

Denton County Master Gardener Association

THE ROOT

Grow With Us



Buds From The Board

BY KATHRYN WELLS, PRESIDENT

Happy November, friends!

During this month of giving thanks, here's a special shoutout to our fabulous 2021 intern class; what an amazing group of individuals! Each and every one has something special and unique to offer our community and our Association.

For example, current intern Ann Athey is a grower, shower, and all-around knower of all things African Violet. What? You're interested in learning more about African Violets? Well, I've got good news for you—Ann is our featured speaker for the November 10th General Meeting and Program, and she's a wealth of information and inspiration. Please plan to join us! It's (hopefully) our last virtual meeting before we (hopefully) resume in-person meetings in 2022. Advance registration is required, and, as always, our general meetings are free and open to the public. (DCMGs, immediately following our featured program, we'll hold our business meeting including the vote for our 2022 proposed budget and Board of Directors.)

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<https://dcmga.com>

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Buds From The Board (Cont.)

And, if you've always wanted to learn more about landscape design, we have a series of eight classes beginning on January 11th—a great way to start the year off right! Featuring Earth-Kind® landscaping principles and practices, our Denton County Master Gardener Association program instructors will help you learn how to create beautiful and easy-care landscapes while conserving and protecting our natural resources and the environment. Registration (only \$50 for all eight classes including materials) opens November 15th. More information will be available soon, so please bookmark the ["Upcoming Events" page of our website](#) for updates.

During this traditional time of giving thanks, I want to express my gratitude to each of you; your love of and interest in horticulture and all things gardening is a joy. And, to our military veterans—thank you for your service; we appreciate you!

Denton County Master Gardeners and Denton County residents—each of you is a treasure; thank you for growing with us. Thanksgiving blessings!

Kathryn

TOP GARDENING TIPS

November

Prepare tender plants to overwinter inside; check for insects.
 Leave the leaves! Mow in place, compost, or use as mulch.
 Check trees for damaged limbs before winter winds & ice.
 Plan to relocate established trees & shrubs after dormancy (late November to early January).

#DCMGA #GROWWITHUS

DENTON COUNTY MASTER GARDENER ASSOCIATION

Janet's Corner

BY JANET LAMINACK, AGRILIFE EXTENSION HORTICULTURE AGENT, DENTON COUNTY

AgriLife Extension's Urban Water Team

The Texas A&M AgriLife Research and Extension Center in Dallas has restructured recently to focus on urban agriculture and forestry, water and land resources, and healthy living. The Urban Water Team took shape earlier this year with the addition of Kelly Albus and Dean Minchillo. They join Dr. Becky Bowling who has been at the Dallas Center since May 2020. Dr. Bowling's background includes serving as a statewide specialist in turfgrass for AgriLife Extension based in College Station. With an educational background in horticulture, she is well-versed in all things landscape with a passion for conservation.



Photo Courtesy Janet Laminack

Dr. Kelly Albus's educational background includes a degree in natural history, teaching certification and a doctorate in environmental science from UNT (in fact, she still lives in Denton.) Albus is an environmental scientist and educator who is passionate about encouraging people to explore the outdoors and building authentic connections with their environment. She has taught at universities, museums, wildlife centers, and schools across the state and plans to bring her experience with engaging diverse learners to connect people while building interest in science that will improve their lives and their communities.

Dean Minchillo has been a water conservation professional for many years. His previous work on several water conservation campaigns will probably sound very familiar. They include Water IQ, Know Your Water, The Lawn Whisperer — for which he received an American Advertising Federation award — and the most recent campaign called Water is Awesome. In joining AgriLife Extension, Minchillo said his goal is to design programs that educate Texans about water conservation, including everyday water-use efficiencies, water harvesting, and programs that help developers and municipalities design and execute water-conscious plans and policy, respectively.

I know these individuals to be energetic and engaging educators. This team is a great asset to our area and county. If you get the opportunity to hear a presentation or work with them, do it.

This article sourced from news releases by Adam Russell and Kerry Halladay:

- <https://twri.tamu.edu/news/2020/may/dr-becky-bowling-on-the-future-look-of-urban-texas/> (May 7, 2020)
- <https://agrilifetoday.tamu.edu/2021/04/29/water-specialists-join-agrilife-extension-urban-water-team-in-dallas/> (April 29, 2021)

Beulah Acres Agroforest Project - Update

BY DANIEL ARENAS

It has been about 20 months since we first started to break ground at the Beulah Acres Agroforest. When actually, we have been building quality soil, harvesting quality water, and planting a bunch of good stuff!

For years, what was a vineyard became an open field in preparation for the Agroforest to be born around February 2020. We remember how challenging that year was, but I also remember how having a Volunteer Day changed the game for us.

I heard someone say one time that volunteers are not worthless; they are priceless! We absolutely agree with that!

Master Gardeners and Master Naturalists, and many other volunteers came together to follow a big design plan that looked cool on paper but was sometimes hard to see through the season after season of changes and new details that developed.

We had to plan everything accordingly to these changes and evaluate how we efficiently manage garden crew staff and volunteers working towards the same goal. Very fun times!

Then it snowed, and everything froze as we had never seen before. Reflecting us to almost 30 years ago, when it last snowed and froze like it did this February 2021. This setback surely kept us on our toes and challenged us to accept seasons of new beginnings and keep moving forward and plan the next steps accordingly.

Even after our little version of Siberia in North Texas, our drive, passions, and dedication to the Land paid off.

Trees, shrubs, and bushes starting to respond to the new environment, native plants and perennials started gaining ground by naturally self-propagating themselves. Voluntary plant species popped up here and there, herbs and medicinal plants began serving their purpose to the system and us as well. Not to mention the seasonal crops, giving us the blessing of flavors, colors, and good nutrients.



Photos Courtesy DCMGA Member Daniel Arenas

Volunteer Day September 29, 2021

Volunteers planting seeds.

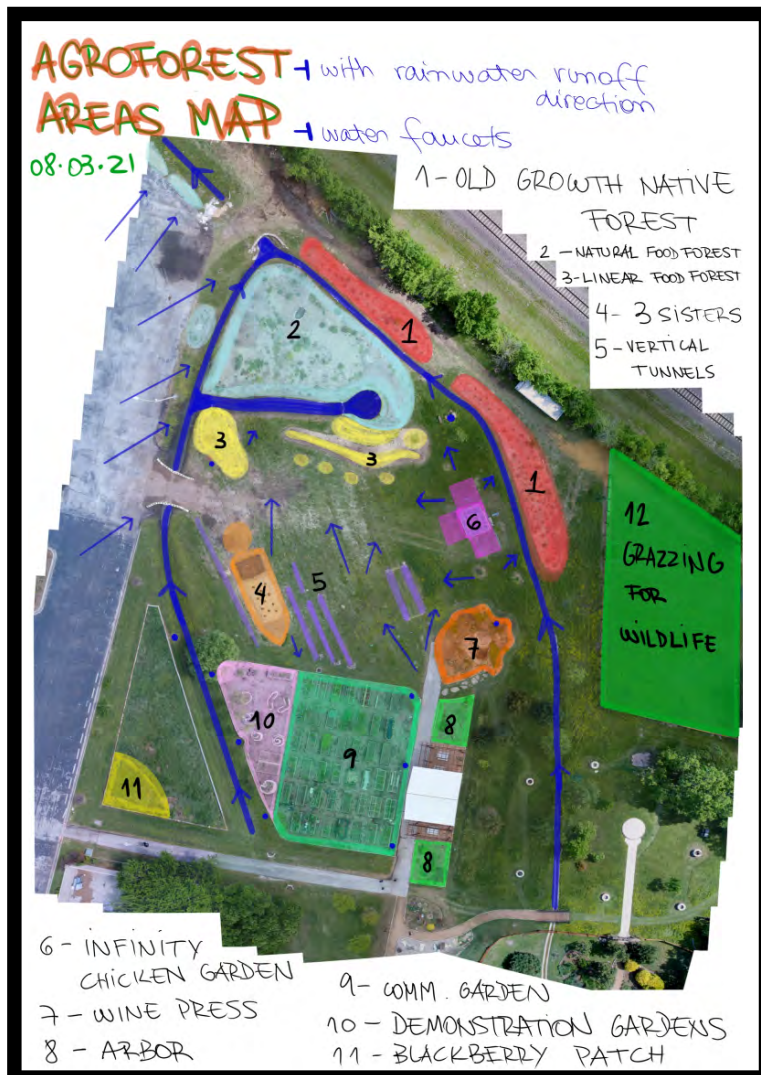
Agroforest Project Update (Cont.)

That combination propelled us to start our Farmers Market Table once a month. We preserve our own food, making pretty awesome products, and always seeking the "no waste" understanding daily.

We know that surplus will come with time. As we learn from today's abundance, multiplication becomes ongoing, and prosperity is a never-ending, lifelong goal in the fields.

Today, you walk around the Agroforest and see how structures and areas are much better developed, getting more established, and allowing us to learn from it and adjust.

We have been arranging the different planting areas so that they work together for the big picture. It takes time, love, and caring to see nature take over, and it's beautiful to see it happening right in front of you!



Agroforest Area Map August 2021

It's undeniable when you see wildlife showing up (we are probably doing some things right) because then it's impossible to hide the smiles on our faces. We look at each other and agree that the Land already has its perfect design, we are just part of the same ecosystem, and we can make positive decisions to help and improve it!

We were able to develop further what we started at the beginning stages. We developed the Native Forest Strip, the Natural Food Forest, the Aquatic Native System, Pollinator Pockets, Berry Tunnels exploring Vertical Gardening, 3 Sisters Native American Agricultural Method, BlackBerry Patch, Community and Demonstration Gardens, and of course, the Composting Operation onsite.

Agroforest Project Update (Cont.)

But we didn't stop there. We expanded to more areas such as the Linear Food Forest and the Infinity Chicken Garden, as we kept maintaining that more extensive list of sites above to keep them in good shape.

The goal is always to restore and enhance the fields in the most natural way we can, harvest the best we can, and learn how to help the Land prosper and thrive moving forward. With no fear of stepping back, we take our time if we need to and not waste the fellowship time we can have together.

So, between working in the field, coming back to the office, teaching classes, working with kids, researching, applying strategies, and making mistakes, we are very joyful to thank you for everything you do. And, we hope to see you soon!



Abundant Blessings,

Agroforest Aerial Photo August 2021

Beulah Acres Agroforest Team
Daniel Arenas



*Denton County Master Gardener
YouTube Channel*

Click on "Videos" and check out our new presentations!
And don't forget to subscribe!

<http://www.youtube.com/c/DentonCountyMasterGardener>

Certificate of Appreciation

DCMGA
received a certificate of
appreciation from the
City of Highland Village,
Parks & Recreation Department
for the work on
Doubletree Ranch Park Pavillion
and for advising the
Parks & Recreation staff.



Newsletter Change Notice



*The December and January issues of The Root will be announcements only.
This will give the Newsletter Editor & Authors time to enjoy the holidays
with their families.*

*You can expect the February 2021 issue to be chock full of the gardening
articles and information you have come to expect.*

The Newsletter staff thanks you for your understanding.

Plant of the Month - What Not to Plant

Nandina: *The Devilish Problem with Heavenly Bamboo*

BY MICHELE RAWLEIGH

Have you ever planted something that you thought was perfect only to regret it later? In this space where we usually feature recommended plants, we are highlighting a popular shrub that can be problematic and should be avoided.

Nandina domestica has a common name of heavenly bamboo but it is neither heavenly nor a bamboo. Also referred to as simply nandina, this popular and versatile shrub is widely available in a variety of forms, some of which can resemble the woody stems and foliage of real bamboo. A native of eastern Asia, nandina is actually in the barberry family and has been bred to fill many niches in U.S. landscapes. From 12" tall ground cover to 8' tall privacy hedge, the nandina species and its numerous cultivars tolerate shade to full sun and dry to moist conditions. They're winter hardy in North Central Texas and the colorful foliage is usually evergreen here. So - what's not to like?

The Bad News

The problem with the nandina species and some of the cultivars is the beautiful red berries they produce. These clusters of showy berries have allowed nandina to escape home and commercial landscapes into parks and other natural areas, earning it a place on the list of Texas invasive plants at

www.texasinvasives.org. Birds and other critters that consume the berries have helped disperse nandinas into wild areas where persistent clumps of shrubs readily spread by tough rhizomes and displace native plants that are necessary for a balanced and healthy ecosystem.



Nandina Berries

result in volunteer shrubs that readily spread and displace native plants.

As if crowding out native plants was not enough, some veterinary hospitals have reported that the berries, when consumed in large quantities, can be fatal to some birds and cattle. Cedar waxwings, common winter visitors in North Central Texas, are especially prone to gorging themselves on berries. Nandina berries contain toxic cyanide compounds but remain on the shrubs into late winter so after other berries and fruits have been consumed, nandinas can be highly attractive to unsuspecting foragers.

What Not to Plant - Nandina (Cont.)



Photo Courtesy DCMGA Member Michele Rawleigh

Invasive Nandina

Just one of the many clumps of invasive nandina at Thrive Nature Park in Lewisville that will be removed as part of restoration efforts.

The Good News

While the species *Nandina domestica* and some of its cultivars produce berries, newer cultivars have been bred to be sterile and not produce fruit. No berries, no problem – as long as plants are not placed in natural areas where they can still spread and form dense clumps by suckering or rhizomes. If your landscape contains nandinas that produce berries and you're not inclined to replace them, then cutting off and disposing of the berries before they turn red in fall will remove the threat.

Clemson University has a nandina fact sheet which describes both the sterile and fruiting varieties (see Reference and More Information section).

There are also native, berry-producing shrubs and ground covers that are suitable substitutes for nandina in the Denton County area depending on the desired size and specific site conditions. Using natives helps increase your landscape's success because they are adapted to our soils and climate and are supportive of our native insects and critters. The Native Plants of North America database has additional information about each of these plants (see the Reference and More Information section).

Native Plants Are Adapted to North Texas Soils and Climate

- Yaupon Holly (*Ilex vomitoria*)
- Possumhaw Holly (*Ilex decidua*)
- Pigeonberry (*Rivina humilis*)
- Texas Barberry (*Mahonia swaseyi*)
- Coralberry (*Symphoricarpos orbiculatus*)
- American Beautyberry (*Callicarpa americana*)
- Southern Wax Myrtle (*Morella cerifera*)
- Carolina Laurel Cherry (*Prunus caroliniana*)
- Fragrant Sumac (*Rhus aromatica*)
- Evergreen Sumac (*Rhus virens*)
- Inkberry (*Ilex glabra*)
- Blackhaw Viburnum (*Viburnum prunifolium*)
- Agarita (*Mahonia trifoliolata*)

What Not to Plant - Nandina (Cont.)

References and More Information

TexasInvasives.org

"Invasives Database"

https://texasinvasives.org/plant_database/detail.php?symbol=NADO

Colorado State University – James L. Voss Veterinary Teaching Hospital

"Guide to Poisonous Plants"

https://csuvth.colostate.edu/poisonous_plants/Plants/Details/117

University of Georgia – College of Veterinary Medicine

"Toxicity Due to *Nandina domestica* in Cedar Waxwings (*Bombycilla cedrorum*)"

<https://vet.uga.edu/toxicity-due-to-nandina-domestica-in-cedar-waxwings-bombycilla-cedroru/>

Clemson University – Home & Garden Information Center

"Nandina Fact Sheet "

<https://hgic.clemson.edu/factsheet/nandina/>

Lady Bird Johnson Wildlife Center – Native Plants of North America database

<https://www.wildflower.org/plants-main>



Book

"Perennial Garden Color" (2013). William C. Welch. Texas A&M University Press. Provides detailed information on planting and growing 125 different perennials and their companion plants for Texas along with 500+ photos.

Book

"Texas Peach Handbook" (2011). Jim Kamas, Larry A. Stein. Texas A&M University Press. The authors cover the basics of peach cultivation—planting, pruning, fertilizing, watering, protecting, thinning, harvesting—and give both instructions on disease and insect control.

Online Course

"Tomato 101: The Basics of Growing Tomatoes" (2021). Joe Masabni. Texas A&M AgriLife. This course teaches the basics of growing tomatoes in your garden. This course was first developed for Texas gardeners. Web link:

<https://agrilifelearn.tamu.edu/s/product/tomato-101-the-basics-of-growing-tomatoes/01t4x000002ciQc>

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M AgriLife Extension Service is implied.

IT'S 2022 MEMBERSHIP RENEWAL TIME!

Dues paid by January 31, 2022, \$15; \$25 after

The Fine Print

- Enter VS & CE hours in VMS by January 31, 2022
- Veterans need 12 hours VS & 12 hours CE in 2021
- Interns need 70 hours VS & 50 hours training in 2021
- On March 31, 2022 members not in good standing will be inactivated unless granted an exception by the CEA-Hort.

Email Tammie Gurley with questions tmgurley@msn.com



Scan or go to Annual DCMGA
Membership Renewal on dcmga.com to
submit your renewal and payment



What's Growing in Members' Gardens



Photo: DCMGA member Carol Noble

Mexican Mint Marigold
Tagetes lucida



Photo: DCMGA member Mary Branstetter

'Pink' Turks Cap
Malva viscosa



Photo: DCMGA member Melissa Weaver

Coleus
Coleus scutellarioides



Photo: DCMGA member Phyllis Minton

Fall Aster
Symphyotrichum oblongifolium

Give Frost & Freeze the Cold Shoulder

Preparing Your Plants for Cold Weather

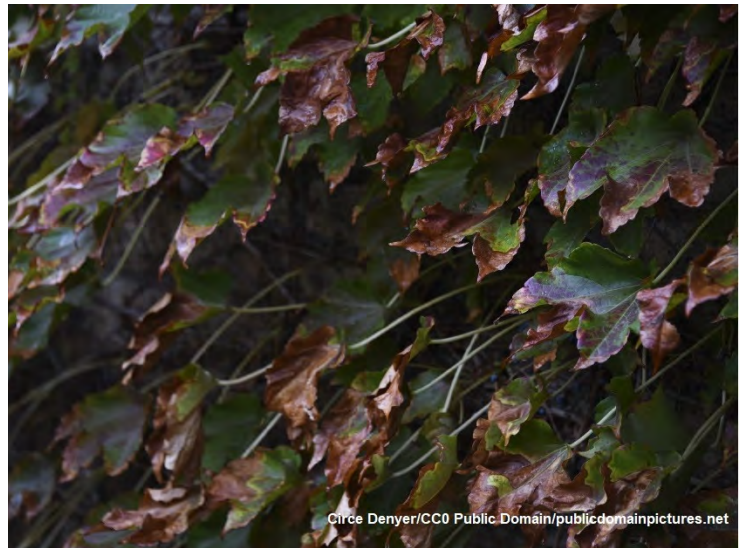
BY CHERYL HUCKABEE

After experiencing Winter Storm Uri in February 2021, preparing for cold weather in Texas is no longer a joke. Not only do we need to prepare our homes, but our plants also need help getting ready. In the northern regions of the U.S., plants acclimate to freezing weather during consistent, gradual exposure to colder weather. Here in North Texas, it's common to have periodic warm weather, which keeps plants from acclimating and leaving them more vulnerable.

Frost vs. Freeze

There are two types of cold weather events in Texas: **advective freezes** ("freezes") and **radiative frosts** ("frosts"). Both cold weather event types can damage plants.

Winter Storm Uri was an **advective freeze**. They bring sudden, deep drops in temperature, a wind of more than four mph, precipitation at the onset of the event, and generally last 1 to 3 days.



Frost Damaged Ivy Leaves

Radiative frosts typically occur on a cold, clear night with wind less than four mph and temperatures that drop near or just below freezing. The most severe frosts happen on cloudy days, keeping the sun from warming the soil and plants and a clear night allowing heat to dissipate and temperatures to drop.

Occasionally, **dew may develop frost**. Dew forms at night on automobiles, rooftops, the ground, turfgrass, and plants when they cool to the "dew point." Dew point is the temperature at which the air releases moisture. Frost will form on these surfaces when they cool to the freezing point or below.

Cold Weather Plant Damage

During a freeze (advective), water inside the plants freezes, causing ice crystals. Those crystals pierce the cell walls of the plant. When the temperature warms, causing the plant to "thaw," the fluids leak out, causing the plant to die. The plant tissue will be dark-colored, appear water-soaked (mushy), turn brown to black, and dry up. In addition, plant foliage is damaged by wind, heavy ice, or snow, causing stem and branch breakage.

Give Frost & Freeze the Cold Shoulder (Cont.)

Frost (radiative) injury usually appears on the top of plants because of exposure to the cold night air. The foliage on the top of the plant will appear collapsed and dark-colored, whereas the foliage below will appear healthy.

Trees, especially young trees and evergreen trees, can experience other types of injury. Sunscald can also occur in cold weather, especially in young deciduous trees. During the day, the sun heats the bark, then as the temperature drops to at or near-freezing, the temperature of the bark drops, killing the active tissue. Shoot dieback and bud death can occur in marginally hardy plants or those that grow vigorously in the fall. Evergreen foliage can become discolored (bleached or brown) from desiccation. The bright sun warms the plant tissue generating cellular activity, then the temperatures drop overnight, causing tissue damage. Bright, sunny cold winter days below 28F can destroy the chlorophyll in foliage resulting in a bleached appearance.



Joseph OBrien, USDA Forest Service, Bugwood.org

UGA5059018

Bark Sunscald



Joseph OBrien, USDA Forest Service, Bugwood.org

UGA5049095

Evergreen Foliage Discoloration

Cold Weather Damage Prevention

Several things can be done to protect plants from radiative frost injury and a short advective freeze if there's not much wind. If there's an extended freeze, more than 1 or 2 days, that includes a strong wind, there's not much that can be done to protect plants from injury. The wind speeds up the cooling of the plant tissue leading to damage.

Give Frost & Freeze the Cold Shoulder (Cont.)

- **Water** plants thoroughly before (1-3 days) forecasted near or below freezing temperatures. Moist soil holds heat and releases heat more slowly than the plant surfaces or air.
- **Covering** plants is the simplest, most practical way to protect against frost damage. Large cardboard boxes, large round garbage cans, and spun polyester row cover fabric are all good choices. Do not use plastic sheeting because it heats up too much and can "burn" the plants.

Make sure the covering is large enough to cover the entire plant and drape down to the soil on all sides. The soil will release heat into the air around the plant. Secure the cover to the soil with boards, bricks, rocks, soil, or garden staples to hold in the air. Remove the cover in the morning to allow the sun to warm the plants and soil, then replace it in the evening before the temperature drops.



Covered Bed

Hoop tunnels with PVC anchored to the soil about 4 feet apart work well in fall vegetable gardens and over low growing ornamental beds. Cover the hoops with spun polyester row cover fabric anchored to the soil. Heavier weight "frost cloth" is the most effective; however, two layers of lightweight spun polyester work well, too.

- Adding a **source of heat** under the row cover significantly helps. Use a mechanic's light or string of large-bulb Christmas lights, ensuring that the electrical cords are protected from moisture. A container of water placed close to small plants under the row cover will also release heat to protect from injury. Use a gallon milk jug or 5-gallon bucket filled with water, and make sure the row cover can still be anchored to the soil over them.
- **Mulch** is a terrific insulator for tender perennials and citrus trees. Apply a thick layer of hay, composted bark, wood chips, or similar material. Don't smother the plant; expose a few leaves for sunlight and air circulation.

Lightweight soil such as sand or sandy loam mounded at the base of citrus trees can protect the root system and graft union. Although the top of the tree may be damaged, the soil may protect the root system and graft union for regrowth in the spring. Pull back the soil after the danger of frost or freeze has passed to avoid rotting the trunk tissue.

Give Frost & Freeze the Cold Shoulder (Cont.)



Tomato Plants Protected With Straw Mulch



Roses Protected With Mounded Mulch

- To protect young trees from **sunscald**, wrap the trunk with commercial tree wrap (white only) or plastic tree guards. Wrap the tree in the fall, then remove it in the spring for the first 2 to 5 years after planting.

Reduce the risk of **foliage discoloration** in evergreen trees and shrubs by wrapping the south/southwest side of the plant with a barrier of burlap or similar lightweight fabric. Leave the top open for air and sunlight.

Protect small trees with multiple main stems can be from **breakage** by wrapping the stems together with strips of carpet, strong cloth, or nylon stockings. It is not practical or safe for homeowners to attempt to do this on larger trees.

Check for cracks in the planting holes of newly planted trees and shrubs. Cold air can penetrate the root zone, killing root growth. Fill in the gaps with soil and add a thick layer of mulch over the root zone.



Tree Wrap

- **Outdoor container plants** are particularly susceptible to cold weather damage. Many of the same prevention techniques work well. Water the containers thoroughly a few days before forecasted frost. Cover the plants with cardboard boxes, row covers, plastic tubs making

Give Frost & Freeze the Cold Shoulder (Cont.)

sure the cover reaches the ground and is anchored down. For more extended freezes, move the containers to southern or western exposure and apply a heavy layer of mulch, straw, or leaves in the container. If possible, move containers to the garage along an inside wall, indoors, or a greenhouse.

- The appropriate timing of **gardening maintenance** is critical. Do not fertilize plants with nitrogen or heavily prune in late summer. Both actions stimulate growth and make plants less winter hardy.

Wait to Assess Damage or Take Action

Damaged foliage will be readily apparent after a frost or freeze. However, damage to stems and trunks may not be easily seen. A few days after cold weather, use a knife or thumbnail to scrape the outer layer of bark on young branches. Damaged areas will be brown beneath the bark; healthy tissues will be green or a healthy creamy color. Delay pruning until after all risk of frost or freeze, typically in mid-March in North Texas.

November is the Time to Prepare

The average first freeze in North Texas is Nov 16 to 30 and can be as early as Nov 1 to 15. Assess the risk in your landscape now and get your protection plan and materials in place. We all hope there won't ever be another Winter Storm Uri. Taking these steps to get ready now will help protect your plants from Texas' unpredictable weather.

Sources and Resources

Johnson, Gary R., et al. "Protecting trees and shrubs in winter." *University of Minnesota Extension*, 2018,
<https://extension.umn.edu/planting-and-growing-guides/protecting-trees-and-shrubs-winter>. Accessed Oct 13, 2021.

Nesbitt, Monte, and Robert "Skip" Richter. "Protecting Landscapes and Horticultural Crops from Frosts and Freezes." *Texas A&M AgriLife Extension*, 2014,
<https://agrilifeextension.tamu.edu/library/landscaping/protecting-landscapes-and-horticultural-crops-from-frosts-and-freezes/>. Accessed Oct 13, 2021.



Guttation, Fasciation, and Vivipary

BY PAM SPOONER

Have your plants been crying tears at daybreak?



Guttation on Strawberry Leaf by Schnobby is licensed under CC-BY-SA-3.0

Is your strawberry starting to grow a green beard?



Strawberry sprouting (vivipary) by Wolfmann is licensed under CC-BY-SA-4.0

Have they grown co-joined flower heads?



Fasciation in the inflorescence of a black-eyed Susan (Rudbeckia hirta) by Merz, Jon, Lady Bird Johnson Wildflower Center

Is your dried teasel germinating seeds still in the seedhead?



A Teasel Head where the seeds in it are germinating (vivipary) by TheDragonflyMan is licensed under CC-BY-SA-4.0

What The Heck???

Guttation, Fasciation, and Vivipary (Cont.)

Some wacky Internet troll might try to convince you that these out-of-the-ordinary occurrences are all due to some evil plot, but the scientific truth is that you are witnessing the processes of guttation, fasciation, and vivipary.

Let's de-mystify these natural processes beginning with guttation. At night a plant's roots – which never sleep – keep pumping moisture up the xylem (like drinking straws) of the stems. But the water vapor releasing pores (stomata) of its leaves close and take a nightly nap, therefore the water pressure increases inside the plant's tissues.

Because the pressure must be relieved, especially during a humid Texas dawn, other specialized pores (hydathodes) that never close are able to excrete the excess moisture which then resembles tiny tears at the edge or tip of a leaf. Small deposits of minerals from this weepiness might remain after the moisture evaporates. Even houseplants can exhibit guttation, so be on the lookout for a possible drippy mess that could impact your furnishings.

As for the double flower heads, or flattened and stringy squash vines, or multiple rose stems fused together, you are observing the phenomenon of fasciation (fash-EE-ation) that affects about 100 different plants and actually can be a 'crested feature' that is sought after, as in Cockscomb Celosia. Causes are thought to be many and varied including the effects of bacteria, viruses (Rose Rosette Virus, for example), fungi, physical injury, or genetic mutation. You can cut off the affected deformity or leave and observe it as a curiosity (except for Rose Rosette*). Unless you want to try to re-create the appearance in another generation, do not save seed from affected plants for the next planting season.

Saving the creepiest for last, let's talk about vivipary (vi-VIP-a-ree, Latin for 'live birth') which occurs when a seed germinates prematurely when it is still attached to the mother plant or is enclosed by its fruit. Seeing a tomato have tiny seedlings make the skin swell and even burst through can bring to mind unwanted memories of the sci-fi movie *Alien*. Other plants in which vivipary occurs are corn, wheat, strawberries, watermelons, squash, etc. Why would Nature spring this on us? It's simply an occurrence when the plant hormone that regulates germination (abscisic acid or ABA) is not quite enough to prevent the seed from springing to life early. A tomato that's been ripening on the counter just a little too long can look perfectly normal from the outside, but after cutting it open, you see that some of the seeds might have just germinated (mostly white and wormy looking) or are a little older so that green seed leaves have already developed or could have even pierced the tomato's skin (really weird!). Because the sprouts won't taste very nice, remove them before consuming the affected fruit or veggie. Vivipary in cereal grains has serious economic consequences because once visible growth occurs, they cannot be used for food processing or seed harvesting.

Guttation, Fasciation, and Vivipary (Cont.)

Google these three little words and view images to see the variety of these intriguing anomalies that occur in our Natural world as well as a fun learning activity with children.

Resources

University of Missouri, Integrated Pest Management, "Guttation: A Pressure Relief for Plants"
<https://ipm.missouri.edu/MEG/2009/6/Guttation-A-Pressure-Relief-for-Plants/>

*DCMGA, Denton County Master Gardener Association, "Rose Rosette Disease FAQ"
<https://dcmga.com/north-texas-gardening/insectspests/rose-rosette-disease-faq/>

Texas A&M AgriLife Extension, "Fasciation on Roses"
<https://agrillifeextension.tamu.edu/library/landscaping/fasciation-on-roses/>

Lady Bird Johnson Wildflower Center, "Beautiful Mutants"
<https://www.wildflower.org/magazine/native-plants/beautiful-mutants>

Alabama A&M & Auburn Universities, AExtension, "Vivipary: What the Sprouts?"
<https://www.aces.edu/blog/topics/lawn-garden/vivipary-what-the-sprouts/>



**Join Denton County MGA
in cyberspace for our
November General
Meeting & Program.**

We're pleased to feature Ann
Athey, who will present
"African Violets."

**Advance registration is
required.**

**As always, our General Meeting
programs are open to the public
and free of charge.**



North Texas Gardening Focus Fall Bulb Planting

Bulbs require planning and patience, but thankfully, you're not too late this year. The broad term "bulb" describes plants that store most or part of their lifecycle within an underground, fleshy structure. Bulbs planted in the fall spend months growing the root structure necessary to sustain the showy flowers that cheer us in the doldrums of winter. Once blooming finishes, the leaves continue photosynthesis, storing nutrients in the bulb for next year's blooms. As the leaves yellow and fade, we know it's time to prune and await next year's showing.

Most gardeners prefer perennial bulbs, which respond to our climate by continuing to bloom for a number of years before needing to be divided and shared. In north Texas, spring-blooming examples include daffodil/narcissus, grape hyacinth, and allium, among others. In the ever popular "tulip" category, look for "species tulips" that naturalize in north Texas, as opposed to the more widely known hybrid tulips that demand higher maintenance.

Plant bulbs when soil temperatures reach about 55 degrees. Planting too soon triggers leaf growth before a root system develops. Underground bulbs withstand freezing weather, but premature leaf growth succumbs to the same temperatures. Planting a little late is better than planting too early or, worse yet, saving the bulbs until the following

year. If you order bulbs early, store them in a refrigerator away from any methane-producing fruits or vegetables until planting; do not allow them to freeze.

Excerpt from [DCMGA North Texas Gardening, FAQs, Help Desk Q&A](#)



TEXAS
MASTER GARDENER
TEXAS A&M AGRILIFE EXTENSION
Denton County

NORTH TEXAS

GARDENING

Denton County Master Gardener Association



German Iris (*Iris x germanica*)



Grape Hyacinth (*Muscari spp.*)



Daffodil (*Narcissus spp.*)



Crocus (*Crocus spp.*)

November Gardening Tips
Plant spring-flowering bulbs this month. They are simple to grow, readily available & inexpensive.

- Choose firm bulbs with no soft spots
- Tulips & Dutch hyacinths need to be chilled in the fridge veggie drawer 45-60 days before planting
- Plant other varieties 1-2 days after purchase
- Plant in full sun, depth 3 times the circumference of the bulb
- Water after planting & once a week absent rain; mulch 2-4 inches
- Daffodil, Iris, Grape Hyacinth & Crocus are good choices

Scan the QR code for more about growing bulbs in Texas.



Pass-Along Marking

BY LIZ MOYER

Avoid Plant Sale Prep Horror!

We've all been there. It's time to pot up pass-alongs for the Plant Sale, but:

1. We can't remember which plants were outgrowing their locations and need to be thinned and/or dug around the margins (edges)
2. The ones we think probably were candidates are still too small to be sure
3. We can't remember the names of the plants, and they are too small for ID

Oh, the horror!



Photos Courtesy DCMGA Member Liz Moyer

Flag Marker



Knife Marker

Act now! Grab a permanent felt tip pen and a bunch of plastic knives or utility marking flags and get out there. Mark your plants now for digging in early March. It's a good idea to make yourself a diagram or some notes when you mark them. Check your markers periodically throughout the winter to be sure they are still legible and to remind yourself where they are ...

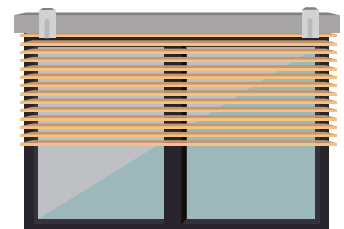
Another advantage: utility flags and plastic knives come in a variety of colors and can really add a pop to your winter landscape!



Mini-Blinds Wanted

Do you have some used mini-blinds that are destined for the trash? Did your neighbor set out mini-blinds for trash pick-up when they moved out?

The Plant Sale Committee can use any and all mini-blinds for Plant Sale ID stakes. If you have some to donate, contact Bob Bender through VMS.





Online Education Opportunities

For Master Gardeners and the Community We Serve

Science-based knowledge on a variety of topics in an innovative and interactive virtual format.

DCMGA General Meeting Presentations

November 10, 2021. 10:00 am to Noon

Open To The Public

"African Violets" presented by Ann Athey

To Register:

<https://uso2web.zoom.us/join/mtqzoiGNFC3Cq97iwMgeioqWTc2E9w>

DCMGA YouTube CE Programs

"Waterwise Gardening"

"The Ease of Effective Hardscaping"

"The Pleasures & Pitfalls of Perennial Plants"

"Gardens Gone Wild"

"Getting Buggy"

"Texas Trees: Caring for Your Legacy"

"Using Technology for Plant Identification"

<https://www.youtube.com/c/DentonCountyMasterGardener>

Chat with Green Aggies

Texas A&M AgriLife Extension

Join us for CWGA 12:12pm, 1st and 3rd Thursday each month. Please register for both 1st Thursday at <https://tinyurl.com/wpwcxwzwa> & 3rd Thursday at <https://tinyurl.com/urc5mr3m> so that you don't miss any chats.

Nov. 4 Disease prevention in Fall; Greenhouse sanitation

Nov 18 Preparing for winter

All previous Chat with Green Aggies recordings: <https://www.youtube.com/playlist?list=PLxT5cUdFaycrUzUiWSA46JRPGBYSFiFzH>

Landscape, Design, Maintenance & Plant Selection

October 21st: Made for the Shade, Daniel Cunningham, Rooted In.

6:00-7:00pm

Please register for this virtual (Zoom) Class:

<https://uso2web.zoom.us/join/-uqrj4vHNLAIJf82vARuN-GNqSyN5e5g>

Tarrant Regional Water District & Tarrant County Master Gardeners

Toni Moorehead "Tough Texas Plants"

Part 1: <https://youtu.be/GPkDJtkn-Jc>

Part 2: <https://youtu.be/3wwDY38VVLg>

Part 3: <https://youtu.be/kZKXOiexJMw>

Tuesdays with Texas Master Naturalists

On the Second Tuesday of each month at the noon hour (12PM Central Standard Time), the TMN State Office will offer an hour-long virtual advanced training event. These will be recorded each month and shared to the website by the following day of each month. Here's a link to one YouTube video: A Presentation by Doug Tallamy – "Nature's Best Hope"

<https://www.youtube.com/watch?v=WY4aV5hqkxY>

The Bee Short Course – Ohio State University

"Building wild bee conservation skills together"

<https://u.osu.edu/beecourse/>

Online Education Opportunities (Cont.)

AgriLife Online Courses

Texas A&M AgriLife Extension

(Most, but not all, are free.)

<https://agrilifelearn.tamu.edu/catalog?pagename=Plants-and-Garden>

Earth-Kind® Online Master Gardener Training

Texas A&M AgriLife Extension

<https://aggie-horticulture.tamu.edu/earthkind/training/>

Introduction to Plant Identification

UDSA NRCS Science & Technology

<http://www.conservationwebinars.net/webinars/introduction-to-plant-identification>

Aggie Horticulture YouTube

Texas A&M AgriLife Extension

https://www.youtube.com/channel/UCbp4wkScRV0HlN3Hi1_KUQ/

Upper Trinity Regional Water District, City of Lewisville and Keep Lewisville Beautiful virtual classes

Information to help you save water year-round.

[Spring Into Action for Long-Term Success](#)

[Soil Preparation and How to Plant a Plant](#)

[Lawn Care Basics](#)

[Getting Started With Natives](#)

Metroplex Tamil Sangam Gardening – "Perennial Gardening in North Texas" By "Sharrie & Rick Ely"

Presentation by DCMGA Member Sharrie Ely

<https://www.youtube.com/watch?v=pF-BMdAaoqM>

Home Grown Lecture Series from Harris County Master Gardeners

Join us for our Free, 30-minute, bi-weekly ONLINE on Thursdays at 10 AM Central time. Must register through Eventbrite to get the webinar link.

<https://www.eventbrite.com/e/home-grown-lecture-series-tickets-143797364789?aff=erelexpmlt>

November 4, 2021 – Citrus Trees for the Landscape – Brandi Keller, Texas A&M AgriLife Extension Agent – Residential Horticulture

November 18 – Rainwater Harvesting – Teresa See, Harris County Master Gardener

Gardening 101 + Virtual Learning Series

Aggie Horticulture

Texas A&M AgriLife Extension

Texas AgriLife posts great videos to the Aggie Horticulture Facebook. There are over 50 presentations here. View them at:

<https://www.facebook.com/watch/Aggie-Horticulture-26803072143/1541129202716211/>

Citrus Varieties: Gardening on the Gulf Coast

Texas A&M AgriLife Extension

Stephen Brueggerhoff, Extension Agent – Horticulture

<https://youtu.be/wSIRjQJnxhE>

DCMGA Members

Plan Your Week emailed each Friday has the most current Online CE Opportunities.

See our [Member Handbook](#) for approved CE sources and guidelines. Note that members may claim up to 3 hours of annual discretionary education; veteran members with 10+ years of service may claim up to 6 hours.



BY HELP DESK TEAM

Q: My trees are creating so much shade that the grass under them has died. Is there a ground cover type plant that will survive in full shade and require little maintenance or water?

A: Yes! There are several Texas native ground covers that like shady areas and once established require limited special care. The common names for three options for you to consider are: horseherb, white avens, and golden groundsel. Let me tell you a bit about each.

Horseherb: *Calyptocarpus vialis* (sometimes called straggler daisy). According to the Native Plant Society of Texas, "horseherb is native to south and south central Texas and adapts to most other parts of the state. It can grow up to 8-10 inches tall, with opposite leaves that are usually less than 1 inch long. It has a sprawling to prostrate habit. Horseherb is perennial and although deciduous, it may remain green during a mild North Texas winter." Not everyone loves this plant as it can spread somewhat aggressively.

White avens: *Geum canadense* is a member of the large rose family of plants and has leaves that vaguely resemble strawberries. It produces small white flowers in the spring. It grows 4 to 18 inches taller, but can grow even taller under ideal conditions. To care for and maintain white avens, The Ladybird Johnson Wildflower Center points out that, "As plants are short-lived, allow to self-sow to maintain a continuous groundcover. In dry areas, water during summer to ensure leaf retention. To keep the clingy seeds low to the ground, mow once a week during flowering and once a month thereafter, no lower than 4 inches."

Golden groundsel: *Packera obovata* is an attractive member of the aster family that blesses its owners with yellow flowers that attract bees and butterflies that grow on 2- to 18-inch stalks in late winter through early spring. The base of the plant is a rosette of oval, dark green leaves that remains evergreen most of the year in North Texas. This plant prefers organically rich soil, but is fairly tolerant of our North Texas native soil. Although drought tolerant, it needs some supplemental water until it is established.



The Collin County Chapter of the Texas Native Plant Society offers these observations and advice on growing golden groundsel, "With their runners or stolons, the Golden Groundsel can fill up a corner of the garden. Plus, their runners can be easily transplanted to start new colonies. As a bonus, they can also propagate by seed. After the flowers have seeded, removing the spent stem cleans them up, and they are a wonderful evergreen ground cover for the rest of the year. Other than cutting back stems after flowering, very little maintenance is required. In addition, it has no serious insect or disease problems."



Caution: Before planting native ground covers, check with your HOA, if you have one. Healthy native plants spread—sometimes aggressively—and therefore may not be approved for your area.

Finding these Texas native ground covers may be a bit challenging. Your best bet is to search out nurseries that specialize in native plants and follow news from local NPSOT chapter websites about their plant sales:

Denton County:

<https://npsot.org/wp/trinityforks/>

Collin County:

<https://npsot.org/wp/collincounty/>

Dallas County:

<https://npsot.org/wp/dallas/>

More information on native plant options for North Texas landscapes:

<https://dcmga.com/files/2021/04/Natives-in-the-Suburbs-dual-branded-V2-2.pdf>

Welcoming pollinators to your yard (with native plants):

<https://www.youtube.com/watch?v=DjXtQFhhR9w>

More information on care of horseherb:

<https://npsot.org/wp/story/2018/10777/#:~:text=Horseherb%20is%20perennial%20and%20although,part%20shade%20or%20full%20shade>



*If you have questions about any horticulture-related subjects,
please contact our Master Gardener Help Desk at 940.349.2892
or master.gardener@dentoncounty.gov.
It's free of charge, and our pleasure to assist you.*



2022 GREATER AUBREY AREA GARDENING SERIES

Jumpstart your gardening in 2022 with this free
virtual educational series



JANUARY 20

6 - 7:30 pm

Vegetable Gardening

Dana Bays, Mike Crawford



FEBRUARY 17

6 - 7:30 pm

Drought Tolerant Plants

Charlotte Canion



MARCH 17

6 - 7:30 pm

Pollinator Plants

Kim Wootton

Sponsored by



Scan the QR code or go to
dcmga.com/upcomingevents to register

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Earth-Kind® Landscape Design

Use Earth-Kind® landscaping principles and practices to create beautiful, easy-care landscapes while conserving and protecting natural resources and the environment.



Scan to learn more about
Earth-Kind® landscape design

TEXAS

MASTER GARDENER

TEXAS A&M AGRILIFE EXTENSION

Denton County

Learning to be Kind to the Earth: An Introduction to Earth-Kind® Landscape Design

2022 Series 1 Classes

.....

**Tuesdays, Jan 11 - Mar 1
7:00 - 8:30p via Zoom**

**Register on dcmga.com
Nov 15 - Dec 28, 2021**

- Planning & Preparation
- Water Conservation
- Pest Management
- Plant Selection
- Soil & Fertilization
- Design Basics

Cost: \$50 for 8 classes & materials

.....

Series 1 is a prerequisite for the
Series 2 Design Application classes

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What's Growing On

Denton County Master Gardener Association

Check Out List of Events for 2021 / 2022

General Meeting & Program

Nov
10

Virtual: African Violets by Ann Athey, 10 am -noon

Earth-Kind Landscape Design

Jan
11

Virtual: Learn to use Earth-Kind landscaping principles and practices to create beautiful, easy-care landscapes. Tuesdays, 7-8:30pm

Vegetable Gardening

Jan
20

Virtual: Greater Aubrey Area Gardening Series, presented by Dana Bays & Mike Crawford, 6-7:30 pm

Drought Tolerant Plants

Feb
17

Virtual: Greater Aubrey Area Gardening Series, presented by Charlotte Canion, 6-7:30 pm

Pollinator Plants

Mar
17

Virtual: Greater Aubrey Area Gardening Series, presented by Kim Wootton, 6-7:30 pm

For detailed information:

dcmga.com/upcoming events

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Mission Statement

Denton County Master Gardener Association educates and engages county residents in the implementation of research-based horticultural and environmental practices that create sustainable gardens, landscapes, and communities.

Extension EO/EEO Statement

Texas A&M Agrilife Extension provides equal opportunities in its programs and employment to all persons, regardless of race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.

2021 Board of Directors

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Social Media

Facebook:

<https://www.facebook.com/DentonCountyMGA>

Instagram:

<https://www.instagram.com/DentonCountyMGA>

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Pinterest:

<https://www.pinterest.com/DentonCountyMGA>

YouTube:

<http://www.youtube.com/c/DentonCountyMasterGardener>

Save the Date

November 3 Board Meeting - (Virtual)

November 10 General Meeting & Program - "African Violets" (Virtual)

Contact Information

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Content

Submission deadline for the December edition of *The Root* is Monday, November 15.

Submissions may be revised at the discretion of the editor.

Ideas, photos, and articles are welcome and may be submitted to Editor Karen Gibson or Communications Director Cheryl Huckabee at dcmga.communications@gmail.com.

All photos are courtesy of DCMGA's Creative Visual Arts (CVA) Team unless otherwise attributed.

<https://dcmga.com>