April 6 – Zoom Meeting

Our Local Native Plant Nurseries

Please join us virtually on April 6, starting at 6:30 pm for social time and a 7:00 presentation by various members on our local nurseries and their native plant selections.

Register in advance for this meeting: https://us02web.zoom.us/meeting/register/tZApcO2spjkpHTREQWQgHvzhIo3lX5yE9gsq

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

Heard Plant Sale April 23-25

The Heard Museum of Natural Science and Wildlife Sanctuary is having their Annual Plant Sale April 23 – 25. Volunteers are needed to help unload plant deliveries and set up in the days preceding the sale. Please visit the website for details. In addition, volunteers will be needed during the sale for various tasks. Please check with volunteer coordinator Laura Regan, email volunteers@heardmuseum.org. Background check is required as well as short training class. Collin County NPSOT Chapter will have an information table at the sale and will need volunteers as well. Please email Valerie.

Flower Selection for Membership Pins

If you have not voted for Flowers for Membership Pins, please send your number selections for 5 plants by April 7. You should have received a list of 28 flowers on March 19 with subject: “Vote for Five Flowers for Membership Pins - please vote by March 31”. Currently votes from 8 members have been received. The deadline for voting has been extended until April 7. Please send your votes to Valerie.

2021 Proposed Budget:

A vote by active members on the Proposed 2021 Budget will take place sometime next week. You will receive an email in advance with the Proposed Budget attached, requesting your vote.

2021 Amendment to Bylaws

A vote by active members on amended Chapter Bylaws will be requested via email soon. A draft of this document is underway. If you would like to volunteer to assist in this update, please contact Valerie.

Editor’s Note: The photo above was taken for me on the 2013 International Master Gardeners Association Cruise to Alaska.
Action vs Inaction
Evangelizing vs Proselytizing

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.”

This month has been trying, filled with meetings and computer activity while I watch birds come and go from the Traveller’s redbud outside my office window. You could say the indoor tasks have prevented me from engaging in the many outdoor habits that I need to avoid. This would be positive Inaction. Grooming patience in gardening is a challenge. It would be easy to head outside and start raking, trimming, and cleaning, engaging what is often negative Action. I am trying to resist the urge to trim and clean to suit society’s desires, instead I am attempting to observe nature and meet the needs of various species.

At least while inside, I had the opportunity to enjoy the view from the other side of the window in this image.

As the February storm approached, I purchased suet thinking I had a holder around somewhere. When I could not find it, my husband created a substitute from hardware cloth which I placed between my office window and the Traveller’s redbud. Feeding the birds was great entertainment for our cat Abel and me. He could sit on the edge of my desk, just a few feet from the hungry birds and remain unseen due to the window screen.

March 19, 2021

The redbud was my first addition to our landscaping, purchased on a cold day in 2014 shortly after we moved in. It was a spur of the moment, spontaneous purchase. As I recall, the tree was on sale and the list price was $59.99. The night of April 2, 2014, with a storm on the way, I decided I needed to get the tree in the ground, literally using a flashlight as I worked. (Action – positive in my mind; negative in my husband’s mind) I was under the impression that my purchase, Cercis canadensis var. texensis ‘Traveller’ was a native tree, although not native to Collin County. I later learned that the cultivar Traveller was hybridized by Hosage although the patent has expired.
At the moment I purchased the tree, I was missing the view from my office window at our home in Missouri and I was desperate to view something living rather than a poorly stained fence just ten feet away. The contrast between the view from my Missouri office window versus my Texas office window was dramatic.

When my husband returned from a business trip a few days after my redbud planting experience, his first comment was “Why did you put it there? It’s too close to the fence”. My response was “I don’t care! I have to have something alive outside my window or I’m going to die!” Perhaps a bit melodramatic, but as stressful as moving is, for me, the experience of moving to a suburban lot where the yard was 90% turf, surrounded by an ugly fence left me feeling suffocated. To be fair, I don’t regret our move, returning to Texas to be near my mother. Nor do I miss the invasive bush honeysuckle that could easily cover four acres without relentless intervention of chopping, burning, and chipping piles of limbs. Bush honeysuckle dominates the landscape of Missouri and was my initiation by fire into the world of invasive plants. Neither do I miss the stress the large deer population placed on our property, the countless plants they destroyed or the ticks that I battled because of the deer’s presence. There were magical moments—the maple turning in the fall, dinner on the deck overlooking the forest, the discovery of spring ephemerals - Mayapples and Jack in the Pulpit. Discovering a fawn nearby as you work to clear honeysuckle or seeing a flock of wild turkeys from your front window often made up for the pain and aggravation. There was life, although increasingly altered by the decreased diversity due to the combined effects of the deer population and the invasive bush honeysuckle which was headed towards monoculture.

Since planting that redbud tree in 2014, I have worked to transform our yard into a haven for wildlife. My efforts began with no more intent than to add irises, herbs and some well-known natives while removing some of the dreaded Bermuda grass. Since Master Naturalist training just 3 years ago, my awareness of the need for change in our relationships with nature has intensified dramatically. During the seven years since we moved back to Texas, I have learned so much from Master Naturalist training in 2018, being mentored by people like Carol Clark, Lorelei Stierlen, Fran Woodfin, Sally Evans, Laurie Sheppard and others. Several are not only Master Naturalists,
but also Native Plant Society of Texas members. Through presentations by conservationists and scientists like Dr. Doug Tallamy, Dr. Dwayne Estes, Jaime Gonzalez, Ricky Linex, Sam Kieschnick, Merlin Tuttle, Dr. George Diggs, Dr. Barney Lipscomb, Dr. Mike Warriner and numerous others, too many to name, I became aware of the many interactions between species. Each presentation added threads of connection between plants, soil, water, mammals, insects, and birds. I benefited from the instruction of Carol Feldman and others in NLCP landscape classes. I have seen inspirational presentations by people like Karen Albracht, Tenison Park Pollinator Gardens and Lauren Simpson, St. Julian’s Crossing, in Houston who have successfully built pollinator gardens, educating others in their communities and affecting change. My conundrum is that I feel sad when I encounter others that do not have a sense of urgency or feel that the earth is in eminent danger. How to turn this knowledge into positive Action? On the one hand, I feel the need to avoid certain Actions while at the same time I feel the need to end other Inactions. This brings to mind Aldo Leopold’s statement in A Sand County Almanac, CR 1949. “One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen. An ecologist must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise.” I want to believe that in the seventy years since Leopold wrote his essays, we have had ample time to understand our world. Yet how long did it take me to reach a point where I embraced the need for diversity and recognized that I needed to change my gardening practices even further? I am struggling to follow Laura Simpson’s advice, “Evangelize, not Proselytize”. Present the positive.

For most of us, it is a challenge to resist applying the same approaches to gardening and living that we have followed for most of my lifetime. These negative Actions focus on our inherent need to control our environment, rather than as Lauren said: “Embrace imperfection”. However, what we see as imperfection is usually nature in Action. We apply mechanical standards and housekeeping strategies to our outdoors rather than learning the intricacies and interplay between insects, plants, and other forms of life. As a result, many Actions we initiate are negative when they should have been a positive Inaction.

“Embrace Imperfection: This is probably the most difficult plan of positive Inaction for most gardeners to accept – leave spent pithy stems and seed heads, use fallen leaves as mulch, let early spring wildflowers go”. The idea that dead stalks serve a purpose in nature is foreign to many. Leaves are to be banished as quickly as they fall. My task is to learn how to involve others using lessons learned from Lauren Simpson and Karen Albracht and the many from NPSOT and Master Naturalists who have influenced me.

WORD OF THE MONTH: cleistogamy [klīˈstāɡəmē] NOUN self-fertilization that occurs within a permanently closed flower.

I first heard the term cleistogamous to describe Lithospermum incisum Lehm, Fringed Puccoon, “The plant is normally easily recognized by the very long corolla tubes and ruffled lobes. However, there is also a later cleistogamous flowering phase (flowers which are self-pollinated and do not open normally) which is considerably different in appearance.” (Ref. Missouri Plants)

Fringed Puccoon was one of those first prairie plants I met on a Stiff Creek Walk in 2018.
I’ve since introduced Fringed Puccoon to our front beds and was excited this last week to find it blooming. So far, there is only one plant.

BRIT is a fabulous botanical resource, and TORCH, The Texas Oklahoma Region Consortium of Herbaria is a treasure trove of images and information.

Cleistogamy is a type of automatic self-pollination of certain plants that can propagate by using non-opening, self-pollinating flowers. Especially well known in peanuts, peas, and pansy this behavior is most widespread in the grass family. However, the largest genus of cleistogamous plants is Viola.
These private individuals have evolved a unique method of self-pollination and self-fertilization called cleistogamy [kliˈstæɡəmē]. Cleistogamy is a “closed marriage” type of pollination that occurs inside a flower. These flowers only open after pollination and fertilization have occurred, if at all. Cleistogamy is believed to have evolved in regions with harsh conditions and fewer resources. Producing petals, fragrances, and nectar is hard work for a plant. Rather than going to all the trouble to create these attractants, cleistogamous plants pollinate themselves in a highly protected process. (Reference: The Daily Garden)

Several of the cleistogamous plants I discovered in the database of Lady Bird Johnson Wildflower Center were described as growing in harsh conditions such as dry, rocky, limestone or rocky, gravelly soils in arid habitats. Nature’s adaptations to specific needs continue to astonish me!

**Update on New Growth from February**

Last month I shared images of the *Astragalus crassicarpus* (Ground Plum) that I had purchased in July 2020 from Randy Johnson. Despite my delinquency in getting the plant in the ground last year, I am happy to report that not only did it survive the deep freeze of February, but it is also blooming! These images were taken March 29, 2021.

You may wonder about the table knife in the ground near the plant in the first image. A couple of years ago, I gave up on the various commercial plant markers and decided to use inexpensive table knives from thrift stores. Seems most stores always have a surplus of table knives and they are usually priced under a quarter. At one-point last year, with the many rescued plants I added to our front beds, my husband asked me if we were “raising knives”. Now to find a permanent marker that is actually permanent.

**Videos and New Book Releases**

Recently we watched the documentary, [Kiss the Ground](#) and found it hopeful and informative. It is available on Netflix at no charge or at [www.kisstheground.com](http://www.kisstheground.com) for $1 rental and is about 1 hour, 30 minutes. It features Ray Archuleta, a dedicated NRCS agent who travels near and far to educate farmers, Kristen Olsen, author of The Soil Will Save Us, Gabe Brown, a North Dakota farmer, various scientists, and a researcher from Rodale Institute. There is also an educational 45-minute version.

[Deep Roots](#) is a website that looks promising with webinars on various native plant topics from Anita B Gorman Conservation Discovery Center, Kansas City, Missouri. Many of the plants native to Missouri are also found in Texas. Topics covered range from replacing your lawn with sedges to natives for sun, shade or wet locations.

Dr. Doug Tallamy just released his latest book and is featured in an interview in [a Nature Guys podcast](#). Tallamy’s newest book, released March 30 is [The Nature of Oaks](#).
During the interview, Bob mentioned that he and his wife have added a Seed Library to their home. That seemed like a great idea. Now to find a suitable site for one.

For those who follow Tallamy, you might be surprised to hear him say that he now has too many trees on his 10-acre property, even though he is heating all winter with wood. Oak trees support 900 caterpillars and are the most important tree in 84% of counties in North America. While oaks are a keystone species, he plans to remove some trees to regain the sunlight needed for more diversity. It was surprising to hear Tallamy say that ten thousand years ago during the Pleistocene era, North America was a more diverse savannah landscape with prairie plants all the way to the Atlantic Coast. The closed canopy forest that we know today formed as large mammals such as giant sloths and mammoths were eliminated allowing forests to close in which reduced diversity.

Listing of Upcoming Native Plant Sales

Spring means Native Plant Sales, and this spring, we are grateful to see a return of more events. Our chapter has had a long and close relationship with the Heard Museum and their wonderful native plant sale. We are fortunate to also have a number of other native plant sales available in the DFW area. As native plant gardeners, these sales are an indispensable source for native North Texas plants.

Please remember that COVID precautions may be in place for the sales. Below is the listing of native plant sales in the Metroplex in April and May:

- **April 10-11, Dallas** – Texas Discovery Gardens annual sale is held at Fair Park with a wide variety of plants for sale. Time slot registration is required.
- **April 23-25, McKinney** – The Heard Museum & Wildlife Sanctuary’s annual Spring Native Plant Sale is one of the longest-running, largest, and best native plant sales in the state. The 23rd is for members only and the sale is open to the public on the 24-25th.
- **April 24, Dallas** – Leadership Arts Dallas has a fundraiser to support the Texas Discovery Garden’s greenhouses including an art exhibition, auction, and plant sale. More information available soon.
- **April 24, Cedar Hill** – The Dogwood Canyon Audubon Center, a beautiful setting for a plant sale or a nature walk, will be holding their plant sale both in-person and online.
- **May 8, Arlington** - North Central Chapter of the NPSOT spring native plant sale is held at River Legacy Park in Arlington. The sale always has an interesting selection of native Texas plants. More information available soon.
- **May 8, Glen Rose** – Prairie Rose Chapter of the NPSOT plant sale will be held in the back garden of their demonstration garden on the historic Glen Rose Courthouse Square. At a state level, if you are in the Austin area in April or May, the Lady Bird Johnson Wildflower Center is holding their Spring Native Plant Sale from April 2 – May 30. The plant sale is held every week on Friday - Sunday, and reservations are required. Admission to the Wildflower Center is required to attend the sale (free for members).

Get your plant list ready, and Happy Shopping!
Native Plants are Essential to the Health of Texas’ Butterflies

by Tim Castelli

Even though National Learn About Butterflies Day was March 14, it is never too late to learn more about these fascinating and beautiful creatures.

The Native Plant Society of Texas places a well-deserved emphasis on helping our state insect, the Monarch butterfly. But there are several hundred other butterflies in Texas that depend on our native plants. In Texas, we have over 400 species of butterflies, the most of any state, and making up over half of the species in the United States.

**Butterflies are Critically Important to our Ecosystem**

Whether due to their limited range, small stature, or unassuming looks, many of us are not aware of the enormous diversity of our butterfly neighbors. They play a vital role in our ecosystem pollinating native plants and feeding other species.

As pollinators, they are important to a wide variety of plants. Dwindling native habitats reduce our pollinators, and 90% of plants need pollinators for reproduction.

They are a preferred food choice of birds, bats, and other insectivores. Some bird’s breeding cycles revolve around the timing of caterpillar availability. Reductions in the number of butterflies would have a direct negative impact on birds and their other predators.

By helping sustain a healthy butterfly population, the benefits cascade to other species in the ecosystem.

**Butterflies are Needy**

Let’s start by learning about the butterflies’ needs. Since they go through four distinct stages in their short lifetimes - egg, caterpillar, chrysalis, and butterfly - the metamorphoses create varied needs.

Just like birds, a butterfly’s range can vary widely. There are three broad categories of travel by butterflies.

1. The rarest form is the “migrant”. They travel back and forth between breeding and overwintering areas. Monarchs fall into this category.
2. There are also “immigrant” butterflies that, as adults, can journey great distances with no set route, such as the Painted Lady.
3. The most prevalent form is the “resident” butterfly that stays in one generalized location their whole life. These butterflies often are at the most risk since their habitat requirements are narrower and with limited ability to settle in new areas.

**Factors to Consider in Planning your Landscape**

We will focus on resident butterflies in our planning. When developing your native landscape to attract a variety of butterflies, you should consider the following variables:

- **Host Plants** – These plants function as food for the caterpillars. The female lays her eggs on these plants, and the caterpillar eats the plant until it forms a chrysalis. Caterpillars are typically fussier than butterflies about their food source.

- **Nectar Plants** – Plants that provide the primary food source for many species of adult butterflies to meet their high-energy demands.
Location – Sunny spots are preferable as butterflies tend to feed on the nectar of plants that require full sun. Plus, butterflies are cold-blooded, and on chilly mornings, are attracted to the heat from the morning sun.

Diversity – Having a wide variety of plants, including vines, flowers, trees, and shrubs, provide the best opportunity to attract a wide variety of resident butterflies. This variety also gives them protection from predators, resting locations, and a stage to show off their territorial displays.

Native Plant Hosts with the Most
Some caterpillars are “specialists”, only eating one plant species. While the “generalists” will feed on multiple plant species, but often on plants belonging to one or a few families. Here in North Texas, some reliable host plants, and the resident butterflies they support include:

- **False Indigo** (*Amorpha fruticosa*) - Gray Hairstreak, Silver-spotted Skipper, Southern Dogface
- **Purple Passion Vine** (*Passiflora incarnata*) - Gulf Fritillary, Banded Hairstreak, Variegated Fritillary
- **Texas Hackberry** (*Celtis laevigata*) - American Snout, Hackberry Emperor, Tawny Emperor
- **Wax Myrtle** (*Morella cerifera*) - Banded Hairstreak, Red-banded Hairstreak

Native Nectar Plants
Butterflies are often drawn by flower’s colors, patterns, and fragrance. Choose a variety of colors, but remember not all brightly colored flowers have nectar. Some native nectar plants to entice resident butterflies include:

- **Blue mistflower** (*Conoclinium coelestinum*) - Little Yellow, Pearl Crescents, Queen, Swallowtails
- **Buttonbush** (*Cephalanthus occidentalis*) - Hoary Edge, Horace’s Duskywing, Silver-Spotted Skipper
- **Coral Honeysuckle** (*Lonicera sempervirens*) - Pipevine Swallowtail, Spring Azure
- **Frostweed** (*Verbesina virginica*) - Great Purple Hairstreaks, Pipevine Swallowtail

The Best of Both Worlds
Below are some hearty “double duty” native plants of North Texas, serving as both a host to some butterflies and nectar source to others:

- **Prairie Petunia** (*Ruellia humilis*) – Buckeye
- **Texas Frogfruit** (*Phyla nodiflora*) – Gray Hairstreak, Phaon Crescent, Silvery Checkerspot
- **Texas Paintbrush** (*Castilleja indivisa*) – Buckeye, Silvery Checkerspot
- **Texas Thistle** (*Cirsium texanum*) - American Lady, Black Swallowtail

Native Plants are Essential to the Health of Texas’ Butterflies Here in North Central Texas, there are an array of native plants to choose from to help boost our local butterfly population. By attracting butterflies, you gain the enjoyment of seeing their beauty, but more importantly, helping them create new generations of butterflies.
Butterflies Behaving Badly: What They Don’t Want You to Know

From National Geographic, March 2016

Butterflies have had us fooled for centuries. They bobble around our gardens, all flappy and floppy, looking so pretty with their shimmering colors. We even write odes to them:

Thou spark of life that wavest wings of gold,
Thou songless wanderer mid the songful birds,
With Nature’s secrets in thy tints unrolled
Through gorgeous cipher, past the reach of words,
Yet dear to every child
In glad pursuit beguiled
Living his unspoiled days mid flowers and flocks and herds!

—Ode To A Butterfly, by Thomas Wentworth Higginson

But butterflies have a dark side. For one thing, those gorgeous colors: They’re often a warning. And that’s just the beginning. All this time, butterflies been living secret lives that most of us never notice.

BYERIKA ENGELHAUPT

The zebra longwing butterfly was made Florida’s state butterfly in 1996. Pixabay, CC0

But it’s also famously poisonous, and its caterpillars are cannibals that eat their siblings. And that’s hardly shocking compared with its propensity for something called pupal rape. As a female gets ready to emerge from her chrysalis, a gang of males swarms around her, jostling and flapping wings to push each other aside. The winner of this tussle mates with the female, but he’s often so eager to do so that he rips into the chrysalis and mate with her before she even emerges. Since the female is trapped in the chrysalis and has no choice in the matter, the term pupal rape came about, though some biologists refer to it more charitably as “forced copulation”. Whatever you call it, it’s hardly the stuff of children’s books.

The zebra longwing is certainly pretty, though. Maybe that’s how it got to be Florida’s state butterfly.

And don’t think for a minute that zebra longwings are an anomaly—plenty of their kin are bad boys, too.

One day in Kenya’s North Nandi forest, Dino Martins, an entomologist, watched a spectacular battle between two white-
barred Charaxes. A fallen log was oozing fermenting sap, and while a fluffy pile of butterflies was sipping and slowly getting drunk, the two white-barred butterflies showed up and started a bar fight. Spiraling and slicing at one another with serrated wings, the fight ended with the loser’s shredded wings fluttering gently to the forest floor.

A green-veined Charaxes dines on animal poop. Photograph by Dino Martins

Martins, a former National Geographic Emerging Explorer, wrote about Charaxes, or emperor butterflies, in Swara magazine, published in East Africa where he is now Director of Kenya’s Mpala Research Centre.

“They are fast and powerful,” he writes. “And their tastes run to stronger stuff than nectar: fermenting sap, fresh dung and rotting carrion are all particular favourites.”

That’s right; don’t get between a butterfly and a freshly dropped pile of dung. It drives them wild. They uncoil their proboscises and slurp away, lapping up the salts and amino acids they can’t get from plants.

It’s called mud-puddling, and it’s very common butterfly behavior. It doesn’t have to be dung, although that’s always nice; you may see flocks of butterflies having a nip of a dead animal, drinking sweat or tears, or just enjoying a plain old mud puddle.

But still, butterflies are harmless, right? Sorry, kids—not always. Butterflies start life as caterpillars, which are far from harmless if you’re a tasty plant, and can be carnivorous. Some are even parasites: Maculinea rebeli butterflies trick ants into raising their young. The caterpillars make sounds that mimic queen ants, which pick them up and carry them into their colonies like the well-to-do being tooted in sedan chairs. Inside, they are literally treated as royalty, with worker ants regurgitating meals to them and nurse ants occasionally sacrificing ant babies to feed them when food is scarce. Butterflies invented the ultimate babysitting con.

So, let’s review. Here are seven not-so-nice things butterflies are into:

- Getting drunk
- Fighting
- Eating meat
- Eating poop
- Drinking tears
- Tricking ants
- Raping pupae

Don’t get me wrong—I like butterflies. In fact, I like them more knowing that they have a dark side. They’re far more interesting, more weird, than any ode to pretty colors could convey.
The virtual Symposium was packed with information and followed an ambitious agenda. The morning featured 3 speakers allotted 30 minutes each, followed by a 30-minute Panel Question and Answer session. Following a 20-minute break, the meeting began again with a 40-minute lunch program. The afternoon session began promptly at 1 pm and again featured 3 speakers, each allotted 30 minutes. The afternoon session ended with a Panel Question and Answer discussion period. I monitored number of participants and saw an unofficial maximum of 185 at one point.

The following are a few highlights from each session. Most of the slides shown were captured with my cell phone camera so the quality is degraded. The symposium content was excellent and definitely worth the meager $20 registration fee. If you registered and missed sessions, it is worth watching the videos.

**Speaker 1: Craig Hensley, Texas Parks and Wildlife Department (TPWD) – Native Plants in Riparian Areas**

Craig Hensley presented slides of native plants that grow in riparian areas ranging from *Populous deltoides* (Cottonwood) along stream edges to the *Ludwigia octovalvis* (Tall Water Primrose) that grows in stream beds.

He defined the riparian area as the interface between the aquatic and terrestrial habitats. These riparian areas function as filters of sediment from surrounding floodplain and /or wetlands, offer stream bank erosion protection, provide adjacent floodwater storage and habitat for a diverse assemblage of wildlife. It is important that the plants offer layers from tree canopy to the ground. This requires a plethora of plants ranging from trees, shrubs to grasses, forbs, ferns, and vines. His presentation set the stage for what would be considered an ideal riparian area offering an excellent segue to the next presentation by Dr. Fouad Jaber.

**Speaker 2: Fouad Jaber, Ph.D., P.E. – Geomorphological Forces Shaping Riparian Habitats**

Dr. Jaber’s presentation covered the technical aspects of channel stability and river functions such as stream sinuosity, meandering pattern, and meander geometry. He discussed channel construction factors and the characteristic of a stable river.

The negative impacts of development that have accelerated erosion in riparian areas were shown. He stated that the common practice of planting turf around water’s edges followed by mowing stream banks increased the breeding capacity of mosquitoes, contrary to the belief held by many. In addition, he...
Collin County NPSOT Newsletter

stated that providing a native plant community in riparian areas promotes bank stability, reduces flood flow, improves water quality, and reduces mosquito habitat while enhancing wildlife habitat.

Speaker 3: Michael Eason – History and Botanical Tour of the Rio Grande

Michael Eason is the head of the San Antonio Botanical Garden rare plant conservation department. He is also a conservation botanist for Texas Flora, a botanical consulting company. Eason has previously worked with the Lady Bird Johnson Wildflower Center and the Millennium Seed Bank Project. He is the author of *Wildflowers of Texas*. He volunteers his time for organizations like the Wildflower Center, the Native Plant Society of Texas, and the Nature Conservancy.

Eason presented the final morning session on the Rio Grande, a relatively young river system, dated 800k YA. Agricultural use dates to 13,000+ years. The mouth of the Rio Grande was charted by a Spanish expedition in 1519. The first Spanish pueblo Ysleta was established in what is now El Paso in 1680. Dams along the river continue to impact botanical aspects of the area. There are 4 ecoregions along the Rio Grande within Texas, ranging from sandy soils/dunes to steep and narrow canyons and areas that are primarily limestone. Invasive plant species are an ongoing issue, with *Arundo donax* (Giant Reed) being a huge problem. Michael commented that the number of invasives far outnumber the number of natives.

One of the several native plant species featured by Eason:

*Morning Q&A:*

Dr. Jaber noted that the traditional detention pond was not recommended. He described a preferred design with permeable pavement, rainwater harvesting, and depressed medians in parking lots filled with plants that can survive 48-96 hours underwater. One developer hired Dr. Jaber to work with the City of Dallas after attempts to gain approval for a green building site plan met with stiff opposition. The project was finally approved after a year of discussion between Dr. Jaber, the city and the developer. Michael Eason commented that there were 50 plants on the rainwater garden list but only 8 were commercially available.

Speaker 4, Lunch Session: Leslie Bush, Native Edibles and How to Cook Them

Dr. Leslie Bush has been a practicing paleo-ethnobotanist since 1993 and a Registered Professional Archaeologist since 1997. She has worked with plant remains from archaeological sites from the mountains of West Virginia to the edge of the Chihuahuan desert in west Texas. She spoke between sessions on native edibles.
One of her favorites was tea from dwarf Yaupon Holly plants.

**Yaupon Tea**
- Toast leaves in oven at 350° F for 30 mins for a nice green tea, shorter and lower for more mellow/less caffeine, hotter and longer for more.
- Leaves can still be on branches. They’ll drop off during toasting. Crush the leaves for faster infusion or leave whole for longer shelf life.
- Cultivated dwarf yaupon works fine, and the leaves are a nicer size for infusers.
- 1 T per cup, infused or simmered to taste

---

**Speaker 5: Carol Leonardi Clark – Monarch Waystations and Bring Back the Monarch (BBMT) Garden Grants**

Carol Clark opened the afternoon session with a report on Monarch Waystations. Carol is a Texas Master Naturalist, longtime member of the Native Plant Society of Texas, Chair of the Bring Back the Monarchs to Texas (BBMT) committee of NPSOT, and a Monarch Watch Conservation Specialist. She is also a co-administrator of the Texas Native Bee Co-op Facebook page. The BBMT committee recently awarded 42 grants for Monarch Demonstration gardens/Waystations. “The Native Plant Society of Texas awards small grants to nature centers, schools, educational groups and others to help fund development of Monarch Demonstration Gardens or Monarch Waystations. “The Native Plant Society of Texas awards small grants to nature centers, schools, educational groups and others to help fund development of Monarch Demonstration Gardens or Monarch Waystations using native plants on public sites in Texas. The purpose of this program is to educate members, applicants, and the public about Monarch conservation and native plants, and to encourage restoration of Monarch habitats throughout the Texas migration flyway.” (Ref. [https://npsot.org/wp/monarchs/](https://npsot.org/wp/monarchs/))

---

Monarch Waystation garden designs need to showcase natives in a positive way. Tenison Park Pollinator Garden in Dallas, shown in the above photo, is a great example. This image was made just six months after the garden bed was begun. This garden not only benefited from a professional design, but it also has the necessary maintenance plan. In addition, it is served by the outstanding leadership of its founder and leader, Karen Albracht. She has successfully involved a diverse group of volunteers from the community which provide continued efforts to nurture and grow the garden.

Monarch Waystations provide nectar plants for adults, milkweeds for caterpillars to eat and shelter for adults so the Monarch butterflies can complete their lifecycles. There are over 28,000 registered Monarch Waystations with Texas leading the way. This year, the returning Monarchs face serious challenges, compounded by our extreme weather during February. The availability of **native** milkweeds for larval food is a big concern as well as the lack of nectar plants to feed the hungry adult butterflies after a long flight from Mexico. Gardeners need to ask their nurseries for native milkweed and...
nectar plants, especially less common natives such as *Eryngium yuccifolium* (Rattlesnake Master) and *Helianthus mollis* (Ashy Sunflower). Texas native milkweeds play a crucial role in the survival of the Monarch population east of the Rockies as they migrate north through Texas each spring. The good news is that actions taken to help Monarchs also benefit hundreds, if not thousands, of other species.

**Future goals of BBMT:**
- Full day pollinator garden workshops
- Online educational tools for garden design process
- Online plant lists by region
- Online sample garden plants by region
- Committee/grantee mentor relationships

**You can help Monarch Watch and BBMT:**
- Become a NPSOT chapter liaison to the BBMT.
- Volunteer to visit completed gardens.
- Generate lists of verified nectar plants for your immediate area.
- Create a sample garden plan or two.
- Volunteer to mentor a local applicant.
- Talk to your chapter about donating to BBMT.

**Speaker 6: Lauren Jansen Simpson – Pollinators in an Urban Home Habitat**

Lauren Simpson is a spring 2016 recipient of University of Houston Teaching Excellence Award; one of three 2018 AALS teachers of the Year selected by the Law Center, and the 2017, 2018, and 2019 Student Bar Association professor of the Year for Law Center faculty teaching in the part-time program. She is also a member of NPSOT and North American Butterfly Association.

She created a pollinator paradise at her home in Houston and educates others through various means including a Facebook community page titled Saint Julian’s Crossing. Her presentation included images of various pollinators—bees, butterflies, moths, flies and wasps and the 4 Bs—beetles, bugs, bats (humming)birds. She noted the importance of native plants that have “historical evolutionary relationships” with particular wildlife communities. Natives feed more critters and are hardier on their home ground. She asked attendees to welcome predators and parasitoids for a healthy garden because they all have roles to play. She recommends flowers of different sizes, colors, structures, and blooming seasons. She piles up plants, allowing combinations in patches. One point she emphasized: **Embrace Imperfection:** This is probably the most difficult plan of inaction for most gardeners to accept—leave spent pithy stems and seed heads, use fallen leaves as mulch, let early spring wildflowers go.

Lauren Simpson: St. Julian’s Crossing Wildlife Habitat, Monarch (*Danaus plexippus*), nectaring on Standing Winecup (*Callirhoe digitata*)
Lauren Simpson: St. Julian's Crossing Wildlife Habitat
Male Eastern Carpenter Bee (Xylocopa virginica), drawing nectar from the base of a Yellow Wild Indigo bloom (*Baptisia sphaerocarpa*).

She named Five Pollinator Powerhouse Plants:
- *Gaillardia pulchella* (Indian Blanket)
- *Eryngium yuccifolium* (Rattlesnake Master)
- *Cephalanthus occidentalis* (Buttonbush)
- *Monarda sp.* (Beebalms) ex: *fistulosa, citriodora, punctata*
- *Lantana urticoides* (Texas Lantana)

Her website for St. Julian’s Crossing, Wildlife Habitat offers additional information. You can learn more about gardening for pollinators and the story of St. Julian’s Crossing and how it evolved from a small suburban garden that succumbed to drought to the pollinator haven it is today.

**Speaker 7: Andrea DeLong Amaya – Tour of Demonstration Gardens at the Lady Bird Johnson Wildflower Center**

Andrea DeLong-Amaya manages the Lady Bird Johnson Wildflower Center’s horticulture programs. She talked about the various garden styles in Wildflower Center’s demonstration gardens ranging from naturalistic to formal to Texas mixed border. The Seed Silo Garden was built with what she termed “plant time sharing” in mind. Plants that are dormant share space with other species until their blooming season arrives after the early bloomers fade and enter dormancy. This replaces the common practice of planting annuals to add color to beds as each new season begins.

The image of the bed in the upper left was taken in the spring when the Buttercups and Indian paint brush were in bloom. The image in the lower right was taken in October when the *Solidago nemoralis* (Common goldenrod) and *Gulf Muhly* grass were blooming.

“This is how we make our gardens here, these are the plants that tell us we are home.”

David Fross
Collin County NPSOT Newsletter

Wildflower Center will have a **Spring 2021 Plant Sale** during 9 weekends of April and May. Reservations are required for specific time slots. Plant list is available on the website.

**Afternoon Q&A:**

Laura Simpson was asked for more details regarding St. Julian’s Crossing. The garden is in Northwest Houston and started in 2014. She advocated starting small, adding one area at a time. The children in the neighborhood are invested in the garden. This seems to be due to her efforts to engage the public with signage and interact with folks. She recommends “evangelizing without proselytizing”.

Andrea DeLong Amaya fielded questions about the galvanized tanks used at The Wildflower Center in some of the gardens. One was a 4 ft diameter tank, 2 ft deep, filled with water and occupied by some native plants and Gambusia, also known as mosquito fish. It was placed where it received little sun which helps reduce the issue of algae growth. The tank has no pump or filter. There were other large tanks used to create a series of semi-circle beds. Holes were drilled in the bottoms for drainage. Drip irrigation was added along with gravel. There was some concern about zinc leaching from the tanks.

Recorded sessions of the Spring Symposium are currently available on the [state NPSOT YouTube channel](http://www.npsot.org/CollinCounty/) for those who registered and yet missed some or all of the sessions. NPSOT President Kim Conrow indicated that the videos may become available for public viewing at a future date. If you missed the symposium and the opportunity to register, you might reach out to Kim and ask if the videos will be made available to all at some point.

---

**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.

email: collincountynpsot@gmail.com

website: [http://www.npsot.org/CollinCounty/](http://www.npsot.org/CollinCounty/)

---

John Worley