

T E X A S



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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.

Beauty on the Beach: The Speckled Swimming Crab

Article & photos by Mary Grizzard, Rio Grande Valley Chapter

It's not a rare find to come across a speckled swimming crab (*Arenaeus cribrarius*) washed up on the sand on a Padre Island beach walk, but it's always a delightful one. Usually it's just the crab's carapace, lovely and fragile, a light maroon or olive green color finely scalloped around the edges, coming to sharp points at the widest part of the shell, and heavily dotted in white. But sometimes it's the whole body, and when that's the case, the first thing one notices are the unusually shaped hind legs.



The legs are wide and flat like little paddles, and that's precisely what they are. These fifth pair of legs, or pereopods, are also known as swimmerettes. They rotate rapidly in the water, propelling the crab for a fast crustacean pursuit or getaway. Speckled swimming crabs share this unique feature with the more familiar blue crab, both being in the family Portunidae, the swimming crabs.

Speckled swimming crab (*Arenaeus cribrarius*)

But swimmerettes are not the only trait both crabs have in common. Both species are known to have a fairly feisty temperament and aggressively use their pinchers when feeling threatened. Some crabbers claim that although the speckled swimming crab is much smaller, only two to five inches wide, its meat is just as delicious, perhaps even more so, than the renowned blue crab.

Speckled swimming crabs are found along the Atlantic Coasts of both North and South America, from Massachusetts to Uruguay, and also along Caribbean and Gulf shores. They scavenge for detritus but are also ambush predators, burying themselves in the sand, mostly in the shallow surf zone but sometimes all the way out to depths of 200 feet. Mole crabs and coquinas are their favorite live catches. They have also been documented pursuing and capturing loggerhead sea turtle hatchlings. But what goes around comes around, and loggerhead adults, along with Kemp's Ridley sea turtles, are the adult crab's primary predators. Humans also take their fair share, both directly for consumption or, as in Brazil, to produce fertilizer and livestock feed. Anglers also like them for bait when fishing for pompano and sheepshead.

Crabs in the Portunidae family have a famously unique method of reproduction. If you ever read Suzanne Tate's delightful children's book, *Crabby And Nabby*, to your children or grandchildren

you will remember this story, which, although its subtitle is *A Tale of Two Blue Crabs*, portrays the reproductive story of the speckled swimming crab as well.

A male Portunidae crab attracts a female with pheromones and courtship displays before grasping her and carrying her around underneath himself for 25 to 35 days. Mating takes place after she molts and sheds her hard exoskeleton, and then the male continues to carry her, cradling her in his legs, for another 24 to 36 days, until her new shell has hardened completely. Humans might find this behavior variously charming or creepy, but it works well for the speckled swimming crab. Once the female's shell has calcified the male swims away.

Eggs develop inside the female's body but they are not yet fertilized after mating. The female can store the male's sperm for up to a year, waiting for ideal water and temperature conditions in which to spawn. When this occurs, the 100,000 to 600,000 eggs she has produced are fertilized as they pass out of her body and are attached beneath her curled-under abdomen. The female then carries them as a "sponge" beneath her body for around two weeks, until they hatch as larvae, at which point they are subject to the mercy of the sea.

Crab larvae are virtually synonymous with the term "fish food" as pretty much everything in the ocean eats them — fish, jellyfish, shrimp, other planktonic animals, even adult crabs. It is estimated that only one in a million crab larva survive to adulthood, which obviously means it takes all the eggs from between two to ten spawning speckled swimming crab females to produce a single adult. So many marine creatures we encounter on the beach give us pause to wonder; not the least when we find the speckled swimming crab's elegant carapace and contemplate how it ever managed to defy the odds!



A memorable way to tell a speckled swimming crab female (left) from a male (right) is to turn it over and examine the under abdomen. On a female, the apron that covers the abdomen looks like the U.S. Capitol dome, while the male's apron resembles the Washington Monument. This is true for blue crabs as well.

The Coquina

Article & photos by Joseph Kowalski, Rio Grande Valley Chapter

Coquina is the common name of a species of clam (*Donax variabilis*) that lives in the sandy beach sediments of many coastal shores. *Donax* is quite small (about 10-15 mm in length) and burrows into the sand where it filters the water for suspended bacteria, phytoplankton and debris (called detritus). They have an in-current siphon that draws water in and an excurrent siphon that pumps used water back out. In between is where they filter the food out to sustain themselves. Some folks cook up coquina and stew them. Bring your own crackers.

Coquina is also the same name used to describe rock that forms when mainly coquina shell remains are broken up and scattered in the fore shore of the beach by pounding waves, along with many other types of invertebrates with shells made of calcium chloride. Once the fragments are swept together seawater moves through the pore spaces and cements the debris, along with sand grains and glues them together to form the sedimentary rock, coquina.



Coquina rock specimen, long axis about 18 cm

A slightly acidic porewater is ideal to act as a cementing fluid. Often calcium chloride is the cementing agent, but silica can act in this role, depending on the geochemistry of the local geologic setting. The best way to know whether you're dealing with calcium chloride is to place a small drop of hydrochloric acid on the rock. If it fizzes, it's calcium chloride. Silica doesn't fizz.



Now that we have the hash of broken material cemented we need a bit of time and pressure. This is how to make a sedimentary rock from a bunch of material (sand, larger rocks, fossils, and the like).

Don't forget that we began this with the *Donax* clam and how they become obliterated in the surf zone of the beach. There are also oysters, but they may not go well in soup.

Enlarged portion of cocina rock showing detail of many kinds of broken fossils.

It's all Connected; it's all Good

Article & photos by Anita Westervelt, South Texas Border Chapter

I knew what I was looking at: silvered prominent caterpillars, *Didugua argentilinea*. But they were on the wrong side of the yard, eating the wrong vine.

It was one week into the 2024 Texas Parks and Wildlife Department's Texas Pollinator BioBlitz. I'd set that day for documenting the pollinator plants and was in the section of our yard where a volunteer *Serjania brachycarpa* appeared last year. Its common name is littlefruit slipplejack, or locally, serjania, in the Soapberry family, Sapindaceae.



Serjania (*Serjania brachycarpa*) with explosive growth

This year, while my back was turned, and most likely because of the previous month's teasing rain events, the vine was gigantic. It had devoured the tall Barbados cherry shrub that kindly lent it's support to the slender vine of last year. Not only that, but the vine had over topped the shrub, spread several feet onto our chain link fence and then traveled up and over the neighbor's taller wooden fence.

I was mesmerized at the volume of growth. And then I noticed all the blooms, magnificently covering the vine in creamy white flowers. I was looking for the best flower/leaf combination to photograph and upload to the BioBlitz, and that's when I saw what shouldn't be there: caterpillars – hundreds, maybe more – too many to count – yellow and black striped caterpillars with red heads and red feet. Once seen, “they” say, silvered prominent caterpillars are hard to misidentify.



Creamy white serjania blooms

I was introduced to silvered prominent caterpillars several years ago after I had planted a common balloon vine on the other side of our yard, behind the barn on the chain link fence. The first fall, it



was full of silvered prominent caterpillars as well as blue-winged bugs, bees and tiny green butterflies.

In subsequent years, for both spring and fall BioBlitzes, I have counted on that vine for entries to upload into the iNaturalist.org database. In the spring it counts as a native plant. In the fall, it hosts silvered prominent caterpillars; red shouldered bugs, *Jadera haematoloma*; and silver-banded and grey hairstreak butterflies.

Silvered prominent caterpillars (*Didugua argentilinea*) on serjania vine

Right: Silvered prominent moth

In the summer, the moth itself is a frequent visitor to my black light/moth sheet. The adult silvered prominent moth has two distinctive white markings on the leading margin of each forewing, “shaped like the dorsal fin of a shark,” according to BugGuide.net. In the scientific species name, *argent* is Latin for silver.



BugGuide.net is my go-to source especially for host plant information for insects, including moths. They note that the silvered prominent moth’s host plants are many and varied. They include multiple genera of Sapindaceae (Soapberry), Urvillea, Serjania, and possibly Cardiospermum, which includes common balloon vine, *Cardiospermum halicacabum*. No possibly about the balloon vine’s use in my yard, it’s a busy vine. Silvered prominent moths also use Turk’s cap, *Malvaviscus arboreus*, unripe seeds of mesquite and foliage of assorted trees including hackberry, ash, and brasil.

According to a pamphlet published by our local Native Plant Project, “Native Plants, Cacti, Ground Covers and Vines,” *Serjania* also is host to the dimorphic bark wing butterfly.

Both common balloon vine and serjania are worthy, interesting and active vines. They attract bees, bugs, wasps, butterflies and moths for pollination and nectar. They are good candidates for a fence or trellis (where you may curtail too dramatic growth). They can be left as ground cover and will travel and undulate over other vegetation.



Both vines have attractive blooms and unusual and beautiful fruit. Common balloon vine fruit, in the fall, turns a deep cinnamon color and looks like festive Halloween lanterns. The dried pods are tissue-paper thin, and contain two or three tiny, white-tipped round black seeds. Bob-white quail eat the seeds.

Festive common balloon vine fruit (*Cardiospermum halicacabum*)

The fruit of serjania is often mistaken for flowers; they are blush-pink and greenish colored and three-dimensional, eventually turning brown as the seeds ripen.

Red-shouldered bugs, a blue-winged bug with red shoulders, are not harmful to humans, lawns, garden vegetable or structures. They eat the seeds, leaves and stems of their host plants, like balloon vine. Some rodents, grasshoppers, birds, praying mantises and spiders occasionally prey on red-shouldered bugs. Birds eat caterpillars. Lizards eat insects.



Pink and green colored developing fruit of serjania vine

It's all connected.

The Serenity Garden

Photos by Velma Schmidt, South Texas Border Chapter



Serenity Garden in Edinburg blooming in early November

The Serenity Butterfly Garden, located in Edinburg (off Sugar Road in The Meadow's Subdivision) was created by Texas Matster Naturalist Zeke Schmidt as part of his Eagle Scout Project four years ago. These pictures were taken this year in late October and early November, when the goldenrod and crucita were in full bloom. The guamucil tree in the center is the host plant for the red-bordered pixie butterfly. We were very excited to see this unique butterfly for the first time this fall in the Serenity Butterfly Garden. Everyone is welcome to come by and see what the garden offers. Feel free to contact the author to make arrangements to visit.



Red-bordered pixie butterfly (*Melanis pixe*)



Agnus' datana moth caterpillar



Snail



White-checked skipper



Spot-sided coreid



Ceraunus blue butterfly



White peacock butterfly



Common buckeye & long-tailed skipper



Phaon crescent caterpillars



Common mestra butterfly

Blue Metalmark Butterfly

Article & photos by M. Kathy Raines

Wild creatures appear where they appear—and sometimes amidst something we humans find distinctly distasteful—like dung.

But that's just where I found this stunning blue metalmark (*Lasaia sula*)—feeding with its fellow butterflies, sickle-winged skippers (*Achlyodes mithridates*) upon grassy clumps of feces along a trail at Resaca de la Palma State Park in early October.

Poets have written pages and pages about beauty popping up amid ugliness, darling blossoms emerging between cracks in weathered concrete and the like. And here was this bluish green beauty feeding upon the dung. But, why?



Blue metalmark and sickle-winged skippers feeding on dung

Butterflies and other insects, I discovered, engage in something called puddling, wherein they feed upon feces, dead animals or other refuse, presumably to absorb nitrogen, sodium and other required minerals. Having something akin to micro-sponges on the tips of their tongues, butterflies lap up what they need.

Like other butterflies, blue metalmarks sip nectar from various blossoms. Personnel at the National Butterfly Center in Mission often see them on crucita (*Eupatorium odoratum*), a native shrub that reaches about two feet in height. But blue metalmark caterpillars, like many, feed exclusively on one host plant, in this case, the black mimosa (*Mimosa asperata*)—a densely-branched, prickly shrub with roundish pink flowers. The metalmarks eat leaves, stems and flowers—and occasionally one another.

Being sexually dysmorphic, a male's four wings are a metallic bluish green with tiny black spots. It also has reduced forelegs. A female has checkered gray/black spots without the blue-green tint.

Assorted hues of gray lines edge the butterflies' wings. With wings closed, both sexes appear grayish brown with checkered spots.

Butterfly larvae, like adult insects, have three body parts—the head, thorax and abdomen. Also, the sides of their heads hold wee ocelli, or simple eyes, and they have an upper lip, strong mandibles and a lower lip with spinnerets, which spin silk threads. While butterfly caterpillars do not, like those of moths, spin silk into cocoons, they may create safety line anchors, shelter or a silk pad, with which they attach a hook, while preparing to pupate. Some use silk for hunting.

A female blue metalmark lays round, whitish eggs upon the host plant's leaves. Blue metalmark caterpillars, furry and greenish white, begin eating immediately after they emerge from eggs. Like all butterfly larvae, they go through five instars, or stages, molting five times.

A blue metalmark's chrysalis or pupa, layered with tiny hairs, is attached to a protected spot on the host plant or to nearby ground.



Blue metalmark butterfly (*Lasaia sula*)

The blue metalmark is one of 1,532 species (and 146 genera) in the family Riodinidae, for metalmarks. (Older sources put them in the family Lycaenidae). North American varieties tend to have gold or silver metallic spots. The National Butterfly Center records eight species of metalmarks.

Blue metalmarks appear from about April to December in woods, edges and farmlands in the Rio Grande Area, and they extend southward to Honduras. Their status appears to be secure.

Yanaguana Chronicles I: Texas Ebony, *Ebenopsis ebano*

Article & photos by Kamala Platt, Rio Grande Valley Chapter

My process as an artist is to work with the land.

To give to it and to see what it takes,

what it makes of the seeds or young plants I place in its embrace. -Kamala Platt

Land and Symbiotic Futures Exhibit, WEAD (Women EcoArtists Dialog) <https://artspace.kunstmatrix.com/en/node/13409738>

Acknowledgement: Yanaguana is an ancient and recovered indigenous name for San Antonio, and its spirit waters.

It has been a few years since I've sent a photo essay to *The Chachalaca* from the westside of San Antonio where I have had a permanent home since 2001. It has been even longer since I became a Rio Grande Valley Chapter Texas Master Naturalist (RGVCTMN) in 2007, while teaching at University of Texas – Pan American (UTPA) in Edinburg. When that job ended and I moved back to San Antonio, I kept my membership in the Rio Grande Valley Chapter, and I've been thinking it is time to reintroduce myself and explain why I continue as a RGVCTMN member.

When I returned to my home on Martin Street in San Antonio, I often brought along mostly native plants, some from several of the many native nursery folk in El Valle, a few from yard sales and farmer's markets and a few transplants from my yard in Edinburg. I sought to plant plants which would still thrive on the cusp of the Coastal Plains close to where it touches the beginnings of the Texas Hill Country.

Most of them transplanted successfully. Some pooped out over the years, and a few succumbed to Winter Storm Uri and/or to later spikes in heat or fast drops in winter temperatures and/or prolonged droughts. I've planted more over the years, from local nurseries, plant exchanges, gifts, and from a plant man from the Rio Grande Valley who came up with a van full of plants every so often. I'd like to offer updates to photo essays from a few years back, of plants thriving here that originated in the Rio Grande Valley.

Today's is a set of photos that tells the story of a Texas Ebony brought in a pot from Edinburg that I planted in my yard circa 2012. The following photos are from over the last five years; (earlier are not in my digital collection, yet.) There are other Texas Ebonies around town, but not many. The last five years have held chaotic weather, I've treasured the come-back of a few species, after storms, heat and drought—not the least, our Texas Ebony in my front yard.



December 2020: Texas ebony and Opuntia/nogalitos from the neighborhood



February 2021: Texas Ebony during Winter Storm Uri



Spring 2021: Texas Ebony after Winter Storm Uri



Dead winter branches providing habitat for roosting birds



2024: Texas ebony regrowth today

The Peace Garden

Article by Volker Imschweiler, Rio Grande Valley Chapter

The Peace Garden in Hugh Ramsey Nature Park, maintained by Texas Master Naturalist volunteers and members of the religious community of Baha'i, served as a meditative garden on September 21, 2024 (International Day of Peace). For an hour, about 10 Baha'i members with children gathered in prayers, song and spoken word.

Afterwards, some decorated rocks (pebbles marked with an expression of virtue) were hidden along the path to be found and picked up by future visitors.

It is planned to use the beautiful park surroundings at Ramsey as an opportunity for future meetings like this one, preferably during the cool season.



Among the participants at the International Day of Peace program at the Baha'i Peace Circle on September 21 were friends Alice and Josephine – photo by Steve Wilder

Flies are so much more than annoying pests

Article & photos by Anita Westervelt, South Texas Border Chapter

Flies are second only to bees as pollinators of plants. More good news: flies prey on undesirable insects and they themselves, are food for other wildlife. In addition, flies do a lot of the dirty work, like cleaning up smelly detritus and rotting dead stuff, turning it back to the earth as usable organic nutrients.

During the October 2024, Texas Parks and Wildlife Department's Texas Pollinator BioBlitz, I set up a black light and moth sheet to attract night flying pollinators.

Several interesting flies joined the count this year, like a nocturnal fly in the **Tachinidae family**. While I was photographing it, I thought it was a fruit fly because of its coloring, size and the way it was holding its wings. It identified on iNaturalist.org as in the ***Ormia* genus** which is a small genus of nocturnal flies that are parasitoids of katydids and crickets. The female is attracted to the song of the male cricket and deposits larvae on or around him.



Genus *Ormia* fly

Tachinids are the most important of the parasitic flies; their larvae are often used in biological control of insect pests, a natural, non-toxic pest control. A garden full of small flowering plants, flowering herbs and aster family flowers attract these flies but you will need to avoid using broad-spectrum insecticides.

A species of this genus (*Ormia ochracea*) is notable for its exceptionally acute directional hearing and has inspired designs for microphones and hearing aids.



Genus *Euthera* fly

Genus *Euthera*, also in the **Tachinidae family**, is an attractive fly with orange shoulder pads and black and clear wings with distinctive markings. The flies have a black body, and black legs tipped in orange. Their larval food is Pentatomidae – stink bugs.

Fruit flies



Mexican fruit fly, in the **Tephritidae family** (fruit fly family) has yellow and brown coloration and a distinctive wing pattern. It's pretty, but a major pest to citrus and mango agriculture in Mexico, Central America and the lower Rio Grande Valley.

The species is a particularly aggressive invasive species because of its high rate of reproducing offspring. Adult Mexican fruit flies live longer than other fruit flies. Worse news, a single female can lay up to 1,500 eggs in her lifetime, which can be about 11 months. They lay their eggs inside of fruit, the larvae grow and feed within the fruit and make it unmarketable, according to a Texas Invasive Species Institute online data sheet.

Mexican fruit fly

Blow flies

Calliphoridae, commonly called **blow flies, bluebottles or greenbottles** are shiny metallic blue, green, copper or black colored. They are usually found in association with carrion and excrement, according to Texas A&M AgriLife Extension online "Field Guide to Common Texas Insects." Blow flies are typically the first insects to arrive on a dead animal. The larvae are scavengers of carrion and dung.

Hairy maggot blow flies (*Chrysomya rufifacies*) are in this family, too. The adults can arrive within the first 10 minutes after death. The female flies can lay eggs in a loose mass of 50 to 200. The eggs hatch in as little as eight hours.

I came upon a dead black rat on the way to the moth sheet at 4:30 one morning. By sunrise, the flies were already on it. As a matter of curiosity, I left it alone for a few days, until all activity had dispersed and only hide, and bits of fur were left. Interestingly, while researching for this article, I found this statement: "This species must have access to decomposing carrion or rotten meat in order to complete its life cycle. Therefore, removal of garbage and carcasses will disrupt the life cycle," according to a University of Florida Institute of Food and Agriculture publication by Jason H. Byrd.



Hairy maggot blowflies on black rat

Blow flies are not dangerous; they do not bite humans. However, due to the hazards of their job: landing on feces, dead animals, garbage and other decaying organic matter, blow flies can carry dangerous bacteria and parasites, which could pose a health threat to humans and animals.

We don't often think about flies having predators because they're so quick at avoiding flyswatters, but really, in the natural world, nothing's safe. Blow fly predators include spiders, beetles, frogs, birds and chickens.

They are primary consumers of carrion and therefore essential decomposers in nature. Blow flies, with their larvae, or maggots, are often used by forensic scientists to estimate the time of death in criminal investigations.

Tribe *Macronychia*

Macronychia is a genus of **satellite flies** in the **family Sarcophagidae**. The genus name, *Miltogramma*, means "painted with reddish lines," according to information on BugGuide.net.



There are at least 20 described species in *Macronychia*. The female flies trail behind their prey, often within a narrow range, as if tethered, according to BugGuide.net. The prey and larvae food of most satellite species of flies feed on prey captured and paralyzed by **sphecid wasps** (mud daubers and other thread-waisted wasps). Flies lay live larvae on the wasp's prey before it is buried, so the prey becomes food for the fly's larvae instead of the wasp's larvae. The strategy is kleptoparasitism, a form of parasitism involving theft, in this case, the fly depositing its larvae on the food reserved for the larvae of the wasp.

Tribe *Macronychia* fly

More about other pollinator flies that came to the moth sheet during the recent BioBlitz are written up on the South Texas Border Chapter website at this link:
<https://www.stbctmn.org/post/anita-s-blog-the-flies-have-it-1>

The Great Pretenders

Article & photo by Melissa V. De Pagter, South Texas Border Chapter

A quiet McAllen backyard reveals an enchanted botanical wonderland, filled with unexpected sights. Myriad brightly-colored butterflies engage in an endless dance, accompanied by the noisy chatter of Chachalacas. But this isn't just any backyard soiree. It is a masquerade ball, just in time for Halloween.

I spy two butterflies sipping nectar from a Gregg's mistflower. Suddenly a yellow-and-black paper wasp swoops in! Instinctively I back away, but then curiosity overcomes my caution and I move in for a closer look.



Texas wasp moth (*Horama panthalon*)

Enter the Texas wasp moth, clothed in a clever disguise. It's a mimic, pretending to be something it isn't. Batesian mimicry (named for English naturalist Henry Walter Bates) is a form of mimicry where a harmless species evolves to resemble a harmful one. In the case of the harmless Texas wasp moth, looking like an unappetizing (and possibly stinging) paper wasp helps it avoid being eaten by hungry birds.

The insect world is full of examples of Batesian mimicry. But the spicebush swallowtail takes it to a whole new level. This butterfly employs Batesian mimicry throughout its life to avoid predators. As a caterpillar, it initially resembles a bird dropping. Later, it looks remarkably like a green snake, complete with false eye spots and a false snake-like forked "tongue" it can extend when threatened. While a chrysalis, it mimics a curled, dead leaf. Finally, as an adult, the spicebush swallowtail mimics the colors and patterns of the poisonous pipevine swallowtail.

Batesian mimicry is not limited to invertebrates. A well-known reptilian example is the milk snake. Although completely harmless, humans and animals alike give the milk snake a wide berth due to its very close resemblance to the venomous coral snake. Both snakes are red with yellow and black bands. The coral snake's red and yellow bands touch each other, while the milk snake's red and yellow bands do not touch. Who hasn't heard the saying, "Red and yellow, kill a fellow; red and black, friend of Jack"? This familiar rhyme is a good device to jog your memory if you encounter one of these snakes in the wild. Another way to tell them apart is that the milk snake's bands do not go all the way around its body.

Even some mammals exhibit Batesian mimicry. Cheetah cubs have evolved fur that resembles, at least from a distance, the notoriously ferocious honey badger. Any predator would definitely think twice about messing with a honey badger!

Making more *Mesoxaea texana* on the South Texas Sand Sheet

Article & photos by Camille M. Rich, Rio Grande Valley Chapter



Side view of two conjoined
Mesoxaea texana

Female: Shiny, black eyes

Male: Green, jewel-toned eyes

Image captured on May 28, 2023.

Dear Fellow Nature Enthusiast,

When I first encountered these two rare bees, they were in flight. In fact, they flew right in front of me, and I almost ran into them. I was confused as to what I was seeing. Initially, these two rare bees appeared to be a very long insect flying about three feet above the ground. It took me a few seconds to realize that this "really long insect" I had nearly bumped into was actually two *Mesoxaea texana*----conjoined---while in flight. These two remained conjoined for quite some time. Rough estimates, based on the metadata for all images and videos taken that day, suggest that they were in this state for several minutes.

Front view of two conjoined *Mesoxaea texana*

Female: Shiny, black eyes

Image captured on May 28, 2023.



The Texas native plant these two *Mesoxaea texana* alighted on is a *Salvia ballotiflora*, also known as shrubby blue sage. This native plant has been observed to be a favorite nectar and pollen source for them. During the years I have been scouting, observing, and documenting these rare bees, I have been able to document the *Mesoxaea texana* also utilizing *Waltheria indica*, *Funastrum cynanchoides*, *Aloysia gratissima*, *Eysenhardtia texana*, and *Cynanchum barbigerum* for nectar and pollen. Additional, detailed information on these Texas native plants may be found in *Plants of Deep South Texas* by Alfred Richardson and Ken King, Texas A & M University Press, College Station, 2011.



Female: Shiny, black eyes

Native Plant: *Waltheria indica*

Image captured on September 21, 2024.

In wrapping up this brief photo story for us, I would like to share with you that I have been stewarding El Mesteño Ranch and Arboretum, located in Puerto Rico, Texas, for these rare bees since the Fall of 2020. Their watch, care, and preservation has turned into one of the greatest, most significant "Passion Projects" of this chapter of my life. As a matter of fact, I have been collecting and recording data on this rare bee from 2020 to the present day with the hopes and intentions of publicly sharing this information with you at some point in the future.

Male: Green, jewel-toned eyes

Native Plant: *Waltheria indica*

Image captured on August 24, 2024.



In closing, if you would like to watch a video of these two bees during my encounter with them on May 28, 2023, please visit www.elmestenoranch.com. You may also find this video, and related *Mesoxaea texana* videos, at the following YouTube channel: El Mesteno Ranch and Arboretum.

Please stay tuned. There is more to come, and thanks for your time!

All my best,
Camille Marie

P.S. If you would like to read more about these bees, you can find information about them on pages ninety-two (92) through ninety-five (95) in “A Guide to North America’s Bees: The BEES in Your Backyard,” by Joseph S. Wilson & Olivia Messinger Carril, Princeton University Press, Princeton and Oxford, 2016.

One male knocked another male off the top of a *Waltheria indica*.

A phenomenal territorial display!

Image captured on September 25, 2024.



South Texas Ecotourism Center



Winter Speaker Series 2024-25

December to February 5:30 p.m. – 7:00 p.m.



December 12th: Ada Beltri —Growing and Nourish Healthy



Ada Beltri is a dedicated professional working with the Texas A&M AgriLife Extension Service. Her current role focuses on Better Living for Texans (BLT) gardening programs for youth and adults, which is all about promoting healthy lifestyles, nutrition, and well-being. Ada graduated from the Texas Master Gardener program Cameron County in 2018, where she has been an active volunteer since then. Ada's experience includes managing educational and cultural programs for museums, nonprofits, and government institutions, in Mexico and South Texas, focused on promoting access to education for the community, cultural diversity, art, and sustainable development.

January 9th: Karen Weaver —Texas Tortoises



Originally from Ohio, Karen has worked at Palo Alto Battlefield National Historical Park since 1996. She earned her master's degree in environmental science from Texas A&M – Corpus Christi and became a Texas Master Naturalist in 2024. Karen serves as both the education and volunteer coordinator. She has coordinated youth to help with reforestation and other resource preservation projects at Palo Alto. During her free time, Karen enjoys volunteering and singing in a choir.

February 20th: Roberto Gaitan—The Laguna Madre: Five Unique Plant Communities Serving Our Wildlife



Roberto Gaitan is a native Texas, born and raised in the Rio Grande Valley. He left south Texas after high school to attend college and returned almost three decades became a High School Science Teacher and a Texas Master Naturalist in 2014. It is then that Roberto discovered the uniqueness of his backyard and the peril of our native species and native habitat. Roberto served as President of the Rio Grande Valley Chapter of the Texas Master Naturalist for three years. He is also a board member of the Friends of Estero Llano Grande State Park, board member of the Native Plant Project group, and recently became President of the organization he helped establish, the Rio Grande Valley Chapter of the Native Plant Society of Texas.

December 19th: Javi Gonzalez - Christmas Bird Count



Javier Gonzalez grew up birding in the Rio Grande Valley and is the Naturalist Educator at the South Padre Island Birding Nature Center & Alligator Sanctuary. He enjoys all things nature, but has a special interest in the birds of the Lower Laguna Madre and the Texas Gulf Coast. He has a passion for promoting coastal bird conservation and awareness through birding. He is also the compiler for the annual "Coastal Tip Christmas Bird Count" happening in December each year.

January 23: Augusto Sanchez Gonzalez —Water Conservation



Mr. Sanchez Gonzalez is a Water Resources Engineer and is the Natural Resources Coordinator for Cameron County as the Floodplain Manager. He implements coastal shoreline management strategies in South Padre Island and manages a variety of drainage and flood Protection projects. Prior to joining the County, he worked at UTRGV

Civil Engineering Department as an instructor and watershed manager for the Lower Laguna Madre/Brownsville Ship Channel Watershed and at TAMU-Kingsville as a Research Engineer implementing and promoting the adoption of Low Impact Development/Green Infrastructure strategies across the LRGV. He is a founding board member of the LRGV Stormwater Taskforce and the Lower Laguna Made Estuary Partnership.

January 16, January 30, & February 6 Speakers TBA

The South Texas Ecotourism Center is located at 501 W. State Hwy 100, Laguna Vista, Texas.
Admission is free. Website: www.stec-lv.org



Welcome back, Winter Texans!

by Joyce Baer Halpern, Rio Grande Valley Chapter

Like the monarch butterflies, we head south. What will we see? What will we do on our journey while we're down south?
Good places to explore, to eat, to dream...

Take a look on the Texas Master Naturalist website, <https://txmn.tamu.edu>, and see what else is here.

T E X A S



Rio Grande Valley Chapter Congratulations!

Newly Certified Texas Master Naturalists

Lindsey Czopek '24

Tess DeSerisy '24

Stephanie Mendoza '24

100 Hours Milestones

Marby Sweeney '24

250 Hours Milestones

Yvette Cano '22

500 Hours Milestones

Michele Gardner '17

1,000 Hours Milestones

Sharon Helsley McGinley '23

4,000 Hours Milestones

Chuck Cornell '18W

T E X A S



South Texas Border Chapter



Congratulations!

Milestones & Awards for
September, October and November 2024

Recertification 2024

Bill Rich
Jennifer Rektorik
Judy Perkin
Becky Jones
Michael Doyle
Liz Eddy
Arnold Tamez
Mary Tamez
Jim Gerry
Melissa De Pagter
Chantel Ortiz
Tom Butler
Ruth Nix

WELL DONE!!

500 Hours

Arturo Rodriguez

250 Hours

Jaime Rodriguez

100 Hours

Vanessa Pena

Contributors to this issue of The Chachalaca



Melissa De Pagter



Joni Gillis



Mary Grizzard



Diane Hall



Joyce Baer Halpern



Volker Imschweiler



Joseph Kowalski



Ed Meza



Kamala Platt



M. Kathy Raines



Camille M. Rich



Velma Schmidt



Anita Westervelt

Rio Grande Valley Chapter Leadership Team 2025



Officers

President	Robin Gelston
1 st Vice President	Rob Gardner
2 nd Vice President	Chad (TC) Wilmoth
Secretary	Evelyn Alpert
Treasurer	Betsy Hosick

Directors and Committees

Past President

Membership Karen Weaver

New Class Amy Daley and Barb Peterson

New Class Rep TBD

Communication Mara Lee Moats

Outreach: Marilyn Lorenz

Historian/Archivist: (open)

Newsletter Editor: Diane Hall

Facebook Editor: Mara Lee Moats

Website: Eryn Wingert, Chet Mink, Richard Blanton

Parliamentarian Penny Brown

Advanced Training Teresa Du Bois

Volunteer Service Project David Batot

At-Large: Winter Texan Joyce Baer Halpern

At-Large: Alicia Cavazos, Mary Grizzard, Rolando Garza, Emma Gonzalez

Advisors

Texas Parks & Wildlife

Javier de Leon & Ernesto Garcia-Ortega

Would you like to help? Please contact us at riograndevalleychapter.tmn@gmail.com

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.

Educational programs of the Texas A&M AgriLife Extension Service and Texas Sea Grant at Texas A&M University are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information, or veteran status. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.

South Texas Border Chapter Leadership Team 2025



Officers

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First Vice President	Velma Schmidt
Second Vice President	Jennifer Rektorik
Secretary	Melissa de Pagter
Treasurer	Taylor Kittleman

Directors

Immediate Past President	Donna Otto
Membership Director	Jaime Rodriguez
Awards: River Rivera	
Hours review/approval: Kathy Tonn, River Rivera	
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Communication Director	Anita Westervelt
Publicity: Anita Westervelt	
Newsletter: participate with RGV Chapter	
Webmaster/IT: Joseph Connors	
Outreach Director: Velma Schmidt	
Historian/Archivist: Kathy Tonn	
Advanced Training Director	Judy Perkin
Volunteer Service Project Director	Jennifer Rektorik
Volunteer Opportunity Director	River Rivera
At-Large Director	Robert Hernandez
Winter Texan Director	Mary Baker
New Class Representative	TBD
Chapter State Representative	Kathy Tonn

Advisors

Texas Parks & Wildlife Advisors Javier DeLeon & Ernesto Garcia-Ortega

