

Gillespie County

Horticulture Newsletter
Late Fall 2023

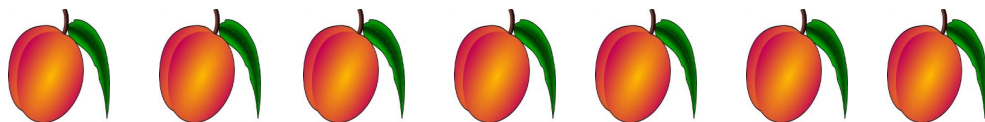


A Time to Be Thankful

After the harsh drought this summer, I have been very thankful for the rain we have received and for the fall color this year. Seeing something other than dead leaf brown or dried out tan has been welcome.

In this quarter's newsletter check out columns featuring poinsettias, bulbs, turfgrass trial update, vegetable trial and information about what those strange berries are that are falling from the post oaks right now.

As always, if you have any questions, please feel free to contact me at Elizabeth.mcmahon@ag.tamu.edu or call me at the office at 830-997-3452.



Gillespie County Chill Hour Tracker

Want to know the latest number of chill hours Fredericksburg has received? Please see <https://gillespie.agrilife.org/agriculture-2/horticulture/chill-hours/> for updates. Chill hours will start being tracked after a heavy freeze ($x \leq$ or equal to 27° F) at the Gillespie County Extension Office.



Highlights

Picking a Poinsettia Pg. 2

Planting Fall Bulbs Pg. 3

Which Turfgrass Grew the Fastest? Pg. 4

USDA Plant Zone Map Update and Comparison Pg. 6

Strange Tales of Horticulture Pg. 8

Vegetable Trial Now Open for Participants Pg. 9

Upcoming Programs Pg. 10

Fast Facts About Poinsettias



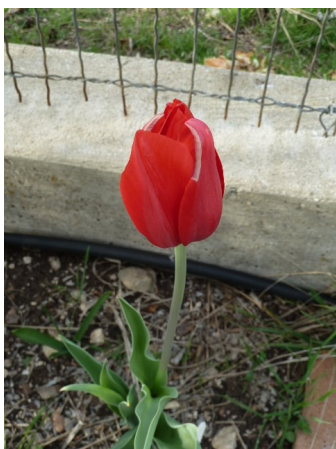
- Poinsettias are native to Mexico. In their native habitat, they can become a shrub.
- Poinsettias have white milky sap, but are not milkweeds. They are in the croton (Euphorbiaceae) family instead of the milkweed family (Asclepiadaceae).
- Eating poinsettia foliage will not kill you or your pet, but it may give you a stomach ache.
- Poinsettia bracts can indicate the age or freshness of a poinsettia. They open as the poinsettia ages, producing yellow pollen above an opening that looks like a fish mouth (bottom picture). Eventually the yellow pollen fades away and these pea shaped bracts drop off. Poinsettias with open bracts will last longer while poinsettias without bracts may soon start dropping foliage.
- Overwatering kills more poinsettias than underwatering. Remove the foil wrap before watering and allow the water to drain out of the pot before putting the foil back on.



The bracts are barely open on this poinsettia. Picture by Beth McMahon.



The bracts are mostly open on this poinsettia. It may not last as long. Picture by Beth McMahon.



"Kings Blood" tulip grown in Harper. Picture by Beth McMahon

Common Winter Bulb Care

Tulip and hyacinth bulbs require a cold period for strong blooms. Local soils may not get cold enough to provide that cold period. This doesn't prevent you from growing these bulbs. To grow them, pre-chill tulips and hyacinths for 45-56 days before planting by sticking them in the fridge. Plant them mid-late December.



Hyacinth in bloom. Picture by Gerald Klingaman.

Tulip Tips

- Plant in masses of single colors for the most visual impact.
- Deer will nip off flowers.
- Species tulips like *Tulipia clusiana* will come back a few years but generally other tulips will not return. In Harper, where it is colder, I have had "Lady van Eijk" tulips bloom one year after planting without pre-chilling.

Hyacinth Tips

- Plant in mass, choose scented varieties.
- Will attempt to bloom again if left in the ground, but do not have energy stored up to have as pretty a bloom as the first time. Fertilization after bloom may help them return.



This "Ice Follies" daffodil has escaped from the safety of the flower bed and into the dangerous mowed lawn area. Picture by Beth McMahon

Adapted daffodil and grape muscari (neglectum only) do not need as much winter chill, and can be planted October–early December



Muscari neglectum. Picture by The Southern Bulb Company.

Daffodil Tips

- Do not remove foliage until brown. The foliage helps the bulb store up energy for next year.
- Daffodils may come back year after year, but it depends on variety. For best chance of come-back, use "Ice Follies" (pictured), or "Carlton". Other recommended varieties include "Dutch Master" & "Unsurpassable"

Grape Muscari Tips

- *Muscari neglectum* is the only consistently naturalizing grape muscari in our part of Texas. Other types may need to be pre-chilled like tulips.
- Plant in full or mostly sun. Look a lot like bluebonnets from afar.
- Foliage emerges in fall.
- Looks best planted in mass.
- Avoid mowing it.
- Might spread by seed.

Which Turfgrass Grew the Fastest?

Gillespie Turf Trial Update

6/15/2023



8/18/2023



11/17/2023



The plot pictured is plot #4, “Timeless 2 Way,” buffalograss & blue grama mix. This plot had germination in as little as one week. The first plot reached 90% coverage on 8/11/2023 . All three plots have reached 90% coverage by October 13th, 2023.



The plot pictured is plot #9, “Citrablue” plugged St. Augustine. “Citrablue” is supposed to be a more drought tolerant St. Augustine turfgrass but it’s cold tolerance is unknown. As of 11/17/2023, two plot have not reached 90% coverage or greater. The first and only “Citrablue” plot to have reached 90% coverage reached it on 10/13/2023.



The plot pictured is plot #8, “Sahara” seeded bermudagrass. A hard rain on June on 6/19/23 is thought to have washed the seeds away, negatively effecting the experiment. The first plot (pictured) reached 90% coverage on 10/13/2023. The second plot reached 90% coverage on 11/2/2023.

Which Turfgrass Grew the Fastest?

Gillespie Turf Trial Update

6/15/2023



8/18/2023



11/17/2023



The plot pictured is plot #2, “Sundancer” buffalograss seeded. The first “Sundancer” seeded plot reached 90% coverage on 11/2/2023. As of 11/17/2023, only one plot out of three has reached 90% coverage.



The plot pictured is plot #3, “Sundancer” buffalograss plugged. The same seed was used for the plugs and for the seeding. The plugs were started a few weeks ahead of time and then planted when all the seeded plots were planted. The first plot of three to reach 90% coverage was on 7/27/2023. All three plots achieved 90% coverage by 10/13/2023.



The plot pictured is plot # 5, “UC Verde” buffalograss plugged. The plugs were obtained from Todd Valley Turf farm. The cold tolerance is unknown for this variety, and could be a potential future problem. The first plot to reach 90% coverage or greater was on 8/11/2023. All three plots achieved 90% coverage by 10/13/2023.

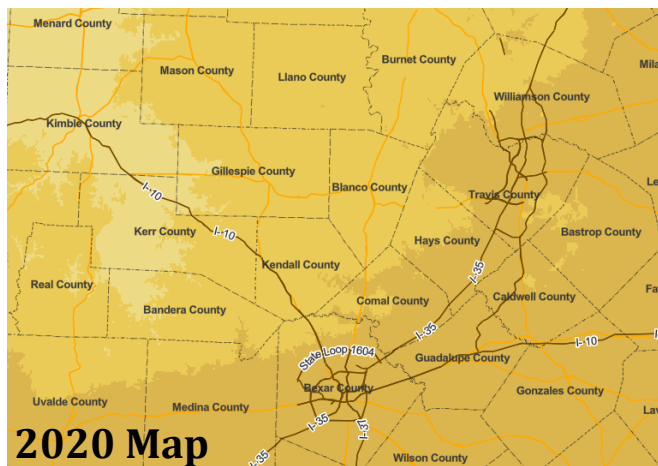
Summary

- Buffalograss plugs established faster than st. Augustine plugs and “Sundancer” & “Sahara” seeded plots.
- West side plots did better than east and north side plots.
- “Citrablue” st. Augustine establishes very slowly during hot dry summer conditions.

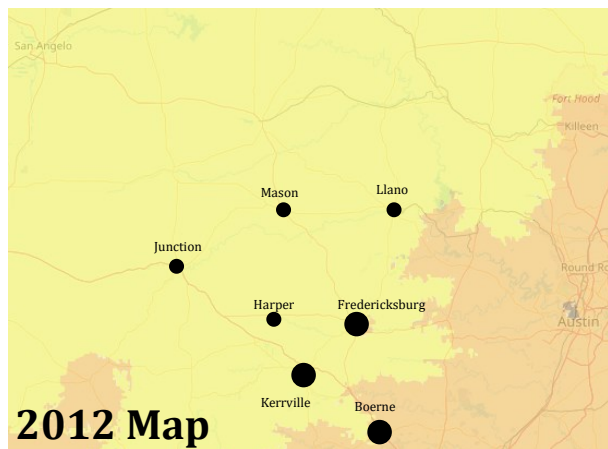
USDA Plant Hardiness Zone Map Gets Updated

Though heat tolerance may be the first thing on your mind when selecting a new perennial plant for your landscape, cold tolerance is important too and the USDA Plant Hardiness Zone map can help with that. The USDA plant map is zoned based off of an average of the single coldest temperature from every winter. The newly updated map is based off of the 1991-2020 weather data set.

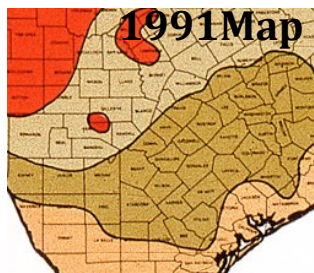
How accurate is this map you may wonder. The first map created used only a few data sets and the opinions of local nurserymen & horticulturists to calculate the zones. This newly updated map uses thirty years previous data and GIS to more precisely calculate finer temperature differences.



2020 Map
In this map, Harper (West Gillespie County) is still 8a (annual average cold temp is 10-15 F). Fredericksburg, Llano, Mason are zone 8B (annual average cold temp is 15-20 F). San Antonio is 9a (20-25)



2012 Map
This is the 2012 map, courtesy of plantmaps.com. It used data from only 8,000 stations from 1976-2005. Harper (West Gillespie County) and most of Gillespie County is zone 8a (annual average cold temp is 10-15°F). There are some spots of zone 8b (orange color 15-20°F) around Fredericksburg.



1991 Map
This is the 1991 map. It used data from only 8,000 stations, and from years 1974-1986. In this map, North Harper & Doss, as well as Fredericksburg, Johnson City, Mason and Llano are zone 8a (annual average cold temp is 10-15°F). Klein Branch area, Thrill Hill area, Tierra Linda, Loma Vista and Mountain Home are zone 7b (5-10°F). San Antonio and Austin are just zone 8b (15- 20°F)

An average temperature is more important in determining zone than basing it off of recent temperature information. I've kept track of winter temperatures since winter 2017, and the coldest temperatures are recorded in the side table. This data includes the outlier

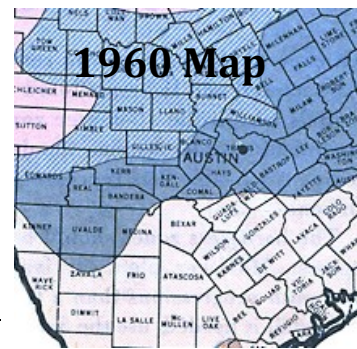
Snowmageddon we had in February 2021, which when removed increases the average up to 15° F.

The cold hardiness map should be used as a guide, not as an ultimate deciding factor when selecting plants. Our summer heat can impact the survival of many plants that can withstand our cold temperatures, and one will get temperatures outside the average. Also, some plants may be cold hardy to a certain temperature, but cannot adjust to the sudden temperature swings we get. If a plant has marginal cold hardiness for your zone, care should be taken to plant it in a sheltered place, because winter will come for it.

| Winter Season (Nov.-March) | Coldest Temp (°F) | Pattern |
|----------------------------|-------------------|---------|
| 2017-2018 | 14.6 | La Nina |
| 2018-2019 | 20 | El Nino |
| 2019-2020 | 18.9 | Neutral |
| 2020-2021 | 1.7 | La Nina |
| 2021-2022 | 13.6 | La Nina |
| 2022-2023 | 9.2 | La Nina |
| Average Minimum Low | 13 | |

If you would like to view the maps for yourself, please check out these links:

- USDA Updated Plant Zone Map planthardiness.ars.usda.gov/
- First frost www.plantmaps.com/en/us/ff/state/texas/average-first-frost-dates-map
- Last frost www.plantmaps.com/en/us/lf/state/texas/average-last-frost-dates-map



1960 Map
This is the original 1960 plant map. The top part of Gillespie county was zone 8a (10-20°F) and the bottom part of Gillespie County was zone 8b (10-20°F). They didn't differentiate within zones. This map was created using weather data from only 450 stations.

2024 Vegetable Gardening Programs



2024 Plantastic Vegetable Gardening Seminar

The Gillespie County AgriLife Extension Office with assistance from the Hill Country Master Gardeners will hold their 6th annual Plantastic Vegetable Gardening Seminar on February 23rd, 2024, from 8:30 AM to 3:35 PM. Sessions are applicable to both new and experienced vegetable gardeners, organic and conventional, from those looking to learn new techniques to those just wanting to learn how to grow a tomato plant. The program will consist of two general sessions led by Dr. Joe Masabni, Assistant Professor and Extension Horticulturist. Topics will include hydroponics and organic gardening. After an optional lunch, participants will break out twice with their choice of three concurrent sessions, with topics to choose from including "Tomatoes", "Texas Permaculture", "Common Vegetable Garden Insects", "Herbs in your Vegetable Garden", and "Growing Onions and Garlic". A third breakout session will be the "Lightning Round", this year themed around heat and drought vegetable gardening. Participants will pick one lightning round session from their choice of "Gardening Disasters", "Vegetables for Heat: A Case Study", and "Conserving Water in Vegetable Gardens". Door prizes will be drawn at the end. During breaks, stop by the seedling table to test your knowledge at identifying the various vegetable seedlings.

Participants will pick one lightning round session from their choice of "Gardening Disasters", "Vegetables for Heat: A Case Study", and "Conserving Water in Vegetable Gardens". Door prizes will be drawn at the end. During breaks, stop by the seedling table to test your knowledge at identifying the various vegetable seedlings.

Please contact Beth McMahon at 830-997-3452 for more information about the program. No pesticide agricultural applicator CEUS will be offered for this program.

2024 Grow It Cook It



Have you ever wondered what to do with all the vegetables you grow? Are you looking to learn how to grow a certain vegetable or want to improve your harvest of it? You should try the Gillespie County Extension's Grow It Cook It 2024 program series. Come taste recipe samples, see recipes demonstrated, and learn how to grow the target vegetable. Cost is \$25 for the series, \$15 per individual program. Topics are:

- February 28th, 2023 12:00-1:00 PM. Irish Potatoes
- April 24th, 2023. 12:00-1:00 PM. Yellow Squash
- August 7th, 2023. 12:00-1:00 PM. Broccoli

Strange Tales of Horticulture

You have all these little balls on your driveway. Looking up, you discover that they are coming from the tree. What's going on? Is your post oak started to produce red berries?

Those Aren't Berries...



Robin May
Nov. 2023

Post oaks have had an outbreak of small round balls that are from the midrib of the post oak leaves. Picture by Robin May.

Residents around Gillespie County and elsewhere are noticing small red berries underneath their post oak trees. While these balls may look like berries, they are not. These are actually red midrib galls, possibly caused by *Andricus dimorphus*, a type of Cynipid wasp.

How can a wasp cause a gall? The female wasp lays her eggs on a leaf. Certain chemicals she exudes forces the plant to grow around the egg. The larvae hatch in the structure the plant was forced to create. Not only do the larvae have protection from predators, but it has a readily available food source as it grows. The galls will detach from the tree, overwinter on the ground, and in the spring a tiny wasp will

Cynipid Gall Wasps



Joe Boggs, OSU Extension©

Cynipid wasps hanging out on a leaf. As you can see, they are quite small, too small to harm a human. Picture by Dr. Joe Boggs.

emerge from the gall.

Though the galls may seem threatening in their multitude, they do not cause mature trees any harm. Plant



Galls are not always caused by wasps. These petiole galls were caused by aphids. Break them apart and see! Picture by Beth McMahon.

nurseries that sell young trees may spray for these wasps, but most people should not need to.

In our area I have seen the galls underneath live and post oaks. Oaks may not be the only trees effected, hackberries and other trees can get wasp galls as well. Galls are not only caused by wasps. An bacterium can cause crown gall, and aphids can cause galls on plants too.

2024 Hill Country Vegetable Variety Trial

You don't need to have gardened for years to know that some vegetable varieties do better in the Texas Hill Country than others. Just try growing a "German Pink" tomato and a "Red Snapper F1" tomato one year, and compare which variety gets you more tomatoes. Generally when selecting seeds from a catalogue your best bet is going with something that is heat tolerant and drought resistant, but not all seeds are described this way.

Research variety trials are usually grown by just one or two people, on only a few locations that do not match the climate of the Texas Hill Country. Would you rather grow a vegetable variety that twenty-five other gardeners in the Texas Hill Country grew and approved of, versus a vegetable that was grown in College Station by a research assistant?

That's where you come in. I need volunteers willing to grow the trial vegetables and determine if they are good for our area or not. A standard variety will be compared with a newer variety. Plant health, production and taste of the new variety will be evaluated to determine if it matches the standard or surpasses it.

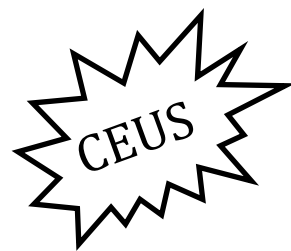
- For the 2024 growing season, Irish potatoes, broccoli and yellow squash will be trialed. Yep, these are the same theme vegetables as the "Grow It Cook It" program series, but you do not have to sign up or attend the "Grow It Cook It" program series or "Plantastic" to participate in the trial.
- Beginner and experienced gardeners are welcome.
- There will be 25 spots per vegetable, and while you can pick and choose which vegetable to grow, you do have to grow both varieties. No GMO varieties will be used for this trial. Specific varieties to be used will be confirmed in the January 2024 newsletter, but current possibilities are:
 - Two gold varieties for potatoes
 - "Covina F1" vs "Green Magic F1" for broccoli
 - "Straightneck" vs "Slik Pik Y 26" for yellow squash
- Participation is "free". There is no cost to participate and participation in the survey is voluntary, but I do ask that if you are unable to have a vegetable garden this summer or do not intend to answer questions about the vegetable plants, please do not take plants.
- Pick-up is expected to be the week of Plantastic (February 20th, 2024).
- Sign-ups will open in January 2024 and their opening will be announced in the 2024 January newsletter. Please do not contact me yet to sign up.



Will "Green Magic F1" broccoli, the only Texas Superstar broccoli variety, be knocked off its pedestal by new variety "Covina F1"? Help us find out! Picture from Plant answers.com

The full list of instructions and datasheet will be up in late December or early January. For general questions, please contact me at Elizabeth.mcmahon@ag.tamu.edu.

Save the Dates



Gillespie County

5 Hour CEU Program

December 7th, 2023. 8:00 AM-2:30 PM Gillespie County Extension Office, 38 Business Court, Fredericksburg.

Needing CEUs? Come attend our five-hour pesticide applicator CEU program. Topics will include turf weed control, pesticide additives to reduce drift, landscape plant disease management using IPM as well as landscape plant disease identification, and laws and regulations review. Two general, 1 laws and regs, 1 IPM and 1 drift CEU will be given. Deadline to register is December 4th. Cost is 75. Included in the program is a catfish lunch and donuts in the morning. Call the Gillespie County Extension office at 830-997-3452 to register.

Backyard Nature

January 13th, 2024. 10:00 AM-12:00 PM Gillespie County Extension Office, 38 Business Court, Fredericksburg.

Join the Friends of the Fredericksburg Nature Center and learn about local nature you may see in your backyard. Also get the free opportunity to make a turkey call! Please contact Nancy Person at 830-992-8411 for more information.



Cedar waxwings (?) perched on a possumhaw holly. Picture by Beth McMahon

What Happened to Our Understory?

January 23rd, 2024. 6:30 PM—8:30 PM. St. Josephs Halle, 212 W. San Antonio St., Fredericksburg.

Program speaker is Robert Edmonson, speaking on 'What Happened to Our Understory'. Part of Native Plant Society monthly meeting, open to the public.

Plantastic Gardening Seminar

February 23rd, 2024. 8:30 AM -3:35 PM Gillespie County Extension Office, 38 Business Court, Fredericksburg.

Vegetable gardening focused seminar. Dr. Masabni will be the main speaker. Topics include tomatoes, insects, herbs, onions and garlic as well as different topics around gardening with hot summers. Cost to be announced, likely between \$40-45 lunch option, \$30-\$35 no lunch option. Registration link forthcoming. Please call the Gillespie County Extension Office at 830-997-3452 or email Beth at Eliza-beth.mcmahon@ag.tamu.edu for when the registration link will be active.

Basics of Garden Design

February 27th, 2024, 2024. 6:30 PM—8:30 PM. St. Josephs Halle, 212 W. San Antonio St., Fredericksburg.

Program speaker is Paula Stone, ". She will cover the basic principles to help people better understand their options and make a garden best suited to their personal situation. History, a little design theory, the most common garden styles, and limits to design. Part of Native Plant Society monthly meeting, open to the public.

Save the Dates

Gillespie County

Grow It Cook It: Irish Potatoes

February 28th, 2024. 12:00-1:00 PM Gillespie County Extension Office, 38 Business Court, Fredericksburg.

Come learn not just how to grow potatoes, but different recipes to cook them as well. Please contact the Gillespie County Extension office at 830-997-3452 to register. Cost is \$25 for all January 2024-August 2024 Grow It Cook It programs, \$15 per program otherwise.



Potatoes come in a multitude of colors. Picture by Beth McMahon

Counties Near Gillespie County

Llano County Private Pesticide Applicator License Training

December 6th, 2023. Llano County Extension Office, 1447 East State HWY 71 unit E, Llano, TX

Training for the private pesticide applicator license. Cost is \$80 if materials are picked up, \$90 if mailed. Includes study manual, laws and regs manual, worksheet, handouts and class. No meal. Call 325-247-5159 to register. RSVP by December 4th.

Texas Superstar Plants

January 13th, 2024. 10:30 AM Butt Holdsworth Memorial Library, 505 Water Street, Kerrville.

What makes a plant a Texas Superstar? Come listen to Rae Raeford's presentation to find out. Program is free.



Gomprena is a Texas Superstar plant. Picture by Beth McMahon.

State Level Programs

Texas Plant Protection Conference

December 5th & 6th. 3232 Briarcrest Dr, Bryan, TX 77802

Two day conference concerning topics in agronomy with some limited horticulture and rangeland topics. Topics include crop insurance, Endangered Species Act impact on pesticide labeling, drone use in agriculture, pest ID contest, soil fertility section, horticulture section (including research needs for pecan, thornless blackberry performance, soil health in vineyards, performance difference of soccer players in synthetic vs natural turfgrass), grain session, pasture and rangeland session (including sand bur management, ENVU product and label updates, incentives to manage brush, range pasture market overview), Crop irrigation session, and cotton session. Virtual option available. Includes student poster presentation. Registration cost is \$110, virtual attendance is \$135. Farmer registration is \$30 in person, \$50 virtual. Email texasplantprotection@gmail.com for more information. 7 maximum CEUS, including 1 laws and regs possible. For more information, see <https://texasplantprotection.com/>.

Save the Dates

State Level Programs

TAMU AgriLife Viticulture and Enology Research Symposium

December 8th, 2023. 8:30-5:00 PM. Hildebrand Equine Complex, 3240 F and B Rd, College Station.

New research updates from statewide viticulture studies, networking, lunch, a research wine tasting and a wine/food industry social. Space is limited to 120 people. Register online at <https://agriliferegister.tamu.edu/ereg/index.php?eventid=765618&>. Cost is \$100.

Lone Star Hort Forum

January 7th-10th, 2024. Hilton DFW Lakes Executive Conference Center, Grapevine, TX.

The nursery and turf industry event for education and innovation. Connect with fellow attendees, gain TNLA CEUS, listen to general and breakout sessions and take a nursery tour. Student research presentations. Three day program cost is \$225(\$300). Tour is an additional \$80 (\$180) cost.

Rooted Across Texas: 2024 Texas Organic Farmers & Gardeners Conference

January 28th-30th, 2024. Estancia Del Norte, A Tapestry Hotel 37 NE Loop 410 at McCullough San Antonio, TX, 78216.

The conference includes two days of in-depth workshops and learning sessions, plus multiple off-site intensives and farm tours. Additional highlights include a Farm Feast with a keynote speaker, social and networking opportunities, and a trade show.

Spinach Field Day

February 20th, 2024. 10:00 AM -1:00 PM. Crystal City, TX.

Free to attend. Focusses on disease management and new field spinach varieties. Primarily for commercial growers. Free. To register, please see <https://forms.office.com/r/GgBmxBvtYY>.

Webinars

Minimizing Drift on Grazing Lands

December 7th, 2023. 12:00 PM. WEBINAR.

Keep peace with your neighbors by learning how to limit drift when you apply 2-4D and other drift prone herbicides. Webinar will discuss how to avoid drift and factors that effect drift. Cost is \$35. Contact casey.matzke@ag.tamu.edu for information on how to register as well as other questions. 1 drift pesticide applicator CEU available.



Tomato foliage damaged by herbicide drift. Picture by AgriLife Extension.

Lawn & Landscape Calendar

December

- Plant tulips and hyacinths for spring blooms later in the month.
- If you choose a living Christmas tree, choose Arizona Cypress or a shaped rosemary (small only). Do not choose Leyland cypress trees.
- Rake and bag leaves or alternatively mow to shred leaves and restore organic material to the ground.
- Wrap pipes.

January

- Plan gardens and flowerbeds.
- Sow seeds of petunias, begonias, and impatiens in flats in early January. Sow seeds of tomatoes, peppers, marigolds, and periwinkles in late January or early February.
- Avoid “topping” crape myrtles.
- If desired, test your soil.
- Plant onion sets in your vegetable garden.

February

- Prepare area for spring planting
- Select and order gladiolus corms for February/March planting. Plant at two-week intervals to prolong flowering period.
- Protect tender plants from hard freezes
- Apply horticultural oil to fruit and pecan trees when temperature is 45-65 for two weeks (mid-February).
- Finish pruning pecan trees and fruit trees before spring bud break.

Extension Office Closures

We will be closed on December 25&26th and January 1st.

Name That Plant!



This is not a rock. What local smelly native plant does this come from? First person to respond with the correct answer will get their names featured in next quarter's newsletter.

Last Newsletter's Plant



*Last quarter's plant was
Horse herb, correctly identi-
fied first by Raeann Reid .*

Picture policy-Unless specifically cited, all pictures were taken by the author of this newsletter. This newsletter is a publication that comes out seasonally. If you would like to stop receiving this newsletter, please contact me at elizabeth.mcmahon@ag.tamu.edu.

*For other questions, comments, and concerns, please contact us at:
Gillespie County Extension office
38 Business Court
Fredericksburg, TX 78624
830-997-3452*

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information, sexual orientation or veteran status. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating. Information compiled by Elizabeth McMahon, Gillespie County Horticulture Agent, except where indicated.