



Sandoval Extension Master Gardener Newsletter

<http://sandovalmastergardeners.org/>



New Mexico State University • Cooperative Extension Service • U.S. Department of Agriculture

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NMSU and the U.S.
Department of
Agriculture cooperating.

**SEMG Newsletter
Submissions
Deadline: 25th each mo.**

Please submit news,
articles, events and
photographs to:
newsletter@sandovalmastergardeners.org

Editor:
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Meg Buerkle Hunn, Advisory Council Chair

A Fond Farewell to Rachel

As many of you know, our Extension Agent, Rachel Zweig, has been accepted into the [Peace Corps](#) (Guatemala). Our loss is Guatemala's gain! Rachel helped us 'emerge' from COVID as a stronger and wiser community of gardeners.

Her irrigation classes alone reached (and helped) hundreds in our community. Her sense of humor (and her newsletter puzzlers) will be greatly missed. SEMG is deeply grateful for the time she's been with us. SEMG gave her a National Geographic Adventure Map of Guatemala along with a brass compass to help her find her way along her journeys. We wish you the best, Rachel, and we look forward to following your adventures with the Peace Corps!

-Meg



Meg Buerkle Hunn, Advisory Council Chair

Six weeks ago, I planted out garlic for next year.

Two weeks later, I put in hundreds of spring bulbs.

I don't think I have memory loss yet, but I sure don't have any recollection of where I put either the garlic or those spring bulbs... I guess I'll know come springtime.

This is a **"don't do as I do" post!** As well as a gift-giving idea for the upcoming holiday. A **challenge post.** A New Year's Resolution in the makings. I don't know. But I do know I wish I knew where those things were planted so I could plant around them, and so I'd know where to look for them come warmer days. So, here's the gift idea: a **Garden Journal** for yourself or a gardener you know.

It could be blank pages or lined. It could be bound or loose-leaf. It could be a black and white Composition Notebook from the drug store or a beautiful leather-bound journal from a local bookstore. Something to record your garden-doings inside of so you don't make mistakes like mine! I am also told that, once you've done this for some time, you start to see patterns, you can recognize best practices for your space, you can effectively rotate crops, you can even give others advice and share the wisdom you've gleaned from this practice.

So, now I just have to pick out a journal - and (here's the hard part) commit to writing things down. And, maybe the harder part is getting your garden partner(s) to commit to the same. But, perhaps, together, we'll all be able to look back on these misplaced garlics and bulbs and laugh and then share the things we've learned and seen in our garden.

I hope you and yours have a wonderful holiday full of the gifts of love, joy, hope, and peace.

-Meg

PS - For a thoughtful gift for the generations to come, check out Anaya Elizabeth Johnson's TED talk called

'How to find joy in climate action.'

https://www.ted.com/talks/ayana_elizabeth_johnson_how_to_find_joy_in_climate_action

The Rev. Meg Buerkel Hunn

Down & Dirty with Rachel-Sandoval County Extension Agent

The grass was alive. Okay, maybe that's obvious, but I mean "alive," like "Frankenstein alive." I heard a rustle along the ditch bank and saw some dried, short reeds and a few sprigs of grass moving back and forth, sticking out of a layer of leaves. I bent closer to see what animal was moving amongst them and realized there was no animal amongst the reeds. One or two reeds at a time, an inch at a time, were being pulled into the earth. The animal was below the reeds, not amongst them. By morning, the clump of reeds and grass had been reduced to a few stragglers.



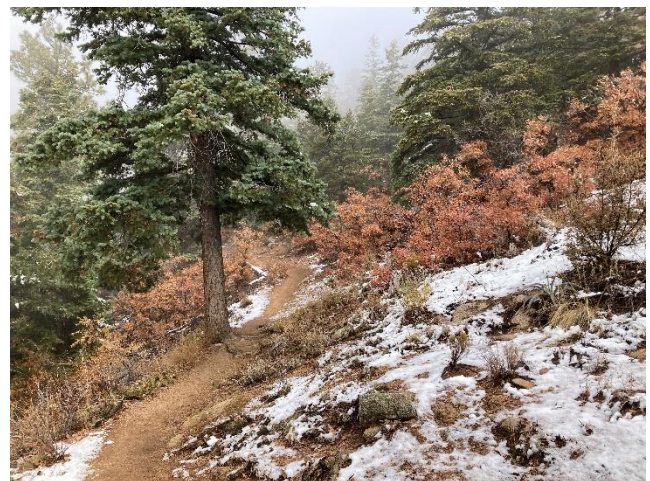
Where the wild things are. Photo: R. Zweig

As part of a program with the Ciudad Soil and Water Conservation District—RiverXchange—the Extension office goes into elementary schools to teach fifth graders about irrigation methods. When we ask them who is responsible for getting them their food, they often say "my mom," "the cafeteria ladies," and "the store" before hitting on the answer we are looking for: farmers and ranchers. But even that answer is too superficial and simplistic.

Microbes, mycorrhiza, worms, ants, insects of all kinds, trees, and that animal dragging the grass into its burrow are responsible for our food production. Animals, plants, fungi, and bacteria work together with the soil, minerals, water, and sun to get us our food. They all influence the water cycle, weather, availability of nutrients, and control or outbreak of pests and diseases that kill or weaken our crops and animals or allow them to flourish.

Humans have been part of this interplay as long as we have been around as a species. Pre-agriculture, we probably influenced the aforementioned cycles to a similar degree as other animals. In the past 10,000 years, however, we have exponentially increased our influence. Initially, this was by selective breeding and diverting water. More recently, by applying inorganic fertilizers and poisons to the soil and pumping carbon dioxide into the atmosphere, among other means. On some lands, this has resulted in a pernicious cycle where we rely ever more on farmers, ranchers, and industry to get us our food because the lands would be infertile without our interventions.

When I hiked the La Luz trail in the Sandia Mountains in November, I was reminded of a different reality. There were no monocrops. A large diversity of plants and animals (and I am sure, microscopic organisms) intermingled with each other, allowing for a healthy ecosystem where no herbicides, pesticides, or supplemental water were needed. Everything fit and contributed to a greater beauty. Even though many annuals had died, and perennials gone dormant, the mountainside breathed of life. Even the rocks and clouds had energy and felt alive.



Harmony. Photo: R. Zweig

Of course, we can knock this balance out of whack by introducing an invasive species or cutting down trees. But I hope instead of us trying to impose “order” and our will on the natural world, we will learn something from its beautiful orderly chaos. If you are tired of weeds in your yard, remember that a weed is “a plant that is not valued where it is growing” (Webster’s Ninth New Collegiate Dictionary, 1988) and, thus, is in the eye of the beholder. Value the diverse species mix you can get in an untended yard. Value the food it gives to above- and below-ground species. Value the insects flitting between your clover and dandelion flowers. Value the water that gives life to all living things and fill your yard with plants that need little, if any, supplemental water. Value the fungi, bacteria, plants, and animals that are around, above, and below us. Value our farmers and ranchers, too. But remember if we don’t value the Earth and the life on it, our farmers and ranchers won’t be able to get us our food, no matter how hard they try.



A breath of life. Photo: R. Zweig

This month’s puzzler: A burger costs \$14, ice cream costs \$20, salad \$12, potato \$15, and soup \$10. How much do oysters cost? (Hint: four oysters cost more than six oysters, but three oysters cost more than two oysters.)

Last month’s puzzler: A group of people are in a room. Everyone wears either an orange or an indigo birthday hat. Each person can see the other people’s hats but not their own. One of them shouts, “If you can see at least 6 orange hats and at least 6 indigo hats, raise your glass!” Exactly 12 people raise their glasses. How many people are in the room? (From Cuemath via The Guardian)

Answer: 18. For an explanation of the solution, see <https://www.theguardian.com/science/2022/aug/22/did-you-solve-it-could-it-be-logic>. It’s the third puzzler.

Dear Master Gardeners,

I hope you all had a wonderful Thanksgiving. As some of you know, I will be leaving at the end of this year. I got accepted into the Peace Corps and will be going to Guatemala early next year. I don’t know where in Guatemala I will be, but I do know that I will be working with rural farmers there. There is a ten-week training period in Guatemala, followed by a two-year post. Thank you all for your support during my time here. I have enjoyed getting to know you and the SEMG projects. Thank you also for your dedication to helping our community and encouraging sustainable gardening in the high desert. I don’t think I will have access to my NMSU e-mail after January 1, 2024. If you want to get in touch with me, feel free to send a message to my personal e-mail.

Best,
Rachel

December Garden Checklist

1. December is the perfect time to buy dwarf/specialty evergreens for your garden.
2. Let all your plants, pots, garden and lawn have a month of rest without fertilizing any of them.
3. Most cities set annual sewer rates for next year based on water usage this month. Water in moderation and use a light hand when using Recycled household water to keep garden plants watered.
4. Unless it rains, you'll need to water some. Even dormant plants need water. Don't water if the ground is frozen.
5. Check out the great gardening resources available from NMSU at <https://pubs.nmsu.edu/h/index.html>

Source: Month-By-Month Gardening: Arizona, Nevada, New Mexico Jacqueline A. Soule

Public Training Opportunities

Ready, Set, Grow

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To register for a class go to: <https://desertblooms.nmsu.edu/grow.html>

Jan. 17 "Chill Hour Requirements & Other Factors Affecting Budbreak in Fruit Trees" with NMSU Extension Specialists Dr. Richard Heerema (Pecans and Pistachios) & Marisa Thompson (Urban Horticulture)

We're working on the calendar line-up for 2024 with topics requested by our webinar attendees, so please check back here!

- *Previous classes are recorded and archived for access. Check out the [Ready, Set, Grow website](#) for those links.*

Gardening with the Masters – Loma Colorado Library 6:45 4th Monday

Upcoming, in-person, classes, held at Loma Colorado Library the 4th Monday of the month. The class runs from 6:45 pm to 7:45 pm as the library closes at 8:00 p.m. These classes are not recorded. We encourage you to join us in person, so your individual questions get answered. New Gardening with the Masters classes will be announced here as they are created.

Classes will be announced on our website and in the newsletter.

Pre-recorded Classes

Courtesy of COVID, we adapted some of our in-person classes to Zoom, recorded them and they are available at <https://sandovalmastergardeners.org/gardening-classes/gardening-with-the-masters-online/>

No, Those Aren't Ornaments On Your Outside Trees

Many of us are surprised by small “decorations” hanging off the branches of our trees, roses and shrubs once the leaves dropped in the fall. They are not ornaments as we'd normally think of that word. They're BAGWORMS. For an in-depth explanation we looked through information available from State Universities around the country as bagworms are a widespread pest. Purdue University had one of the more complete write ups and great photos. Attached below.

LANDSCAPE & ORNAMENTALS **BAGWORMS**

Timothy J. Gibb and Clifford S. Sadof, Extension Entomologists

During July and August, bagworms may defoliate arborvitae, junipers and other trees and shrubs. Bagworms are caterpillars that live inside spindle-shaped bags which they construct to protect themselves against birds and other enemies. These bags, composed of silken threads and bits of foliage, look so much like a part of the tree that they may go unnoticed until extensive damage has occurred. Bagworms are common throughout the state.

LIFE HISTORY

Early in June, the insects hatch from eggs which wintered in the old bags attached to tree branches. As soon as the young worms appear, they start to spin bags and continue to enlarge these as they feed and grow. The caterpillars crawl part way out of the bags to feed. If disturbed, they retreat safely inside, and it is almost impossible to pull them out. Each female bag can produce over 1,000 bagworms.

Bagworms mature in late August or early September. At this time, the bags are about 2 inches long and can no longer be killed by pesticides. The worms then attach the bags firmly to branches or other objects and change into the adult stage. The wingless female never leaves the bag and is fertilized by the winged male. The eggs are laid in the bag where they pass the winter. Eggs of bagworms located south of Monticello, Peru and Bluffton, or near Lake Michigan usually survive the winter. In other parts of the Indiana eggs can be killed during cold winters. **NOTE: Bagworms affect plants in NM, and metro Albuquerque as well.** There is only one generation each year.



Bagworm hanging from branch.



Bagworm caterpillar feeding.

CONTROL MEASURES

Bagworms tend to be a problem on trees that are isolated or in urban settings. When bags are found in the tree, simply pick the bagworms off and drown them in a bucket of soapy water. This method is most effective before eggs hatch out of the bags in June.

Bagworms can be controlled by spraying the foliage with insecticides after eggs have hatched and small bags are seen on the trees. Caterpillars must consume the foliage for the insecticide to kill them.

For the best results, use a biorational pesticide listed in Table 1. The biorational materials will kill the caterpillars without killing the natural enemies of spider mites and scale insects that can cause additional damage to the plant. (See [E-42-W Spider Mites on Ornamentals](#) and [E-29-W Scale Insects on Shade Trees and Shrubs](#)). Caterpillars may have to feed on treated leaves for 1-2 days to get a lethal dose of these materials. In contrast, rescue materials can kill caterpillars feeding on the foliage within hours after application. All pesticides are most effective when directed against worms in bags that are still small. Dipel is only effective on bags < 1" long. Two weeks after any pesticide application look for live bagworms to determine if additional treatment is needed.



Young bagworm covering itself with leaves.

Alternatively, a soil application of dinotefuran may be applied to the base of the tree. Applications should be made in early May to allow enough time for this material to get into the foliage before eggs hatch. Our research has shown this product to be most effective on young bagworms on small evergreen shrubs.

"A garden requires patient labor and attention. Plants do not grow merely to satisfy ambitions or to fulfill good intentions. They thrive because someone expended effort on them."

[Liberty Hyde Bailey](#)

TABLE 1. PESTICIDE LIST

<i>Insecticide</i>	<i>Formula tion</i>	<i>Amo unt per 100 Gal.</i>	<i>Amo unt per Gal.</i>	<i>Suggest ed Use</i>	<i>General Use Restriction (Check Label); H=Homeo wner C=Commer cial</i>
<i>Ace hate (Orthent)</i>	<i>75% S 15.6% EC</i>	<i>1/3 lb. 1 1/5 cup</i>	<i>1/3 tsp. 1 1/2 Tbsp .</i>	<i>Rescue</i>	<i>H, C</i>
<i>Acetamiprid (TriStar)</i>	<i>30 SG</i>	<i>2.7- 5.3 oz.</i>	<i>-</i>	<i>Rescue</i>	<i>H, C</i>
<i>Azadirachtin (Azatrol, Azatin-o and others)</i>	<i>1.2% SEC</i>	<i>96- 160 fl. oz.</i>	<i>1-1.6 fl. oz.</i>	<i>Bioratio nal</i>	<i>H, C</i>
<i>Bacillus thuringiensis (Kur osaki) (Dipel, Biotrol, others)</i>	<i>See label</i>	<i>See label</i>	<i>See label</i>	<i>Bioratio nal</i>	<i>H, C</i>
<i>Beta-Cyfluthrin (Tempo)</i>	<i>20 WP 0.75 EC</i>	<i>1.9 oz. -</i>	<i>- 1 Tbsp .</i>	<i>Rescue</i>	<i>C H (Bayer)</i>
<i>Bifenthrin (Telstar L&T and other site specific products)</i>	<i>0.7 F</i>	<i>5.5 - 10.9 oz.</i>	<i>1/3- 2/3 tsp.</i>	<i>Rescue</i>	<i>H, C</i>
<i>Carbaryl (Sevin and others)</i>	<i>4 F 2 F</i>	<i>1 qt. 2 qt.</i>	<i>2 tsp. 4 tsp.</i>	<i>Rescue</i>	<i>H, C</i>
<i>Chlorantraniliprol e (Acelepryn)</i>	<i>1.67 SC</i>	<i>1-2 fl. oz.</i>	<i>-</i>	<i>Bioratio nal</i>	<i>C</i>
<i>Cyfluthrin (Decathlon) (Bayer Lawn & Garden)</i>	<i>20 WP 0.75 EC</i>	<i>1.9 oz. -</i>	<i>- 1 Tbsp .</i>	<i>Rescue</i>	<i>C H (Bayer)</i>

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<i>Deltamethrin (Delta Gard T&O) (Suspend SC)</i>	<i>4.75% EC</i>	<i>4-8 oz.</i>	<i>1/4 - 1/2 tsp.</i>	<i>Rescue</i>	<i>H, C</i>
<i>Dinotefuran (Safari)</i>	<i>20 G</i>	<i>See label</i>	<i>See label</i>	<i>Rescue</i>	<i>C</i>
<i>Fluvalinate (Mavrik)</i>	<i>2 F</i>	<i>5-10 oz.</i>	<i>2 tsp. 4 tsp.</i>	<i>Rescue</i>	<i>H, C</i>
<i>Indoxacarb (Proviant)</i>	<i>2.4 SC</i>	<i>1.2 - 2.5 fl. oz.</i>	<i>-</i>	<i>Bioratio nal</i>	<i>C</i>
<i>Lambda- cyhalothrin (Scimitar, Demand)</i>	<i>9.7% EC</i>	<i>1.5 - 5 oz.</i>	<i>-</i>	<i>Rescue</i>	<i>H, C</i>
<i>Malathion</i>	<i>57% EC</i>	<i>2-4 pt.</i>	<i>2 tsp.</i>	<i>Rescue</i>	<i>H, C</i>
<i>Spinosad (Converse) Bulls-Eye Bioinsecticide Fertilize Borer, Bagworm, Leafminer & Tent Caterpillar Spray</i>	<i>SC SC</i>	<i>6 oz. -</i>	<i>1/2 tsp. 4 Tbsp . 4 Tbsp .</i>	<i>Bioratio nal</i>	<i>C H H</i>

READ AND FOLLOW ALL LABEL INSTRUCTIONS. THIS INCLUDES DIRECTIONS FOR USE, PRECAUTIONARY STATEMENTS (HAZARDS TO HUMANS, DOMESTIC ANIMALS, AND ENDANGERED SPECIES), ENVIRONMENTAL HAZARDS, RATES OF APPLICATION, NUMBER OF APPLICATIONS, REENTRY INTERVALS, HARVEST RESTRICTIONS, STORAGE AND DISPOSAL, AND ANY SPECIFIC WARNINGS AND/OR PRECAUTIONS FOR SAFE HANDLING OF THE PESTICIDE.

PURDUE EXTENSION

Graduation 2023

A major goal for all the Extension Master Gardener chapters, nationwide, is to educate and support new Master Gardeners with science based horticultural training and opportunities for hands-on experience. In Sandoval County, prior to COVID, most of these activities were done in person and in front of our county residents. Since COVID we've developed a hybrid model that allows on-line class work combined with small group projects and once a year we get together to celebrate our newest Master Gardeners and to honor our new Life Members (15 year veterans) as well as the 5 and 10 year members. Getting to share great food at the same event increases our enjoyment. Here are some photos from the November 2023 graduation celebration. Thank you to Beth Murphy and John Thomas for capturing the fun. There are more photos to come in our January newsletter.





***"Everything that slows us down and forces patience, everything that sets us back into the slow circles of nature, is a help. Gardening is an instrument of grace."
~May Sarton***

HELP WANTED #1 –

Help Line Coverage We still have need of volunteers to cover the Helpline. This is online, from the comfort of your own home. Each week of coverage earns 10 hours of Outreach credit. For more information, contact Penny Lindgren or Sandra Liakus via their email or phone numbers in the member roster.

HELP WANTED #2

Co-Chair Needed: Sandoval County Administrative Building Plant Watering/Maintenance Backup for watering schedule Assistance analyzing plant problems. Help resolve plant issues in the building. Annual repotting coordination Contact Michelle Wittie if you are interested.

HELP WANTED #3

Mentors Needed Master Gardeners, in good standing, are eligible to serve on a **Mentor team**. The requirements include one hour weekly meetings as well as being responsible for walking Interns through 3 or 4 of the weekly NMSU training videos. Please contact Linda Walsh if you are interested in being part of a Mentor team. NOTE: As a mentor you cover all your required volunteer hours for the year.

HELP WANTED #4

Co-Chair Needed SANDOVAL SEED SHARE PROJECT

Seek seed donations from large companies. Analyze seeds for viability in Sandoval County. Assist in packaging and distributing seeds. Contact Michelle Wittie if you are interested.

