



Introduction

I don't know about all of you, but I am excited about the upcoming spring gardening season.

Having learned a hard lesson last year, I intend to wait until April before I plant my pampered tomato transplants. I know I could always go out there and cover them, but I tend to forget about it until it's too late.

This quarter's newsletter includes program announcements, an article on H \ddot{u} gelkultur, information on combating squash vine borer and more! As always, if you have any questions about an upcoming program or general plant related question don't hesitate to call us at the extension office.

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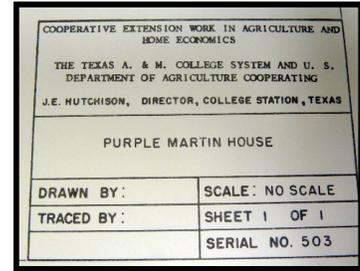
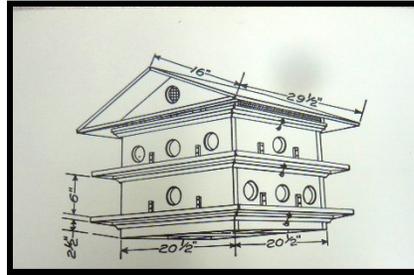
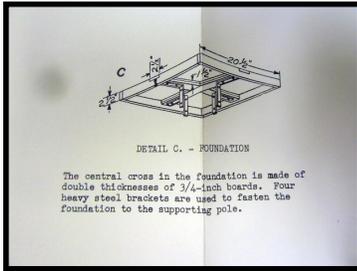
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Bluebonnets beginning to bloom at the extension office!

Horticulture Information and Building Plans



Need some information but can't make it to the office? Check out the horticulture page on the Gillespie County Website. You will find many links for documents on different horticultural topics. It's like our wall of publications, only with more. Please follow this link to pursue our collection: <https://gillespie.agrilife.org/agriculture-2/horticulture/horticulture-info/>

Recently we found building plans in our back storeroom. These are available if you want a copy. There are plans for birdhouses, chicken coops, greenhouses, a fruit and vegetable store room, a walk in cooler, trailers, tractor implements, sheds, sprayers, animal feeders, seed harvesters, armadillo and turtle traps, a tilting calf table, pecan cleaner, pecan rake, and more. I even found a plan for an aboveground fallout shelter and a filing cabinet. If you're interested or looking for a building plan of something in particular, please let us know!

Squash Vine Borer



Photo's by Bruce Leander, Agrilife Extension and Adventures in North Texas Gardening Blog

- Pretty moth lays eggs, tiny caterpillars hatch in a week and tunnel into the stem. They consume the inside stem plant tissue before borrowing out.
- To prevent damage, you can grow squash under a row cover until bloom. Or scout for eggs, remove them when found. Apply carbaryl or permethrin on the stem base, starting in late April or early May.
- *Cucurbita maxima* types are the most susceptible, vine rooting squashes are the least susceptible.

Upcoming Plant Propagation Workshop



Would you like to learn how to create duplicates of your plants without buying new ones? Is there a plant variety that you particularly like, but haven't been able to find again and would like to save? Learning how to propagate your own plants is the answer.

A plant propagation workshop will be held by the Gillespie County Extension office on Wednesday, April 25, 2018. The first half of the program will consist of a broad overview on the science behind plant propagation, as well as general methods of propagating your plants. The second half will have three stations that demonstrate three different methods to replicate your plants. Participants will rotate from station to station, and will get to visit all three stations. Attendees should expect to take home plants.

The workshop will start at 8:45 am with registration, with the program beginning at 9:00 am. It is expected to last until 12:00 pm. Because of limited materials being used, this workshop is limited to thirty people. Participants must pay to hold their spot in the class. Cost for the class is \$20.

Vegetable and fruit tree grafting demonstrations will not be included with this program this year, but I am working on including some kind of grafting program for the future.

If you have any questions or wish to register, please contact the Gillespie County Extension Office at 830-997-3452.



Elderberry cuttings being rooted in water.

Managing Your Piece of Texas Gillespie County Landowner Workshop

If you've recently purchased land in the area or would like to learn how to take care of it better, consider attending the "Managing your Piece of Texas: Gillespie County Landowner Workshop". This seminar will include topics such as: "Planting for Wildlife", "Identifying Tree Diseases", "Riparian Areas and How to Manage Them", "Tax Valuation Options", "Wildfire Prevention" and "Tree Selection, Planting and Care". It is scheduled to take place on Friday, June 22nd, 2018 at the Hill Country University Center (2818 E. Highway 290, Fredericksburg, TX).

Cost for the seminar is \$20.00 and includes lunch. Three Pesticide Applicator CEUS will be available. This class is limited to 100 attendees, so please call the Gillespie County Extension office at 830-997-3452 by June 20th to let us know if you are coming.

Hügelkultur: The Mound Method for Home Gardens

Article written by Adam Russell. Originally published in *AgriLife Today* on January 13th, 2018.

A bedding system new to Texas – hügelkultur – is trending among home gardeners looking for low-maintenance ways to grow flowers, fruits and vegetables, said Texas A&M AgriLife Extension Service horticulturist Dr. Joe Masabni. Hügelkultur mounds should be planted with a cover crop such as



ryegrass or clover prior to garden establishment to prevent erosion.

Hügelkultur, German for “hill culture,” is the practice of composting large woody material, such as tree logs, to create a raised garden bed, said Masabni, who is based in Overton. Other excess garden waste, including prunings, hedge clippings and brushwood can be utilized to create the no-till bed for plants.

Masabni said hügelkultur is a good way to compost without the hard work of tilling and bed preparation every year. He collaborated with Bridget Corbett, a Master Gardener in Denton, on a hügelkultur project to provide valuable information about the method for growers.

“I joke when I call it the lazy man’s composting,” he said. “As time goes by and the log rots, the deep soil of the bed becomes rich with soil microorganisms, earthworms and microbes. It’s a great way to employ a low-maintenance, no-till strategy for your home garden.”

Masabni said the microorganisms that thrive in the rotting material release nutrients to plants. Rotting wood will also hold moisture longer in dry periods.

To create a hügelkultur garden, Masabni said a trench about eight to 10 inches deep and two to three feet wide must be dug to hold larger material such as logs that will create the base support for the mound. Logs should be covered with progressively smaller woody debris from small tree limbs to twigs.

Compost materials, such as grass clippings, hay and manure are then added on top of the woody materials. Poke the compost materials into the cracks and crevices between the logs and brushy material until it is fully covered. Cover the compost material with the dirt removed to create the ditch, and dig a small trench along the uphill side of the mound.

Masabni said to immediately plant a cover crop, such as ryegrass, clover or wheat to prevent erosion. The soil and plant roots should not be disturbed except to harvest root crops or to pull weeds.

“You always want the mound covered with something that will provide roots to prevent soil erosion,” he said. “The good thing about hügelkultur is you plant your crop and then cut back the plant when it stops producing. Just leave the roots to hold the soil and become part of your compost then plant something else on the mound.”

Soil tests suggest the nutrient quality improves over time as the materials within the mound rot, Masabni said. He also noted hügelkultur beds are able to sustain soil moisture better than traditional garden beds. “The mounds are very well suited to handle summer conditions here in Texas,” he said. “You still have to water because the surface dries but underneath the logs soak up water and provide good moisture to plant roots, especially for mature plants.”

Single crops can be planted in the hügelkultur, Masabni said, but it also performs well with multiple plant varieties, including vegetable crops, herbs and flowers. “Hügelkultur is a method that people are becoming familiar with and trying more and more,” he said. “It’s a great method for gardeners who want a low-maintenance garden. Once you’ve built the mound, you just plant your crops, water them, maybe practice some weed control and harvest season after season.”

Strange Tales of Horticulture

Less watering, more nutritious food?

Can watering your garden less result in more nutritious vegetables? It's possible that it might, through an idea called "deficit irrigation". Deficit irrigation isn't "Drat, I forgot to water this week". It's also known as regulated deficient irrigation, so you are intentionally watering below optimal standards.

Plants normally release excess water vapor through these tiny openings in the leaves, called stomata. When a plant is water stressed, it closes up its stomata. It may at this point also produce secondary metabolic compounds, some of which could be different antioxidants which might make the produce healthier for humans to eat.

It should be stated that deficit irrigation does reduce production. But the goal behind the science is that while there is less production, the quality of the produce is improved. While this benefit isn't likely to be realized for those who sell for quantity, not quality, it could be beneficial for those who operate specialty markets.

This idea sounds nice, but is there any science that backs it up? In an experiment by Bordonaba & Terry (2010), they compared strawberries that had only received a quarter of their normal watering to strawberries that were watered normally. Water was withheld starting when the strawberries were starting to form flowers. They found that the berries were the same size or smaller, depending on variety, when compared to the regularly watered plants. Oddly enough, the water lacking strawberries weren't as red as the others. They didn't find a difference in total sugar content between the two groups, but fructose and glucose, two natural sugars which make things taste sweet, were higher in the water withheld plants, which could indicate that these berries were sweeter.

Tomatoes however seem to be a hit and a miss. In an experiment by Sanchez-Rodriguez et al. (2011), all the tomatoes varieties except for one showed a decrease in phenolic compounds, some of which can be good for humans to eat. This was at half the normal amount of watering. In a different experiment by Cruz et al. 2017, they showed that some tomato varieties had an increase in carotenoids, but again a decrease in phenolic compounds.

Is deficit irrigation a good idea or not? There doesn't seem to be a quantifiable answer yet. Most likely it will be found to be acceptable for some vegetable varieties, while not recommended for others. But as water resources become scarcer in upcoming years, this may be something to look into.



Is this plant possibly going to produce more nutritious jalapenos? Maybe.

Local Horticulture Info on the Go!

Would you rather learn by listening, instead of reading? Check out my radio shorts on KNAF 910 in the morning around 7:10 am during the Farm and Ranch News. Or check them out on the internet, where you can download them and listen to them at your convenience on your phone, computer or MP3 player.

Go to <https://soundcloud.com/txhillgarden> , pick a radio program to listen to, click "More" and then click "Download" to download.

Upcoming Programs in Gillespie County

Fruit Trees for West Gillespie County

March 22nd, 2018. Harper Public Library, 23247 W US Highway 290 , Harper, TX
Free program on growing fruit trees and vines suited for the West Gillespie County area. Starts at 6:30 pm. Contact the Harper Public Library at 830-864-4993 for more information.

Introduction to Beekeeping

March 24th, 2018. 9:00 am to 12:00 pm. Gillespie County Extension Office, 95 Frederick road, Fredericksburg, TX.
Learn the basics on raising bees. Includes demonstrations on the parts of the hive, appropriate clothing, and how to light a smoker. Plenty of opportunities to ask questions. To preregister, contact Stan Kremp at stankremp@gmail.com

Multi-County Wildlife Field Day

April 5th, 2018. 8:30 am to 3:30 pm. Doss Community Center, 14174 Rural Road 783 N, Doss, TX.
Topics include using drones for wildlife surveys, tips on identifying native plants, information on deer nutritional needs, white tail deer necropsy, and how to acquire a managed land deer program permit. Three pesticide applicator CEUS offered. Program cost is \$25, with a catered lunch included with the fee. Register by March 29th. Please contact the Gillespie County office at 830-997-3452 with questions.

Plant Propagation Workshop

April 25th, 2018, Gillespie County Fairgrounds, Stockshow building, 530 Fair Drive, Fredericksburg, TX.
Learn how to propagate plants. Includes a main propagation overview with three rotational demonstrations. Expect to take plants home! Class is limited to 30 people due to supplies. Cost is \$20. Payment is due with pre-registration. Call the Gillespie County Extension Office at 80-997-3452.

Upcoming Programs Near Gillespie County

Llano County Master Gardener Lawn and Garden Show

March 24th, 2018. 9:00 am—1:00 pm. St. James Lutheran Church, 1401 Ford Street, Llano, TX.
Plant and garden equipment sale.

Blooms and Barrels Hill Country Master Gardener Plant Sale

April 14th, 2018. 9:00 am – 2:00 pm. Hill Country Youth Event Center, 3785 Hwy 27, Kerrville, TX.
Come purchase native and adapted plants, ornamentals, herbs and vegetables. Take a tour of the demonstration gardens to see a few of these plants in action. Free programs on topics such as reviving gardens and rainwater harvesting. Contact the Master Gardeners at 830-257-6568 for more information.

Upcoming Programs Near Gillespie County

5th Hill Country Land Stewardship Conference

April 26th-27th, 2018. YO Ranch Hotel & Conference Center, 2033 Sidney Baker Street, Kerrville, TX. Two day event, most meals included. Cost is \$75. First day includes programs on prescribed fire, herbicide control, equipment showcase, information on hunting leases and fence laws, identifying wildlife, and livestock grazing. Second day has three tours to choose from, including the Wine and Roses which has horticultural stops such as a hydroponic farm and a garden to table restaurant. Registration is due April 20th. For more information and to register, see here: <https://agriliferegister.tamu.edu/productListingDetails/2505>.

South Llano River State Park Birding Festival

April 27th to April 29th, 2018. South Llano River State Park, 1927 Park Rd 73, Junction, TX. Includes special presentations, guided bird walks and photography sessions. Cost is \$65 dollars. Email southllanoriverbirdingfestival@gmail.com for a registration packet.

Upcoming Statewide Programs

Battleground to Breaking Ground

Military and Beginner Farmers and Ranchers Agriculture Workshop

March 9th and 10th, 2018. Millican Reserve, 4401 High Prairie Rd. College Station, TX. Farm tour on March 9th (4:00 pm- 7:00 pm). Program on Saturday 8 am to 5 pm. Program includes business planning, possibilities for farming/ranching with a disability, marketing resources, and rural business ideas. Two meals provided. Free. Register here: <http://txagrability.tamu.edu/calendar/>

Chill Hour Final Count

967 Chill Hours (under 45 °F method)
692 Chill Hours (between 32-45 °F method)
40 Chill Portions (Dynamic Model)

Office Closures

The Gillespie County Extension Office will be closed on March 30th for Good Friday and May 28th for Memorial Day.



Garden Calendar



With tips taken from "Dr. Welch's Garden Tips", Neil Sperry and Dallas Master Gardener Gardening by the Month Guide

March

- Plant evergreens, shade and fruit trees. Mulch root areas.
- Continue to protect tender plants from freezes.
- Do not prune spring flowering shrubs and vines until after blooming.
- Allow foliage on spring bulbs such as daffodils to die back and dry before removing. This creates food for next year's plants.
- Plant beets, kohlrabi, radishes, and turnips in your garden. Plant potatoes in the first half of March. Though the weather may be warm, be wary about planting tomatoes and other warm season vegetables unless you can protect them from late frosts.

April

- Begin planting warm season bedding plants or sow warm season flower seeds.
- Prune spring blooming shrubs and vines after blooming.
- Use a slow release fertilizer for shrubs and lawns if possible. Avoid fertilizers high in phosphorous.
- Begin fertilizing lawn after you have mowed actively growing grass 1-2 times.
- Allow foliage to die from daffodils before removing.
- Trees grown in containers and as bareroots can still be planted this month.
- Plant beans, cantaloupe, corn, cucumber, eggplants, okra, southern peas, peppers, tomatoes, pumpkins, radishes (early April), and watermelon this month. Early April has a higher risk of frost than mid-April.
- Fertilize roses every 4-6 weeks.

May

- If wanting to re-seed your lawn, start now.
- Fertilize roses every 4-6 weeks.
- Remove cool season flowers such as pansies and plant warm season bedding flowers or seeds.
- Side-dress tomatoes and peppers with fertilizer when first fruits appear. Apply 12-14 inches from base of plant. Apply either a labeled fertilizer according label instructions, a light layer of compost, or 1 lbs. per 100 feet of row of 21-0-0.
- Remove or harvest cool season vegetables, if you haven't already.
- Plant cantaloupe, okra, southern peas, peppers (early May), pumpkins and summer squash (early May) this month.
- Trees growing in containers can still be planted this month, but it's best to plant them earlier in the month than later.
- Start sowing tomato seed in six packs for a July planting (for fall tomatoes).

Name that Plant!



Hint!

It's non-native
and does not
produce edible
fruit.

What is the name of this plant? First person to respond with the correct answer will get their name featured in next quarter's newsletter.

Last Newsletter's Plant



Answer was Henbit. First person to submit the correct answer was Raeann Reid.

This newsletter is a publication that comes out quarterly, with issues out on February/March (spring), June/July (summer), September/October (fall), November/December (winter). If you would like to stop receiving this newsletter, please contact me at elizabeth.mcmahon@agnet.tamu.edu.

For other questions, comments, and concerns, please contact us at:

*Gillespie County Extension office
95 Frederick Road
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.

Hill Country
Master Gardeners
Blooms & Barrels Sale

Saturday, April 14, 2018, 9 am—2 pm



PLANTS

**Native - Adapted - Ornamentals
Herbs -Vegetables**

RAIN BARRELS

**Demo Garden Tours
Children's Activities Booth
Exhibits / Vendors**

FREE PROGRAMS

- 10am True Love and Homegrown Tomatoes
by HCMG Connie Townsend**
- 10am How to Revive A Garden
by HCMG Judy Beauford, Shirley Smith**
- 11am Vegetable Gardening
by HCMG Lydia Jones & Pat Wolters**
- 11am Plant Propagation
by HCMG Debra Bass & Sandy Lewis**
- 11am Rainwater Harvesting
by HCMG Anne Brown**



Programs presented by Experienced Texas Master Gardeners

**All Sales on 4/14/18 are Tax Exempt
Cash or Check Only (ATM available)**

Hill Country Youth Events Center – Ag Barn

3785 Hwy 27 East, Kerrville

Hill Country Master Gardeners

830-257-6568



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