Our June 1 Program

On June 1st, our chapter meeting will include a presentation on “The Rise to Dominance of Flowering Plants: What do Texas Fossils Tell Us?” by Dr. Bonnie Fine Jacobs, Professor Emerita, Department of Earth Sciences, Southern Methodist University. Social time will begin at 6:30 pm with a 7:00 presentation.

Dr. Jacob’s research centers on paleobotany, the study of fossil plants, ranging in size from microscopic cells to macroscopic leaves, fruits, seeds, and wood.

The meeting will be virtual. Please register in advance for this meeting via the below link:

https://us02web.zoom.us/meeting/register/tZMkd-yqpzktGNNey9KvDLmdLPxSloH20Muw

After registering, you will receive a confirmation email containing information about joining the meeting.

Chapter News

2021 Budget

A proposed budget was emailed to chapter members for approval earlier in May. Due to an error in one of the email addresses, one half of the distribution list did not receive their email until the error was discovered on May 20. As a result, the deadline for approval was extended until May 28. As of May 27, eighteen votes have been received. Please check your spam folders for missed email, dated either May 12 or May 20 from valerie_dalton@msn.com. A simple majority of our chapter is more than 36 votes. As our meeting is just around the corner, the deadline has been extended one last time to June 1.

Bylaws

If you are interested in participating in a review of our 1995 bylaws and the needed updates to bring them into compliance with current requirements/practices, please contact me at valerie_dalton@msn.com.

Facebook Page

Awaiting launch. There are so many great articles to share; I hope to open this to the public soon.
Thank yous!

Be sure to thank John Worley for his continued wrangling of disparate parts into an exceptional chapter newsletter. His behind-the-scenes work is time consuming and without his patience, experience and creativity, our newsletter would most likely not exist.

Also please thank Tim Castelli for his efforts, updating and maintaining our website as well as publishing articles on various topics related to native plants, particularly on subject matter appealing to gardeners new to native plants. His efforts are paying off with increased site traffic and enthusiastic new members.

And thank Bill Woodfin for arranging such qualified and engaging monthly speakers! Despite the confines of online meetings, Bill has managed to provide unparalleled range and depth of topics.

Thank you, Lorelei Stierlen, for serving as Treasurer, “dotting the I’s and crossing the T’s.” She handles honorariums, files required reports with the state and makes our occasional bank deposits quietly in the background. All while working tirelessly to restore prairie at Blackland Prairie Raptor Center.

May, A Busy Month!

by Valerie Dalton
President, Collin County Chapter, Native Plant Society of Texas

“Our mission is promoting research, conservation, and utilization of native plants and habitats through education, outreach, and example.”

The collage represents some of the flora and fauna diversity that appear during the month of May at our house. Indeed, all things are possible in May!

It has been a busy month! Thankfully, we had three events uninterrupted by rain: The May 4 annual Heard Plant Walk, the 17th Annual Stiff Creek Walk on May 8 and a May 14 field trip to Randy Johnson’s Organic Nursery.

May 14 Field Trip to Randy Johnson’s Organic Nursery

A small group of seven made the drive to Forney and were rewarded with a delightful and educational experience! Randy offers a unique nursery adventure. He guides visitors through his hoop houses and shares his knowledge while explaining his passion for natives. He takes pride in propagation of natives through seeds rather than cuttings. Many of his offerings are two-three years old.
SEEDLINGS VS CUTTINGS.

Randy showed us a large tray of *Eustoma exaltatum* (Texas Bluebells or Prairie Gentian). The red arrows added in the top cell of the right image point to the tiniest bluebell seedlings that are hardly discernible in the seed starter tray. The bottom cell contains bluebell seedlings at various stages of growth. Unfortunately, I don’t remember how old he said the larger seedlings were, but found an online reference that discusses the techniques and the difficulty of growing this species from seed.

May 14, 2021 Bluebell seedlings – (image on right is close up of two cells from image on left)

Randy has recently begun using a new pot design that is better suited for plants with long roots. He pointed out that channels running the length of the pot provide space for the roots to grow vertically rather than circle as they do in a round pot.

Tall channeled pot and effect on roots

Image by Alex Walker

Close up of roots grown in tall pot

Image by Valerie Dalton

Randy takes pride in his growing methods. He contrasts his practice to that used by large nurseries employing workers in an assembly line method to fill plant trays with cuttings dipped in root hormone powder. An April 2019 article from Michigan State University details a streamlined production process used by many larger nurseries. Randy shared a story of a Dallas landmark that replaced all their landscape with masses of a few Texas natives. Within 3 years, all the plants died. He suspects this occurred because the plants were grown from cuttings which produced clones. He pointed out that the entire population of cloned plants is at risk of failure from the same diseases or pests to which the parent plant was susceptible.
The lack of DNA diversity in a cloned population will likely result in failure of all when exposed to disease or pests. Randy’s goal is to preserve plant diversity and consequently the population’s resistance to disease and pests despite the increased investment of time required.

**TROPICAL MILKWEED**

In a discussion on the possible impacts of growing tropical milkweed on the monarch population, we wondered if female monarchs would lay eggs on the species. Randy described an aspect of female butterflies that was one of those “Wow!” moments. Female butterflies have spines on the underside of their forelegs that they use to probe plant leaves before depositing their eggs. “*When they land on a leaf these spines puncture the surface, releasing aromas that are detected by the olfactory sensors.*” Randy pointed out that tropical milkweed continually produces tender leaves throughout their long season in contrast to native milkweed leaves that thicken as the season progresses. One might think having tender milkweed shoots for caterpillars over a longer season could be advantageous. What if, instead, the monarch’s cycle of reproductive diapause is interrupted because of the presence of tropical milkweed and affected monarchs don’t migrate? Scientists have been studying that question and some conclude that the presence of tropical milkweed during fall migration could result in the creation of a nonmigratory resident population.

Research in the last few years has shown that the presence of tropical milkweed has a negative impact on Monarch health for other reasons:

“Ophryocystis elektroscirrha (OE) is a debilitating protozoan parasite that infects monarchs. Infected adult monarchs harbor thousands or millions of microscopic OE spores on the outside of their bodies. When dormant spores are scattered onto eggs or milkweed leaves by infected adults, monarch larvae consume the spores, and these parasites then replicate inside the larvae and pupae. Monarchs with severe OE infections can fail to emerge successfully from their pupal stage, either because they become stuck or they are too weak to fully expand their wings. Monarchs with mild OE infections can appear normal but live shorter lives and cannot fly as well as healthy monarchs. Although recent research shows that tropical milkweed can lower OE replication within infected monarchs (due to high levels of cardenolide toxins), this might not benefit the monarch population. In fact, this could actually promote disease spread by allowing moderately infected monarchs that otherwise would have died quickly following eclosion to live longer and spread more parasite spores.”

Reference: Monarch Joint Venture Potential risks of growing exotic milkweeds for monarchs

**INSECTS NEED ONE ANOTHER AND THE WORLD NEEDS THEM TOO**

Someone noticed aphids on a milkweed plant which elicited a lesson regarding the parasitic wasps that prey on aphids. Randy noted in addition to the wasps, there are also syrphid flies that parasitize aphids. This conversation prompted me to research milkweed aphids, and I realized not all aphids are the same species. You might think by now I would assume that diversity in nature applies to every animal, plant, and insect. Yet, I continue to be surprised by the level of specificity and connectivity between species. The aphids that prey on milkweeds are oleander aphids and they multiply rapidly. “Females are viviparous and parthenogenetic, meaning that they deposit nymphs rather than eggs and that the progeny are clones of the adult female (i.e., sexual reproduction is not necessary for offspring production).” Aphids have a parasitic
relationship with their host plant so generally gardeners react negatively to the sight of aphids. However, the presence of aphids on a nursery plant is a sure sign that the plant has not been treated with systemic pesticides. You may have heard of the residual impacts of neonicotinoid use. You might be tempted to use a detergent mix to spray kill aphids, but Texas Butterfly Ranch points out that this kills all the insects there. Once again, we are reminded that our interference in nature has unintended consequences.

Meet insect family Aphididae, Aphidius, genus of various wasp species that evolved as a specialist to parasitize mostly aphids. This tiny wasp is less than 1/8 inch long. Syrphid flies in the larval stages also prey on aphids. A few other natural predators such as lady bugs, lacewings and soldier beetles are generalists who prey upon aphids as well as other insects.

Then there are mutualist relationships. “A good example of a mutualism is the relationship between aphids and ants. The aphids secrete a sugary solution called honeydew. Ants drink the honeydew and, in return, they protect the aphids from predators.” Ref. Amateur Entomologists’ Society.

The more I learn about nature, the more I realize that intricate relationships have developed between various species in ways that we may never have imagined.

As the ant expert E. O. Wilson observed: "If all mankind were to disappear, the world would regenerate back to the rich state of equilibrium that existed ten thousand years ago. If insects were to vanish, the environment would collapse into chaos.”

I think it is safe to say that many of us grew up viewing most insects with disdain. They were a nuisance or worse, a threat. Wondering how we change that mindset, I searched for historic human thoughts on insects and stumbled upon this:

“The scientific term describing the practice of eating insects by humans is anthro-po-entomophagy.[5] The eggs, larvae, pupae, and adults of certain insects have been eaten by humans from prehistoric times to the present day.[6] Around 3,000 ethnic groups practice entomophagy.[7] Human insect-eating
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(anthropo-entomophagy) is common to cultures in most parts of the world, including Central and South America, Africa, Asia, Australia, and New Zealand. Eighty percent of the world's nations eat insects of 1,000 to 2,000 species.[8][9] Food and Agricultural Organization of the UN (FAO) has registered some 1,900 edible insect species and estimates that there were, in 2005, some two billion insect consumers worldwide. FAO suggests eating insects as a possible solution to environmental degradation caused by livestock production.[10]”


Reading this gave me pause. I would love to hear from any of you who have ventured into adding insects to your diet. I have learned to appreciate the value of insects but the discussion of “antropo-entomophagy” caused me to realize I need to work on growing that acceptance.

VARIETY OF INFLORESCENCES FOR POLLINATORS

As we walked through the various hoop houses, Randy also pointed out the importance of plants with umbel flowers, like *Zizia aurea, Golden Alexanders*, to pollinators.

Author Heather Holm, in Pollinators of Native Plants, p. 132, writes about *Zizia aurea*: “The flowers are an important source of nectar and pollen for insects just emerging from pupation. The small, numerous, shallow flowers provide nectar for short- and long-tongued bees throughout the flower development. A disc at the top of the ovary secretes nectar. Flowers develop from the outside of the umbel toward the center; stigmas are receptive first followed by anthers dehiscing. Small bees that collect pollen such as mining bees, *Andrena* spp., are primarily responsible for pollination; large bees visit the flowers for nectar.”

March 30, 2015: Texas Native Bee Co-Op Facebook post

“These sweet-faced little *Andrena* bees are some of the early bees out in North Texas, enjoying the Mexican Plum at Arbor Hills Park in Plano.”

We will have to ask Carol Clark, co-administrator for the Texas Native Bee Co-op Facebook page, which mining bees we’re likely to see on *Zizia aurea*.

*Golden alexander is a short-lived perennial* with yellow flowers less than 1/8 inch long. Each tiny flower has 5 sepals, 5 petals, and 5 stamens. Separate clusters of tiny, yellow flowers gather into a large, flat-topped flower head, the middle flower of each umbel being stalkless. Dry seed heads turn purple, adding summer interest.
Another description from Missouri Botanical Garden, *Zizia aurea*, “features flat-topped clusters (compound umbels) of tiny yellow flowers in late spring atop stems growing to 3' tall. Distinguished from other carrot family members by the absence of a flower stalk on the central flower of each umbel. Both basal and stem leaves are compound biternate with toothed leaflets.”

**WORD(S) of the MONTH**

The Word of the Month quickly evolved into a series of words when I found the following illustration comparing corymb, cyme and umbel inflorescences. The graphic shows an umbel, but then what are a corymb and a cyme? After searching with BING and checking several websites, I decided to revert to the old-fashioned source for answers. I picked up Shiner and Mahler’s Flora and Fauna, found the Glossary, and typed in the definitions of each word below. (The good news is that this 1626 page tome is now available digitally.)

**Corymb**

Corymb: A more or less flat-topped inflorescence (resulting from lower branches being longer than upper) that is indeterminate (i.e., with the outer flowers opening first); inflorescence superficially similar to an umbel but with the branches arising at different points rather than one.

**Cyme**

Cyme: A broad, flattish or convex, determinate inflorescence with the central flowers maturing first.

**Umbel**

UMBEL: Usually flat-topped or convex inflorescence with flower pedicels all attached at the same point, like the rays of an umbrella; inflorescence type typical of Apiaceae (Umbelliferae).

The previous image and definitions pointing out order of flowering only resulted in more questions for me. What is the order of flowering on a plant with umbel flowers? This illustration was very helpful.
You have probably figured out by now that I am the Queen of Bunny Trails. My curiosity drives me with a seemingly infinite number of questions, often with one answer leading to more questions.

Some references mentioned compound umbels which led to double and triple umbels and talk of flat or round umbels.

Childhood Memories and Speargrass

Randy demonstrated how “Spear Grass” got its name. He shared childhood memories of spear grass battles among the neighborhood children in the alley. He plucked some seed heads from a clump, twisted the ends together, moistened the end and then threw the bundle at Cassie’s back.
A discussion ensued about how the seed drills itself into the ground. Randy pointed out the color change as you move from barb end of the awn to the tip. “The light brown seed has a **single, twisted awn** that is 2 1/2 to 4 inches long with a barb at the base. Hence, it is sometimes called spear grass. In late spring after the seeds have fallen, the white glumes resemble oats. A spikelet at the base of the stem is self-fertilizing. This is the most abundant native, cool-season grass in Texas.”

Ricky Linex, author of *Range Plants of North Central Texas*, and retired NRCS Wildlife Biologist, created a **short time lapse video of this action**. "With dew in the mornings or rain at any time the awn is moistened and begins twisting and as the day heats up the dew dries the awn begins to dry as well coiling in the opposite direction. The seed is attempting to screw itself into the ground for germination."

Everyone agreed that the trip to Randy’s nursery was well worth the drive! We also agreed that we wanted to make a return trip, arriving at ten rather than eleven AM. Even though we were there more than three hours, we would have enjoyed more time to contemplate what plants we wanted to add to our gardens. Unfortunately, we were faced with the reality of Friday afternoon traffic, so we left around 2:30 pm.

**A closing thought from Dr. Robin Walls Kimmerer:**

“What would the world look like if a developer poised to convert a meadow into a shopping mall had to ask the permission first of the Goldenrod and the meadowlarks and had to abide by the answer? It’s all alive, it’s all connected, it’s all intelligent, it’s all relatives.”
Local Plant Walks!

by Valerie Dalton

It has been a busy month! Our May 4th Plant Walk at the Heard was attended by about 25 folks. Rain in the preceding days impacted access to some trails, but thankfully Carol Clark’s prairie walk was able to proceed. It’s always a crowd favorite and this year proved no different. Another popular tour is a visit to the Butterfly House and other areas in the vicinity. Led by Melanie Schuchart and Fran Woodfin, the walk included a successful search for the **Green Dragon**.

Green Dragon, The Heard Natural Science Museum, Photo by Melanie Schuchart, April 28, 2017

There’s a blurb about Melanie’s images on iNat and the value of the database.

Janice James, Lorelei Stierlen and I led a group of two through the main gardens to the SRC building and into the edge of the prairie. In addition to **Penstemon cobea** (Prairie Penstemon), **Baptisia australis** (Blue Wild Indigo) and many others, eight native plants are featured in the photos, at the right, by Janice James.

I am sure those who were able to attend saw several memorable plant species in the diverse community of The Heard Natural Science Museum and Wildlife Sanctuary. It is a local treasure!
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May 8 A Guided Tour of Local Wildflowers
17th Annual Stiff Creek Walk

A group of twenty-four attended this annual event that was somewhat modified to meet COVID precautions. Several groups headed out to Stiff Creek Cemetery and another group started at the Buckner Property.

I was going to use a couple of Jean’s images – maybe more – I’m just plugging them in below
Edited images from Jean Suplick – includes ALL, not necessarily intending to use all -

Stiff Creek Cemetery, awash in blooms of Wooly white

Yucca arkansana Arkansas Yucca
Image by Valerie Dalton

Y. arkansana close up of blooms
Image by Valerie Dalton

Wine Cup
Image by Jean Suplick

Oenothera lindheimeri
Butterfly Gaura
**Hymenopappus scabiosaeus** Old Plainsman

**Echinacea angustifolia** Narrow leaf coneflower

Another view of narrow leaf coneflower
The term “invasive species” brings forth a variety of connotations and disagreement about its meaning. We will utilize Executive Order 1312 establishing the National Invasive Species Council as our source. An invasive species is:

- “Non-native (or alien) to the ecosystem under consideration
- Whose introduction causes or is likely to cause economic or environmental harm or harm to human health.
- Invasive species can be plants, animals, and other organisms (e.g., microbes).
- Human actions are the primary means of invasive species introductions.”

**Traits of Invasive Species**

Whether a plant or animal, these species present the following characteristics:
- Endanger the survival of native plants and animals
- Quickly reproduce, and grow
- Rapidly establish themselves over a large area
- Prosper over many years
  - They are typically able to succeed due to environmental conditions that are similar or more favorable than their native range. In addition, their success is due to the absence of natural predators, competitors, and diseases that would naturally temper their advancement.

**Facts and Figures**

Even though not all non-native species are invasive - all invasives are non-native. Below are some eye-opening facts about the impact of invasives on our environment and economy:

- Almost half of our federally endangered native species are significantly threatened by invasive species.
- The cost of managing and controlling invasive species in the US is nearly $140 billion annually. For plants alone, the cost is estimated at $13 billion per year.
- The Texas Parks and Wildlife Department bans the importing and possession of about 600 species.
- Texas has 37 noxious weeds, or nonindigenous invasive plants, per the Texas Department of Agriculture.

**Damage from Invasive Plants**

Our focus is invasive plants, specifically those that cause the most damage in North Central Texas. All of these plants are unfortunately readily available for purchase locally.

Invasive plants inflict damage on our ecosystem by easily self-propagating outside of their initial location and quickly spreading to decrease the biodiversity of the surrounding area. They threaten the survival of native plants, which are pushed out by their incursion. Native animals that depend on our native plants for nourishment and protection are also severely impacted by the loss of native plants.
The Dirty Dozen Invasive Plants

Below are the invasive plants, the dirty dozen, which can be purchased locally, and cause the most severe issues for our native ecosystems. We have also included alternative plants that are native to North Texas, readily available, provide your landscape with the same or better benefits than the invasive, and without harming our local natural habitats.

<table>
<thead>
<tr>
<th>Invasive Plant</th>
<th>Impact on Environment</th>
<th>Native Alternative</th>
<th>Benefits of Native Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bermudagrass</td>
<td>Extremely difficult to eradicate</td>
<td>Buffalograss (Bouteloua dactyloides)</td>
<td>Durable grass Low water requirements Non-aggressive</td>
</tr>
<tr>
<td>Bradford Pear</td>
<td>Cross-pollinating with similar cultivars has allowed them to spread via seed dispersal</td>
<td>Rusty Blackhaw Viburnum (Viburnum rufidulum)</td>
<td>Tall shrub / small tree produces attractive fall foliage Spring-time flowers Birds attracted to their fruits</td>
</tr>
<tr>
<td>Chinaberry tree</td>
<td>Quickly spreads due to root sprouts and seed dispersal by birds Crowds out native plants that provide more benefits to native insects and animals</td>
<td>Mexican Plum (Prunus Mexicana)</td>
<td>Small tree that attracts pollinator insects Abundant berries provide wildlife with valuable food source Fragrant and showy white blooms</td>
</tr>
<tr>
<td>Chinese, Glossy, and Japanese privet</td>
<td>Troublesome threesome all spread rapidly by their prodigious seed dispersal Dense canopies and evergreen foliage usurp native trees and shrubs</td>
<td>Carolina Cherry Laurel (Prunus caroliniana)</td>
<td>Large shrub or small tree with evergreen foliage Berries provide nourishment for birds Larval host for butterflies and nectar source for a variety of insects</td>
</tr>
</tbody>
</table>

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<td>Chinese tallow tree</td>
<td>Begins seed production early in life and is a prolific producer Will outcompete native trees, and their decomposing leaves create unfavorable conditions for natives</td>
<td>Texas Redbud (Cercis canadensis)</td>
<td>Small tree with beautiful spring flowers Hardy and drought tolerant Sought after nectar source by butterflies, and other insects</td>
</tr>
<tr>
<td>Chinese wisteria</td>
<td>These woody vines strangle native shrubs and trees. Form dense thickets that inhibit native plant’s growth</td>
<td>Coral Honeysuckle (Lonicera sempervirens)</td>
<td>Twining vine with beautiful reddish flowers Flowers attract a wide variety of species Vines offer shelter to birds and insects</td>
</tr>
<tr>
<td>Japanese honeysuckle</td>
<td>An evergreen woody vine Spreads by runners and seed dispersal Girdles and strangles native shrubs and young trees</td>
<td>Virginia Creeper (Parthenocissus quinquefolia)</td>
<td>Hardy vine with beautiful fall color Attractive foliage does not damage buildings like other vines</td>
</tr>
<tr>
<td>Lilac chastetree</td>
<td>Very aggressive small tree or large shrub Readily seeds to surrounding areas</td>
<td>Mexican Buckeye (Ungnadia speciosa)</td>
<td>Tall shrub produces beautiful pink flowers Attracts butterflies as larval host and nectar source</td>
</tr>
<tr>
<td>Nandina</td>
<td>Extremely tenacious, fast-growing, and spreads by seed and root system Outcompetes and eliminates natives due to its adaptability</td>
<td>American Beautyberry (Callicarpa americana)</td>
<td>Stout shrub is best suited for part shade, but tolerates other conditions Produces striking purple fruit uniquely clustered on branches Berries are an important food source for birds</td>
</tr>
</tbody>
</table>
Invasive plants impact all Texans through their degradation of local ecosystems, the escalating cost to manage and control, and harming our enjoyment of the state’s vast natural resources. By choosing native alternatives to these “dirty dozen” invasive plants, you can play a big part in stopping the spread of invasive plants here in North Texas.

### Top 10 Benefits of Using North Texas’ Native Plants

**Invasive Plant** | **Impact on Environment** | **Native Alternative** | **Benefits of Native Plant** |
---|---|---|---|
Periwinkle | Creates a thick layer of growth that smothers native groundcovers and small plants Extremely aggressive and tolerant of a variety of conditions | Coralberry (*Symphoricarpus orbiculatus*) | Woody shrub with long lasting berries Hardy and spreads easily in shade or part shade Beneficial to wildlife for food, cover, and nesting |
Pincushions | Fast growing perennial that will overwhelm native prairie plants Difficult to control once it becomes established in an area | Prairie Verbena (*Glandularia bipinnatifida*) | Short perennial with attractive purple flowers often lasting March – October Hardy and able to tolerate variety of conditions |
Redtip photinia | Unyielding spreading overwhels native shade plants | Aromatic Sumac (*Rhus aromatica*) | Pruned as tree or shrub, creates an effective screen Nearly evergreen leaves Female plants produce red flowers and berries |

In 2021, Collin County NPSOT Newsletter, Collin County Chapter – Native Plant Society of Texas, Texas, USA, page 16.

**Top 10 Benefits of Using North Texas’ Native Plants**

“Native plants give us a sense of where we are in this great land of ours. I want Texas to look like Texas and Vermont to look like Vermont.”

“Lady Bird” Johnson

Many people when hearing about native plants, wonder what it means and why it is important. It is a great question, one that involves many facets.

Native plants in North America are plants that were in a geographic area prior to European settlement. These plants have survived for thousands of years, and have evolved and adapted to our weather, soil types, topography, and many other variables. As part of their adaption, they have coexisted with other flora and fauna in our intricate and highly interconnected ecosystems.

Surviving in the unique conditions of an area makes native plants more resilient than non-native species. Below are the top ten benefits of using plants native to North Texas:

1. **Increases scenic and property value.** Native plant’s beauty increases scenic values, and when done effectively, also enhances property values. As awareness of the environment increases, so does the public’s desire to do their part. A National Association of Realtors survey found that nearly 90% of home buyers considered environmentally friendly features important in their buying decision.

2. **Less overall maintenance.** Once established, native plants require less cost and effort to maintain. They were here long before us, so they do not require as much coddling as...
introduced species. A study found that a native landscape over the long-term costs half as much as a traditional manicured lawn with non-native plants.

3. **Provides habitat and food for wildlife.** Whether you are looking to entice birds to your backyard or create a thriving sanctuary on your ranch, native plants provide a biologically rich and diverse assortment of **resources for wildlife.** Birds, insects, and other wildlife benefit from them as a food source, shelter, and nesting material. By using plants of varied sizes and heights in your landscape, you can create the range of options necessary for wildlife to flourish.

4. **Lowers water requirements.** Native plants typically need less water to survive and prosper than non-native plants. This is primarily due to robust root systems that better utilize the moisture available in the soil. Our environment benefits from the reduced stress on our water supply and as homeowners, we benefit from the lower water bills. According to an EPA study, by converting even parts of your yard to native plants, you can reduce your outdoor water usage by 20 - 50%.

5. **Prevents erosion.** When we get too much rain, native plants help to absorb the excess water with their deeper root systems and also hold the soil in place. Their deeper roots reduce water runoff and erosion. Some native plant root systems are up to 15 feet deep.

6. **Fertilizers are not required.** Native plants have thrived for eons without the help of humans, adapting to the area’s soil composition for their needs. By utilizing native plants, you do not need to use fertilizers. Thus, helping both the environment and your bank account.

7. **Fewer diseases.** Their time evolving to an area makes native plants much more resilient to diseases than exotic plants. It results in less time and money for you in treating diseases. Non-natives are often more vulnerable to diseases, such as Crepe Myrtle bark scale or Rose Rosette disease.

8. **No pest control necessary.** As part of an intricate balanced local ecosystem, native plants have adapted to provide for insects, such as butterflies, but also defend their survival against other insects. Non-natives provide neither the benefits nor have the defenses to protect themselves against aggressive infestations. This results in the need to provide
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costly pest control measures to save these plants. Natives are more resilient, requiring no pesticides for their survival.

9. **Plant diversity.**
Paraphrasing Lady Bird Johnson, using native plants in your landscape helps make Texas look like Texas, not like California or New York. Big box stores have made certain introduced plants ubiquitous across the United States. By using plants native to our area, you help increase biodiversity that avoids the monoculture environment that enables disease, infestation, and invasive behaviors.

10. **Native North Texas plants are more beautiful.** Admittedly not a very objective measure, but who can argue with the beauty of our native North Texas plants. Whether it is an **Indian Blanket** (*Gaillardia pulchella*) or **Englemann Daisy** (*Engelmannia peristenia*) in the spring, **American Beautyberry** (*Callicarpa americana*) in the summer, or **Possumhaw Holly** (*Ilex decidua*) in the fall and winter, we have an abundance of native beauties. Our native plants are available in a plethora of colors, textures, heights, and blooming seasons, providing gorgeous displays throughout the year.

With over 2,000 plants native to North Texas, there are many native plants to choose from for your landscape. With a bit of effort, choosing native plants offers great benefits to you and our environment.

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**NATIVE LANDSCAPE CERTIFICATION PROGRAM**

**Level 1**

Introduction to Native Landscapes

hosted by the

Native Plant Society of Texas, North Central Chapter

The day-long class includes online presentations and an online plant identification walk.

- Learn the value of including and preserving natives in landscapes.
- Discover the differences between conventional and sustainable landscaping.
- Understand your Texas vegetation region and soils.
- Learn 45 native Texas plants for your landscape and 5 plants to avoid.
- Receive Native Plant Society of Texas **competency** certificate after taking the class and passing the test, although no test is required to progress to other levels.
- **TX Nursery and Landscape Association (TNLA):** 6 CEUs
- **TX Master Naturalists or Master Gardeners:** 7 hrs advanced training

**Level 1 is a prerequisite for Levels 2 and 3. Levels 2 and 3 may be taken in any order.**

**When:** Saturday, July 17, 2021 – 9:00 am to 3:30 pm

**Where:** On-line on Zoom

Covers plants from the Dallas/Fort Worth/Denton area

**Cost:** $45 all participants

Class description and registration.

More information: Meg Inglis at nkcp@npsot.org or 512.589.1316

Collin County Chapter – Native Plant Society of Texas
Oh, No! Not Another Invasion

by John Worley

You may recall about this time last year, I wrote about my Pandemic of Frogs. (The continuous rains filled low spots in my yard. Frogs moved in. Their sounds were deafening.) Well, they’re back during this current monsoon season.

While walking Boomer, our 9-month old German Shepherd, last weekend, it occurred to be that Milkweed just might also be mounting an invasion this year.

Of course, Milkweed normally grows in the fields.

Lately, the Milkweed has crept out of the fields and into the roadside strips.

I know that this shouldn’t have surprised me. For years, Milkweed showed up in my garden beds. I’d pull them up (with little long term success). That sounds harsh to me now, but that’s what the conventional gardening “experts” taught me to do with “weeds”, like Milkweed. (I didn’t know any better.)

Since joining NPSOT, when Milkweed sprouts in a flower garden, shrub bed, or my blackberry bed, I’ve left them alone. (I do that for the Monarchs. It’s not that I’m just lazy.)
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Now, they have begun to invade the roadways themselves!

With Milkweed appearing to be mounting an invasion in my area, do you think that I need a plan to protect myself?

Collin County NPSOT General information

The Collin County chapter of the Native Plant Society of Texas meets the first Tuesday of January through October, in Laughlin Hall at the Heard Museum. Unless otherwise noted, doors open before 7:00pm and the program starts at 7:15pm.

The Native Plant Society of Texas is a non-profit organization with the goal to promote the conservation, research, and utilization of the native plants and plant habitats of Texas, through education, research, and example.

Thanks for your support.

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website: http://www.npsot.org/CollinCounty/

John Worley