

Mark Your Calendars... EXPO is coming!

March 23, 2024



Home and Garden Show at
Ellis County Youth Event Center
October 21 - 22, 2023 ~ Waxahachie, Texas

Marj McClung and Sally Severson engaged residents and visitors to Ellis County on what we do as Texas Master Gardeners. Together with Master Naturalist Jerry McClung provided guests with information, answered questions, and distributed wildflower seeds.

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To contact us: email: ellismg@ag.tamu.edu Office: 972-825-5175

701 Interstate Highway 35E, Waxahachie, TX 75165-4702

Website: <https://txmg.org/ellis>



PLANTING

- 🍁 Now through February is the perfect time to plant container-grown trees and shrubs. Dig a hole two times the diameter and one inch shallower than the root ball. Make sure the root ball and the hole are thoroughly wet before planting. Backfill with existing soil and water well.
- 🍁 Use the “Custom Tree Selector” at Texas Tree Selector (tamu.edu) for help in selecting the right tree for the right location.
- 🍁 Plant pansies and violas now. Bluebonnets can still be planted from transplants. Daffodils and grape hyacinth may be planted once soil temperature drops below 55°F. Plant 2-3 times as deep as the bulb is tall.

FERTILIZING AND PRUNING

- 🍁 Feed winter annuals growing in the ground and in outdoor containers with a high-nitrogen, water soluble plant food every two to three weeks. Also feed and water cool-season vegetables that you are growing.
- 🍁 Remove the tops of herbaceous perennials after they have died. Add 2-3 inches of mulch to the beds to reduce winter weed growth.
- 🍁 Trim patio plants and hanging baskets before moving indoors for the winter. Locate them near bright windows.
- 🍁 Refrain from pruning freeze-damaged woody plants at this time. This pruning is best done in late winter.

GARDEN WATCH

- 🍁 It's time to winterize! Disconnect hoses from faucets and drain all hose-end sprinklers. Drain fuel from gasoline-powered engines and run the carburetor dry. Greenhouse owners should check the heating and ventilation systems to ensure proper operation.
- 🍁 Check outdoor potted plants for insects (mealybugs, whiteflies, spider mites, aphids, roaches, ants) before moving inside for the winter. Apply a labeled insecticide if needed.
- 🍁 When planting new landscapes, select trees shrubs and perennials that are winter hardy in your area. According to the USDA Plant Hardiness Zone map, Ellis County is located in Zone 8 (average lowest annual temperature is 10o-20oF) Therefore, it is best to choose plants listed for Zone 8, or one or two zones to the north (Zone 6 or 7).

SUCCULENTS

by Marj McClung, ECMG



Succulents aren't a family or genus of plants but a descriptive category for various plants that share the same characteristics.

The word "succulent" describes any plant with thick, fleshy tissues adapted to water storage enough to be temporarily independent of an external water supply. These plants often have waxy leaves to retard evaporation and some have stomata that open at night and close by day since cooler night temperatures mean less loss of water. Stomata are openings that take in carbon dioxide and release oxygen and water vapor. The leaves also may have a waxy white powdery coating (Forina epicuticular wax) that acts as a natural sunscreen.

This wide definition can include tubers and bulbs that sprout before expected rainfall comes, but is mostly used to describe cacti, euphorbias (like poinsettias), orchids and Crassulaceae (such as Kalanchoes).

Succulents are common as house plants since they are adapted to the lower humidity of living indoors. Since over-watering and under-watering are the two most common ways house plants die, growing succulents helps indoor gardeners by giving plants a better chance of survival if we are forgetful.

For the next few months, we will have articles on succulents we Master Gardeners have grown that have somehow survived the cat knocking the plant to the floor; cold spells in a north-facing, single-paned window and sporadic watering. Plants don't really like to live with us, but some are forgiving and a few relish the attention. So when you can't garden outside, enjoy an indoor garden, starting with the easiest of roommates, the succulents.

THE KALANCHOES

(American pronunciation: kah-lan-ko-ee)

Kalanchoes are a Genus of the plant Family Crassulaceae. They are easy to grow and make some of the prettiest and most interesting of container plants. Many provide long lasting blooms. Some are fuzzy, covered with fine "hairs" like panda plants (*K. tomentosa*). Some have leaves that turn red when slightly stressed, as in hot or cold weather. Most propagate easily and all, as succulents, are tolerant of under-watering. Most are natives of Madagascar or tropical Africa, so these are container plants to bring inside when temperatures drop below 45 degrees. They need loose, well-draining soil and a water-soluble fertilizer every few weeks while actively growing. Most prefer dappled shade on the patio in summer and bright light in a window or greenhouse in winter.

Here are four that I have growing now:

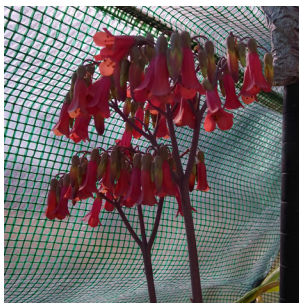


Kalanchoe luciae, known as the flapjack or paddle plant. This plant divides itself, so I have never tried to propagate it. The large (4" x 4 1/2") rounded leaves are a light green with a reddish margin that expands to cover most of the leaf when I put it in a space that gets several hours of sun in the summer. If I keep it on the partially shaded patio, it remains green. It blooms in late summer with a long spike with insignificant white flowers. The plant putting out the blossoms then dies.

Kalanchoe gastonis-bonnieri, known as donkey ears or mule ears plant. This plant produces little plantlets at the end of the 3" wide, 10" long leaves. The plant gets one to two feet high. The plantlets have aerial roots, making them easy to propagate. The young leaves are gray green that, with age, lose the grayness and develop rust-colored splotches. These leaves too turn redder with stress.



Kalanchoe blossfeldiana are the florist flowers sold when blooming at Christmas or Valentine's Day. With red, coral, pink, white, orange or yellow flowers, these are the most common Kalanchoes. They are propagated by planting the leaves which will grow roots from the stems easily. Florists will force the blooms. Left on their own, mine bloom in late winter to early spring.



I also grow ***Kalanchoe bryophyllum*** (delagoensis), the infamous "Mother of Thousands/Millions" that propagates whether I want it to or not, into every pot that comes into contact with it. These gray-green leaves with rust splotches have serrated edges. At every point on the leaf margin, there grows a little plantlet. These put out aerial roots and, when jostled, fall off. They very quickly root themselves. It is annoying to find these plants happily sharing space with other plants...before overtaking them. But the older plants do make up for their litter by putting out a mass of blossoms in the winter. These blooms form a chandelier of red blooms that last a month or more. This plant can get up to three feet tall.

Join us next month for a study of the **A****L****O****E** family.



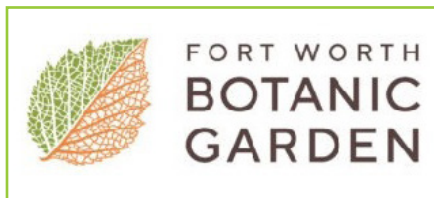
Grand Gifts for Gardeners

by Anne Nimblett, ECMG

As the holiday season quickly approaches, many of us begin pondering gift choices for our loved ones. Although you early worms probably started shopping in July, there are those of us who have yet to begin (and, let's be honest, those of us who will wait until the last minute). Should you choose to get a jump on your holiday gifting preparations for the gardener in your life, you may consider some of the following options.

FWBG or Arboretum Memberships

If you have ever spent a day strolling through the Ft. Worth Botanic Gardens or Dallas Arboretum, you know how relaxing and inspiring it can be. Perhaps a gardener you love has never considered or purchased a membership and would enjoy the fun opportunities it can bring.



A Ft. Worth Botanic Gardens individual annual membership costs \$60 and includes many perks like a subscription to Better Homes and Gardens magazine and reciprocal admission to over 330 public gardens across the country. A family annual membership is \$95 for two adults and two children. <https://fwbg.org/become-a-member/>



A Dallas Arboretum individual annual membership runs \$102, and a family annual membership is \$151. Membership includes perks like free parking, gift shop discounts, reciprocal admission to more than 300 gardens and arboreturns worldwide.

<https://www.dallasarboretum.org/support/membership/>

And yes, these two gardens do allow reciprocal admissions, so a FWBG membership offers better bang for your buck!

Aerogarden

For the gardener who is anxiously awaiting a return to the outdoor growing season while stuck inside during a bleak winter, Aerogarden, an indoor aeroponic/hydroponic growing system, may fit the bill. I've used it repeatedly to grow and/or start herbs, flowers, even tomato plants. You can then choose to keep the plants growing in the Aerogarden (if the plant doesn't get too tall to stay under the LED grow lights) or to transplant your starts elsewhere. Their website touts a faster grow time: "5X faster than soil," and while I cannot attest to the accuracy of that figure, I can absolutely say that any plants I start in the Aerogarden do grow more quickly than those started elsewhere.



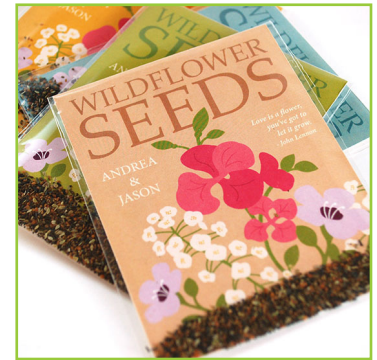
Aerogarden systems start at around \$60 and go up to around \$600, depending on the size and features. Some of the higher end systems can even connect to your Wi-Fi and feature a Vacation Mode. All systems do include a starter kit of fertilizer and seed pods, and you can choose the type of seeds you would like included (herbs, salad greens, various flowers, etc.). The recipient can then purchase more seed pods online or can choose a Grow Anything Seed Pod Kit, which includes the plastic receptacle with a growing medium but no seed. Gardeners can then insert their own desired seeds to grow. I've done this to start a variety of flowers and herbs, and it works wonderfully.

www.aerogarden.com



The Personal Touch

What gardener doesn't love seeds? You can, of course, purchase seed to gift, but many of us also have plenty of seed we can gather from our own plants to gift as well. Seeds are an inexpensive gift that can add a personal touch, especially if you feel crafty and create attractive seed packaging by hand. Many gardeners would be thrilled to receive seeds that are considered unusual or otherwise valuable, and for many it can be quite sentimental to grow a plant from gifted seeds. Perhaps consider gifting bluebonnet seeds to a transplanted Texan or seeds from your most productive tomato plant. If you gather your own seeds, of course, you will want to be sure to follow best practices for harvesting and storing that seed as well as making sure your gifted seed packet includes accurate instructions for the recipient.



Other gift possibilities that may work for your gardener:

If none of these options sounds like a winner for your gardener, you may also contemplate gift certificates to locally owned nurseries or gardening classes, gardening books, protective clothing, and garden tools or totes.





Sustainability – Peat Moss and Coir

by Lea Sandoz, ECMG

Both peat moss and coconut coir are used as soil amendments. Both help loosen and aerate the soil, which is a boon for our Blackland Prairie soil. They improve water holding capacity. Although they don't have any significant nutrient value of their own, they can help the soil retain nutrients.

The purpose of this article is not to debate the relative merits of peat moss and coir as planting media; the intent is to compare sustainability and environmental impact of the two. Since most information comes from producers of these two products, it can be a bit hard to sort out.

Sustainability is the adjective form of the verb sustain.¹ Sustain means, simply, the ability to keep in keep in existence. Environmental impact; the effect that the activities of people and businesses have on the environment.²

Peat Moss

Almost all peat moss sold in the United States comes from Canada. Peat does replenish, but at a slow rate. According to the Canadian Sphagnum Peat Moss Association (CSPMA), peat is a slow grower:

Peatlands are ecosystems where the production of biomass exceeds its decomposition. The result is the accumulation of organic matter coming from plant debris and especially Sphagnum mosses that dominate peatland vegetation. This more or less decomposed plant biomass forms the peat. Sphagnum mosses grow a few centimeters a year in height, but because of the subsequent decomposition and compaction processes, the rate of accumulation of peat is only about 0.5 to 1 mm per year.³

Data provided by the CSPMA and the CSPMA Science Coordinator allow us to calculate a “worst-case scenario” on how much Canada's peatlands shrink each year due to harvesting. Projecting the 3% annual loss into the future, Canada loses 15 hectares (37 acres) annually from harvesting operations. Over the next 1,000 years, Canada would lose 79,676 hectares of peatlands (196,884 acres).⁴

While this seems like a lot of peatland to lose, consider that there are currently 113,600,000 hectares or 280,711,713 acres (438,612 square miles) of Canadian peatlands;⁵ this gives a bit of a different view about sustainability.

Peatlands are important players in the global carbon cycle, storing vast amounts of carbon in the ground. When bogs are drained or otherwise dry out, these drier conditions mean that stored carbon is released into the atmosphere as carbon dioxide. Previous research has suggested that re-wetting dry peatlands is a way to restore ecosystem health, reduce carbon dioxide release, and increase carbon storage



within these environments. However, adding water to a bog can increase emissions of methane.⁶

Coir

Coconut fiber, commonly known as coir (pronounced coy-er⁷), is obtained from the fibrous husk of the coconut. This is the thick fibrous middle layer.⁸ It is made from the waste from producing coconut oil, coconut milk, and other types of products. However, just because it is made from waste products does not automatically make it environmentally friendly.

Waterlogged shell waste can become mosquito-breeding sites, which can lead to epidemics of dengue fever and malaria in nearby communities. Coconut waste can disrupt the flow of water channels and cause waterlogging at the disposal sites. Over time, piles of coconut waste can harm both humans and the environment.⁹

According to one coconut coir producer and North American importer, processing involves two steps that involve fresh water.

The top graded coco pith is left in a clean weed free cement floor for over 18 months. During this time, the monsoon rain washes off excess salts from the coco pith and make the coco pith pH neutral. The coco pith is also washed with fresh water to bring the pH and Electric Conductivity to desired level.¹⁰

The questions of sustainability and environmental impact must consider water use, soil depletion, and transportation. Coir requires significant processing that uses input resources and produces waste products. It also poses health risks. Perhaps the most significant long-term problem is the depletion of soil nutrients.¹¹ Because it takes about 8 years to produce coconuts, there is little opportunity to rotate crops.

For an in-depth article, with more citations, please refer to:

<https://txmg.org/bastropcounty/files/2021/04/04-Apri.pdf>



FOOTNOTES

1. Webster's New World Dictionary, Concise edition
2. Cambridge Dictionary online
3. Quinty, François and Rochefort, Line. "Peatland Restoration Guide: Second Edition." Published by Canadian Sphagnum Peat Moss Association and New Brunswick Department of Natural Resources and Energy, copyright 2003, page 3. [tx_centrerecherche/Peatland_Restoration_guide_2ndEd.pdf](https://txmg.org/bastropcounty/files/2021/04/04-Apri.pdf)
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