Fredericksburg Nature Notes

Newsletter of the Friends of the Fredericksburg Nature Center

November 2026 Volume 7 Number 11

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A Vision Worth Growing
Help Build Our Future Interpretive Center

Support the Bill Lindemann Capital Fund and help make the Nature Center's vision a reality.

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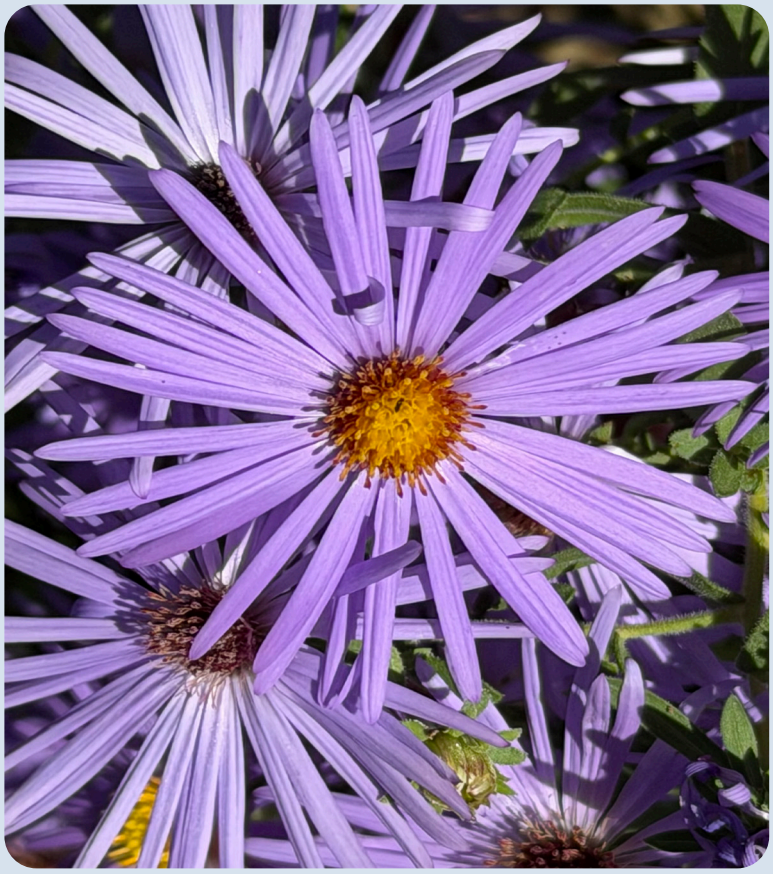


Photo by: Patti Guin

Fredericksburg Nature Center

FNC Facebook

President's Message

Before we plunge into the holiday season, let's take a moment to give thanks for all who have contributed to the continued success of the Fredericksburg Nature Center over the past 26 years. The vision and persistent leadership of our founder, Bill Lindemann, planted the seeds for FNC's growth through the years. The volunteer organization that grew from his leadership forms the backbone of our mission. Our volunteers continue to demonstrate their dedication to achieving our vision and deserve our heartfelt thanks and admiration. They are truly the lifeblood of FFNC—our sine qua non—and, as a bonus, make great friends and companions! Danke dir!

Next, we must recognize the many supporters and members who have provided financial backing for our educational programs and the maintenance and improvement of our trails and gardens. Their generosity supports both our operations and our Interpretive Center capital project. We thank you and hope you continue to view your support as a valuable investment in conservation, human health, and personal growth, especially among our youth. Supporters supply the oxygen that keeps us striving. Gracias!

Our partnerships with like-minded organizations that also foster programs in service to nature endure because of our shared values of community, cooperation, and service. Among these, I would highlight two organizations: the Hill Country Master Naturalists, who form the core of our volunteer group, and the Fredericksburg Chapter of the Native Plant Society of Texas (NPSOT), whose members have provided valuable support and cooperation. Sharing the work multiplies our success. And yes, valuable friendships are part of the reward. Merci!

FFNC's close partnership with the City of Fredericksburg Parks and Recreation Department allows our mission to flourish at FNC. Not only are they a great landlord, but they also provide assistance with the "heavy lifting" projects beyond our capabilities. Their help is very much appreciated. Grazie! Finally, we thank Mother Nature, who provides the resources that sustain life, offers beauty, awe, and repose for our well-being, and asks nothing in return except that we honor and preserve nature. In recognition of these gifts, we should aspire to do better. Gratias tibi ago.

The January newsletter will reveal some exciting news for our Interpretive Center, so be sure to tune in!

Happy Nature Trails. Joyful Holidays. Be Safe.
Lonnie

Fredericksburg Nature Center Events

FUNDRAISER FOR FREDERICKSBURG NATURE CENTER

RAPTORS

BIRDS OF PREY OF THE TEXAS HILL COUNTRY

Saturday - November 14, 2026 - 9:00 AM - 12:00 PM

John Wm. Klein Room, Marketplatz, 115 N. Crockett, Fredericksburg

Guest Presenters - Patsy & Tom Inglet and Sherie Gee

Discover the remarkable raptors that call the Texas Hill Country home. Join FFNC, Patsy and Tom Inglet and Sherie Gee in exploring how to identify these magnificent birds, understand their behavior, and appreciate the vital role they play in our ecosystem. The Workshop will focus on 14 diurnal species of raptors commonly encountered in our area and will include general information on raptors as a distinctive bird group, information on ways to separate them into seven basic types, and tips on how to identify them to species using all the clues available in the field. The workshop will also include three hands-on activities created by Sherie Gee to help make the information easier to remember and use. In addition, all attending the workshop will receive a post-workshop digital resource package that will help them continue to expand and solidify their knowledge of raptors and increase their identification confidence. This program is approved for three (3) hours of Texas Master Naturalist Hill Country Chapter AT credit. Reserve your seat via the QR code or using the following Eventbrite reservation link: https://www.eventbrite.com/e/1999787952599?aff=oddtdtcreator

LIMITED SEATING - RESERVATIONS REQUIRED!

TICKET PRICE: $45.00

Tickets can be purchased through Eventbrite by scanning the QR code below with your camera phone. Seating is limited, so reserve your spot today!



All proceeds from this workshop go directly towards funding the educational programming provided by Fredericksburg Nature Center.

Friends of the Fredericksburg Nature Center Reaches Out to Volunteers

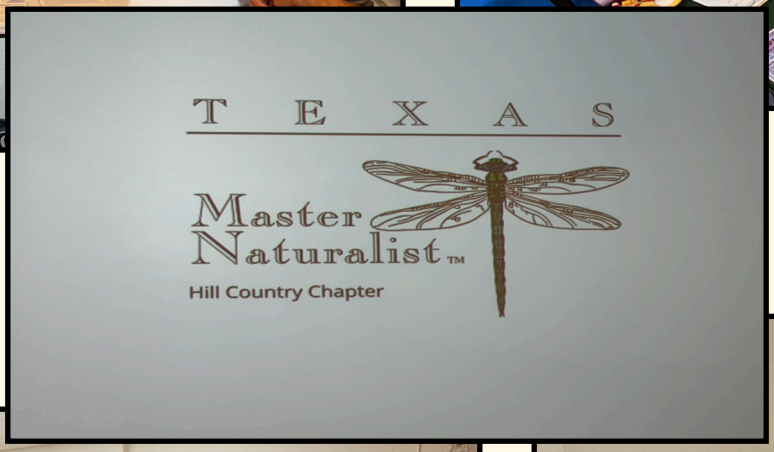
At the October 26 Hill Country Texas Master Naturalist chapter meeting, the Friends of the Fredericksburg Nature Center hosted an informational table staffed by Lonnie Childs. The display highlighted the Nature Center's activities, educational programs, and volunteer opportunities.

Billy Guin also gave a presentation encouraging chapter members to become involved with the Nature Center and its ongoing projects.

Photos by Patti Guin



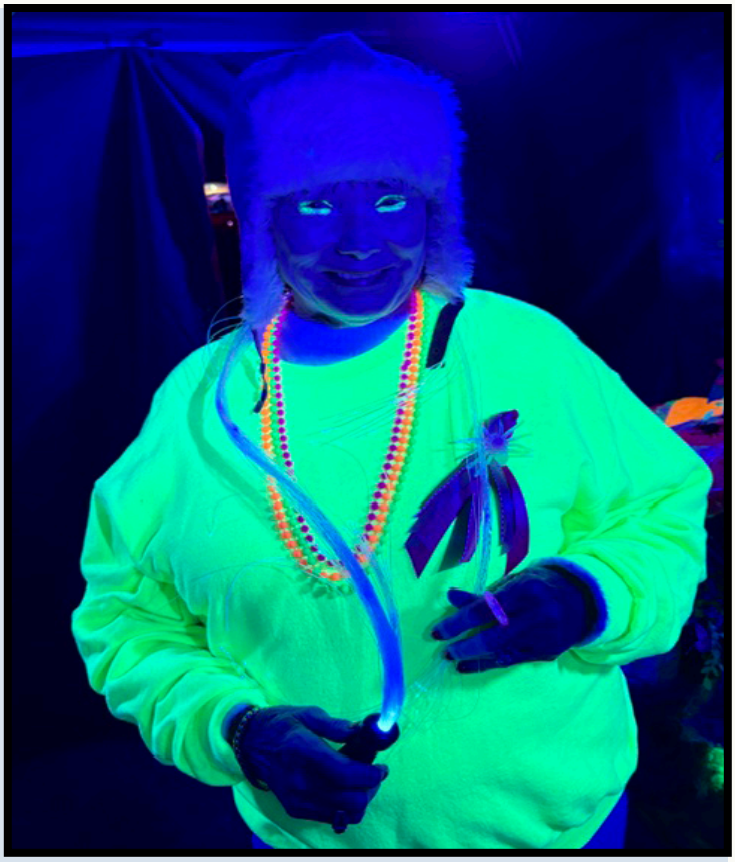








A GLOWING SUCCESS!



Nancy Neon

Friends of Fredericksburg Nature Center recently took part in the City of Fredericksburg Parks and Recreation Neon Nights family event at Lady Bird Johnson Municipal Park. After weeks of preparation, a small FFNC volunteer team created “Neon Nature,” a magical glow-in-the-dark experience that delighted visitors of all ages. Upon entering the Neon Nature tent, attendees were transported into a world of glowing plants, insects, reptiles, and rocks reminiscent of a Willy Wonka wonderland. Inside, volunteer David Oelrich pointed out the various plants, reptiles, insects, and fluorescent rocks and gave a brief explanation of the difference between bioluminescence and fluorescence. Upon exiting the tent, volunteers Maura Windlinger and Patti Guin were on hand to apply insect-themed-glow-in-the-dark tattoos to the children (and even a few adults). Thanks to all the volunteers including David Oelrich, Gracie Waggener, Nancy and Paul Person, Maura Windlinger, Bridget Langdale, Trudy Eberhardt, Jane Crone, Jackie Gibler, Kathy Lewis, Lonnie Childs, Mary Ellen Terrell, and Patti Guin.



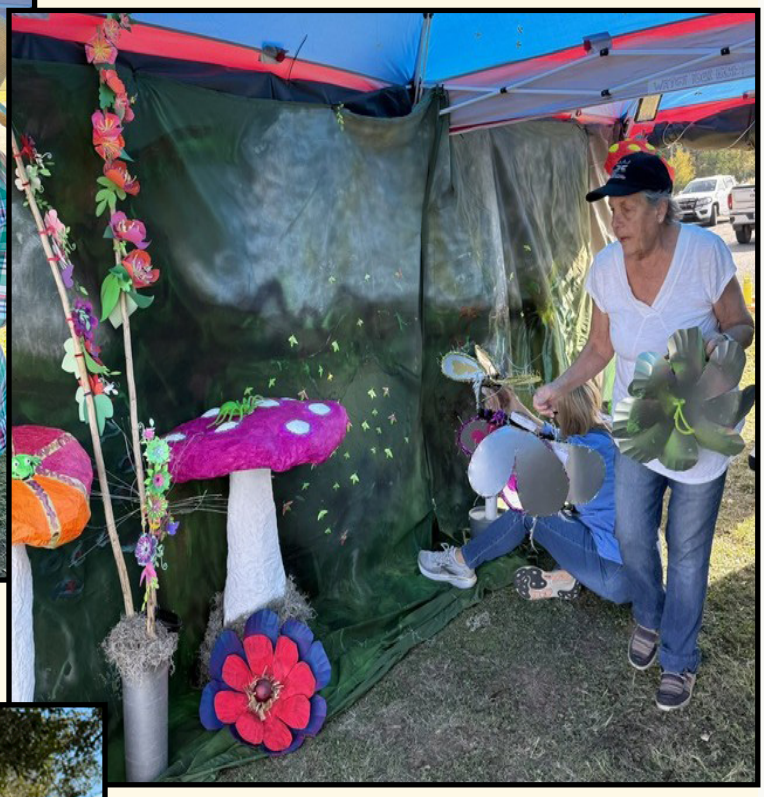
Arrangement Adjustment



Dave Inside the Neon Nature Tent

Afternoon Preparations

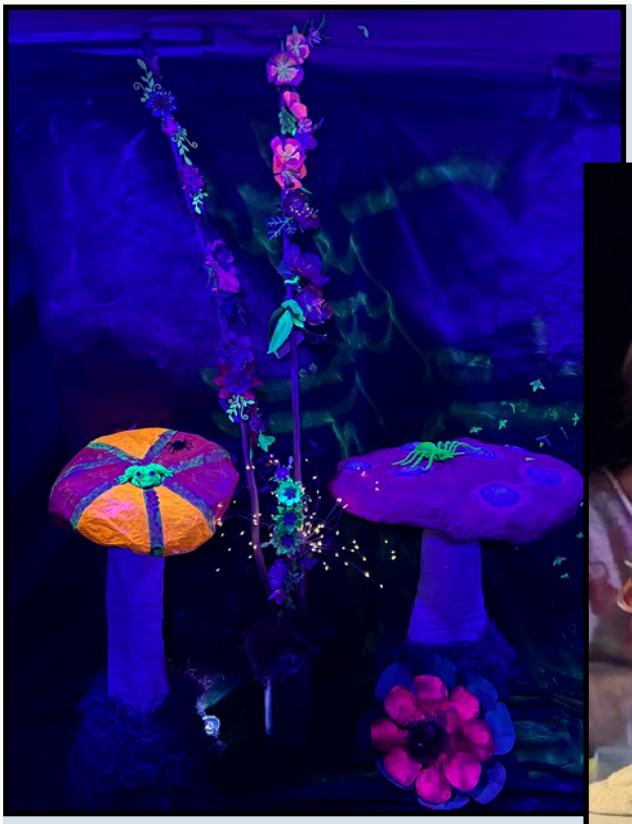




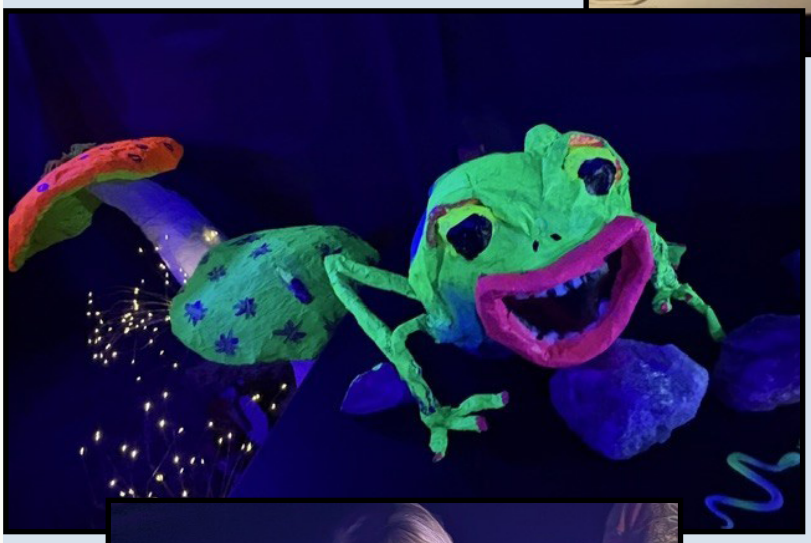




Get Your Glow On











Photographs courtesy of Maura Windlinger, Jackie Gibler, Bridget Langdale, Gracie Waggener, Lonnie Childs, and Patti Guin

Nature Journaling

Autumn Leaves Are Falling Down

Rebecca Stapleton, TMN

Remember the little elementary school song about autumn leaves? What triggers leaves to change color and fall in the autumn? Shorter daylight hours and cooler temperatures signal to deciduous trees that winter is approaching.

As autumn arrives, deciduous trees stop producing chlorophyll and begin breaking down what remains in their leaves. During this process, valuable nutrients are absorbed back into the twigs, branches, and trunks, where they are stored for use during the winter and the following spring. As the green chlorophyll disappears, yellow and orange pigments called carotenoids become visible. In some trees, red and purple pigments called anthocyanins also develop, giving us the beautiful autumn colors we love so much.

But there is more to this story! Trees form a special layer of cells where each leaf stem attaches to a branch. This layer gradually cuts off the flow of water and nutrients to the leaf. Eventually, the leaf dies and drops, leaving behind a protective seal rather than an open wound on the tree.

Why is losing leaves so important? During winter, trees can have difficulty drawing water from frozen ground. Dry winter air also causes leaves to lose valuable moisture through a process called transpiration. Freezing temperatures can damage leaf cells when ice crystals form inside them. Leaves can also act like sails, catching the wind and collecting snow and ice. The additional weight and resistance can cause frozen or brittle limbs to break, damaging the tree.

By shedding their leaves, deciduous trees conserve water and protect themselves during the cold winter months. Even after they fall, the leaves continue to serve a purpose. They act as natural mulch around the base of the tree, gradually decomposing and returning valuable nutrients to the soil.

Sources~ AI, Wikipedia, Texas A&M University



Art by~ Rebecca Stapleton

Interesting Plants of the Hill Country



Lindheimer's Muhly or Big Muhly
(Muhlenbergia lindheimeri)
Photo: Sam Strickland

Meet the Muhlys

By Lonnie Childs

"As a budding naturalist, I started out as a tree hugger and flower lover.
After much study and immersion in nature, I evolved into a grass kisser."
Poa Gramen

Historically, grasses have been one of the least understood and underappreciated plant families. Pioneers described the lush grasslands of the Great Plains as a desert because of the lack of timber, and while early ranchers prized it for grazing, they did not understand the necessity of nor how to preserve the rangelands. Some of the early botanical collectors found them to be uninteresting as did their patrons. The first compilation of Texas grasses was not developed until 1933 when W.A. Silveus self-published his Texas Grasses. Even modern-day Texas botanists posit that our native grasses are under collected and not well understood.

The scientific body of knowledge did not recognize until the 20th century that grasses were literally holding the world together. Their extensive roots are the primary soil stabilizers on earth while providing habitat structure for the subterranean soil building microbes. We have long recognized but not appropriately appreciated that all of our cereal grains (wheat, corn, barley, oats, rice, etc.) derive from native grass species, and their production allowed for the development of agriculture which supported the creation of modern civilization. Without native grasses, we might still be hunter-gatherers!

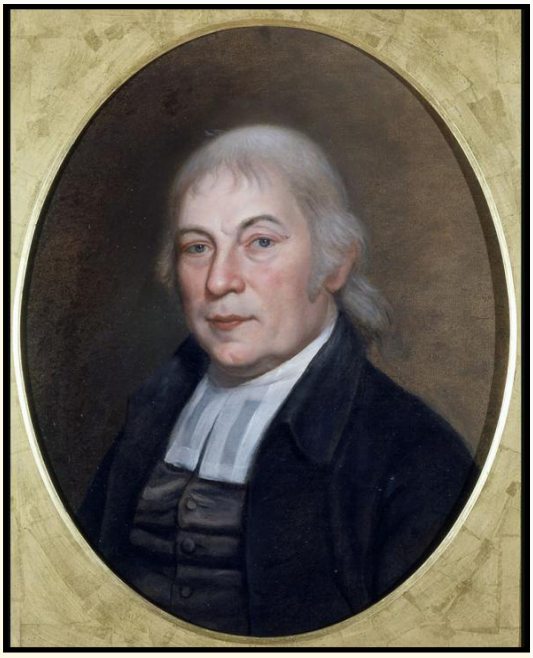
Here are some other fun grass facts.

- The Poaceae family (grasses) include 11,000 species and 785 genera.
- In terms of genera, they are the 3rd largest family of flowering plants.
- One third of the earth's surface is covered with grasslands.
- Estimates are that there are more individual grass plants than all other vascular plants combined.
- Grasses occur on all continents and in almost every terrestrial ecosystem.
- The majority of large herbivores depend on grasses as a food source.

Source: Guide to Texas Grasses by Robert B. Shaw

Fast forward to contemporary amateur botanists and landscapers, and we must admit that grasses haven't rated as our favorite plant families nor have we sought them out for our home landscapes, until recently. Although they are angiosperms, their tiny flowers do not rate the awesome response of gazing at a field of bluebonnets. If we had saved more tall grass prairies and given more folks the opportunity to view fields of golden Indiangrass undulating in evening light, their beauty status might have been elevated. Also, for those of us aspiring botanists, grasses don't make themselves easy to identify and present a whole new set of identifying features and nomenclature.

We have come to admire the Big Four bunch prairie grasses (Big Bluestem, Little Bluestem, Indiangrass, and Switchgrass) and discovered that mixes of the short grasses like Buffalo. Blue grama, and Curly Mesquite make for a nice native turfgrass alternative. Most of us can recognize the suitably named Texas state grass, Side-oats Grama.



Gotthilf Heinrich Ernst Muhlenberg (Henry Muhlenberg)

I am writing to introduce you to another genera of grasses of which you probably already recognize at least a couple. The Muhlenbergia genus, aka the Muhlys, include about 150 species growing mostly in the southwestern US with approximately 50 occurring in Texas. Eight species grow in Gillespie or surrounding counties.

The Muhlenbergia genus was named after Heinrich Ludwig Muehlenberg, or Henry Muhlenberg (1753-1815), who was a German-educated Lutheran minister and the first president of Franklin College in Pennsylvania. He was an accomplished botanist who is credited with classifying and naming 150 species of plants in his 1785 work, Index Flora Lancastriensis. His collaboration with European botanists contributed to advances in classifying botanical species and earned him recognition via the attachment of his name to an important genus.

The Muhlys are mostly mid-size bunch grasses typically exhibiting coarser leaves and ranging in height from 12-36 inches. Probably due to their coarser leaf characteristic and growing habitat (wet or dry creek beds), they are not a grass favored for grazing by herbivores. Accordingly, they perhaps have received less attention than the grass species that are highly favored for grazing.

Following are some of the Muhlys that you might have encountered in the wild and/or at a nursery.

Lindheimer's or Big Muhly *(Muhlenbergia lindheimeri)* is probably the best known of the Muhlys and the first one to enter the nursery trade. Named for the Father of Texas Botany, Ferdinand Lindheimer, its blue-green bunch of foliage can reach three feet in height with golden feathery inflorescences that grow to six feet in the fall and can be quite attractive.



Gulf or Pink Muhly
(Muhlenbergia capillaris)
Photo: James Garland Holmes

Although not uncommon, it is not prevalent in the wild and can be found on slopes and in canyons growing in loose, gravelly sandy soils along streambeds and seasonal creeks. It seems to favor getting wet feet on a periodic but regular basis.

Big Muhly is the solution for those who are considering Pampas or Purple Fountain Grass in your landscape. Big Muhly might not be quite as showy, but it is hardier, more cold tolerant, and semi-evergreen in the winter.

Gulf or Pink Muhly *(Muhlenbergia capillaris)* reigns as the second most recognized of the Muhlys, although it may be eclipsing Big Muhly in popularity because of its attractive pinkish flower stocks in the fall. Its' bunch form is a little smaller and more compact than its bigger cousin, and it exhibits narrow and wiry leaves. Gul Muhly naturally inhabits the Gulf Coast and southeastern Texas and can be found in rocky to clayey soils in open woodlands. It performs pretty well in central Texas landscapes if you give it extra water.

Muhlenbergia "Pink Flamingo" is a new hybrid cross of Big and Gulf Muhly which flashes even brighter pink inflorescences in the fall. How this occurs is a genetic mystery to me. I have little experience with it but assume that it might like a little more water also. In general, I find that native hybrids and cultivars are bred for one outstanding feature but in a genetic trade will lose some hardiness and vigor. Having offered that caution, this hybrid is quite attractive.

Seep Muhly *(Muhlenbergia reverchonii)* is a smaller species that typically only reaches one to two feet in height. Its identifying feature is its curly-leafed mounding form where the narrow leaves roll inward like a messy head of curly hair. Seep Muhly exhibits a wispy, copper-colored flower stalk in the fall.

Named after botanical collector, Julian Reverchon, who traversed the western Edwards Plateau in 1875, its common name reveals its propensity to live in areas of active or periodic seeps on limestone hillsides. Oftentimes, you will find it dryly waiting for the seep to seep, and so it will appear as a crispy little grass. Give it a dose of moisture, and it will revive from its sturdy roots. Seep Muhly can occasionally be found at specialty nurseries these days.



Seepy Muhly
(Muhlenbergia reverchonii)
Photo: Lonnie Childs



Pine Muhly *(Muhlenbergia dubia)*
Photo: Ray Mathews

There is reportedly a naturally occurring hybrid cross between Seep and Big Muhly in Gillespie County and surrounding areas known as Muhlenbergia involuta.

Pine Muhly (Muhlenbergia dubia) appeared in the nursery trade several years back and is one of my favorites. Although its confounding name might suggest otherwise, it is a west Texas native growing in the Trans-Pecos where it can be found growing on slopes, rocky outcrops, and in canyons. The "Pine" designation derives from its thin, wiry leaves that resemble pine needles. Dubia is a Latin term referring to its wavering or vacillating form.

Pine Muhly displays a denser, more compact bunching form and is shorter than Big Muhly. However, it sems to hold up better in the winter and is more evergreen. Its flower stalk is not as showy, but I find the denser strong form appealing, and it is more drought tolerant.

Why should you use or preserve Muhlys in your landscape? Muhly grasses make great filler plants in your garden, blocking potential weeds and providing contrasting textures to shrubs and woody perennials. They can also be used to fill larger areas as an accent planting. As my tolerance for maintenance diminishes with aging, I find myself resorting to grasses more often when I replace non-performing or dead plants, and Muhlys can oftentimes fit the space.

Since grasses constitute less than 10% of a deer's diet, the coarse-leafed Muhlys are way down their list of appealing plants to eat. Muhly grasses require very little maintenance – just some early Spring clean-up and trimming of dead stalks and foliage. They are survivor species providing drought and cold tolerance and great hardiness. Some species like Big Muhlys will spawn offspring readily. I planted three individuals along a faux streambed and now have seven. If you are attempting to create a backyard habitat, grasses should be part of the equation.

Muhly grasses do provide ecological services to their resident terrain and neighboring wildlife, particularly birds. Their seeds provide feed, their leaves make good nesting material, and they offer cover, even to butterflies when cold strikes. Muhly grasses are vital soil stabilizers on slopes and along streambeds where erosion potential is high.

If you have a larger tract of land and are fortunate enough to have naturally occurring Muhlys, then preserve them mostly by just leaving them be. Since Muhlys did not evolve with frequent grazing as part of their lifecycle regimen, unlike most other bunch grasses, they do not respond well to severe mowing and trimming. Do no harm.

The bottom line on Muhly grasses – they are steady, functional contributors to natural and man-made landscape environments. And over time, you can learn to love their look if you will just give them a chance. Stop and observe their undulating hula skirt form or look for their flower and seed stalks illuminated by the evening light. They have their own sense of beauty. Who knows – maybe you can become a grass kisser too!

Grass reference books:
Common Texas Grasses, An Illustrated Guide by Frank Gould (Texas A&M Univ. Press)
Guide to Texas Grasses by Robert B. Shaw (Texas A&M Univ. Press)
Grasses of the Texas Hill Country by Brian & Shirley Loflin (Texas A&M Univ. Press)



Adult female Carolina mantis *(Stagmomantis carolina)*
Photo: Kaldari (wikimedia)

The Praying Mantis's Winter Nursery

The **Carolina Mantis** ***(Stagmomantis carolina)***

Have you ever noticed a small, hardened, foam-like lump attached to a twig or garden structure? What looks like an insignificant piece of dried foam may actually be a nursery filled with praying mantis eggs.

During autumn, the female Carolina mantis deposits 50 or more eggs in a frothy substance that hardens into a protective case called an ootheca. Inside, the eggs remain sheltered from winter weather, waiting for spring.

When warmer weather arrives, dozens of tiny mantises emerge from their winter nursery. These youngsters, called nymphs, resemble miniature versions of their parents, but they lack fully developed wings.

The young mantises immediately begin hunting small insects. As they grow throughout summer, they repeatedly shed their exoskeletons, eventually developing into winged adults.

Carolina mantises are remarkable predators. Their powerful, spiny front legs allow them to capture unsuspecting insects, including garden pests. However, they also feed on beneficial insects such as bees and butterflies.

If you discover a praying mantis egg case in your garden this autumn, leave it undisturbed. Bringing it indoors may cause the eggs to hatch prematurely.

That ordinary-looking little lump could be hiding the next generation of one of nature's most fascinating hunters.



Carolina mantis egg case (ootheca)
Photo: Beatriz Moisset (wikimedia)
CC BY-SA 4.0

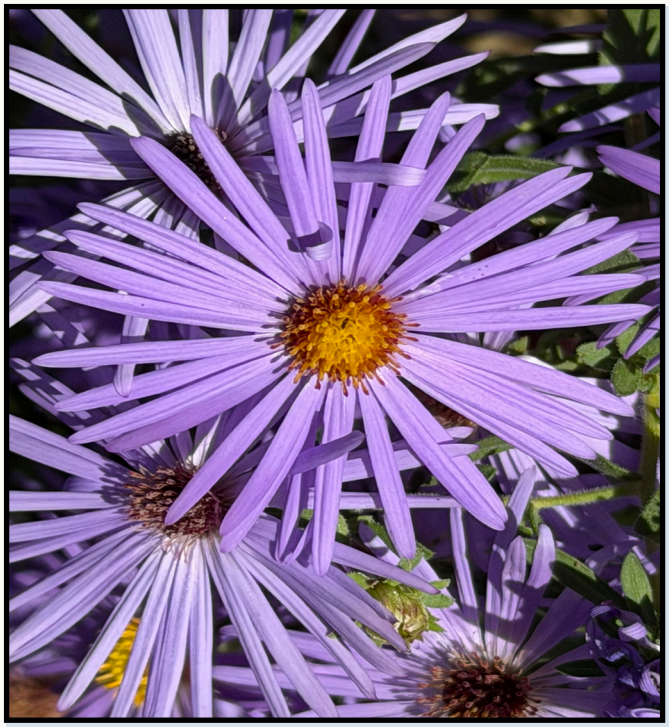


Newly hatched Carolina mantis nymph
Photo: spidereyes2020 (wikimedia)

Photo Sources

Website: wikimedia commons

In the Garden



Fall Aster
(Symphyotrichum oblongifolium)
Photo: Patti Guin

Fall Asters: A Bright Finale to the Growing Season

By: Patti Guin

Fall has FINALLY arrived, and with its arrival summer flowers begin to fade and fall asters (Symphyotrichum oblongifolium) step into the spotlight with sprays of lavender daisy-like blooms. These cheerful late-season flowers can brighten garden beds and provide valuable pollinator support well into autumn, offering a welcome burst of color as the landscape prepares for winter. This is one of our great Central Texas natives that can always be relied upon to rejuvenate our gardens and our spirits after a long, hot, dry summer.

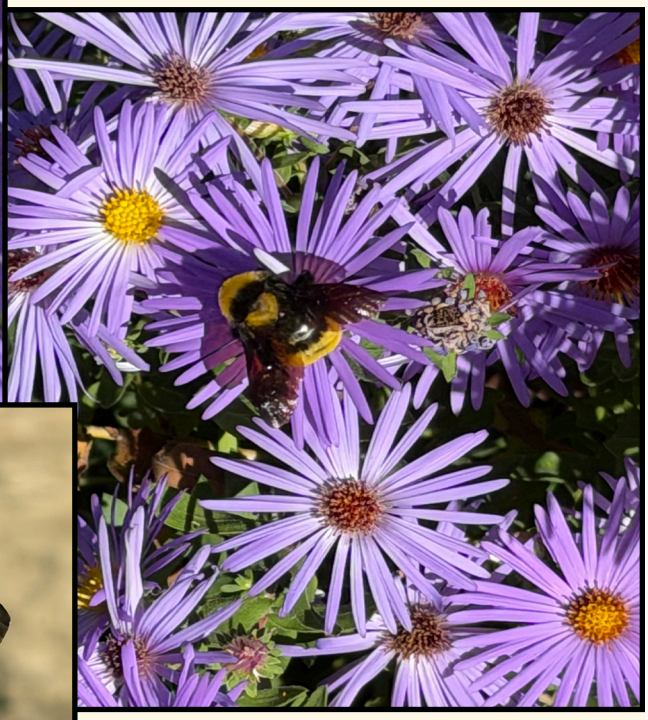
Fall aster is a smallish, mounding perennial plant usually reaching less than two feet tall, but it has been known to grow up to three feet. They are especially valuable to bees, butterflies, and other pollinators because they bloom when fewer nectar sources are available. Planting them alongside ornamental grasses, goldenrods, and other late-season perennials creates a lively and supportive habitat for visiting wildlife. And although no plant is completely deer-proof, deer tend to avoid fall aster because of its pungent leaves.

For the healthiest growth, plant asters in a sunny location (at least four hours of morning or afternoon sun) in well-drained soil. Once established, they require very little water, so be careful not to overwater them. And as with most of our drought-tolerant native plants, they require no fertilization. You should trim tips periodically through spring and summer, to keep plants compact and prevent them from splaying out. In worst case scenarios, I have cut stems to the ground to allow them to resprout. Leave plants alone after July (no later than mid-August) to allow flowers to develop for fall. After flowering, leave some seed heads standing to provide winter interest and food for birds. The plant's dark-colored foliage provides texture and form throughout winter, and you should cut them back only after they begin to look scruffy but before new growth emerges, typically in March.

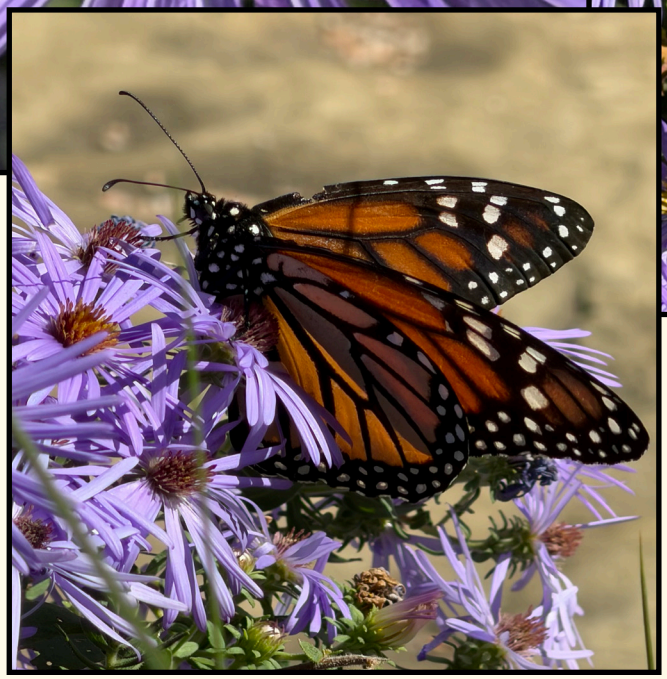
Whether tucked into a perennial border, planted in a container, or used to create a naturalized garden display, fall asters are very adaptable and an easy way to extend the beauty of the growing season. Their long-lasting blooms remind us that the garden can remain vibrant right up until the first frost.



Western Honey Bee *(Apis mellifera)* visiting a Fall Aster



Bumblebee *(Bombus sp.)* visiting Fall Asters



Monarch *(Danaus plexippus)* visiting Fall Asters

Photos by: Patti Guin

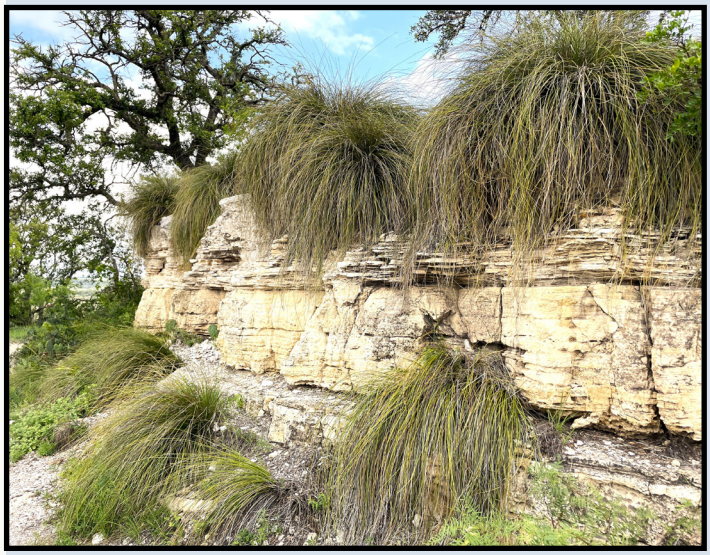
Cross Mountian Blooms

Blooming on Cross Mountain

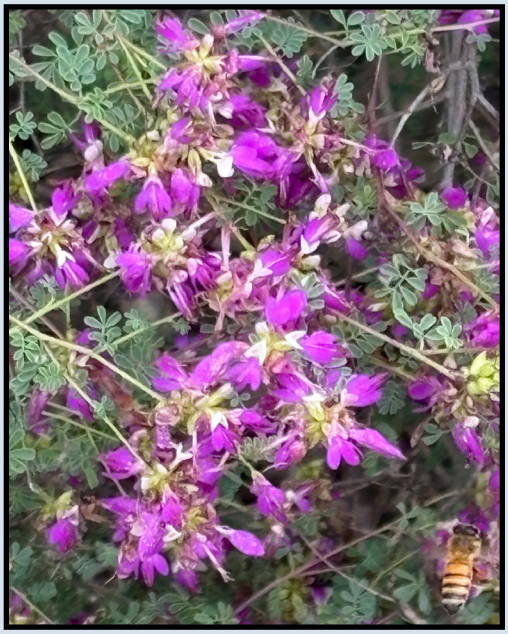


Cross Mountain View

In 1847, during the settling of Fredericksburg, a timber cross was found on the historic hilltop, previously used as a lookout point by Native Americans. Early Fredericksburg pioneers gave this hill the name “Kreuzberg” or Cross Mountain. Today, Cross Mountain Park on N. Milam provides an opportunity for a scenic overlook of Fredericksburg. Of equal beauty and little heralded is its value as a botanical haven for alkaline loving plants that inhabit its limestone crest and caliche flanks. Take a hike now, slow down, and enjoy the late fall blooms before our first freeze. Don’t forget to stop at the exhibits kiosk in the parking area provided by our local Native Plant Society of Texas (NPSOT) chapter.



Nolina *(Nolina sp.)* at Cross Mountain



Black dalea *(Dalea frutescens)*



Edward's Plateau Five Eyes
(Chamaesaracha edwardsiana)



Lindheimer's Paintbrush
(Castilleja lindheimeri)



Wright's Indian Mallow
(Abutilon wrightii)

Photos & Article by Lonnie Childs

Six-Legged Neighbors of the Texas Hill Country

Photos by Bill Lindemann



Tree Cricket



Ant Lion



Grasshopper



Havester Ant

Fredericksburg Nature Notes
Newsletter of the Friends of the
Fredericksburg Nature Center

Volunteer Corner

Fun Tuesdays - Consider Volunteering with the Fredericksburg Nature Center.

Typical tasks involve gardening skills and trail improvement and maintenance projects, but no experience is necessary.



Use it as a learning opportunity. Work in whatever area you choose for as long as you choose. We work some and have a lot of fun outside in the beauty of nature. It's good exercise for the body and great therapy for the soul. If you would like to join us at the park, we would love to have you!

Other Volunteer Opportunities that don't require physical labor.

- **Social Media** - Assist with maintaining & posting content on Facebook & other media.
- **Newsletter** write articles, editing and production.
- **Website** - content management website and support.
- **Membership management** - recruitment and support.
- **Programs** - Assist with planning and organizing workshops and children's activities.

Contact **Gracie Waggener** to receive a weekly email notification about scheduled work tasks for the coming week.



For newsletter information, contact **Lonnie Childs** or **Barbara Shirley**

http://fredericksburgnaturecenter.com

Our projects are approved for serivce hours by the Hill Country Texas Master Naturalist chapter.

A Vision Worth Growing

Consider Supporting Fredericksburg Nature Center in 2026

Please consider becoming a Member of FFNC. Our operations are funded by membership fees & donations.

Click here to become a member.

Donate to the A Vision Worth Growing Campaign (Bill Lindemann Capital Fund) which will fund our future Interpretive Center project.

Click here to donate.

Friends of the Fredericksburg Nature Center Board of Directors

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Thanks to our supporters and the City of Fredericksburg for your continued support of the Friends of the Fredericksburg Nature Center! A 501(c)(3) corporation