

**Yellowstone Master
Gardeners**
P.O. Box 35021
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YELLOWSTONE COUNTY MASTER GARDENER



We want hear from you
-Send your submissions
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by March 15th for the
next issue.

Newsletter

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~ Featured Master Gardener ~ Jerry Dalton ~

Jerry Dalton Conquers Changing Shade Challenges

Growing up, the emphasis was on growing food since his family lived on a farm south of Lewistown until he was in the sixth grade. It was never a huge money maker, so they grew much of their food and only drove to town once a week for groceries. Jerry remembers lots of flowers around the farmhouse but suspects they were annuals and broadcast seed since other chores took priority. In the early 50s and 60s he had breakfast bowls of fresh picked strawberries from their family patch.

When Jerry was a young adult his Grandmother requested some gardening help and Jerry worked on clearing pulmonaria (Lungwort) from under the crabapple trees. He kept some of the "Mrs. Moon" variety which he still has today.

If he could nurture one plant in his home, he would defer to his wife, Lois. She keeps indoor violets and ferns in shape while he concentrates on the garden space. He would miss them if they weren't there, but he doesn't want to fuss.

Long ago, wanting to understand a plant, he grew garbanzo bean "seeds" from the supermarket. They formed a roundish ball a foot in diameter and when he reached his hand into the mass, it had a cool temperature. He noted a sage green leaf color and thinks there were probably only two seeds per pod – not a real "crop." If he spots a field of chickpeas (garbanzos) along the road, now that pulse crops are often grown in Montana, he will want to investigate at the edge of the field.



In 2013 Jerry joined the Master Gardener Program after he retired from driving Billings Public Library's bookmobile. He volunteered at the zoo and kept hearing people ask, "Are you a Master Gardener?" Eventually, he took levels 1 and 2 classes and now has a specific area of the Sensory Garden that he nurtures. He has served as Treasurer of the Botanical Society of ZooMontana which is the planning group for the zoo grounds.

Jerry's advice to beginner gardeners is to just keep trying when a plant doesn't seem to thrive. You can relocate the plants, the garden plot, or keep trying different varieties until you get it right. This is what happened as trees matured in his own yard shading the garden more each year and he took Dr. Bob's advice on

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- ◆ Amy Grandpre
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vegetable varieties good for Montana. He even switched from the ever popular CalWonder Peppers to Ace bell peppers from Johnny's Seeds in Maine finding them more compatible to his now cooler shade garden and Montana's climate. Eventually the peppers had to move to get more sun, too. (Dr. Bob Gough was a former MG class instructor).

Jerry wanted to end the interview as it began – with humor (he started the ZOOM meeting wearing a COVID-compliant face mask!) so he shared a joke from local birdwatchers John and Margaret Tuttle: “ Never plant a bigger garden than your spouse can tend AND process.”

~Submitted by Elizabeth Waddington

Planning Your Winter Garden

As the days get shorter and darker, we hunker inside with our seed catalogs and dream about the next growing season. Even though they may not be out of sight, our gardens in winter are too often out of mind. Many gardeners 'clean up' too much in fall by trimming and raking away all the remnants of summer, leaving only a few shrubs at best for winter interest. While we are planning for next summer, we can also do some thoughtful planning for next winter and extend our gardening year to the *whole* year. Although it's a different kind of beauty, winter gardens are full of beauty *and* life. We love gardens because they bring beauty, healing and life to our

yards and our lives; when we spend time outdoors, we are renewed and invigorated. Remembering that our gardens do not grow in a plant vacuum but are interconnected with a wildly rich network of insects, birds and other animals, there are some simple things we can do to support and enjoy those networks as we plan and manage our gardens.

Harmony and balance are the guiding principles of all good design. They can be achieved by using focal points, repetition and contrast. These are created by combinations of shape, texture, color, mass, rhythm, movement and even sound. By engaging your senses through *all* the changing seasons, your gardens can bring you pleasure all year long.

When employing good design principles in your garden planning, you have choices about what plants will achieve that harmony and balance. A specimen tree or evergreen can anchor your design but also provide food and shelter to animals and insects. As you feast with your eyes, remember to also include plants for caterpillars to nibble and butterflies to visit. Bees need pollen and nectar from last frost (or sooner if the days are warm) to first frost (and often even later), so use pollinator plants to create mass and provide color and texture. Repeat some of these in groups to create rhythm while creating contrast using shape, color and texture. Choose plants with a variety of bloom times and flower shapes to appeal to a wide range of wildlife. Keep in mind that you are not only offering food for these animals but places to raise young and find shelter. This is not only important in summer, but is crucial in the winter, and by following the guidelines for a healthy wildlife habitat, you are also enhancing the beauty of your winter garden.

This spring plant some echinacea or rudbeckia and leave their skeletons standing next winter. They will provide color, mass and texture to enhance your design, and pollen, nectar, seeds and shelter for birds and insects as the seasons progress. Our native bees and parasitic wasps will enjoy their summer sustenance and then shelter in the hollow stalks in winter, so try to leave the dried stalks until the bees have emerged in spring. If you feel compelled to cut them earlier, set the cut stems aside until the weather has warmed. Leaving the skeletons of your beautiful grasses, not only gives color, texture and movement, but provides seed for birds.



Chrysalis in a flower pot

The graceful stems also protect the crowns of the grasses from drying sun and wind while holding the snow on them to provide steady moisture. *Panicum virginiana* (switch grass) and *Bouteloua gracilis* (blue grama) are among the many attractive native grasses that do well here and benefit native fauna. Prune your thoughtfully placed shrubs in early spring instead of fall to provide natural elegance to your winter design and safe perch areas for birds. *Physocarpus* has interesting exfoliating bark which is only visible in winter and *Aronia* has attractive silvery bark and provides late winter berries for hungry birds. Allowing the leaves of trees and shrubs to remain and decay (unless they were diseased) helps insulate the ground and returns nutrients to the soil to feed your plants and the microbiome they depend on to grow up and do it all again the next season. That rich layer of organic material also provides food and shelter to decomposers such as worms and centipedes and safe harbor for many other overwintering beneficial insects and their eggs, including ladybugs, assassin bugs, butterflies and moths.



By leaving some plant material through the winter, you are also spreading out your workload. I like to remove the messier plant material in the fall such as nepeta, salvia and annuals. They have already given their pollen and seeds for the season and don't look so great in the winter.

Winter in Montana is long, so planning your garden to include the winter season not only gives life to the animals who share our space, but adds comforting calm beauty with the reminder that hope springs eternal in every gardener's heart.

Some helpful resources for planning your winter garden include [The Prairie Winterscape](#) by Barbara Kam and Nora Bryan, and [Native Plants for Prairie Gardens](#) by Jane Flanagan. You can find the simple guidelines for providing a wildlife habitat at the Montana Wildlife Federation and the Xerces Society websites listed here.

<https://montanawildlife.org>

<https://savvygardening.com/spring-garden-clean-done-right/>

<http://www.xerces.org/pollinator-resource-center/mountain-region>

<https://savvygardening.com/6-reasons-not-to-clean-up-your-garden-this-fall/>

<https://savvygardening.com/spring-garden-clean-done-right/>

<https://www.theguardian.com/lifeandstyle/2020/feb/08/cutting-it-fine-why-winter-stems-should-be-left-until-the-last-minute>

~Submitted by Ann McKean

Level Awards

Lev. 1 Shirt & Certificate
 Patti Doble
 Margy Bonner
 Marla Patterson
 Kristi Picchioni
 Renee Verbeck



Lev. 2 Shirt & Certificate
 Roberta Fuller
 Renee Verbeck

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 Please take 2 minutes to complete the survey at:**

<https://www.surveymonkey.com/r/Y8YXMLZ>

Film Review: "The Biggest Little Farm" by Bess Lovec



Directed by John Chester, 2018, PG, 1 hour 31 minutes

I tend to avoid documentaries due to the ponderous facts slowly delivered, ostensibly presented to make viewers feel guilty about what they have or haven't done. On the other hand, **The Biggest Little Farm**, directed and produced by John Chester, has a genuinely refreshing feel. Even though a documentary, in the sense that the information is true, it pleasingly has a beginning, middle, and end, plus character development. These elements help contribute to its success.

No spoiler alert or thick plot summaries here. A young couple decides to purchase desecrated, neglected land in southern California to develop into a productive, multi-faceted, healthy farm. They hire a wonderful guru-type fellow to help them achieve their goal, although many steps, challenges, and heartaches await them. Portrayals of the bittersweet moments and explosive successes thankfully don't feel like a sappy Hallmark production. What is not dwelt upon, however, is that this young couple found some substantial funding to build their dream. That the man of the house is a professional film editor surely doesn't hurt either.

Their goal is not only to find a little piece of heaven but to develop an environmentally sustainable, healthy ecosystem. The methods their teacher recommends are not the short-term, fix-it-now solutions. Instead they counter predators with other predators, mimicking the natural world, and they avoid chemical applications.

Achieving the fragile balancing act of animals, plants, and weather takes enormous lift. Seven years later an economically and environmentally sustainable organic farm begins to finally hum. What emerges is a beauty to behold and a triumph of human endeavor.

I realize that I gush, but another editor of this publication liked it so much that she watched it twice. International Movie Data Base (imdb.com), rates it an 8.1/10, and rottentomatoes.com audiences score it a 95%, in case you need ample justification to tune in. The Billings Public Library has it in DVD form to check out for free. I realize that the library is closed now, but you can reserve it online and then pick it up curbside, or you can stream this film through Amazon Prime. Get the popcorn ready.

ANOTHER WAY TO READ THE NEWSLETTER - WORD PRESS

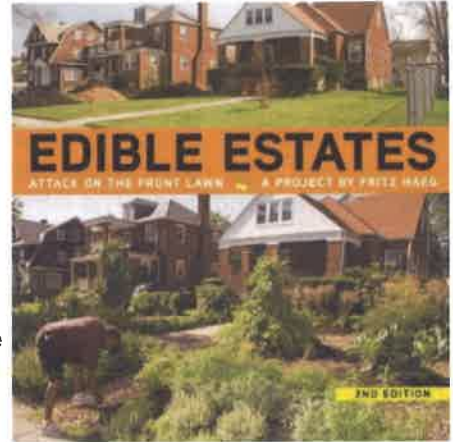


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You can contact Corinna Sinclair if you have any questions.

crean.bean@yahoo.com

Edible Estates: Attack on the Front Lawn by Fritz Haeg



I have not read a more iconoclastic, thoughtful author in a long time. The subject of this book is a project to replace front lawns with gardens, but I imagine I would be interested in any subject Mr. Haeg wrote about.

We start with the many reasons lawns in the United States have reached the point where they cover 30 million acres and ... "use more equipment, labor, fuel, and agricultural toxins than industrial farming, making lawns the largest agricultural sector in the United States." (p. 118) Care of our lawns also consumes enormous quantities of water. And our food travels an average of 1500 miles to reach our plates, using fuel and causing pollution on the way.

The author sees these vast acres as a place to grow local food and started the Edible Estates project in 2005 with the first prototype front garden in Salina, Kansas, the geographical center of the U.S. The project has gone on to create 14 other gardens, the last one in the Twin Cities of Minnesota in 2013, with sites in several other countries besides the U.S. There has been a deliberate choice to pick typical front lawns that sit within a row of contiguous grassy lawns, are relatively flat, and have adequate sun. Mr. Haeg wants the project to be noticeable, which these gardens are when set side-by-side with flat grass lawns.

Many of the gardens are sponsored by local art centers and all are documented in several ways. There is an in-depth website about Edible Estates that is informative of the process and results. The book covers the first four U.S. gardens with testimonials and photos from the homeowners, as well as stories by other individuals who have started their own front gardens. Each story relates the reaction of neighbors, some of whom are aghast but most of whom are supportive. All the gardeners delight in picking fresh food from their front yard. They all discuss how much more connected to their neighborhood and community they are as the garden develops, especially to the kids.

All of these prototypical gardens are set in suburbs or cities. My garden south of Billings has a large deer fence around it—apparently that was not a problem in these urban gardens. We also use lawn around our house as a fire break, again not mentioned regarding these urban settings. While many of the sites have mild winters, some, like in Minnesota, have cold, snowy winters like Montana and I did not see any photos of what these gardens look like in winter. Many front yards in Billings have been replaced with plants other than grass and it is interesting to drive by them to see what they look like in winter. And, lastly, I want to mention that there are other alternatives to grass lawns than vegetable gardens, such as meadows, groupings of native plants, and gravel/cactus landscaping such as in Arizona and Nevada.

I recommend reading this book for the information and ideas and the fun of seeing these projects, even if you have no inclination to remove your front lawn. One outcome may be to reduce the size of your lawn, leaving a smaller area in which people sit or play.



~Submitted by Ann Guthals

Before and after photos of Ann McKean's front yard near the Rims



**THREE MACRONUTRIENTS NEEDED FOR GOOD PLANT HEALTH
NITROGEN – PHOSPHORUS—POTASSIUM**

I have been struggling since moving from sandy loam that grew everything with good result to some very confusing dirt and clay been soil. "Confusing" would be a good word to describe how everything I have planted has grown or died. I planted two peonies ten feet apart. One has acceptable leaf growth and blooms. The other shriveled and died. The lab said it was an abiotic (not pesticide) issue.

Below are some bits on information about N, P, and K. If you get confused about which one does what remember "up, down, and all around"

N- Nitrogen - A primary macronutrient that is neutral will produce vigorous vegetative growth that is lush and dark green. Nitrogen is a major component of chlorophyll where plants use sunlight energy and water to produce sugars and food for the plant and energy to grow through photosynthesis and respiration.

Most forms of N leach rapidly from the soil because they dissolve in water and drain deeper underground. If there is not enough N, the plant stops growing and the older leaves turn yellow and fall off. When excess amounts of N are applied to fruit crops such as tomato and squash the result is all vines and few fruits. Excess N will produce a tall tree with many thin branches and fewer stunted roots inviting pests and disease. The same applies for root crops like carrots, turnips and beets, lots of leaves and small roots.

P – Phosphorus - A primary macronutrient anion is responsible for the plants photosynthesis storage, transfer of energy, respiration and timely maturity of fruit. It also has a role in growth of new tissue, division of cells and root growth. Adequate P in the soil helps the plant resist disease and pests. Lack of P can lead to weak plants that fail to produce. Plants need P early on because it is hard to reverse after the plant is stunted. P should be worked into the soil before planting because it is highly immobile meaning it doesn't move down in the soil.

K – Potassium - A primary macronutrient cation that is essential for water uptake and synthesizing plant sugars needed for food. It is associated with the movement of water, nutrients and carbohydrates in plant tissue. It is also responsible for the opening and closing of stomata which regulates water vapor, oxygen and carbon dioxide. It too is immobile, but not as much as phosphate. Deficiencies stunt plant growth and reduce yield.

Remember that soil type, temperature, microbes and PH, as well as water and air in the soil make a difference in growth as well as other nutrients like calcium, iron, copper, manganese, and zinc. The best result for your garden or lawn AND the environment are achieved by applying the correct type of nutrients in the proper amount, at optimal times throughout the year. The correct deficiency can only be found by getting your soil tested.

Resources: Wikipedia

Fertilizers and Soil Amendments. (book)

~Submitted by Sheri Kisch

Your Questions

My go-to general gardening book is 1978 Reader's Digest Illustrated Guide to Gardening. It has a little about propagating, pruning, bugs, weeds, and charts with details about trees, shrubs, perennials, annuals, etc. For an update, what could the editors collectively suggest published in the last 10 years? I know, just google my garden question limited to edu. responses. But I am that generation that likes a reference book. (Jerry Dalton)

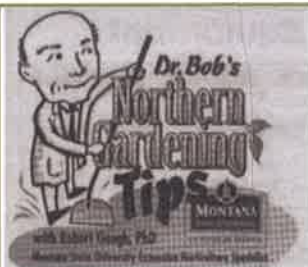
From Sheri Kisch:

Rocky Mountain Month-By-Month Gardening: What to Do Each Month to Have A Beautiful Garden All Year - Colorado, Idaho, Montana, Utah, Wyoming by John Cretti. Quarto Pr, 2015.

The Montana Gardener's Companion: An Insider's Guide to Gardening under the Big Sky by Bob Gough and Cheryl Moore Gough. (Gardening Series) 2nd Ed, 2015.

Best Garden Plants for Montana by Bob Gough and Cheryl Moore Gough. Lone Pine, 2005.

"I think all three of these would be excellent references for Jerry or any of us." (Secoded by Amy G.)



Christmas Cactus

Question to Dr. Bob: Why doesn't my Christmas cactus bloom?
 Answer: Don't be too kind to your Christmas cactus: it may not bloom.

Both Christmas cactus (*Zygocactus truncatus*) and Easter cactus (*Schlumbergera bridgessii*) need a dormant period before blooming. Ease off watering from August

through November so the plants droop a little. In mid-September, place them in a cool (50-55 degrees F) window where they'll get no artificial light. An east window in an unused room is great. Keep it cool-the plants won't set flower buds if the night temperature rises above 70 degrees F. When buds have set, move the plants into a warmer area and give them plenty of water. Don't fertilize until bloom is over. Once you see new leaf growth, begin using a liquid fertilizer, following the directions on the package.



Dr Bob's wisdom lives on...

~ Submitted by Corry Mordeaux



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 inter-

Garden Advice or Myth

Gardening Advice or Myth

Let's promote truthful gardening wisdom and debunk advice/myths that we often hear which may or may not be solidly rooted in science or actually work.

Myth 1: Plants grow bigger in big pots

Plant growth rate is mostly driven by genetics although growth can be affected by light, water, fertilizer, and temperature. A bigger pot has more soil and more room for root growth but plants only grow the roots they need to support the above-ground part of the plant. The plant does not even know that it is in a pot.

Myth 2: Water indoor plants with distilled water, not tap water

Distilled water and reverse-osmosis (RO) water are pure water containing no minerals. Although a few houseplants do prefer almost pure water, most plants find it harmful. Most tap water will not harm plants, unless it has high alkalinity (hard water) or contains high levels of sodium, in which case it has to be treated or mixed with rainwater, distilled water, or RO water before using it on plants.

Myth 3: A strict watering schedule is best for indoor plants

When an indoor plant should be watered depends on how quickly water in the soil dries up in the pot, which is influenced by factors like pot size, plant size, indoor temperature, humidity, and amount of light. Therefore a plant's watering need in each house or room differs and does not work on a schedule. Stick your finger in the soil. If it is dry, water; if it isn't, don't.

Myth 4: Water succulents less than other houseplants/succulents only need a tiny sip of water

This does not mean you should only add a small amount of water each time you water a succulent. What it really means is that you should water the succulent thoroughly but less often so they dry out between waterings. It also implies the plant likes a well-draining soil and you must include more grit or sand in its soil.



Continued on page 8 -

Myth 5: Houseplants purify the air and add oxygen in your home

Claims that NASA studied and proved that houseplants purify the air are bogus. The NASA research study does not even mention using plants to clean the air in a home. Plants give off oxygen during photosynthesis. However, the quantity produced is so minuscule that it does not effectively increase the oxygen level in a home.

~Submitted by Suri Lunde

Mindfulness

Expanding Mindfulness through Nature

If at some point you want to leap into another learning journey, consider the Montana Master Naturalist course at the Montana Audubon Center. It usually occurs in spring, with some sessions inside but mostly outdoors. Due to Covid, the spring 2020 session was postponed to fall 2020. The instructor Heather Bilden accommodated Covid restrictions with sensitivity and thoughtfulness. Unfortunately the class met inside more than usual due to cold weather, but we soldiered on. At first glance the price might seem daunting until calculating the number of hours with highly qualified instructors. Heather brings in many professional scientists from the colleges and the City of Billings, such as an arborist, a retired biology teacher, an entomologist, and other local luminaries.

The content focuses on that magical intersection of geology, birds, plants, reptiles, weather, mammals, grasslands, waterways, insects, and of course people. Implications lead to politics, but I'm glad to say we didn't go there. The only drawback resulted from my own shortsightedness, as usual. I signed up for the class primarily to get feedback on my writing, which did not come to fruition. I completed my writings, plus the readings, presentation, volunteer work, and attendance to earn the certificate. However, the Wise One at the end of the kitchen table, my spouse Ted, reminded me that it is not a writing class!



The Naturalist program through the Montana Audubon Center by Riverfront Park emphasizes slowing down and observing. I really like developing this skill. Too often I find myself rushing from here to wherever and then wondering what happened. Lately the popular term for slowing down to observe, not just slowing down, is mindfulness. Our environments change frequently, and by really waiting, then closely observing, we are given clues about how nature works. Next we can begin to figure out what actions, if any, to take.

I likewise enjoyed meeting new people with similar leanings. Another student works with horses, so we shared that world. Birders definitely hear a different drummer than I, and seeing the world through their eyes, even briefly, helped expand mine. Gladly I soaked up tons of facts, more than I can share here! Feel free to contact me if you'd like additional details on this rewarding journey towards fulfillment.

~ Submitted by Bess Lovec

Vegetables Au Gratin

White Sauce

1/4 c. mayonnaise! 2 Tbs. flour
 3/4 tsp. salt 1/4 c. minced onion
 1 Tbs. parsley 1/4 tsp. Italian
 pepper to taste seasoning (basil/oregano)
 Add to saucepan and cook
 1 minute, over, medium heat.
 Slowly add 1c milk & stir to thicken

Add vegetables to sauce. Stir into casserole (1 qt size)

Topping

Mix 1/2 c. bread crumbs
 1/4 c. grated parmesan cheese
 1 Tbs. melted oleo Sprinkle
 over casserole.
 Broil 5 min. until golden.

Vegetables

Carrots, zucchini (slice, boil & drain), peas, pea pods, green beans, cauliflower... or...
 up to 1 qt assorted...

from Janet Schoonover

A family favorite for using up odds and ends of veggies from either the garden or the fridge (in a 1 qt casserole pan) . This recipe is unlimited in variations.

~submitted by Elizabeth Waddington



"Covid-cado" planted from a sprouted avocado pit in late March, now 27" tall in December.

COVID-coping



The Master Gardener program like many other organizations is struggling to remain relevant and vital to their members in our COVID-19 suspension of activities and sense of time. Stay with us; this won't last forever.

Find connections through nature when you can get outdoors and try some quarantine projects indoors when you can't. Here are the results of starting plants indoors with preschoolers.

Miss Hazel with her amaryllis planted in October and blooming in December.

Share the magic of growing plants.

~Submitted by Elizabeth Waddington

so

Congratulations to Yellowstone County Master Gardeners who stand out as recipients of the 2019-2020 Outstanding Master Gardener and Master Gardener of the Year awards.

Outstanding Master Gardener honors go to AnnaMarie Linneweber, Sherry Doty, Tom Kress and Brian Godfrey for their exceptional dedication and service to the Montana Master Gardener program. Amy Grandpre, Yellowstone county Horticulture Assistant, had this to say about each of her unique Master Gardener Volunteers:

AnnaMarie Linneweber has been a Master Gardener since 2014. Her many volunteer projects include the Moss Mansion gardens, ZooMontana Sensory Gardens & Botanical Society, Yellowstone county Master Gardener Association board member (since Nov. 2014 to present), Arbor Day celebration, Friendship House children's gardens, Independence Hall Vet's Garden (2016 to 2018), and Billings Annual Flower Show. She suffered a major health setback in 2017 with heat-stroke complicated with severe reaction to multiple wasp stings causing her hypothalamus to fail. This crushing condition made her body unable to adjust to hot or cold, limiting her ability to exercise her huge passion for gardening, and outside activities. "AnnaMarie just keeps plugging along despite her health issues and has figured out how to keep everything going!! She still promotes Master Gardener every chance she gets and continues to become more involved as her health allows."



Sherry Doty, a Master Gardener volunteer since 2017, works tirelessly on many volunteer projects including ZooMontana, Geranium Festival, MetraPark Square Foot Demo Garden & Education Center greenhouse, Farmers Market, Jim's Jungle, Arbor Day events, info booth at fair, Northern Rockies Tree School, Master Gardener Level 1 & 2 class assistant, event photographer, Billings Library Adult Education seminar coordinator – arranging monthly speakers for Library Gardening Series, Independence Hall Garden, Sow & Grow Metra Gardens, Courthouse Memorial Planter, and Yellowstone county Master Gardener Association board secretary.

"Sherry is highly motivated and is always there offering to help."

Longtime Master Gardener volunteer, **Tom Kress**, joined the group in 2003. His many volunteer projects include donating major amounts of homegrown vegetables to both the Billings and Red Lodge food banks, donated money from personal tomato plant sales and bedding plants to the Laurel Garden Club sale, hosted several Master Gardener tours of his truck farm, Level 1 Master Gardener class coordinator, information booth at fair & Good Earth Market, several presentations on seed saving and other garden topics, as well as a Yellowstone county Master Gardener Association board member since 2016. "He has been a tried-and-true Master Gardener for many years, and he is so willing to spread his knowledge and promote the Master Gardener program."



Winner of a 2018 Outstanding Master Gardener award and the **2019-2020 Master Gardener of the Year**, **Brian Godfrey** completed all three levels of the Montana Master Gardener program in a single year. A feat not accomplished by many; Brian achieved this task by logging close to 300 volunteer hours that year. Since 2018 Brian has logged well over 700 volunteer hours on projects such as: ZooMontana Sensory Gardens, Plant Select Garden, Geranium Festival, president of the ZooMontana Botanical Society, Jim's Jungle, Potager's, fair & Farmers Market info booths, president of the Yellowstone county Master

Gardener Association since 2018, MetraPark Square foot garden, 4x4 competition garden, rockery at square foot demo garden, Moss Mansion Gardens, major participant in organizing of annual Yellowstone county Master Gardener Christmas party at Moss Mansion, has secured major donations for our program, coordinates summer BBQ events and created a "chuckwagon" to simplify event process, Level 1 & 2 Master Gardener class coordinator, major coordinator of the 25 years of Yellowstone county Master Gardeners event, purchased and donated Master Gardener class laptop and projector, plants, soil, boulders, chuckwagon and endless other items without seeking reimbursement. "He has such a heart for the Yellowstone County Master Gardener program and truly gives his all in so many ways. Brian is a major asset to the advancement of our program. He is such a dynamic person, has done so much, and continues to do much for our program. He is a great spokesman for the Master Gardener program and really gets people involved."

~Submitted by Amy Grandpre

Gardeners of all ages (especially millennials) are rediscovering the joy and beauty of growing greenery indoors. Just like gardening outdoors, tending indoor plants helps reduce stress and elevate your mood. Here are some plants that are low-maintenance for a seasoned or novice indoor gardener. These plants can literally survive for weeks or months with only minimal care. They all require indirect or low light and need to be watered when the soil is dry to the touch, which is perfect for busy plant parents.

* Denotes toxic plant; so place these plants out of reach of pets and children.

Spider Plant/Airplane Plant (*Chlorophytum comosum*) • Long thin leaves with tiny white flowers that fall down to the edge of its container, ideal for hanging baskets • During winter, mist the plant frequently to prevent the leaf tips from turning brown. (At right)

Prayer Plant (*Maranta*) • Variegated leaves fold up at night as if they are hands in prayer • For its colorful foliage to stay vibrant, it needs indirect to low light and good draining soil • Mist leaves on a regular basis.

Boston Fern/Sword Fern (*Nephrolepis*) • Bright green arching fronds that look great in urns or baskets • Love cool, low-light, and humidity (mist often during the winter to minimize leaf drop) • Keep away from cold drafts or heat ducts • In summer, place in a shaded outdoor location.

Peace Lily (*Spathiphyllum*) • Shiny green foliage and produces white flower spaths • Prefers humid room with low-light • Water and mist regularly to aid blooming.

Cast Iron Plant (*Aspidistra elatior*) • Dark green narrow leaves, slow grower • Thrives on neglect and lives happily in dark rooms with only occasional watering.

Hoya/Wax Plant (*Apocynaceae*) • Slow-growing vine with thick waxy leaves and occasionally produces clusters of flowers • Let it trail over the edge of a pot or train it up a trellis or totem • Thrives in bright indirect light but does just as well in darker locations.



ZZ Plant/Eternity Plant (*Zamioculcas zamiifolia*)* • Upright, slightly arching thick stems covered in shiny, dark green leaves • Tolerates neglect and low-light areas of the home.

Snake Plant/Good Luck Plant/Mother-in-Law's Tongue (*Sansevieria*)* • Sword-shaped vertical leaves, comes in variety of leaf patterns and shapes • A succulent that adapts to different light conditions. (At left)

Philodendron* • Fast-growing vine, ideal for hanging basket or can be trained to climb a small trellis or totem.

Pothos* • Vining plant ideal for hanging basket or can be trained to climb a small trellis or totem • Comes in wide range of foliage colors.

Jade Plant (*Crassula ovata*)* • Thick stems branch like a small shrub or tree • Slow-growing succulent that can survive neglect. (Pictured on next page)

Dumb Cane (*Dieffenbachia*)* • Comes in wide range of colorful leaves • Prefers low light or bright, indirect light.

See next page for a Note on Pets and Toxic Plants

In addition to the houseplants noted above as toxic, there are many other common indoor plants that can cause mild to severe symptoms in cats and dogs when ingested. Some examples are azalea, cyclamen, kalanchoe, true lilies, sago palm, hyacinths, chrysanthemum, poinsettia, holly, Bird of Paradise flower, aloe, and amaryllis. (Source: list obtained at veterinarian's office printed by Pet Poison Hotline). All of these plants should be out of reach of pets. This is not an exhaustive list of indoor plants toxic to pets; there are many sources on the internet if you have questions about a particular plant or you can consult your veterinarian. Being aware that some plants are dangerous to pets when consumed can help one have an educated approach as to whether or where a plant should be grown in one's house.



Here are some additional pet-friendly indoor plants: African violet, air plant (Tillandsia), aluminum plant, Christmas cactus, some ferns (e.g. bird's nest fern, staghorn, maidenhair), Peperomia, friendship plant (Pilea), some herbs (e.g. basil, sage, thyme), lace flower vine, parlor palm, moth orchid, polka dot plant, and some succulents (e.g. echeverias, haworthia, hens and chicks). (Source: Better Homes & Gardens, Architectural Digest)

~ Submitted by Suri Lunde & Ann Guthals

Yellowstone Master Gardener Association

Highlights of November 18th, 2020 Minutes



NEW BUSINESS:

-MSU Extension Account: Amy said that individual extensions will not have bank accounts and they will go through the main extension in the future. The current total of \$3,000.00 was therefore donated to the YCMGA. Amy requested approval for 14 appreciation gift cards for the newsletter committee and board. The total would be about \$700.00. Tracey made a motion to approve the request. Sheri F. seconded.

All approved.

-Update on Channel 7 courses: Sherry briefly reviewed the Channel 7 contract with board members. The contract covers how the program works and a warranty agreement which reiterates that our films should be free from slanderous materials, etc., and that we do not violate any laws. The cost is \$300.00 for 26 one-half hour programs or 13 hour-long programs. Sherry will be working with Cory Glasser to start filming a demo with hopes of having Channel 7 as a venue to share info on the YCMG Program. Tracey suggested having sponsors to help support the program. Amy stated the Michael Walz would like to help with any gardening videos for children.

-Historian position: Corry Mordeaux gave Amy information on the history of the YCMG. Amy will keep the info until we fill the position.

-Seed starting kits: Amy said she still had about 13 boxes of seed starting kits available for use. Master Gardener Lori Byron asked if she could have about 7 kits to use in Big Horn County. Brian approved giving Lori 7 kits.

-Master Gardener 2 classes: Amy said the MG2 classes will be held in Jan/Feb 2021. They will be online, with two 1-hour sessions each week. Patrick Mangan will be putting it together.

-Master Gardener T-shirts: Amy has stocked to Level 1 T-shirts. They have a lighter fabric and the color is a darker green than the previous shirts.

Respectfully submitted by: Sherry Doty
Secretary, YCMGA



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Announcements

Be sure to read the emails from Amy Grandpre to stay up-to-date on Master Gardener events and to learn about volunteer or paid opportunities.

Winter classes for Level 2 begin January 21st 2021 and will be online via WebEx.

2021 Calendars

I just received the 2021 Urban IPM Calendar and Yellowstone County Master Gardeners Rayanne Schuler, Corinna Sinclair and Stacey Jacobs have their photos featured.



How exciting to have 3 of our Master Gardeners featured, and want to commend them on being selected for the 2021 calendar...lot's of folks will be seeing their photos.

 Currently all
 classes and face to
 face programming
 are on hold.

However, our office
 remains open 8 am - 5
 pm and we will
 continue to service our
 community via phone
 calls, emails, and other
 appropriate means.

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Top left: Stacey
 Top right : Rayanne
 Center below: Corinna

~Submitted by Amy Grandpre



Yellowstone Master Gardener Association

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Important links (full list only in this winter issue):

Yellowstone Master Gardener Association Page – <http://www.ycmgamt.com>

YMGA Facebook page – <https://www.facebook.com/ycmga>

YMGA newsletters Blog online: www.yellowstonemastergardenernewsletter.wordpress.com

YMGA Newsletter Submissions ynergardener@gmail.com

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

Ask An Expert <https://www.msueextension.org/>

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

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

Yard and Garden MontGuides—<https://store.msueextension.org/Departments/MontGuides-by-Category/AG/Yard-and-Garden.aspx>

Montana State Master Gardener Facebook page- <http://www.facebook.com/MTMastergardener>