

The Steward

Fall 2022 Highland Lakes Master Naturalists Volume 13 Issue 3



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**Cover Photo:
Ocotillo in Bloom,
by Suzanne Adkinson**

Please submit pictures, articles, reports, stories, announcements, etc. to:

becky_breazeale@yahoo.com

Photos should have captions and appropriate credits. We will announce the deadline for submissions two weeks prior to the deadline. Or contact Becky and Martelle.

Thank y'all for ALL!!

Message from our President

By Suzanne Adkinson

As I write my last one of these, I will reflect on key things I appreciate as your elected President.

I appreciate your ability to embrace change. Change is hard and many choose to stay comfortable with their routine. Not Highland Lakes Master Naturalists!

I asked you to go to Doeskin Ranch and hike before the meeting; I asked you to go to Inks Dam National Fish Hatchery and go through an Interpretive pollinator hike through the gardens and native plant hike before the meeting; then I asked you to travel to Blanco to Gem of the Hills and work on the trails before the meeting. In each case,

many of you said, "Yes"!

I asked State MN (AgriLife) how to bring in a new county. It was merely meeting minutes to articulate our membership voting of "YES"! Welcome Lampasas County!

I asked for a Fall Trip and a Committee Chair. George Brugnoli volunteered. Many were part of his Trip Committee and I'd like to thank each of you who participated to make this a memorable trip. Big Bend was AWE-SOME! What a great time to be together and a super place to visit.

I asked you for a Christmas Banquet and a Committee Chair. Lori Greco volunteered, along with a whole host of Committee members. That's scheduled for the 1st Wednesday in December (regular monthly meeting date). It will be memorable!

I asked you for a Spring Trip. Sherry Bixler offered to coordinate all venues and George Brugnoli offered again to be the Chair. Our dates are 23-27 April 2023. I can't wait!

We are able to accomplish whatever we set out to accomplish with a little team work. It's all about "want to". I'm a "think outside the box" kinda gal. One that embraces change and tries to make a difference.

All it takes is an idea and someone to get involved in a leadership role. You've done all that- AND MORE!

As I conclude my President role, I'd ask you to embrace Roy Appleton as your new President-elect. He will continue to make our organization great!

Thank you for supporting my tenure. Also, thank you again for all you do to make our environment better for those behind us. Your passion and willingness to make it better will never go unnoticed

Summer Happenings

By Lori Greco

At the Hill Country Fellowship VBS, there were almost 500 children at camp between 2nd and 5th grades. It worked out pretty well and several kids remembered us from GOP at the Park in April! They retained so much information from GOP! It was hot but very rewarding.



Our Inks Lake State Park Interpreter Ranger and (Master Naturalist) Jamie Langham read today at the Herman Brown Library during their Summer Reading Program. She had a craft for the kids afterward and it was a huge hit!



Photos by Lori Greco and Mark Stracke
Special thanks to these instructors: Sharon Drake, Krista Paul, Terry Stracke, Ingrid Hoffmeister, Nandine Cowey, and Lori Greco.



Kids with brown bags who are "pollinators" looking for a flower that matches their flower color to pollinate it with cheese ball bits (pollen). Enjoyable

Inks Lake State Park Presentation at August Meeting





August meeting photo
creds: Kristen Rodgers

New Collection Box at Inks Dam National Fish Hatchery :) Wayne Holly recycled a box that had been used at Granite Shoals. Photo by Pat Campbell



Candlelight Ranch: an interview with Paula Richards

Who founded Candlelight Ranch and how would you describe the mission/philosophy of the organization?

In today's fast-paced, stress-filled environment, children and families face so many challenges, underserved families and children even more so. John Muir once said, "Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into trees. The winds will blow their own freshness into you, and the storms their energy, while cares will drop away from you like the leaves of Autumn." John Burroughs echoed that thought: "I go to nature to be soothed, healed and have my senses put in order." Scientific studies from around the world have shown that getting out into and in touch with nature can have a profound healing effect. The Japanese even have a special word for it: *shinrin-yoku*. This is what [Candlelight Ranch](#) is about.

Candlelight Ranch delivers creative, hands-on programs and nature-based activities in a beautiful Hill Country setting. Partnering with community groups, nonprofits and schools, the Ranch provides interactive learning programs and experiences that are customized to meet the specific needs of the youth and families served. These groups range from foster families to the Texas school for the blind, from children with autism and cerebral palsy to children who have suffered physical and sexual abuse, and from families with PTSD to young adults with developmental and intellectual disabilities.

The Barr family purchased the dream property in 1999 as a family retreat so their children, grandchildren and future generations could experience the peace and magic of nature. Shortly after purchasing the property, Don Barr and his wife, Jeri, along with Don's brother, Randy Barr wanted to share a piece of their beautiful property with children who would likely never experience the magic of nature on a Hill Country ranch. Together, they turned their mutual love of children and nature into a mission and started Candlelight Ranch as a 501(c)(3) non-profit focused on connecting children and their families with nature.

Where is Candlelight Ranch located?

Candlelight Ranch is located about half-way between Marble Falls and Lago Vista off of FM 1431 at 6408 Muleshoe Bend Trl. Marble Falls, Texas 78654. Google does a good job of mapping the route.

What are some volunteer activities at the Ranch that our members could pursue and how do members learn about these opportunities?

Volunteer activities focus on environmental education programs such as:

- Backyard bass and fishing off the dock
- Native peoples and their sacred gardens
- Touch tables
- Birding
- Leading hikes
- Zip lines (a bird's eye view of the canyon)
- Archery
- Microscopes
- Scavenger hunts
- Art in nature (e.g. solar prints, nature journals, etc.)
- HLMN partners share their discovery trunks (e.g. vertebrates, migrating monarchs, trees, watershed, mystic creatures, what is a bird, bird songs, etc.)

We typically post upcoming volunteer opportunities to groups.io and review them at the monthly meetings. If you're interested in volunteering through HLMN, you can reach out to Paula Richards (alabamatick@yahoo.com). They love HLMN volunteers because we have already been cleared through a background check, and we share our excitement about nature and have lots of fun with the kids and their families.

One of the nice things about volunteering at Candlelight is that they limit the numbers to protect the land. The ratio of adults to children is very good. Adults include parents, councilors, therapists, and teachers. Even when there are just adults, as in the recent "caring for the caregivers" event, the numbers are limited and the groups are typically less than ten per activity.

To reach out directly to the Candlelight Ranch staff about other volunteer opportunities or training for things like zip line, canyon crawl or the rock wall, check out this link. <https://candlelightranch.org/get-involved/volunteer/>

What is your favorite volunteer activity at the Ranch?

It's hard for me to say which is my favorite activity. The smiles we see from the participants and the volunteers are so rewarding. I love watching Phil Wyde teaching children and their parents how to cast. The joy on their fac-

es when they pull in one of those silly plastic fish says it all. Whoever catches the most fish, does NOT have to do dishes. Dan Nugent ensures everyone is safe on the zip lines and helps them experience what it must be like to soar through the trees like a bird. (Yes, we even do this with blind and wheel-chair bound children. It's a great confidence builder. Their giggles echo across the canyon.) Ray Buchanan connects with the diverse groups of children through his stories about native peoples and their relationship with nature. They watch him mesmerized and love the Navajo chant he teaches them about thanking the earth and all the wild things. George Brugnoli and his trusty band of archers do more than teach archery. They helped repair the gear and fine-tune the setup at the ranch. (Military Family Days are such fun watching these service men and women pick up the compound bow and show off for their families.) Sharon Drake does a marvelous job with vertebrates and the watershed table. The kids love the puppets and she is just so engaging. There are so many HLMNers who have experienced the joy and fun of Candlelight Ranch. Isn't it time you did too?



Me with kids at touch table showing them a cow skull demonstrating the different teeth between plant and meat eaters.



Sharon Drake teaching about watersheds (using the table HLMN purchased that is stored at Agri-life building)

Learn.
Explore.
Heal.



Martelle Luedecke excited to teach about the lunar calendar on a tortoise shell, at the touch table.



Phil Wyde, BackYard Bass. While learning to fish, often parents and children are having a fish off on who will be taking out the trash. With Phil's guidance and the added incentive of watching parents do their chores; children reel 'em in with BIG smiles!



Sharon Drake sharing her knowledge of the many fascinating characteristics of mammals.



Ray Buchanan, telling of sacred garden. He talks about the shape of the gardens and how each quadrant has special meanings to the native peoples. They would plant different things depending on the location within the design.



Celia Escamilla and Indigenous People; she would end her presentation with the making of walking sticks from Yucca blooming stems.



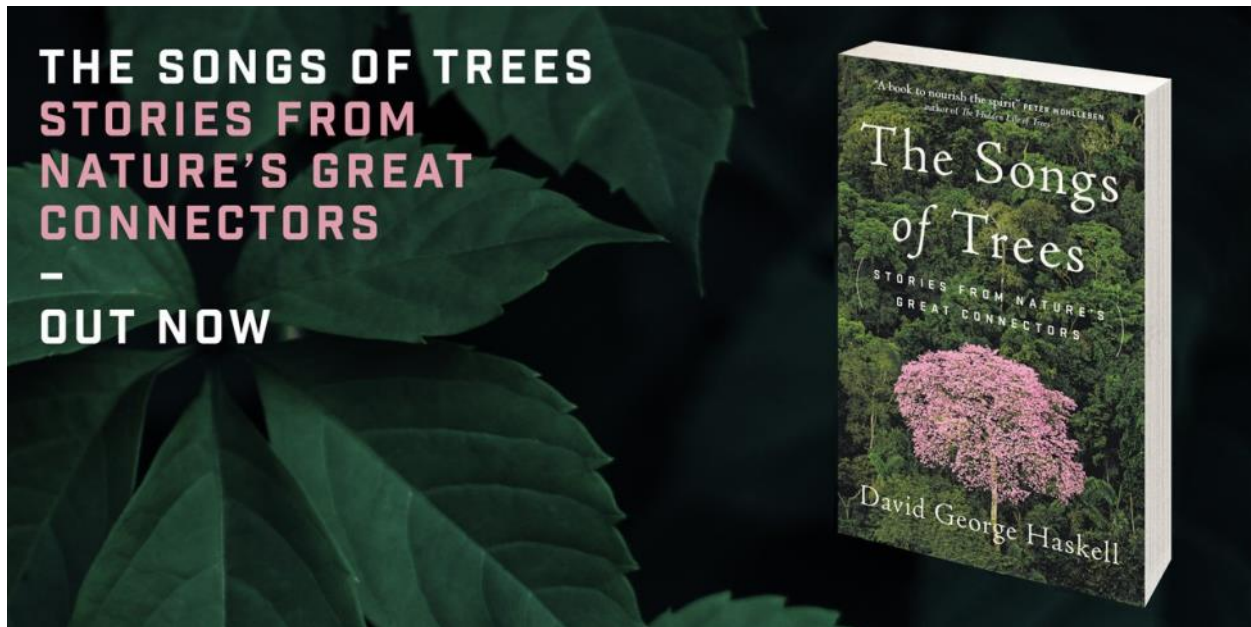
Paula Richards at the Touch Table. Horace (held by Paula) is a favorite of visitors.



George's crew teaching kids about archery

Book Review of David Haskell's
**The Songs of Trees: Stories From Nature's
 Great Connectors**, New York: Penguin Books, 2017

By Ray Buchanan



Saying that “No tree stands alone!” seems like a very casual statement, confirmed by casual experience and common sense. But Haskell’s 12 stories about trees and how they connect to their immediate environment completely redefines that plant category we label as “trees”. Whether or not a tree stands alone in the middle of a field or in a grove of other trees or in a forest is no longer an illuminating consideration. That thing that has roots, a trunk, limbs, twigs, and leaves is no longer, it seems, worthy of the title of “a tree” because its identity must include much more than that, according to Haskell!!!

Alive or dead, in the rainforest or trapped in the concrete at the corner of Broadway and Eighty-sixth, or clinging to an island sand dune, or a charcoal remnant of a prehistoric house – “a tree” is a connected thing that incorporates its immediate environment as an integral part of its total network of existence.

Take, for example, how unique sounds help us redefine what is a tree by highlighting its inseparable connections with its environment. In the rainforest tree tops are a virtual swampland where one hectare of space might contain sixty thousand species of insects, all fighting for survival among the leaves, so that the air around every tree literally “thrums with vibratory energy,” (p.11, the Ceibo story). Likewise, the diverse concentration of particles in the air create extra heavy rain drops that crash against the tree leaves (each different for the 600 species of trees in the Ecuadorian rainforest), creating the sound of river rapids (Ceibo). And the tree speaks eloquently as the wind shatters a cone

(the Balsam Fir story) and slices its way through the silica-stiffened palm fronds (the Sabal Palm story). Then, there are the crunching sounds of beetles eating their way through a fallen log, as the tree continues to “exist” even after the wind pushed it over (the Green Ash story).

But even more spectacular is what Haskell reveals about the trees’ internal interaction, with “internal” now written as including the immediate surroundings. Those cell-level electrical and chemical signals, like the root-to-leaf stomata openings and closings in response to moisture variations, are revealed as taking place with the “outside”, but through different connecting agents – bacteria and fungi. For example molecules from certain bacteria soak into root cells and combine with plant chemicals to promote growth and regulate the architecture of root growth (the Balsam Fir story). Also, fungal cells on the surface and interior of the leaves attune those cells to sounds, odors, temperature levels, and moisture from their environment to establish biochemical “memories” of their surroundings (Balsam Fir). Through its connections via bacteria and fungi the “Ponderosa pine senses, integrates, weighs, and judges, external and internal intelligence,” (p. 152, the Redwood and Ponderosa Pine story).

And not at all the least significant, Haskell defines trees by their connections with humans: two blocks of maple connect with nerves in the ear to test a possible violin backing – “The first block is bright, open, and lean muscled, quick. The second is very similar, yet tinged with granularity and turbidity,” (p. 158, the Interlude: Maple story). The Cottonwood at the confluence of the Platt River and Cherry Creek in Denver circumscribes the activity of town, waterway, and park (the Cottonwood story). Trees along Broadway in Manhattan connect personal interaction with nature (the Callery Pear story). “The Olive has been the species that turned the stony hills of the Levant into producers of energy-dense food,” (p. 228, the Olive story). And the Japanese White Pine brings the bonsai, an entire tree, down to the scale of the human torso for beauty in nature (the Japanese White Pine story).

Throughout these 12 tree stories Haskell champions his idea of “ecological aesthetics”: “the ability to perceive beauty through sustained, embodied relationship within a particular part of the community of life,” (p. 148). Humans are a part of this “living choreography” with nature; and this book gives us some fascinating insights as to how this happens.



Photo by Betty Cruikshank

Big Bend 2022

By Your Trip Committee

Forty-five intrepid HLMNs mostly awoke dark-early on Tuesday September 27th for the ~450 mile trek to Big Bend National Park. But this trip actually began much earlier, in the late 2000's, when then-President Phil Wyde gathered some members together to plan the first HLMN Big Trip. His vision was to expand our members' knowledge of the bounty of our state, foster increased cohesiveness among us and to have a ton of fun. Those remain the goals of the Committee today.

This Journey began in January, when the Committee first met to decide on a plan for the year. We felt 2022 was especially important – two years of COVID had shuttered our 2020 plans and the Committee never met in 2021. WebEx meetings, concerns about the virus and severely decreased opportunities to volunteer had taken their toll on our group. The Committee's plan for 2020 had been a visit to The Big Thicket, with Big Bend a plan for 2021 – we learned that, even early in the year, sufficient rooms at Chisos Basin were not available for the fall. However, while discussing our options, Karyn Parker stepped out of the Hatchery Ed Building and placed a call to the Chisos Basin Lodge. Twenty-five rooms available in late September! Decision made!

The road to September wasn't an easy one due to staffing shortages at the Park and the Lodge (which also changed hands) and periodic high levels of COVID in Brewster County. Lots of challenges but, in summary, we mostly overcame them. One brilliant decision was to ask for HLMN member DJ Sanders' help. She not only agreed – she became a member of the Committee. DJ was a longtime resident and school teacher at the Park and is extremely knowledgeable regarding the area and the folks who could help us make the trip a success. She recruited Ranger Cathy Hoyt for a Butterfly AT and VS Butterfly Count (great fun – butterflies are like two year olds – flitting everywhere), Tom Alex for a "sold out" tour of the Indian Head Springs petroglyphs and geology and Tierra Grande Chapter President Denis Foley, who gave us a remarkable tour of the geology along Ross Maxwell Scenic Drive and Santa Elena Canyon. Sherry Bixler and Kay and Fred Zagsts led birding tours at Dugout Wells and Indian Head Canyon Trail and DJ gave a remarkable tour of Indian Head Springs and the Langford Homestead. It's hard not to single out every member of the Committee, each of whom made important contributions both in planning the event and organizing individual activities during the trip.

Big Bend covers over 1200 square miles, that range from high mountain peaks to badlands to riparian areas. Our 45 Big Benders included members who had been to the Park many times to newbies, for whom this was their first visit. So, we planned a variety of activities and options, hoping to scratch itches and provide meaningful learning opportunities for all. It took a lot of planning, carpools, and a whole bunch of driving, but we think the results were worth it.

We believe that there are three key elements to any successful trip and they are well represented in our 2022 adventure. First, a Committee that worked hard to plan a trip that met diverse interests and to identify and plan for the inevitable contingencies. Second, a blow-your-socks-off venue. The photos highlight our activities and the grandeur of Big Bend. Third, and certainly not least, our outstanding membership. What a combination!

There are ten members on the Committee for 2022. In addition to DJ, Karyn and Sherry, Committee members include Linda O'Nan, Betty Cruickshank, Janie Watson, Bill McCartney, Suzanne Adkinson, Jill Goff and

George Brugnoli. Because of the necessary lead time, the Committee is already planning a South Texas Birding Trip (led by Sherry Bixler) for late April 2023. Next year's Committee will be planning the fall Big Trip and perhaps a day trip jaunt along the way. Sign-up for the 2023 Committee will begin at the January meeting.

Stay tuned. Your 2022 Trip Committee



Chris McCartney on Lost Mine Trail, Photo by Bill McCartney



Denis Foley with the Crew Just up from Santa Elena Canyon



View of the Window, Photo by Bill McCartney



Cattail Falls below the Window, Photo by DJ Sanders



Black Bear along Park Road a mile from Park Headquarters at Panther Junction, Photo by DJ Sanders



Indian Head Springs Petroglyph, (left) and Indian Head Springs Petroglyph in Early Morning Photos by George Brugnoli



South Rimmers, Photo by Jerry Stacy



Birding at Hot Springs Trail, Photo by Karyn Parker

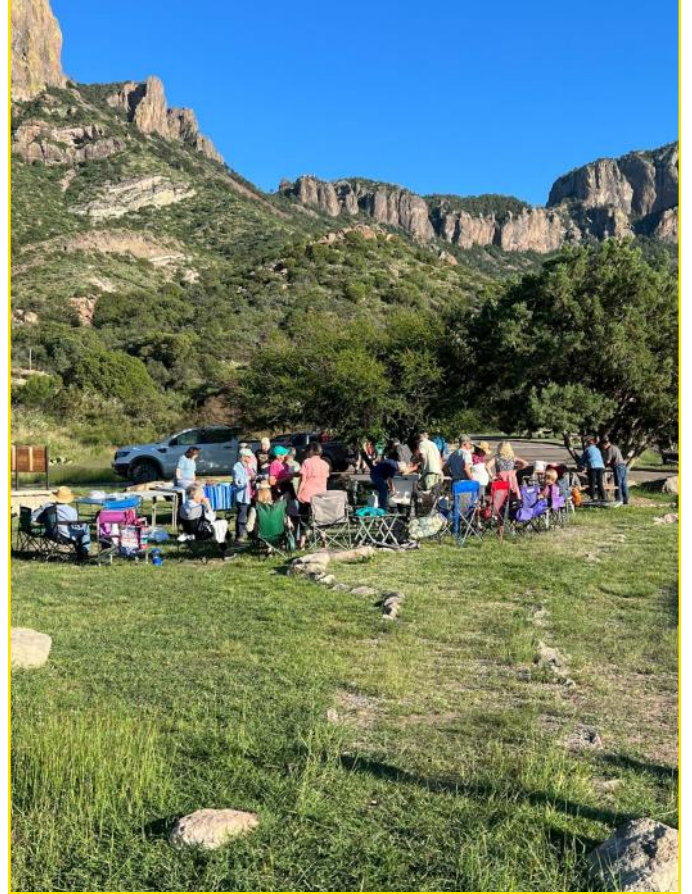


Photo by Karyn Parker



South Rim, Goat Territory, Photo by Jerry Stacy



Pot Luck and some members had not arrived, Photo by George Brugnoli



Butterfly Count, Photo by Karyn Parker



Desert Bloom, Photo by Suzanne Adkinson



Part of Barton Warnock Crew, Photo by Linda O’Nan



The Window from the South Rim Trail,
Photo by Suzanne Adkinson



Geology on Display, Terlingua Jeep Tour,
Photo by Pat Campbell

Insect-Based Evidence That Nature Is Cool!!

by Phil Wyde

Joan and I are about (tomorrow in fact) to leave on a 21 day trip that will take us among other places to Barcelona, Marseilles, Monaco, Tuscany, Pompeii, Rome, Sicily, Greece, Crete, the Ionian Sea and Turkey. I am sure that we will see very many spectacular and fascinating things. Thus, I don't have time to submit a "wordy" article to the Steward. However, I would like to share with you some of my favorite images taken of insects. All of these images were taken around my house, Inks Lake State Park or Inks Dam National Fish Hatchery. Why images of insects when we have so many beautiful birds and landscapes? It is because I find insects very fascinating. Many are truly beautiful, and all are fascinating.

The insects (Bee Fly, Texas Wasp MOTH and Robber Fly) shown in images 1 – 3 are not beautiful, but easily fall into the fascinating category. I really did not know what I was looking at. I am sure that their predators have the same problem. Of these 3, only the Robber Fly is a predator.



Figure 1 . Bee Fly

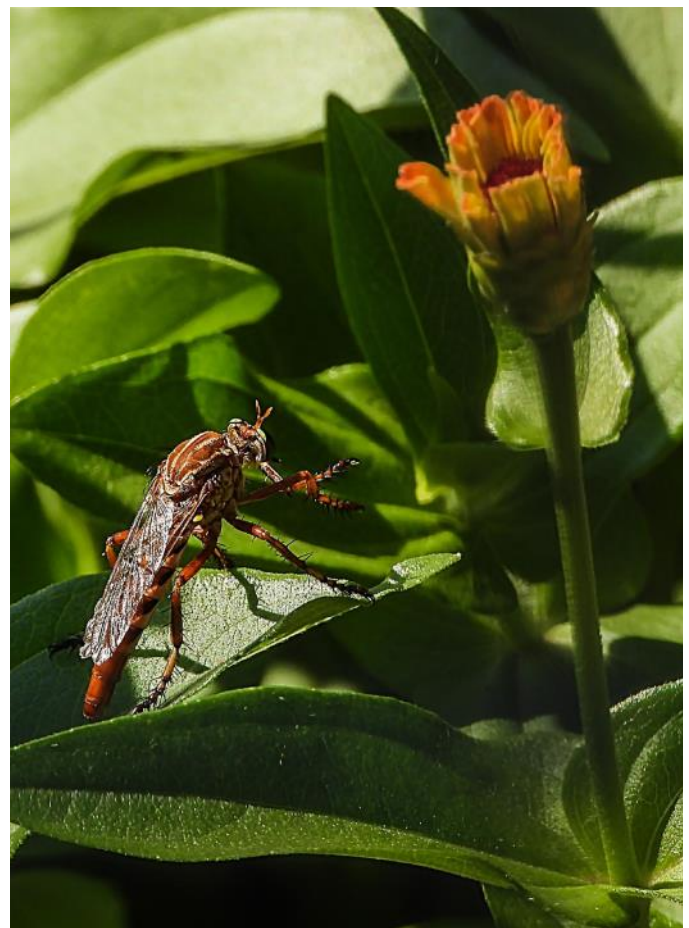


Figure 3 . Robber Fly

Figure 2 . Texas Wasp Moth



Many of the images that follow are of butterflies. How could they not be? Almost all butterflies are pretty and fascinating, if not beautiful. I have to work hard to get good images of them, primarily because they do not sit still for long. However, I also include images of a Dragonfly, a wasp, a cicada, a grasshopper, a caterpillar and a Bumble Bee. I think that you will have to admit, if not beautiful, they are fascinating.



Figure 4 . Flame Skimmer Dragon Fly



Figure 5 . Bumble Bee on Mealy Blue Sage Flower



Figure 6 . Fritillary Butterfly Head On



Figure 7 . Blue Ceraunus Butterfly



Figure 9 . Red Wasp



Figure 8 . Fritillary Butterfly From Above



Figure 10 . Grasshopper



Figure 12 . Bordered Patch Butterfly



Figure 11 . Cicada

I, of course, have many more images that I could have included in this report. However, I think that what I included suffices. Even limited to insects, Nature is so cool.



Figure 13 . Monarch Caterpillar

Dragonflies

By Cathy Hill

I was recently watching a children's nature program on PBS called Nature Cat. Perhaps some of you have seen it with your grandchildren. It's really cute and actually quite informative. The episode I saw was about dragonflies and the characters sang a little song that I just had to share:

Dragonflies, dragonflies; they've got long bodies, and great big eyes. In the water and in the skies. Dragonflies!

They've got six legs and two pairs of wings. You can see them flying near ponds and springs.

They fly so fast as they flit around. They can fly forwards, backwards and up and down.

(repeat of chorus first line)

Their bulging eyes can see great too. And when you look at them you know they can see you too.

So head to a marsh or to a pond, a dragonfly might just sit on your palm.

(repeat chorus)

As all of us in Texas Master Naturalist know, the dragonfly is our official logo. And it's not just a generic dragonfly, but a specific one, the Cyrano Darner. To read more about this species and the process involved in capturing it's likeness as our logo go to

<https://txmn.tamu.edu/chapter-resources/tmn-brand-marketing> and read all about it.

So a brief refresher course on Dragonflies. They are in the Order Odonata meaning "toothed" and the suborder Anisoptera. They can be found on every continent except for Antarctica.

They are among the most ancient insects and some of the first winged insects to evolve about 300 million years ago. Fossils have been found of dragonflies with wingspans of up to 2 feet! Scary!!

By comparison, modern dragonflies average about 2 inches in length, and the largest being the

Giant Darner that has a length and wingspan of 5 inches.

Dragonflies are excellent fliers with two sets of wings that can work independently which enables them to be very agile and can move forwards, backwards, sideways, up and down and even hover. They can fly up to 18 mph and some even migrate long distances over water. Dragonflies are mighty predators, with a 97% success rate in capturing prey. They grab flying insects midair and tear off the wings with their strong mandibles and swallow their prey without having to land.

Dragonflies lay their eggs in the water. After they hatch into the larval stage called nymphs, they remain in the water for several years where they are also predators. After numerous molts they emerge out of the water and shed their last nymph form to emerge as adult dragonflies, a stage which lasts about 6 months, during which they will mate and lay eggs to start the cycle again.

Damselflies also belong to the order Odonata, but are in the suborder Zygoptera. Unlike the robust dragonfly, they are smaller and more delicate in build. Their wings, unlike dragonflies are both the same size and shape, and when at rest are folded back in line with their body. Dragonflies usually hold their wings perpendicular to their bodies when at rest.



I want to thank Phil Wyde for sharing some of his dragonfly photos with me. The blue damselflies are my photo.



Pollinator Garden at Inks Dam National Fish Hatchery

By Linda O’Nan

Many thanks to Roy & Jerry for finishing up the “repurposed” fence in front of the pollinator garden—looks terrific! With the welcome rain on Monday, this was just the perfect touch.

Jeff helped make this chore doable with the purchase of an auger. The BEST volunteer org around makes the pollinator garden a special place.



Left: Working on Fence at Pollinator Garden



Completed Fence



Congratulations!

Congratulation George Brugnoli and Linda O’Nan
5,000 Hours !!!



George Brugnoli with Suzanne Atkinson and Linda O’Nan
not pictured
Photo by Kristen Rodgers

2022 Awards Banquet



Outgoing President, Suzanne Atkinson and Incoming President, Roy Appleton
Photo by Lori Greco



Lori Greco, Banquet Coordinator
Photo by Becky Breazeale



Suzanne Making Special Acknowledgements



Left: Marvin Bloomberg, 2022 Recertification and Suzanne
Photo by Lori Greco



Right: George Vavrek, 2022 Recertification and Suzanne

Below: Members of the Class of 2022 with Suzanne and Cris Faught
Photo by Lori Greco





Lynne Claire, 2022 Recertification and
Suzanne
Photo by Lori Greco



Karen Stewart, Initial Certification 2022
and Suzanne
Photo by Lori Greco



Jamie Langham, Initial Certification 2022
Photo by Lori Greco

T E X A S

MISSION



The Texas Master Naturalist program is a natural resource-based volunteer training and development program sponsored statewide by Texas A&M AgriLife Extension and the Texas Parks and Wildlife Department.



The mission of the program is to develop a corps of well-informed volunteers who provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities for the state of Texas

Officers:

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- V.P.** Roy Appleton III (214) 208-3624 cell
- Secretary** Kristen Rodgers (512) 695-6087 cell
- Treasurer** Jerry Stacy (325) 248-4524 cell

