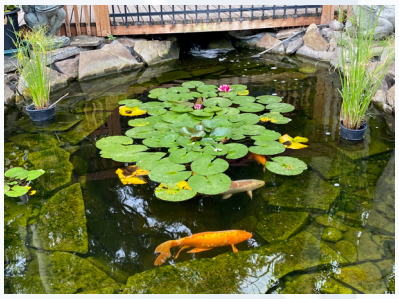
Anyone is welcome to be a member. For information, contact President Linda Haden at 406.702.6128 or Carol Harr at 406.696.7533.

BILLINGS BONSAI CLUB

The Billings Bonsai Club meets every third Saturday at Gainan's in the Heights. Members bring current projects, attend training demonstrations, and put on seminars at Gainan's on how to create bonsai. Contact the club by email at billingsbonsaiclub@gmail.com.

WATER SKIPPERS (inactive)

For over 20 years, the Billings Water Skippers Club met to learn how to create and maintain water features in their backyards. During the Covid pandemic, the club became inactive and unfortunately has yet not returned. If there is anyone interested in re-activating this club, please contact Elaine Allard at 406.694.3100.



MONTANA MASTER GARDENER PROGRAM *continued from page 7*

Volunteer Management System and acknowledge the code of conduct.

Volunteer hours should be educationally based. Answering questions is the number one way in which people volunteer. Demonstration gardens and community gardens are also places where volunteers are encouraged to volunteer. Presenting and teaching along with working at a table/booth designated to answer horticulture questions is another opportunity.

What does not count as volunteer hours? Work you are paid for, maintaining private gardens, designing non-educational or community focused gardens/ landscapes, and finally maintaining gardens related to a for-profit business. The most important thing to remember is that Master Gardeners are not free labor; they are volunteer educators, and the volunteer hours should reflect that.

Continuing Education trainings must be factual and accurate, and come from a research-based source. Training hours must be provided by Extension professionals, university staff, Extension sponsored seminars/workshops, Montana Department of Agriculture events, horticulture or plant sciences classes, or online trainings sponsored by a university. What does not count as approved training? Gardening sessions offered by entertainers, mass media, and salespeople; watching videos from commercial personalities that are not supported by a university system; listening to radio programs or watching television programs.

The Montana Master Gardener Program combines education, certification, and community service to promote sustainable gardening practices and strengthen horticultural outreach statewide.

Yellowstone County Master Gardener Newsletter MISSION STATEMENT

The mission of the Yellowstone County Master Gardener newsletter is to "educate and inform," not to advocate or persuade. The Newsletter Editorial Board takes no position endorsing or opposing, approving or disapproving, any of the assertions or arguments in the contributed information. Information submitted to the newsletter is for your interest only.

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Suri Lunde • Ann Guthals
Ann McKean • Laura Estes
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CONTRIBUTORS

Anthony Sammartano
Sarah Eilers

Our Homegrown National Park

by Ann McKean


Photo by Suri Lunde

Have you taken a walk or worked in your garden lately and wondered where all the insects and birds have gone? North America has lost nearly 3 billion birds (30%) since 1970! And although it is difficult to accurately measure, scientists believe we have lost somewhere between 25% and 75% of our global insect biomass. These shocking statistics are both directly related to an increase in development and the ensuing loss of habitat.

Co-founded by Doug Tallamy, Homegrown National Park is a grassroots call-to-action to restore some of this habitat and regenerate biodiversity by removing invasive plants and planting natives. This can range from a single native plant in a container to a meadow, forest, or prairie.

According to government figures, the total land in the U.S. is 2.26 billion acres, 85 million acres of which is in the National Park System. There are approximately 74 million acres of urban land, and even though that is just 3% of land in the U.S., its development has had a huge impact on our natural world. If we collectively restored just half of our nation's residential land to native plants, that would be almost 45% of our National Park System: our own Homegrown National Park!

If you have planted even one native plant, you can put it on the biodiversity map at Homegrown National Park. The biodiversity map shows where people have registered their work toward biodiversity regeneration, and that has energized me to continue working toward greater biodiversity. Montana has 93,147,839 (largely uninhabited) acres and 134 people who have registered 166 planting areas with a total of 5,979 acres! Add your efforts to the map and help energize others. You can click on this link to see the interactive map: https://map.homegrownnationalpark.org

This is a link to the homepage where you can learn more and join the movement: https://homegrownnationalpark.org/about-us/

Remember, you don't have to redo your whole yard. Tuck in one or two native plants, or reclaim a corner of lawn. Then register your accomplishment on Homegrown National Park! Every plant helps!

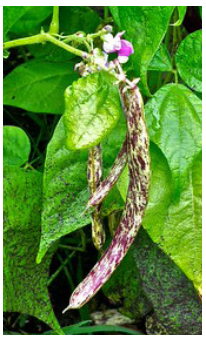
Sources:
https://ers.usda.gov/sites/default/files/_laserfiche/publications/109971/EIB-275.pdf?v=49369

https://www.ers.usda.gov/amber-waves/2024/december/ers-data-series-tracks-major-uses-of-u-s-land-with-a-focus-on-agriculture

Gratitude!

by Suri Lunde

The Billings Community Seed Library (BCSL) is always grateful for donations of seeds grown by local gardeners as regionally adapted seeds generally grow better. All seed donations help to serve as a learning tool for all types of gardeners, and provide a fun opportunity for the community to try and grow something new.



Recently, BCSL had a noteworthy seed donation. A patron donated a package of Dragon Tongue beans with the following note: "The seeds came from the Seed Library – they are the first bush beans I've had success with so I've been saving the seeds for others to try. Thank you!"

BCSL's goal is to foster the enjoyment of gardening and empower our community to grow and eat healthier food. The organization not only provides free seeds to the community but also offers educational events throughout the year like hosting a seed swap in March of each year. It is open to the public during library hours in the Montana Room of the Billings Public Library. If you would like to volunteer or donate seeds, please contact the Billings Community Seed Library at billingsseedlibrary@gmail.com.

If you are interested in seed saving (a great way to help ensure you continue to have a bountiful harvest year after year) or donating seeds, please contact Anthony Sammartano (anthony.sammartano@montana.edu) for a Seed Donation form and information on seed saving.

MONTANA STATE UNIVERSITY | EXTENSION

Plant Disease and General Diagnostic Form

Mail completed form and sample to:
Schutter Diagnostic Lab
Montana State University
119 Plant Bioscience Bldg.
P.O. Box 173150
Bozeman, MT 59717-3150

Date: _____ (MM/DD/YYYY)

Name: _____ Email: _____

Address: _____ City/County: _____

Zip/Area code: _____ Phone: _____

Send samples as soon as possible after collecting. Package in a sturdy container. Do not expose to extreme temperatures. Please fill all applicable fields on this form, including page 2.

Plant common or scientific name: _____

Variety: _____

Describe the problem: _____

_____

_____

Planting date, age, or size: _____

Approximate date the problem appeared: _____

Did the problem occur all at once? Yes ☐ No ☐ Is the problem getting worse? Yes ☐ No ☐

Check all affected plant parts:

- ☐ Branches/Twigs
- ☐ Flowers
- ☐ Fruit/Seed
- ☐ Growing Tips
- ☐ Leaves/Needles
- ☐ Roots
- ☐ Stem/Stalk
- ☐ Trunk

Other: _____

Check all visual symptoms or signs of the problem:

- ☐ Browning/Scorched
- ☐ Canker
- ☐ Damping off/Seedling blight
- ☐ Dieback
- ☐ Distortion/Cupping/Curling
- ☐ Galls
- ☐ Leaf spot
- ☐ Poor growth
- ☐ Root rot
- ☐ Rot
- ☐ Shoot/Tip blight
- ☐ Soil discoloring
- ☐ Stem rot
- ☐ Wilted
- ☐ Witches Broom
- ☐ Yellowing
- ☐ Dead areas
- ☐ Defoliation
- ☐ Mold/webbing
- ☐ Scarring
- ☐ Soil discoloring
- ☐ Stunted

Other: _____

Continued on Page 2

Check all problem distribution areas:

☐ Bottom of plant
☐ Current season's growth
☐ One side of plant
☐ Previous season's growth
☐ Scattered
☐ Top of plant

Other: _____

Describe the pattern of disease problem and the location or environment: _____

_____

_____

Irrigation practices: ☐ Drip ☐ None ☐ Overhead/hand ☐ Sprinklers ☐ Center Pivot ☐ Flood

Frequency: _____ Other: _____

If any insecticide, pesticide, fungicides applied, give type/rate/dates: _____

_____

If any lawn treatments applied, give type/rate/dates: _____

_____

If any soil amendments applied, give type/rate/dates: _____

_____

Additional information: _____

_____

_____

_____

A diagnostician will be in touch shortly after your submission is analyzed. Further information and additional forms are available on the Schutter Diagnostic Lab website: diagnostics.montana.edu

This section is for Extension Office use

Agent: _____ County: _____

Administrative staff/Personnel: _____

Email addresses that reports should be sent to: _____

_____

Can a diagnostician contact the client with questions?

☐ Yes
☐ No