



# The Dirt

SUMMER NEWSLETTER | 2026



Sample plots of drought-tolerant turf grasses at the southern end of the Waterwise Garden.

## IDEAS FOR A WATERWISE WAY OF LIFE

By Sara Ungrodt, MBG Horticulturist

**N**ot surprisingly, the Montrose Botanic Gardens have done amazingly well this growing season, despite our prolonged drought, extreme heat and winds. In particular, our Waterwise and Native Gardens (to the west of the Promenade) are a showcase for our community, filled with plants chosen for their ability to thrive with less water, resist diseases and pests, and provide long-lasting beauty.

When you visit the Gardens, imagine the possibilities at home. Look for the PlantSelect® logo in our Gardens and at your favorite nursery. PlantSelect® is a project of Denver Botanic Gardens, Colorado State University and professional horticulturists.

In addition to appropriate plant selection, another key element in waterwise landscaping is a smart irrigation system. Our goal in the Gardens is to use domestic water as efficiently as possible.

The Gardens are divided into 39 different irrigation zones. Seventeen are evapo-transpiration (ET) zones, which use local weather data to calculate water loss from soil and plants, and automatically adjust watering schedules. ET zones account for evaporation from the ground and transpiration from leaves to prevent overwatering.

In addition, the Gardens have 21 irrigation zones that have watering schedules of regular, set duration. In addition, one zone in the Cactus Garden is manually triggered, about once a month.

CONTINUED ON NEXT PAGE



Three of our favorites in the Native Garden: Fernbush (*Chamaebatiaria millefolium*), Apache plume (*Fallugia paradoxa*) and Wasatch Maple (*Acer grandidentatum*).

## MBS BOARD

### President

Brenda Bafus-Williams

### Vice President

Anne Britton

### Treasurer

Peggy Justis

### Secretary

Anne Schuttig

### At Large

Laulii Hillier

Kathy See

**Board meetings are on the 4th  
Wednesday of each month  
unless otherwise posted.**

2:00pm - 4:00pm

Old County Courthouse  
320 S 1<sup>st</sup> Street, Room 350  
Montrose, CO



### Horticulture

Sara Ungrodt

### Operations & Maintenance

Rob Clapper

### Photography

Jim Cencer

### Private Events

Linda Bentley



### Montrose Botanical Society

P.O. Box 323

Montrose, CO 81402

Visit the Gardens: 1800 Pavilion Dr  
Montrose, CO 81401

**Free admission; dawn to dusk**  
facebook.com/montrosegardens  
info@montrosegardens.org  
[www.montrosegardens.org](http://www.montrosegardens.org)

*WATERWISE,  
CONTINUED FROM PAGE 1*

In addition, we have spray heads, rotors and spray sticks for things such as raised containers for herbs. We also use cycle and soak programming to reduce soil runoff and provide better soaking.

The Gardens also have battery-powered drip zones for the Happy Hollow Children's Garden and for the south orchard area in the

Homestead Garden, where we only have frost-free hydrants as a water source.

The Valley Garden event lawn and the Entry Garden, which has a higher percentage of annuals than other areas, require the most water of any of the zones.

Despite careful selection of plant species and watering systems, the Botanic Gardens are not immune from the effects of environmental stressors. These factors set the stage for increased populations of certain insects this year, such as the black vine weevil.



**The scalloped edges of these lilac leaves are a classic sign of black vine weevils.**

The larvae of these tiny weevils live in the soil where they feed on the plant's roots. As adults, they climb up into the foliage at night, feeding on the leaves, reducing the vigor of the plant and eventually causing death.

Root drench insecticides such as imidacloprid were used to combat black vine weevil in the past, but they are no longer allowed in Colorado. We are consulting with a local contractor to treat our numerous lilacs, red twig dogwoods, manzanitas and privets.

This spring's late freezes also left their mark on the Promenade's Spring Snow Crabapples with leaf scorch (crispy brown edges). Fortunately, this condition is an aesthetic issue, not a health problem for the trees. We soak their roots deeply with traditional drip irrigation emitters and a drip line irrigation soaking system.

A side note to those who are removing bluegrass lawns and replacing them with hardscape or low water perennials: It is **CRITICAL** to continue regularly soaking your established trees!!!



To request a small group tour to learn more about waterwise landscapes, visit [montrosegardens.org/programs](http://montrosegardens.org/programs)

## Thank You TO OUR GENEROUS DONORS & PATRONS

John & Anne Britton, CAM Electric, Bryan Cashion, Rob & Kathy Clapper, Charlotte Duckett, Tim Edgar, John & Nancy Elloe, Darrell Hartigan Estate, Maya & Todd Haynes, Michiko Hitchcox, Cherie MacDonald, Steve Manis, Sally McClintock, Renee Pasman, Carol & Jerry Pyle, Lauren & Jeff Riddle, Emily Schneider, Anne & Dave Schuttig, Kathy See, Molly & Chuck Shaver, Kay Sibold, Spiritual Awareness Center, Sandy Storey, Sara Ungrodt, Barbara van Schaik Estate, Mike and Anita Winter

# Interested in SERVING ON THE MBS BOARD?

The Montrose Botanical Society's Annual Meeting in November may seem light years away, but it's not too soon to be thinking about nominations for MBS officers. We will hold elections for two positions: Vice President and Treasurer. Both will be elected to a two-year term beginning on January 1, 2027.



If you're interested in learning more about MBS board member responsibilities, please visit [montrosegardens.org/boardofdirectors](http://montrosegardens.org/boardofdirectors) to read our Bylaws. You can also email MBS President Brenda Bafus-Williams ([president@montrosegardens.org](mailto:president@montrosegardens.org)) with any additional questions.

To nominate someone (including yourself), please email [info@montrosegardens.org](mailto:info@montrosegardens.org) no later than 5:00 pm on October 1, 2026. If an officer position feels like a "step too high", let us know if you'd be interested in being appointed to an At-large board position!

The MBS Annual Meeting will be held on Wednesday, November 11 at 2:00 pm at the First Presbyterian Church (1840 E Niagara Road) in Montrose.

## Join the

## COLORADO COLUMBINE CHALLENGE



Here's a way to help celebrate Colorado's 150th anniversary: The next time you see our State Flower – the blue Columbine (*Aquilegia coerulea*) – in the wild, take a photo and upload it to the iNaturalist app on your phone. Let's make it the most observed plant in Colorado – instead of the common mullein!

*Sponsored by the Colorado Native Plant Society*  
([www.conps.org](http://www.conps.org))

## Welcome

### TO OUR NEW MEMBERS

Mesa Anderson  
John Brandsma  
Barb Clark  
Kirsten Halffield  
Cloris Hopkins

Kathleen Hupfer  
Evelyn Kaufmann  
Nicole & Ryan Sedgeley  
Kay Sibold

## Experimenting WITH BINDWEED MITES

**W**e'd really like to find a way to eliminate pulling bindweed among the Cholla, Claret Cup and Beavertail cacti.

To that end, we just received our shipment of harvested bindweed plants carrying bindweed mites from the Palisade Insectary. We wrapped healthy bindweed growing in our Cactus Garden around the mite-carrying samples in hopes of starting a local population. The mites are host-specific, feeding only on Field bindweed (*Convolvulus arvensis*). The mites are not visible to the naked eye, but the damage inflicted on the bindweed will be apparent.

The Colorado Department of Agriculture (CDA) rears the microscopic mite, *Aceria malherbae*, at the Insectary. These mites stunt and kill field bindweed by forming protective leaf galls that drain the plant's energy.

The mites will not provide overnight eradication. It typically takes two to three seasons to see a noticeable reduction in the weeds. Symptoms of a successful establishment include curled, twisted, and ball-shaped leaves (galls),

stunted vines, and reduced flowering. We'll let you know how it goes – we tried this experiment in another area last year, but weren't successful. Learn more at: <https://ag.colorado.gov/conservation/palisade-insectary>



# A CLOSER LOOK

## COMPOSTING BASICS

By Art Clifford



*Editor's Note: Art Clifford (at right) joined the MBG Weed Warriors at the end of the 2025 season, and hit the ground running this year. In his passion for composting, he has transformed the way we handle our green waste, and infected others with his enthusiasm. The following is an excerpt from his paper on the topic, which is available in full at [www.montrosegardens.org/compost](http://www.montrosegardens.org/compost).*

In this year of our nation's semiquincentennial (US250), it seems appropriate for gardeners to remember that George Washington was an advocate and maker of compost on an impressive scale.

Initially Washington's fields were planted in tobacco. After several years the tobacco crop declined precipitously. He knew that dung from his livestock would improve the quality of tired soils and built an impressive stercorary (dung repository).

Washington also practiced crop rotation as he experimented with his fields. He corresponded with other farmers, including Thomas Jefferson, regarding various farming practices and the best methods of incorporating compost into the soil.

Composting as a scientific method is first documented by Sir Albert Howard (1873-1947) who, observing the agricultural practices of farmers in India, referred to them as his "professors of agriculture." [1] In 1931 Howard and his collaborator Yeshwant Wad authored a seminal work entitled, 'The Waste Products of

Below: MBG Weed Warrior Art Clifford sifts compostable material through a screen. Materials too large to fit through the screen are sent back to the previous bin to "cook" a while longer. The sifting also provides aeration of the materials, one of the four key precepts of the science of composting.



Agriculture.' Together they developed what is now known as the Indore Method of composting.

Fast forward nearly 100 years to today. The current science of composting has four key precepts. **ONE: The carbon (C) to nitrogen (N) balance (C:N).** Think of it as a Brown (dry leaves, straw, woodchips and paper products) to Green (manure, grass clippings and other green plant material) ratio. Brown feedstocks are considered carbon-givers, and Green feedstocks are considered nitrogen-givers. The C:N ratio is important because it ensures that the bacteria, yeasts and fungi necessary for composting have the nutrients necessary to reproduce. Optimal conditions for composting require a balance of 25:1 to 30:1.

Carbon is an energy source and basic building block of cellular structure. It comprises approximately one-half of the mass of microbial cells. Nitrogen is a key component of proteins, amino acids and enzymes that ensure cell growth and metabolic processes. If the C:N is weighted in favor of nitrogen, it creates odors and cytotoxic ammonia gas (NH<sub>3</sub>). [2]

..... Continued on next page.



At left: Dwain Cribari, MBG's part-time caretaker, gets ready to haul a massive pile of yard waste from the Gardens to Beaver Lakes Landscaping. Then, he'll back haul a load of Beaver Lake's mulch to feed into our composting operation.

A higher ratio of carbon (or brown materials) will stunt the growth of microbial colonies, and therefore the optimum temperature in compost of 130 to 160°F will not be achieved. This effectively increases the amount of time required for the feedstock to become compost.[3]

**TWO: Oxygen through aeration.** While the microbial community harbored within compost can survive on as little as 5 to 10% oxygen (normal atmosphere is 21%), oxygen levels below 10% in the compost pile can become anaerobic and produce methane gas (CH<sub>4</sub>) and hydrogen sulfide (H<sub>2</sub>S). Oxygen accelerates the breakdown of organic matter and fuels microbial activity which raises heat, killing detrimental organisms and sterilizing weed seeds. According to CompostMagazine.com, good aeration is a must for successful composting.

**THREE: Moisture content.** The best moisture content for compost is between 40 to 60%. This is approximately the dampness of a squeezed sponge. This level of moisture in the pile allows yeasts, fungi and bacteria to carry on necessary metabolic functions and to move through the medium on the water film.



**Special thanks to Tami and Ben Boggan at Milk and Honey Homestead for donating a load of organic cow manure to give the Botanic Gardens' composting operations a big boost! Thanks also to members Laulii and Mark Hillier for providing the transportation.**

## BRING US YOUR COMPOSTABLES!

You can contribute your plant-based kitchen scraps and weed- and chemical-free yard waste to the Botanic Gardens' composting operations. The bins are located in the southeast corner. Please add to the pile closest to Pavilion Drive, outside of the bins.

**If you have a large load, contact [info@montrosegardens.org](mailto:info@montrosegardens.org) to make arrangements.**

If moisture levels are too high, anaerobic conditions develop as water fills air spaces. If moisture levels are too low, the decomposition process slows dramatically. Compost material, when squeezed in the hand, should not release more than a drop or two of water. This approximates 65% moisture content. Although slightly out of the previously mentioned ideal range of 40 to 60%, it is appropriate for home composters in an arid area like Montrose.[4]

**FOUR: Temperature.** This is the best indicator of the efficiency of the composting process. Temperatures over 130°F for 72 hours continuously will eliminate most weed seeds and eliminate many harmful pathogens, including fly larvae. There are three phases of temperature in composting: the Mesophilic (50° to 104°F), the Thermophilic (104° to 149°F) and the Curing Phase, during which temperatures decrease back to surrounding environmental levels. If temperatures remain too low, one of the other variables (i.e., C:N, moisture or oxygen) will be improper.[5]

When the prerequisites for composting are met, the microbes responsible for the process begin to metabolize carbon and nitrogen, and spread rapidly through the medium. In addition to microbes, yeast and fungi, springtails (*Collembola*) help to reduce the material from the optimum starting size of ½" to 1½" feedstock to smaller sizes allowing the bacteria to breakdown the lignin.[6] Lignin is a tough, organic polymer that gives plants their rigid structure. Accounting for 20% to 35% of dry plant mass, lignin forms the vascular tissues that transport water and minerals upwards (xylem) and distribute the photosynthetically produced sugars and amino acids downwards (phloem) to the roots.

Clearly plant science has journeyed far since our ancestors first suspected the benefits of recycling and incorporating composts into the soil. We are fortunate to have such an amazing resource available in the Botanic Gardens. Hopefully we will utilize it fully.

### FOOTNOTES

1. Keith Addison, 'Journey to Forever' Handmade Projects, Online Library. June 17, 2026.
2. National Institutes of Health. <http://pmc.ncbi.nlm.nih.gov>. Articles PMC 12278057. June 22, 2026.
3. Cornell Composting Science and Engineering. [Compost.css.cornell.edu](http://Compost.css.cornell.edu). August 24, 1995.
4. 'Agricultural Composting and Water Quality.' Oregon State University. <https://extension.oregonstate.edu>. June 2026.
5. Tom Richard, Cornell Cooperative Extension Operator's Fact Sheet No. 5 of 10. Cornell Composting Science and Engineering. [Compost.css.cornell.edu](http://Compost.css.cornell.edu). August 24, 1995.
6. Nathaniel Corrow, 'Isopod and Springtail Handbook,' page 10. 2026.

# Spotlight on BUSINESS SPONSORS

By Liz Mauch



*Gayle and Glen Goodhue, San Juan Gardens*

## SAN JUAN GARDENS

If you're a gardener like me, a trip to the nursery is better than a walk through a candy store! I had a nice visit with Gayle Goodhue, who along with her brother Glen, has owned and run San Juan Gardens since 2003. They are "home grown" with deep roots in the nursery business and in the Uncompahgre Valley.

In the early 1990s, their father started a tree farm nearby, which still provides most of the nursery's trees, while Gayle and Glen grow most of the perennials and annuals they sell.

They only carry plants that will succeed in our western Colorado climate, catering to a wide customer base from mountain communities like Telluride and Crested Butte to the high desert here in Montrose. While their gardening crew works for much of the year, customers are welcome from around April 1st to October 31st.

Besides plants, they carry many other products including: seed mixes in bulk for turf and wildflower meadows; organic products such as Neem Oil and Yum-Yum mix; and the very popular Nutri-Mulch - a composted turkey manure from Utah.

**A big thanks to San Juan Gardens for being a long-time supporter of the Botanic Gardens and for offering our members a 10% discount on plants!**



*Gary, Jackie and LJ, Cooper Soils*

## COOPER SOILS

The "bones" of a garden - the soil, hardscape and mulch - deserve careful planning, whether you're installing a new or renovating an old landscape. A trip to Cooper Soils on North Townsend might be just what the your project needs! This local business has been family owned and operated by Gary, Jackie and LJ since 2003.

Their inventory includes both washed and crushed gravel, from ¼" - trail mix to 1-1/2 " size, as well as cobbles. If you're shopping for sand, they carry both masonry sand and washed sand. They carry cedar mulch in bales (the Botanic Gardens uses this product), as well as cedar mulch and aspen mulch in bulk. If you need soil for your planting beds, they sell a garden soil mix and a soil conditioner with decomposed bark. Both products are low in salt and help improve the health of your soil and water retention/drainage. They offer delivery in 5 yard dump trucks and have a handy product calculator on their website.

**Be sure to take  
your MBS  
membership card  
along on your next  
shopping trip!**

**Many thanks to Cooper Soils  
([www.coopersoils.com](http://www.coopersoils.com)) for offering a  
10% discount to MBS members on soils  
and mulch. Open March through  
November, Monday-Friday 8:30-4:00,  
and Saturdays 8:30-12:00.**

# PHOTO PATCH



Center: Some fun on the Promenade doing chalk art to celebrate Endangered Species Day! Clockwise from top left: [1] Greg Wilburn, Dwain Cribari and Tim Edgar tighten up the logworm fence that forms the boundary between the Promenade and the Rose Garden. [2] At the MBS booth at FOYAN's "Bring on the Summer" event, we talked about pollinators, looked at bees under a microscope and made butterfly masks! [3] Kids of all ages helped plant the raised beds in Happy Hollow. [4] A swallowtail butterfly visits a Claret Cup cactus. Photo by J.P. Cencer. [5] Cheri Axtell with Revive Body & Soul hosted yoga sessions on our Valley Lawn on two Saturdays in May, and donated the proceeds to the Gardens! Thank you!

## UPCOMING EVENTS

### AUGUST 1

**Eating the Rainbow with Angie Marin at 9:00 am.** Learn about nutrition while making a yummy salsa. For kids ages 3 and up with an adult. Free, but limited class size so reserve a spot for your kiddos at [montrosegardens.org/programs](http://montrosegardens.org/programs) today! Class co-sponsored by Friends of Youth & Nature (FOYAN).

### AUGUST 12

**Annual Member Picnic at 5:00 pm.** Bring a salad, side dish or dessert to share. MBS will provide beverages, chicken and tableware. BYOB. Join us to celebrate another thriving year at the Gardens

### SEPTEMBER 12

**Happy Hollow Harvest Day at 11:00 am to noon.** Harvest the garden we planted in May and use the bounty to create some salsa for your chips! Plus Storytime with the Montrose Regional Library's Bookmobile.

### NOVEMBER 11

**MBS Annual Meeting at 2:00-4:00 pm**  
First Presbyterian Church (1840 E Niagara Road). Elections, possible bylaw changes and the year-in-review. (See article on page 2.)

### DECEMBER 2

**Member Holiday Party at 5:00-7:30 pm** at the Cobble Creek Clubhouse (699 Cobble Drive, Montrose). Bring a potluck dish and an item for the Silent Auction (optional).

### DECEMBER 12-13, 19-20 & 26

Garden of Lights, 5:30 to 8:30 pm



## GARDEN OF LIGHTS UPDATE

By Anne Britton



We will be hosting the Garden of Lights in 2026 on December 12-13, 19-20 and 26 from 5:30 – 8:30pm.

Santa will once again be in his tip and we'll have lights, lights and more LIGHTS to make the Gardens a truly festive holiday event. We currently have a committee working on all the particulars and will be closing the Gardens to foot traffic starting on October 31st to begin decorating. Be on the lookout for emails on helping to decorate and/or volunteer during this fun event. We look forward to hosting this very popular event for our community, and hope to see you there!



## HOME GARDEN TOUR

The planning team has started the wheels rolling for our next Home Garden Tour in June 2027! While they have already flagged some likely contenders, there's still a little time to nominate other inspiring and/or unique gardens to showcase on the tour. We're especially eager to highlight well-designed water-wise landscapes in these times of drought.

If you would like your garden to be considered -- or if you know of another outstanding garden -- please email the team at [info@montrosegardens.org](mailto:info@montrosegardens.org) as soon as possible with the location and owner's contact information (if available). We'll send a small team to evaluate the proposed sites. We plan to make final choices in August so that our garden hosts have plenty of time to get ready!

Visit: [montrosegardens.org/garden-tour](http://montrosegardens.org/garden-tour) to see highlights from our 2024 Home Garden Tour, .



From 2024 Home Garden Tour



Red, white and blue petunias - the only safe fireworks this year. Photo by J.P. Cencer