

T E X A S



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IN THIS ISSUE

Life of an Antlion	2	The Welcomed Guest	14
<i>Robert Hernandez</i>		<i>Drew Bennie</i>	
Blue-eyed Ensign	4		
<i>Anita Westervelt</i>			
Tepaneca Long-horned Bees	6	Don't Call Me a Toad	15
<i>Camille M. Rich</i>		<i>Anita Westervelt</i>	
Grackle Watching	7		
<i>M. Kathy Raines</i>		There Be Giants in the Land	17
Save the Date: Rio-Reforestation	9	<i>Mary Grizzard</i>	
<i>Anita Westervelt</i>		In the Yard – A Dance of Spring & Summer	20
Passing Through	10	<i>Jose Palmos</i>	
<i>Melinda Melo</i>		Milestones	23
My Travel Companion	12	Contributors' Gallery	26
<i>Drew Bennie</i>		Leadership Teams	27
The Life of a Caterpillar	13	Editor: Diane Hall	
<i>Drew Bennie</i>			

The Rio Grande Valley Chapter of the Texas Master Naturalist program is organized exclusively for charitable, scientific, and educational purposes, more specifically to develop a group of knowledgeable volunteers to provide education, outreach, and service dedicated to the study of conservation of natural resources and natural areas within the Rio Grande Valley of Texas.

Life of an Antlion

Article & photos by Robert Hernandez, South Texas Border Chapter

It's the dog days of summer, or the Canícula as it is known in the Rio Grande Valley. This time of year takes me back to the days when all types of creatures crawled around in our backyards, including horned toads, harvester ants, lizards and the amazing antlion, most of which have disappeared from the urban concrete jungle that now dominates the landscape.

Without the modern gadgets that now entertain school age children, we would venture out into the surrounding native habitats to explore the flora and fauna that unknowingly gave us a hands-on experience with nature. With a plethora of creatures to observe, the one that fascinated me the most was the perplexing antlion. I would sit by these odd-looking sand pits for hours trying to figure out what creature had created them and what was happening underground as ants or other insects fell into the sandtrap. With no nearby Wikipedia to find out, I could only surmise as the carcasses flew out from the lion's den. As summer ended it was back to school and every observation made was recorded in our natural born memory banks.



Intriguing antlion sandtrap – photo by Robert Hernandez



Fierce-looking antlion larvae - photo by Robert Hernandez

Years later, when I began to pursue interests in the natural world, I would find out that the antlion was actually an antlion lacewing in its larval stage. Its life cycle begins with oviposition, to larva, followed by pupation, and finally the adult. What is unique to the antlion is that it spends most of its time in the larval stage. According to different observations this is due to its short lifespan as an adult. An antlion can remain in the larval stage for one to two years depending on food supply and only one month as an adult.

During the larval stage the antlion will dig funnel-shaped pits in sandy soil that serves as a death trap for ants and other insects that accidentally fall into the pit and into the waiting mandibles of the antlion. The antlion will pull its prey under the sand where it will pierce the body with its mandibles and inject venom to immobilize the victim. Enzymes in the venom soften the insides of the prey so it can be sucked up through the hollow mandibles. The carcass will then be flung out of the pit and the antlion larvae readies itself for the next victim. The antlion larva will develop through several stages called instars and molts as it moves from one worn out pit to make another. As it moves backward from one area to another it creates lines resembling doodling, thus the common name Doodle-bugs. Having no anus during the larval stage, the antlion will store the waste generated which will later be used to spin the silk for the cocoon and the rest is voided as meconium at the end of the pupal stage.

After having spun its cocoon under the sand, metamorphosis will take approximately three weeks. The fully developed adult, now named lacewing, will clumsily fly off into the night to look for a mate. Except for its awkward flying technique and clubbed antennae, they can easily be mistaken for a damselfly. Once the lacewing finds a partner they will mate and die shortly thereafter.

The lifespan of an antlion lacewing as an adult is only about one month, therefore you can understand why they spend most of their time during the larval stage which may last up to two years. The adult lacewing is beneficial to the environment as it feeds on nectar, pollen, and aphid honeydew.

As you can see by this experience, we can learn all about our natural world through modern technology, however more knowledge can be developed through hands-on activities. Take yourself on a nature walk and bring the young ones along. No reason to travel to Mars.



Adult antlion (*Peruveleon dorsalis*) – photo by Anita Westervelt

Blue-eyed Ensign

Article & photo by Anita Westervelt, South Texas Border Chapter

You'll not be meeting this blue-eye ensign at a USO dance.

Evania appendigaster is a wasp, and one I don't mind finding inside the house. It is a parasitoid wasp and its specialty is cockroach eggs. They are often seen more where larger cockroach species are present, such as the American cockroach. Their habitat is generally outdoors but it is not uncommon for them to enter buildings in search of their host.

Ensign wasps are beneficial insects. They do not sting or bite humans nor pets; there is no need to kill them when you see them. An ensign wasp can destroy a cockroach egg case and the eggs inside with a single oviposited egg, according a Food and Environmental Hygiene Department online newsletter.



The blue-eyed ensign is black with blue eyes. It is one of the larger ensign wasps with forewings a bit longer than one-quarter inch. The wasp's flight is wispy, more like floating, rather than the quick, erratic, aggressive-seeming flight of social wasps, mud daubers, paper wasps and yellowjackets.

Blue-eyed ensign (*Evania appendigaster*)

When searching for their host, the wasps pump their posterior end rhythmically up and down, according to BugGuide.net.

The blue-eyed ensign wasp reproduces by laying eggs into egg cases (oothecae) of cockroaches. The wasp larvae use the cockroach eggs as their food source. One egg is deposited in each

cockroach egg capsule and the wasp larva consumes all the eggs within it. The larva proceeds through five instars. When it reaches about five-sixteenth of an inch in length, it pupates. When mature, it cuts a hole in the egg capsule and exits, according to JungleDragon.com, “a nature and wildlife community for photographers, travelers and anyone who loves nature.”

Adult blue-eyed wasps live two to three weeks; they feed on flower nectar and honey dew deposited on leaves by aphids.

It is called an ensign wasp because the wasp’s gaster (the posterior section of a wasp’s abdomen) is considered flaglike and clearly visible. The gaster is attached by a slender petiole (technical term for the narrow waist) to the propodeum (the first abdominal segment) above the base of the hind coxae (insect legs) and carried like a flag, according to BugGuide.net.

Ensign is the most junior officer rank in the U.S. Navy. More importantly, an ensign is a maritime flag used for the national identification of a ship. It is the largest flag, generally flown at the stern (rear) of a ship while that ship is in a port. Ensigns, used by a country’s navy as a war flag for military ships, do not mean a country is at war. The military use of an ensign falls under the law of war and the United Nations Convention on the Law of the Sea, according to Wikipedia. The word ensign comes from the Latin word insignia that means emblem or banner.

“Shift Colors, Underway” is the command as a navy vessel gets underway whereby the ensign is lowered from the ship’s flagstaff on the stern and shifted to the main mast at the bow of the ship.

So there you have some naval tradition to spice up a short lesson about a beneficial wasp.

Tepanec Long-horned Bees on the South Texas Sand Sheet

Photos & article by Camille M. Rich, Rio Grande Valley Chapter

This tepanec long-horned bee (*Melissodes tepaneca*) was found nectaring on a coma tree, briefly captured for a portrait session in my light box back at home, and then returned, unharmed and alive, to the same exact Coma tree it was found on less than twenty-four hours later at El Mesteño Ranch and Arboretum, in Puerto Rico, Texas.



"Abundant throughout the United States and Canada, these fast-flying bees are hairy and generally large. Males have extraordinarily long antenna."

Source: Wilson, Joseph S., and Olivia Messinger Carril. "The Bees in Your Backyard: A Guide to North America's Bees." Princeton: Princeton University Press, 2016.

"Melissodes means 'bee-like.' Melissa means 'bee' and -odes means 'looks like' or 'resembles.'"

Source: Wilson, Joseph S., and Olivia Messinger Carril. "The Bees in Your Backyard: A Guide to North America's Bees." Princeton: Princeton University Press, 2016.



If you would like to enjoy a few more tepanec bee images and watch a few videos of this striking bee as it moves effortlessly over a coma branch loaded with fragrant blooms, please head on over to www.elmestenoranch.com for a closer look. Thanks a million!

Grackle-Watching

Article & photos by M. Kathy Raines, Rio Grande Valley Chapter

Great-tailed Grackles—iridescent black males and brown females and youth— populate my yard every day, whether it’s sweltering or chilly, whether my feeders are full or empty. Like a flock of chickens, they’re familiar and unintimidated. They almost seem like pets.

Unlike other backyard familiars— House Sparrows, Great Kiskadees, Golden-fronted Woodpeckers, various doves and Curve-billed Thrashers—they barely bother to fly off at my approach, as if to say, “Oh, you’re here again? Well, okay!”

In fact, they tail my lawnmower, gulping down critters I’ve roused. They munch on just-poured dog food, sometimes dipping it in a conveniently placed water bowl. (To my shock, I once saw my elderly lab mix swallow an entire male grackle, but I guess word didn’t get around about that in the grackle community).

Great-tailed Grackles like all of us, are seriously making their way in the world. Still, I find them a source of continual fascination and, admittedly, amusement. Males, defending their turf, turn their heads from side-to-side with bills so far up and backwards, it seems they will fall flat on their backs. Hunched forward, with tail fanned and feathers fluffed, a male shimmies towards or walks around a female. She generally ignores him as she yanks insects from the grass.



Great-tailed Grackle during molt; notice the lack of tail feathers

At the Harlingen Convention Center this spring, migration season near its end, I watched male grackles as they intently pried lizards or large caterpillars from the ground. Interested, I walked over—the grackles flying off as I neared—to identify the wrigglers, but, not being a grackle, I found nary a one.

Grackles are quick to rally to the rescue. When I'm out filling feeders or trimming bushes—and, unbeknownst to me, a fledgling flutters nearby—twenty or more grackles follow me about from tree-to-tree, screaming, clacking, and squawking. It's almost scary, like a scene from Alfred Hitchcock's *The Birds*. Last month, a frustrated fledgling struggled within a tangle of duranta (skyflower) branches. When it managed to fly onto low branch on the nearby ash, adults quietly, well, for grackles, returned to their various occupations.

It's odd to me, and somewhat humorous, I admit, to watch these magnificent birds—with so much heft that, from a distance, I hear their wings flapping as they take off—lose their long, luxurious tail feathers about this time of year. It seems their oddly blunt bodies struggle a bit to launch themselves into the air.



Even adult birds, of course, must molt and do so once or twice a year. Molting demands such energy that birds do this after childrearing chores are done, and, with migratory birds, before traveling. But it must be done—to assure they can fly, stay dry, healthy and sufficiently warm or cold, plus, in many cases, give off proper visual signals to the opposite sex. A Great-tailed Grackle's rectrices, or flight feathers in its tail, are the last to go. Grackles may be tailless for a couple of weeks.

During molting season, grackles may be tailless for two weeks

On hot days between migration seasons and between bike rides to Palo Alto Battlefield or sojourns to Resaca de la Palma or Sabal Palm Sanctuary, I relish the opportunity to observe these interesting, vocal and seemingly undaunted birds.

Save the Date – It's Important!

October 19, 2024
U.S. Fish and Wildlife Service's
30th Rio Reforestation

This is a big scale tree-planting volunteer opportunity for Texas Master Naturalists, school children, Valley residents, visitors and Winter Texans.

The goal is for 1,000 volunteers to plant 15,000 seedlings on 15 acres at the Lower Rio Grande Valley National Wildlife Refuge, which will become home to native wildlife and more than 400 species of migratory birds.

The location is Milagro Tract (904 W Doffin Road, San Juan, Texas 78589).

The sponsors recommend you bring sunscreen, shovels, gloves, water and a hat.



Flats of guajillo for planting at Rio Reforestation 2024
– (photo by Anita Westervelt)

You may sign up at <https://bit.ly/RioReforestation2024Sign-Up>

The above link has more information and a map to the tract. Volunteer options include leaders as well as those who may choose to do the digging and planting. The activity begins at 8 a.m.

Passing Through

Story & photo by Melinda Melo, South Texas Border Chapter



I hide in the dark. It's 5:15 am. It's been a stressful night, traveling miles across the disjointed pieces of monte that still remain. I feel a deep stabbing pain in my liver that just won't go away but I keep walking. I haven't been able to find a comfortable place to rest and in two hours, it'll be sunrise. Desperately, I continue on.

Crossing the pavement lined streets of the southernmost part of the Rio Grande Valley within 10 miles of the border wall late at night is both the safest and most dangerous way to do it simultaneously.

From discovered coyote bones a story emerges...

For the most part, traffic eases up. There are less small cars zooming by. Yet, there are the truckers in their huge 16 wheelers, sleep deprived, driving across the country at all hours of the day, fully taking advantage of high-speed limits so they can finally reach their destinations and rest stops. You have to be sure you cross at the perfect time otherwise you're basically guaranteed to become roadkill.

Both unfortunately and fortunately, I travel alone. My pack had to split up a long time ago because of the fragmentation of our habitat. Trust me, if it were up to me, I would never have to run into

human spaces. Many of them are scared of me but don't realize that I am more scared of them for the harm they'll do to me and to members of my species. The stabbing pain strikes me once again. I reach the outskirts of the Salinas Boulevard in Donna, stretched out horizontally in front of me. I use all my senses to decipher whether it is safe to cross; sniffing with my nose, flickering my ears left and right scanning for the sounds of an oncoming car, and finally turning my head left and right to visually verify that no one is approaching in my immediate direction. The street is clear and quiet, signaling my right of way. The only constant is the pulsing stabbing pain in my liver and I grimace in discomfort. I quickly cross the road and find myself traversing on a slight downward slope in unkempt dead tall yellow grass.

When I reach the flat surface of the ground before me, I find myself on the outermost edge of a young onion field. To my right, near the corner, is an abandoned tire with a ratty, dusty looking piece of carpet on top of it. The pain in my liver reverberates throughout my body once again. I eagerly walk the few steps towards the carpet crested tire and lay my body down on it. Finally, a place to get ready for sleep. I gaze up at the night sky, several thousand stars stretched across its midnight purple expanse. Its sheer beauty grips me and for a moment, I lose myself enmeshed in awe.

I am quickly brought back to reality as the pain within me begins to grow stronger and stronger and I soon come to realize that it's only getting worse. As I look at the sky above me, I think about my pack: my mom, my dad, my brother and my sister. I hope they're all doing alright. A star shoots across the sky. I think about my lover. Man, I wish she was here with me tonight. I weakly howl at the moon, now unable to get up, hoping my pack might hear me and didn't think I left them without trying to say goodbye. I shed a few tears as the pain consumes me both emotionally and physically until it swallows me whole. As I reach my last moments, I nuzzle myself more deeply against the somewhat rough fibers of the carpet, feeling like I am a young pup, cuddled up in my mother's furry embrace. The pain comes to an abrupt stop and suddenly so do I. My spirit joins a gentle breeze moving through the landscape of the Rio Grande Valley causing the tree canopies and tall blades of grass to sway in my wind. I am free once again.

My Travel Companion

Poem & photo by Drew Bennie, Rio Grande Valley Chapter

*Driving home from Houston town
Through the traffic southward bound.
After work in the heat,
All you can see are strip malls and streets
Reflecting lots of warmth from the sun
Knowing my trip has just begun.
Everything around is all man made
Hardly even any shade.
Asphalt and cement cover the ground
Nothing of nature there to be found.
Surprised I see up in the sky
There's a lone monarch butterfly
Gliding high above the fray
Also headed with me on this hot day.
Wings flapping hard, on the go
On her pilgrimage to Mexico.
A long way to travel headed southwest
So no chance to stop and take a rest.
Her brain is tiny but somehow she knows
Just where she needs to go
To meet the other butterflies
In their trees on the mountainside.
What she's thinking, we'll never know
As she looks at us far below.
Our man made chaos all around
Spending our lives here on the ground.
She follows a path who knows how old,
To avoid the winter weather that's cold.
But in the spring she'll fly back north again
And another life cycle will begin.*



Monarch butterfly

The Life of a Caterpillar

Poem & photo by Drew Bennie, Rio Grande Valley Chapter

*Caterpillars aren't real neat,
They walk in frass with their feet.
Traveling on their host plant from leaf to leaf,
All they do is grow, poop, and eat.*

*And as the caterpillar grows
It must change out of its old clothes.
Their hiding place they must not show
Because birds will eat them if they know.*

*They use long hairs and disguise
To hide from parasitic wasps and flies
Or when they're small and just the right size
They become dinner where the spider lies.*

*Quickly growing the time comes soon
When they build their own cocoon.
Tucked inside without much room
A butterfly Mother Nature does groom.*

*Pumping fluids to wings in tiny tubes
And using its new muscles to move
Looking for a mate with no time to lose,
Then off to a new host plant to choose.*



Queen caterpillar

The Welcomed Guest

Poem & photo by Drew Bennie, Rio Grande Valley Chapter

*Little Hummingbird passing through
I wish I were off to Mexico instead of you.*

*Drinking your fill at my flowery tree
Flashing your red breast so discreetly.*

*You hardly have time for hello or goodbye
Because you have such a long way to fly.*

*Maybe I'll see you again in the spring
When you return from your tropical fling.*

*Then off to the land where you build your nest
And spend the summer as our welcomed guest.*



Male and female Ruby-throated Hummingbirds

Don't Call Me a Toad

Article & photos by Anita Westervelt, South Texas Border Chapter

Couch's spadefoot toads (*Scaphiopus couchii*) are not true toads; the species should be recognized simply as spadefoots, but they are stuck with their given name. Spadefoots are small, two and a quarter to three inches long. They have greenish backs and short fat, toad-like bodies.

I found an interesting website called happyhollow.org/explore/zoo/education-ambassadors that had precise details explaining how to tell a male from a female: Couch's spadefoot toads "are sexually dichromatic and dimorphic, meaning the more greenish males are uniformly colored, while the larger females are covered with an irregular network of blotches of black, brown or dark green."



With that description, I'd say the one in my photograph at left is a female.

The species is native to the United States, southwest of southeastern Colorado, and central Oklahoma south into northern Mexico and including the Baja peninsula. They are found throughout much of Texas, except the extreme eastern portion of the state. Typical habitats are short-grass prairies and mesquite savannahs.

Couch's spadefoot toad is actually not a true toad.

They are not rare, although this was my first encounter with one. In fact, they are listed as a species of least concern by the International Union for Conservation of Nature.

Why it's not a toad: spadefoot toads have vertical pupils; other toads have horizontal pupils. There's a reason why they are categorized as spadefoots: on the underside of the hind foot is a hard, dark "spade," a tubercle. On Couch's spadefoot, the tubercle is sickle-shaped; the western spadefoot toad (*Spea hammondi*) has a rounded spade.

The happyhollow.org website further explained the difference between a toad and a spadefoot. Besides the cat-like eyes and sharp-edged tubercle on each hind foot, spadefoots have teeth in their upper jaw and smoother skin than toads. Toads do not have teeth.

Adult spadefoots are nocturnal. I'm sure the one I found had jumped in the pool during the night. I rescued it mid-morning. It did not appear to be suffering from chlorine saturation because after one quick shot, it disappeared while I rescued a Gulf Coast toad, what I thought were a dozen Texas blind snakes (why else would they have fallen into the pool?) and a tiny spider, possibly a northern yellow sac spider. The blind snakes identified as common earthworms – really long earthworms, I thought.



Northern yellow sac spider and earthworms were also rescued from the author's pool along with the spadefoot toad.

In the wild, adult spadefoots eat beetles, termites, ants, grasshoppers, katydids, crickets and spiders.

Although cute, they are not cuddly, and they come with a caution: they have a skin secretion that can cause allergic reactions. Reactions can include the secretions making cuts and scratches painful and they can cause sneezing, running nose and watery eyes, according to Landpotential.org. <https://landpotential.org/habitat-hub/couchs-spadefoot/>

Couch's spadefoots are well adapted to extremely dry conditions, however the species relies on abundant summer rains to create optimal breeding conditions; adults can survive at least two years in hibernation, according to natureserve.org. They do not breed during years of drought or insufficient rainfall.

https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.105658/Scaphiopus_couchii

There be Giants in the Land

Article by Mary Grizzard, Rio Grande Valley Chapter

There's an exhibit at the Houston Museum of Natural Science that's my family's hands-down favorite. Gargantuan skeletons of a mastodon and a Columbian mammoth fill the room, while two additional, rather frail and puny skeletons —*Homo sapiens* —are depicted in relationship to these two extinct Elephantidae family members.



One human skeleton is posed lifting a burning torch to frighten the mammoth into charging off the edge of a simulated cliff, (presumably for butchering by other humans waiting down below); the other human skeleton is flying through the air after being catapulted from a pair of massive mastodon tusks. Such was life in the Pleistocene!

Houston Museum of Natural Science exhibit with mastodon and human skeleton – (photo by Mary Grizzard)

It's hard to imagine scenarios like this playing out in the subtropical Lower Rio Grande Valley, especially if you or your kids grew up watching the “Ice Age” animated film series. When people think “mammoth,” most of us tend to visualize *woolly* mammoths and continental glaciers, and clearly there weren't any glaciers in Texas even during the Pleistocene.

But woolly mammoths were only one of ten different species of mammoth, many of which lived in much warmer environments and had very little hair. And in 1975 a shrimp trawler snagged part of a femur of one of those temperate species in 40 feet of water, 10-30 miles off the coast of South Padre Island (SPI). This femur portion, which was previously on display at the Coastal Studies Lab on SPI, is now located at the University of Texas Rio Grande Valley (UTRGV) campus in Edinburg for the Community Historical Archaeology Project with Schools (CHAPS) Program's Ancient Landscapes of South Texas Project.

Paleontologists believe the femur belonged to a Columbian mammoth (*Mammuthus columbi*). Additional Columbian mammoth remains, mostly their huge, shoe-sized molar teeth, pieces of large bones, and tusk fragments have been discovered in near surface deposits in Starr County, and a five foot long tusk fragment weighing 50 pounds was recovered from a gravel pit in La Joya in the 1960s.



But the shrimp boat's femur catch is perhaps the most intriguing, reminding us that sea level during the glacial maximum of the Pleistocene was 300 feet lower than today, and the Gulf Coast shoreline extended 50-100 miles

offshore beyond our present coastline. Portion of Columbian mammoth femur discovered off South Padre Island in 1975 (photo by Larry Ditto with permission CHAPS Program's Ancient Landscapes of South Texas Project)

The Columbian mammoth was a massive creature, standing 14 feet tall and weighing in at around 20,000 pounds. They made their first appearance in North America around 1.7 million years ago, when Pleistocene glaciers covered nearly one-third of the earth's land surface and sea level was at least 300 feet lower than it is today.

This drop in sea level exposed the Bering Land Bridge between Asia and North America and a parade of Asian mammals migrated over it to North America during this time, including muskoxen, caribou, bison, lions, wolves, brown bears, mammoths — and human beings. The Columbian mammoth took up residence in the southern half of North America, including all of Texas and into central Mexico.

Mammoths are often confused with mastodons, whose fossils are also found in Texas, although in far fewer locations and numbers. Mastodons were not as tall as mammoths, but were thicker in build; their tusks were also shorter and straighter.

But the easiest way to differentiate between the two are their teeth. Mammoths were grazers of open grasslands; their molars had a flat, wavy surface for grinding up grass. Mastodons ate *trees* — at least saplings and large branches — and needed teeth that could chop and pulverize such fare. The surface of a mastodon's molars were comprised of large, sharp cones, and the young French anatomist Georges Cuvier thought these teeth looked like breasts. In 1806 he named the creature who possessed such teeth a "mastodon," from the Greek *mastos* "breast," and *odont* "tooth." Sounds like a young guy alright.

Mammoths are, surprisingly, more closely related to today's Asian elephants than they are to mastodons. Paleontologists have pieced together much about mammoth behavior and lifestyle by their observations of Asian elephants.

Paleo-Americans lived together with mammoths in North America for at least a thousand, and perhaps several thousand years. They were highly successful predators and utilized mammoths for food, clothing, shelter, fuel, tools, and even music! The oldest known musical instrument is a flute made from mammoth ivory tusks. But around 12,000 years ago, at the end of the last ice age, mammoths became extinct.

Theories for their extinction include a rapidly changing, warmer post-glacial environment which the mammoths couldn't adapt to quickly enough, intensified hunting pressure from humans, and even evidence of a fragmented comet impact magnifying the climate change already in progress. Most scientists believe it was probably a perfect storm of all of these.

But the story of the mammoth may not be quite over. With heavy shades of Jurassic Park, a Dallas-based biotech company, Colossal Biosciences, is aggressively pioneering cutting-edge cloning and genetic engineering techniques with the aim of creating a woolly mammoth-Asian elephant hybrid to repopulate the arctic tundra. Why would they want to do this?

Some scientists believe that a mammoth hybrid could make a significant contribution to slowing the rate of global warming. During the Pleistocene, vast herds of grazing mammoths helped maintain arctic grasslands, which reflected sunlight and kept temperatures at ground level cooler. These cooler temperatures slowed the thawing of tundra permafrost, important because thawing permafrost releases sequestered carbon dioxide into the atmosphere, causing global temperatures to rise.

Siberian permafrost has been thawing rapidly since the 1980s. Could herds of grazing mammoth hybrids restore the vast arctic grasslands, reverse the tundra's thawing trend, relock carbon dioxide into the soil, and reduce global warming? No one really knows.

And if humans *can* resurrect mammoths — *should* they? While some scientists believe reintroducing mammoths would be an important contribution to the global tool chest in reversing a warming climate, others are critically concerned. How would reintroducing an extinct species of mega fauna affect the ecological web that exists today? And what might the ultimate fate of this new mammoth species be? Animals rights activists are fearful that many of these hybrids would end up in "freak show" exhibits. Biologists worry, too, that "resurrected" mammoths would inevitably join the long line of animal species already disappearing and merely become extinct for a second time.

Sci-fi pipe dream, spectacular blunder or fantastical cure — however the mammoth's future story unfolds, it will certainly be a captivating tale.

In the Yard: A Dance of Spring and Summer

Article & photos by Jose Palmos, Rio Grande Valley Chapter

Aaah, the dog days of summer! Even as a local native of Deep South Texas, I have yet to fully embrace the hottest days of the year here. Who has? The dreadful combination of intense heat, high humidity, Saharan dust, and Texas-sized skeeters (need I say more?), have made even a simple walk to the car a daunting undertaking at midday.

La Canícula, as always, is an inevitable part of summer that we must endure and adapt to – if only August was the shortest month of the year! It was only a few weeks ago that temperatures were in the upper 80s, unusual for summer. In fact, look backing at the last few months, one can see a stirring dance between spring and summer unfold, and this seasonal tango has brought out a spectacular show from our native plants throughout the Lower Rio Grande Valley.



Clockwise starting with large photo: *Nymphaea elegans* (tropical royalblue waterlily), *Merremia dissecta* (Alamo vine), *Cooperia drummondii* (rain lily), *Clematis drummondii* (old man's beard vine), *Diospyros texanus* (Texas persimmon or chapote), and *Cyindropuntia leptocaulis* (tasajillo)

To start, El Niño brought wetter-than-normal conditions from winter through spring. The rains and favorable temperatures created the perfect conditions for wildflowers to grow across the entire state. As I traveled during spring from the Valley to Central Texas, I got to see the explosive blooms that overtook the roadsides and hills of Texas – among the predominating were *Lupinus texensis* (Texas bluebonnet), *Castilleja indivisa* (Indian paintbrush), *Argemone albiflora* (white prickly poppy), and *Tetragonotheca texana* (Nerve-ray); many other species were present, but the most memorable was seeing a single *Asclepias asperula* (antelope horn milkweed). As I stopped from one pocket of blooms to the next, I would find a slightly different array and abundance of species. It was truly an unforgettable living work of art.



In April, the City Nature Challenge of 2024 gave me an another opportunity to not only observe more of these eye-catching wildflowers, but also the native flora communities that have held onto existence along the frontage roads and railroad tracks that dissect the farmlands of northern Cameron and Willacy County. *Senegalia berlandieri* (guajillo) and *Vachellia farnesiana* (huisache) were two of spring’s specialties that added color to the tree canopies, while *Fleischmannia incarnata* (pink slender-thoroughwort), *Conoclinium coelestinum* (crucita / fall mistflower), and *Heliotropium angiospermum* (scorpion-tail heliotrope) marked the understory.

Left to right, top row to bottom: *Lantana* species, *Castilleja indivisa* (Texas Indian paintbrush), *Cirsium texana* (Texas thistle), *Argemone albiflora* (white prickly poppy), *Asclepias asperula* (antelope horns milkweed), *Allium drummondii* (Drummond’s garlic), *Hymenopappus scabiosaeus* (Carolina woollywhite), *Monarda citriodora* (lemon beebalm), and *Verbena hastata* (blue vervain)

To be fair, I was reluctant to accept that summer was just around the corner. Would there be a repeat of 2023, the hottest year to date globally? Although temperatures would sure begin to warm up as summer readied for its annual debut, it seemed that “spring” was not quite done. Warmer waters in the Gulf of Mexico and Atlantic Ocean made a busy start to hurricane season. Tropical Storm systems Alberto and Beryl (previously a hurricane) brought more favorable rains across the Valley throughout the months of June and July.

While hot summer days followed intermittent rain, enough precipitation fell to clear the entire region of drought, what wonderful news! Taking full advantage of any rain that falls, our native plants continued to put out blooms and thereafter fruit/seeds.

Taking recent walks through Harlingen Thicket, Arroyo Nature Park, and briefly at Hugh Ramsey Nature, it was a pleasant to see the Tamaulipan thornscrub in a such lively state at this time of year – even *Cephalanthus salicifolius* (Mexican buttonbush) have taken to bloom. Just recently, I came *Nymphaea elegans* (tropical royalblue waterlily) flourishing– their blooms lined up and down the ditch in white and blue flowers.

Perhaps the best place to have witnessed the wonderful dance of spring and summer was in the yard. Persistent rains brought incredible growth to many of the native plants. Tucked away in one corner of the yard, neglected and almost forgotten, was a vine that for while laid low, clinging

around some *Salvia coccinae* (tropical sage) and volunteer chile pequin. After the rains, I finally checked up on the vine, partially expectant to have lost the vine to neglect. However, the opposite was true. The vine had grown two to three times its length, and on it were the unmistakable blooms of *Matelea reticulata* (pearl milkweed vine), like jewels delicately placed on ornate petals.

Clockwise starting with large photo: *Verbesina encelioides* (cowpen daisy), *Ehretia anacua* (sandpaper tree or anacua), *Cardiospermum halicacabum* (lesser balloon vine), *Chlosyne lacinia* (border patch butterfly), *Erythrostemon mexicanus* (Mexican holdback tree or Mexican caesalpinia), and *Matelea reticulata* (pearl milkweed vine)



On the other side of the yard, I was pleasantly surprised to find that *Cardiospermum halicacabum* (balloon vine) had volunteered, and it too had just taken over the fence side. Its characteristic, lantern-shaped seedpods hung neatly, as though it was the New Year Festival. *Macroptilium atropurpureum* (purple bush-bean) was another vine to show its blooms for the first time - the color of utmost royalty.

Verbesina encelioides (cowpen daisy) have been excellent host plants for bordered patch caterpillars throughout spring and summer – close to a hundred were seen last week alone. The adult butterflies are now a common sight in the yard as well. Sulfur butterflies and a lone tiger swallowtail are other frequent visitors to the yard. While these are only a few mentions, with all that has continued to grow in the yard, I continue to learn more about our native plants and appreciate their importance to the local ecosystem.

We are currently in the hottest time of the year, and as the temperatures return to "normal," summer has taken back the lead. With that, it may be of some relief to know that we are not too far from fall – or what is sometimes referred to as “second spring.” There is a sense of shortening daylight and cooling evenings. Migrations have started or already begun for several species, including that of the monarchs, hummingbirds, shorebirds, Purple Martins, etc.

October is often the most ideal time to begin fall plantings in our area, and I would encourage all to take advantage of this – plant natives or participate in organized plantings to help support these species, as well as our local species. Take time to appreciate the green thornscrub, and as best put, “take time to smell the roses (in this case – I’ll say the aroma of the mistflowers, whitebrush, and torchwoods.”

T E X A S



Milestones & Awards for June, July & August 2024



Congratulations!

Newly Certified Texas Master Naturalists

Roberto Cepeda '24
Mark Sorenson '24
Marby Sweeney '24

Karen Weaver '24
Eryn Reddell Wingert '23

100 Hours Milestones

Maki House '24

250 Hours Milestones

Terrilyn Alaniz '24

Joseph Kowalski '22

1,000 Hours Milestones

Dana Allamon '18

5,000 Hours Milestones

Barbara Peet '15

Re-certification for 2024

(through June of 2024)

Terrilyn Alaniz
Dana Allamon
Josue Ayala
Joyce Baer Halpern
David Batot
Sherry Borrayo
Pamela Bradley
Bobbie Brown
Chery Brummett
Michelle Cano
Yvette Cano
Alicia Cavazos
Diana Cepeda
Amy Daley
Theresa De Salvo
Robert Gaitan
Michele Gardner
Robert Gardner
Robin Gelston
Joni Gillis
Mary Grizzard
Diane Hall

Betsy Hosick
Volker Imschweiler
Devin Johnston
Dawn Johnston
Kenneth Koch
Ed Langley
Marilyn Lorenz
Susan Manning
Dan Martin
Deborah McCoy
Linda McGonigle
Jody Nelsen
Barbara Peet
Barb Peterson
Carol Rausch
Jacob Reinbolt
Mimi Romero
John Romero
Danny Salinas
Paul Sorenson
Susan Upton
Carolyn Woughter

Thank you everyone for your hard work and
dedication!

T E X A S



South Texas Border Chapter

Congratulations!



Milestones & Awards for June, July & August 2024

Recertification 2024

- Logan Dovalina
- Stevan Schiefelbein
- Janet Schofield
- Lisa Adam
- Rosa Flores
- Gayle Rice
- Judy Gibbons

1000 Hours

- John McKee

500 Hours

- Ellie Kidd
- Velma Schmidt
- Janet Schofield

250 Hours

- Jim Gerry

100 Hours

- Logan Dovalina
- Stevan Schiefelbein

WELL DONE!!

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Anita Westervelt

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Outreach: Marilyn Lorenz	
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Facebook Editor: Robert Gaitan	
Website: Eryn Wingert, Chet Mink, Richard Blanton	
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Volunteer Service Project	David Batot
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Texas AgriLife	
Texas Parks & Wildlife	Javier de Leon

RGV Chapter Texas Master Naturalist: This chapter is an affiliate of the Texas Master Naturalist Program jointly sponsored by Texas AgriLife and the Texas Parks & Wildlife Department.

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Second Vice President	Jennifer Rektorik
Secretary	Velma Schmidt
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