

E-Gardening Newsletter

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This newsletter is written by ECMG volunteers and is published digitally in February, March, April, June, August, October and December (Even months plus March). For questions or submissions please email: **ellisTXMGnews@gmail.com**.

2024 Scholarship Awards DID YOU KNOW...

...that Ellis County Master Gardeners along with our annual Expo sponsors provide scholarships for Ellis County High School Seniors? As of 2024, we have provided \$114,100 in scholarships. These scholarships go to deserving students who will pursue studies in horticulture or related life sciences including agriculture and water and soil conservation. In addition to high school seniors, previous scholarship winners are eligible to reapply annually.

This year we have two outstanding winners.

Brayden DeBorde – Monty Gearner Memorial Scholarship \$3,000 winner. Brayden is a previous scholarship winner and will begin his fourth year at Texas Tech University in Lubbock, Texas with a major in Agriculture Applied Economics and Agriculture Business. He has a proven track record of success with many honors related to ranching as well as water and soil conservation. Brayden has been active his whole life on the family farm in Bardwell.

Emma Siar – Jim Dockins Memorial Scholarship \$3,000 winner. Emma is a graduating senior at Midlothian Heritage High School and plans to attend Tarleton State University in the fall. She will pursue a degree in Horticulture. Emma has had a full life with many hobbies and interests, but an interest in botanical studies has been constant since early childhood.



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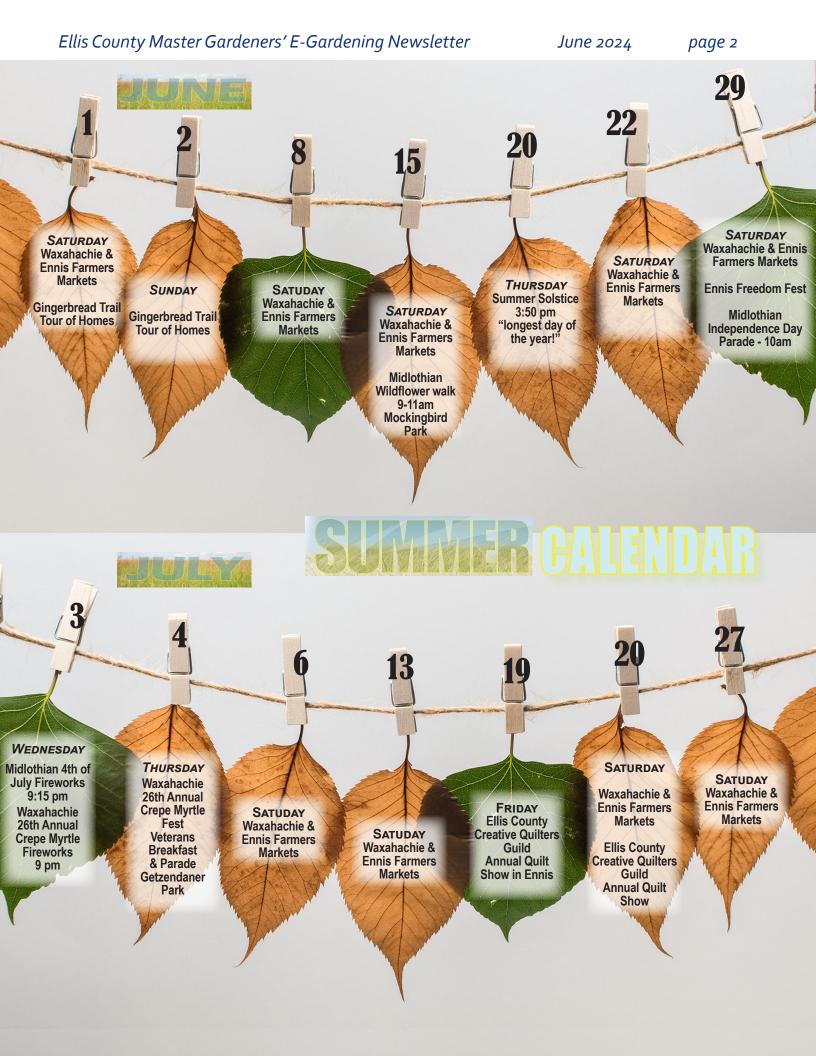
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RAINWATER HARVESTING INCENTIVE PROGRAMS

by Paul Thomas, ECMG intern

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I attended a workshop on groundwater catchment on Apr 13, 2024 at the Prairielands Groundwater Conservation District in Cleburne (**prairielandsgcd.org**). I was interested in the incentive programs for installing rainwater harvesting systems as well as the feasibility of such systems for residential use.

Registration costs \$25 but includes a 55-gallon rain barrel and hardware. You install the hardware on the barrel during the workshop. If you register, bring your pickup truck or van! The barrel is too big for a typical sedan. Not having the requisite vehicle, I just showed up, and the presenter was happy to let me audit the session. The \$25 is already a good deal. On Amazon, a rain barrel can run over \$100.

Texas has two incentive programs. One is that materials purchased for rain catchment and storage are sales tax-free. Certificates are available on their website. The other is a dollar per gallon of capacity grant for the installation of such a system. This second program is new in 2024 and funds are limited. The presenter was not certain due to the newness of the program, but she believed that any completed applications that come in after funds run out will be deferred to the following year. Tax exempt form here.

I asked about how you connect a barrel to a rain gutter. The presenter referred me to <u>www.rainbrothers.com</u>, where there are parts and installation videos for diverting rainwater from a gutter into a barrel.

Why collect rainwater? Rainwater in the garden provides neutral pH, no chemicals, and returns water back into the shallow aquifer. I will water the garden from a hose during dry conditions. Then I watch my garden really perk



up after a rain; noticeably better than it does from irrigation. Water catchment also reduces erosion of your property and leakage of chemicals such as nitrogen fertilizer into the street.

What about the HOA? HOAs are required by law to allow rain catchment tank installation. However, they retain authority to place restrictions on design.

So how much does the grant help? For a small project with a standard 55-gallon barrel, the barrel could run \$80 on Amazon and a kit to divert water from a standing gutter to a barrel will cost around \$40 at Rainbrothers (link above). With the kit, you drill a hole in the downspout (for which they may supply the drill attachment in the kit). For this you might get back \$55 in grant money from the state of Texas.

A 500-gallon tank costs \$870 and could get you \$500 back from the state. I didn't research costs associated with the added volume and weight.

Personnel from the Conservation District are available to visit and talk to any group. Contact information:

Kaylin Garcia ~phone: 817-556-2299, email: kgarcia@prairielandsgcd.org

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by Lea Sandoz, ECMG

The Peggy Martin rose is a beautiful, thornless, climbing rose with clusters of pink blooms. They are disease resistant and quite easy to care for. These roses can grow over 15 feet tall, so they need support – a trellis, a fence, a wall, or even a garden shed.

These roses have been around for a while – spread by cuttings gifted from one gardener to another. Peggy Martin, for whom the rose is now named, received cuttings in 1989 from a friend, Ellen Dupriest, who received her rose cuttings from her mother-in-law, who had gotten her cuttings from a relative's garden in New Orleans.

Peggy Martin was a long-time member of the New Orleans Old Garden Rose Society. She lived in Louisiana when Katrina devastated the area. Two years before the storm, a visitor, Dr. William C. Welch, a rosarian, and professor at Texas A&M University, admired the rose and received cuttings.

Peggy's house and garden were under about 20 feet of saltwater following the hurricane. When she was able to visit the property later, she was greeted by lush growth on her pink climber. Only one other plant survived - a crinum lily.

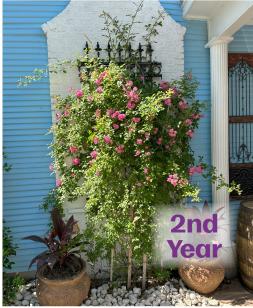
The rose became an inspiration and a symbol of hope. Dr. Welch was already convinced that this rose should be available to gardeners in other locations. He had a middle-of-the-night inspiration to grow the Peggy Martin Rose as a fund raiser, and \$1 from each plant was donated by various participating nurseries to the Garden Restoration Fund.

Peggy Martins bloom twice a year, in spring and fall, and does not require dead heading. (That's a good thing, because ours reaches the bottom of the second story windows. I don't fancy climbing a ladder with pruning shears.)

The rose is drought tolerant but welcomes watering during extended dry periods. Plant in well-drained soil and fertilize twice a year. These roses are easy to grow from cuttings, so if you know someone with a Peggy Martin, you may be able to get a cutting. Or, shorten the process, and buy one from a local nursery.

This rose is a fast grower and prolific bloomer – as these pictures show.









In the Master Gardener Community, we learn how to choose and care for trees based on science. It is best to go for Texas native trees because they last longer, thrive in our soil and weather and support pollinators. To protect our investments, we need to take good care of our trees steering clear of common mistakes like planting near power lines or structures, over or under watering, volcano mulching and bad pruning techniques.

Tree Care Basics

Let's talk about how to care for those newly planted trees. For the first three years, it is crucial to give them extra attention. Start by clearing out any grass or weeds in a circle about four feet wide around the tree. To conserve water, use about 2-3 inches of mulch around the base of the tree, but be sure to leave a 6-inch space between the mulch and the trunk. Water the tree slowly and deeply, especially out to the drip line. During the first three years and in dry spells, young trees need about 2 to 3 gallons of water for every inch of trunk diameter, applied two to three times per week. Once the trees are established, they can get by with less-about one to two gallons per inch of trunk diameter, just once a week. It is all about giving them the right amount of water at the right time to help them grow strong and healthy.

When To Prune

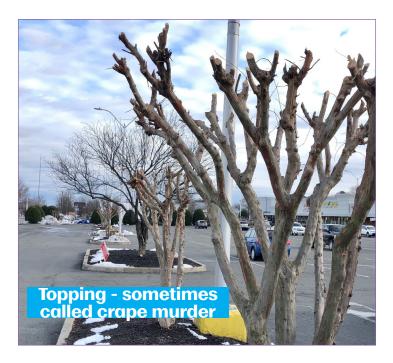
The next thing to consider is when and how to prune trees. For shade trees, it is best to prune when the shade tree is dormant, which means it is not actively growing and does not have any leaves. Traditionally, this happens in the winter, before the buds start to sprout. You can also prune after the first burst of growth has slowed down. During this time, the wounds from pruning seal up better. Avoid doing any major pruning when the tree is actively growing in the spring, because the branches are tender and can be

by Mary Ann Mezzapelle, ADVANCED MASTER GARDENER - TREE CARE mmunity, we learn r trees based for Texas native ger, thrive in our ort pollinators. , we need to s steering clear lanting near over or under g and bad pruning

> For other types of trees, there is other considerations. For trees that bloom in the spring, it is best to prune them after their flowers have faded. But for those that bloom in the summer, it is better to do the pruning in the winter or early spring. Pruning in the fall can be a bit risky because the tree might start growing again and then are damaged by the cold weather.

Bad Pruning Techniques

Improper pruning methods rank high among the problems caused by humans. Topping, lion tail cuts, over-raising, stub cuts, and flush cuts are some of the most common poor practices.



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The first common mistake is known as topping, often referred to as "crape murder." Topping is a harmful practice that permanently alters the tree's structure and weakens it. This process removes essential leaves needed for photosynthesis, resulting in fewer blooms and increased vulnerability to sun damage on the previously shaded bark. Also, the stubs left behind attract insects and promote decay. Instead of topping, consider alternatives like crown reduction or drop crotch pruning, which are better for the tree's long-term health.

Next up is the "lion tail cuts." This pruning method involves removing inner branches and leaving foliage only at the branch ends. It's not good for the tree because it removes too many leaves needed for photosynthesis, disrupts the tree's balance by shifting weight to the ends of branches and exposes the crown to wind and sun damage. Also, it often triggers the growth of stress-induced shoots along the trunk and branches, indicating that the tree is struggling to cope with excessive pruning.



The next common pruning mistake is overraising trees. This happens when you cut off too many lower branches which can cause big wounds on the tree. Ideally, you would prune earlier in the tree life, less branches and foliage at a time. Depending on the type of tree, you generally want about onethird of the trunk to be visible with the rest covered by the canopy of leaves. Also, try not to remove more than 25% of the foliage or crown at once.





Trees do not heal wounds like you may think. Instead, they use a process called compartmentalization. This means they form walls around the damaged area. The tree covers the wound with callus tissue, which makes a protective barrier to stop infection from spreading to the rest of the tree.

Preserving the branch collar is important because it helps the tree recover properly after pruning. The branch collar is a swollen area where the branch meets the trunk or a bigger branch. It has special cells that help the tree close the wound and stop decay from spreading. By not cutting into the branch collar when pruning, we help the tree seal faster and stay healthy.

Smaller proper cuts seal more rapidly so avoid flush cuts and stub cuts. Make cuts just outside the natural "collar" where the

Undercut 12-24" up from the branch collar.
2 Make the second cut from the top all the way through the branch, 2-3" above cut #1.
3 The final cut should be just beyond the branch collar. Support the stud or that it does not tear the bark.

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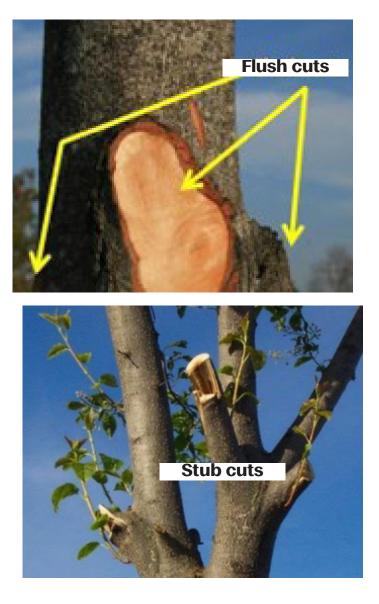
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Source: https://texastreeplanting.tamu.edu/PruneLargeTreeLimb.html

branch to be removed attaches to the trunk or a larger limb. Do not leave a stub, which only invites decay into the tree and do not cut them back flush against the trunk. A rule of thumb to avoid stub cuts: If you can hang a hat on a branch stub, it is too long. Flush cuts makes a larger wound and removes the important collar tissues and ability to seal.

So, to keep things simple, just remember to prune shade and summer bloomers in winter or early spring, spring bloomers after their flowers are gone and be cautious about pruning in the fall. When you are pruning, remember to keep the natural shape of the tree in mind and make sure you are helping it recover properly.

In short, trees are not just nice to look at-they are like investments for our yards. When we pick the right trees, take good care of them and prune them carefully, we are not only making our yards look great and helping the environment, but also making sure our investment pays off. So, the time and care we put into our trees now will make a big difference for years to come.



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Online Resources:

https://aggie-horticulture.tamu.edu/earthkind/landscape/proper-pruning-techniques/

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev7_016046.pdf



by Angie McKune, ECMG

Blueberries are about as American as apple pie however I never cared for the taste until I went Blueberry picking at a farm in East Texas. I popped a berry in my mouth and couldn't believe the difference in taste compared to store bought berries! I knew then I had to try to grow them. So, I started doing some research and was disappointed to learn that the soil in Ellis County is not the best for growing blueberries, even with amendments as the pH is too high and they don't like our clay soil. Upon further research, I learned that they can be grown successfully in pots! I also learned the are rich in antioxidants, have a low sugar content and may reduce the risk of Parkinson's



disease and may prevent memory loss/Alzheimer's disease. They are known as a super food!

Blueberries can be easy to grow in Ellis County if you select the right variety, grow in the right pot and growing medium, provide full sun (late afternoon shade can be beneficial in the summer) and water.

There are several varieties, and one needs to be careful of selecting the right variety, especially when buying from a big box store. I recommend buying from a reputable, knowledgeable nursery. The Northern Highbush should be avoided as it cannot take our hot summers. There is also the Southern Highbush which can be grown in our area but the best variety for Texas is the Rabbiteye Blueberry (Vaccinium ashei).

Blueberries need to cross pollinate to give a good harvest. You need at least 2 bushes to cross pollinate. Three is better! I chose a Premier, Tif Blue and a Climax bush. Try to select varieties that bloom at the same time.

Blueberries should be grown in a large pot, minimum 20-30 gallons, The pot should have plenty of drainage holes. Blueberries like water but don't like to sit in wet, soggy soil. Whisky barrels can be great for growing Blueberries. Make sure to put a layer of rocks in the bottom to prevent soil loss from the drainage holes when watering.***** See note drainage at the end of this article.

As I mentioned, blueberries like an acidic soil with a pH of 4.5-5.5. They like welldraining, loamy soil. They also like to be mulched. Chose a pine bark mulch to help with the pH. Incorporate a mix of peat moss, composted pine bark and a good loamy soil when planting. A mix of 50/50 of composted pine bark and peat moss is recommended. When planting, plant at the same depth at which they grew at the nursery. Avoid fertilizing until the plant becomes established. Blueberries can be sensitive to excessive fertilizing. They are also sensitive to nitrogen, so avoid fertilizers that contain nitrate forms of nitrogen. Instead use fertilizers with ammonium sulfate (21-0-0) or Urea-N. Urea-N is less acidifying with repeated use and ammonium sulfate

can cause the soil to become too acidic over time. So, consider alternating these products. You can also find fertilizers specific for berries. It is best to fertilize 2-3 times

a year instead of one high dose feeding. Slow-release fertilizers are best.

Blueberries should be watered regularly, at least once a week. They have shallow roots and don't like to dry out. They may need more frequent watering in the hot summer months. I use a water meter, and when the soil is dry 2 inches down. I water. Blueberries are also sensitive to calcium and sodium. So, if your water is high in these minerals, it could cause a problem over time. I depend on rain most of the time in the spring, and I also have rain barrels I use to water mine. But I do have to supplement with city water at times and this hasn't been a problem.

Don't allow fruit set the first 2 years. This increases your harvest in the future. They also may need some light pruning from time to time. Prune branches that are touching the soil. Thin out the lower limbs and any dead

canes. Try to prune to keep the center of the bush open so air can flow freely. Thin about 20 percent of branches every year and remember they produce on one year old canes. The best time to prune is in the winter while dormant.

Blueberries can withstand cold to 0 degrees Fahrenheit. Make sure your plant is well mulched. Mine survived the extended freeze we had in 2021, but I wrapped them and put them up against the house on my patio.

Blueberries don't have too many issues with disease and pests but can get crown rot from poor drainage. They also can get Fungal Stem Blight. You can prevent this by cleaning your pruning equipment. Pests include stink bugs, birds and other wildlife. Just remember to plant enough to share!

Blueberries are ready to harvest in June and July. Maximum yield is at 5-8 years and they can be productive up to 20 years. Let them ripen on the bush because they don't ripen once picked. Once picked place them in a dry container in the refrigerator and don't wash them until ready to be eaten.

Blueberries can be fun to grow and it is a great project for children to be involved in as they love picking their own berries! So don't be afraid to give Blueberries a try!

References:

https://aggie-horticulture.tamu.edu/fruit-nut/wp-content/uploads/ sites/6/2015/04/blueberries 2015.pdf

Lecture: 2024 Master Gardener Convention Tim Hartman "Antioxidant Factory in a Pot: How to Grow Your Own Container Blueberries"

*There is a right and wrong way to use rocks in the bottom of a container. While you do want to prevent soil from washing away, you still want the water to be able to escape. Do not use rocks that will compact to the point of slowing water drainage.



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Growing Plumeria (Frangipani) in Texas by Anne Nimblett, ECMG

Plumeria trees (also known as Frangipani or the Hawaiian lei flower) can be a gorgeous, unexpected addition to any spring and summer landscape, even here in North Texas. The beauty of the multicolored flowers and their subtle but lovely

perfume add ambiance to any backyard patio space.

Not only are they a beautiful and unusual plant to cultivate, but plumeria are rich in symbolism. In folklore, plumeria signify love, devotion, purity of heart, good fortune and prosperity.

Although they are frequently associated with Hawaii, plumeria are not Hawaiian natives. Rather, the tree is native to Mexico, Central America, Southern India, and Venezuela. Because we are farther north than their natural habitat, plumeria trees kept by Texans generally fare best in pots. The trees can be kept small enough in stature to stay potted and brought in during our cold winter months.

Soil Preference

Plumeria like a slightly acidic (pH 6.0 to 7.0), well-draining soil.

Sun and Water Needs

If you are fortunate enough to find a plumeria tree in a nursery now, place it in full sun and water it regularly when the top few inches of soil are dry. Plumeria require a full 6 to 8 hours of sun in order to bloom and require a lot of water but will not tolerate wet feet. As our temperatures progressively become hotter and our Texas sun more scorching in summer, be cautious about leaving your plumeria in full sun for 8 hours, as the leaves are easily burned and can become rather crispy. They will do just as well in 2 to 4 hours of the extreme Texas July and August sun.

Fertilizing Your Plumeria

You can find fertilizers specific to plumeria or use an allpurpose fertilizer with an N-P-K of 11-11-13 applied once or twice a month during the growing season.

Fall and Winter Care

Because plumeria will not tolerate temperatures below 40°, they will need to be taken indoors in North Texas winters. As we approach such temperatures, defoliate your plumeria. Be prepared for a slight mess as a milky white sap will emerge as you pluck leaves.

Plumeria naturally grow up to 25 feet tall, which may or may not be a feasible size for your indoor space. In the fall, you can decide whether your plumeria is small enough to fit in your indoor (greenhouse, garage, living room) area or whether you need to prune it. Each 12- to18inch branch that you cut off can be dipped in rooting hormone (if you wish) and kept in soil over winter in the hopes of creating a new tree in the spring. Be sure to keep these cuttings indoors with your original plumeria during the winter months. Because I have a small garage







space for plants, I cut mine back every fall and have plenty of cuttings to share with friends.

Plumeria will need very little (some argue zero) water during dormancy. I generally water mine about once a month while they are in the garage.

Spring Care

After our last average frost date, pull your plumeria back into an outdoor space where it will get 6 to 8 hours of full sun once again. Begin watering regularly, and soon enough you will be rewarded with beautiful, vibrant green oblong shaped leaves and fragrant blossoms.

https://plumeria.care/

https://www.gardeningknowhow.com/ornamental/flowers/plumeria/growing-plumeria.htm

Lasagna garden uppate

by Rob Franks, ECMG

In an earlier newsletter (February 2024) I wrote about how to build a Lasagna Garden. A Lasagna Garden is constructed by layering compost, sticks or mulch, and soil over either a new area or over an existing garden bed. I have had a garden area for several years where the soil was getting a bit tired. I then planted my usual assortment of veggies, which was helped along nicely by the frequent showers that we have had this spring. I planted with usual spacing, but this new Lasagna Garden took off much better than I had anticipated. I have included several photos of the garden, and I am anticipating bumper crops of tomatoes, peppers, okra, and herbs this summer. I have already harvested a lot of winter vegetables including broccoli, cauliflower, and tomatillos





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by Donna Summerlin, ECMG



Companion planting is a method to enhance the health and productivity of your garden by placing plants close to each other to achieve an identified benefit. This article examines some advantages of companion planting and how you can apply the method to your own garden.

Pest Management

One of the main benefits of companion planting is for natural pest control. Certain plants can repel harmful insects or attract beneficial ones. For example, marigolds release a chemical that deters root-eating nematodes, while nasturtiums can attract aphids away from more vulnerable crops. Using companion planting can reduce the need for chemical pesticides, promoting a healthier environment.

Space Efficiency

Planting short-season crops alongside later maturing ones conserves space and allows for multiple successions of plants in the same area increasing the productivity of the garden. For instance, you can grow plants that grow best in cool weather, such as lettuce and spinach early in the season and plant warm season plants like peppers or tomatoes into the same bed a few weeks later. As the cool-season plants are harvested, the warm-season plants will take over, allowing for maximum production and giving less space for weeds to take hold.

Soil Health

Combining plants with different root structures aerates the soil and enables nutrient uptake from various soil depths. Taproot or tuber crops (e.g., carrots, potatoes) break up soil compaction, while deep-rooted crops (e.g., melons, tomatoes) access nutrients deeper in the soil. Legumes (peas, beans, clover) fix nitrogen, enhancing overall soil health.

Mutual Support

One of the most widely known uses of companion planting is the three sisters, a method which has been used by indigenous communities for centuries. This method integrates corn (to provide a stalk for the beans to climb), beans (to fix nitrogen in the soil) and squash (to shade the soil which helps to retain moisture and prevents weeds).

Implementing Companion Planting in Your Garden

To implement companion planting in your garden, consider the following steps:

1. Explore Plant Combinations: There is a lot of information online and in garden books that identifies plants that perform well together, some of which conflicts. Look for information that is supported by research for the best results. One such resource is linked here: https://extension.wvu.edu/lawn-gardening-pests/gardening/garden-management/companion-planting

While searching through information to use as background for this article, I found that Blue Hubbard squash has been successfully planted by commercial farms to lure squash vine borers and squash bugs away from their cash crops in the cucurbit family (yellow squash, zucchini, cucumbers, etc.). I've been frustrated by these pests for several years and plan to try this in my garden. The link to information about using Blue Hubbard squash as a trap crop follows: https://ipm.missouri.edu/MEG/2017/3/Trap_cropping/

2. Plan Your Garden Layout: Arrange your plants in a way that maximizes their benefits. For instance, basil planted near tomatoes has been found to repel pests and enhance the tomatoes flavor. 3. Monitor and Adjust: Observe how the combination of plants you have selected perform and adjust as needed. Not all companion plantings may work as expected, so be prepared to experiment and learn from the process.

Conclusion

Companion planting is a natural and effective way to enhance the health and yield of your garden. By understanding the relationships between different plant species, you can create a more productive and sustainable garden ecosystem. Whether you're a seasoned gardener or just starting out, consider incorporating companion planting into your gardening practices for a healthier, more bountiful garden.



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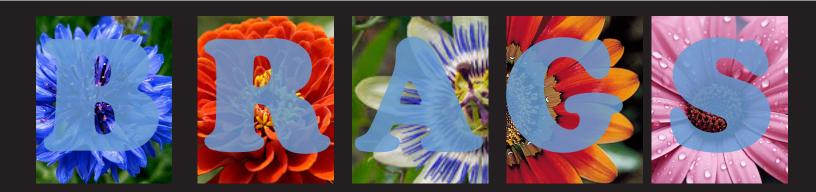
Native plants are very important for our environment and native pollinators. A couple of years ago I cleared an area and planted native seeds in the fall. Every year since, I have enjoyed the variety and beauty of native plants and the assortment of bees and

butterflies that visit. Native plants flower at different times through the seasons, so what you see in early spring is entirely different from what you will see during the hot summer months and the fall. And like a box of chocolates, you never know what you will get. I am also planting natives in my front flower beds to save water and provide additional habitats.

I have included photos of the early spring beds and the visitors that are attracted. Yes, the caterpillar is a monarch butterfly.



Rob's original article about native plants was in October 2022 abailable at txmg.org/ellis/e-newsletter/



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Send in YOUR labeled photos to ellisTXMGnews@gmail.com