



Naturalist Notes



Flower Scarab on Basket flower
Houston Arboretum
credit Irmi Willcockson

“It seems to me that the natural world is the greatest source of excitement; the greatest source of visual beauty; the greatest source of intellectual interest. It is the greatest source of so much in life that makes life worth living.” David Attenborough



A promotional banner for the Plastic Pickup Challenge. The top left features the logo for Partners in Litter Prevention (PLP), which includes a stylized map of Texas and the acronym 'PLP'. The main text reads 'PLASTIC PICKUP CHALLENGE' in large, bold, red letters. Below this, the dates 'JULY 19 - JULY 25' are displayed in white on a blue background. The bottom of the banner is decorated with colorful illustrations of various pieces of litter, including a plastic bottle, a can, and a piece of paper.

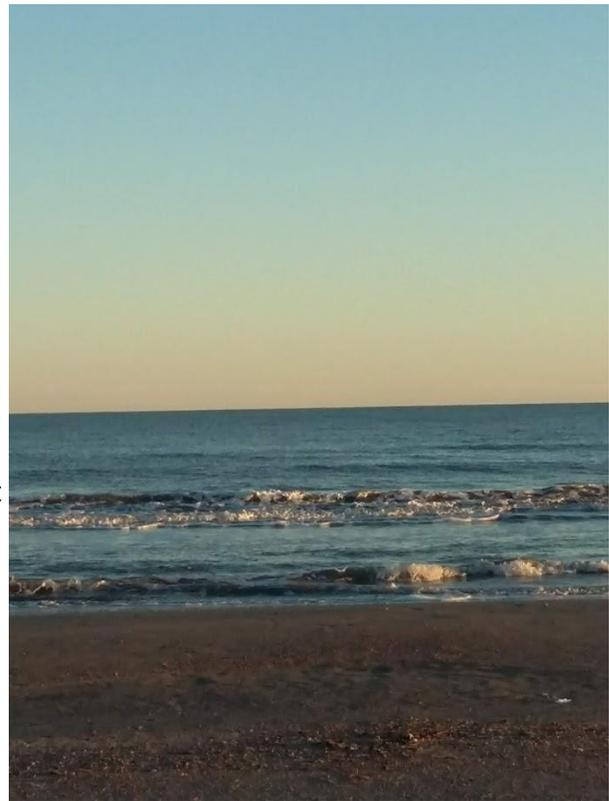
For information on local events, check

https://www.donttrashagoodthing.org/plasticpickupchallenge?fbclid=IwAR3hyEqJ1pKr-b1R42YlciSZ-yw-W0UMj2AlqMNRuMfUGFLrz7DPMUO_2IQ

Water of the Month - Ripples, Waves, and Swells

While all three are created by wind moving across a surface of water, the difference lies in how long they outlast the wind, and how far they travel. Ripples are created and die away almost instantly based on changes in the wind. You can create ripples by blowing across a cup of coffee. Waves are created when wind blows over a larger area. Waves don't die down immediately after the wind stops but will within hours. Swells have enough energy to travel beyond the area of the wind.

Ripples in ponds are the same as waves in the ocean. Next month we'll look at how ripples/waves interact with obstacles such as rocks or islands.



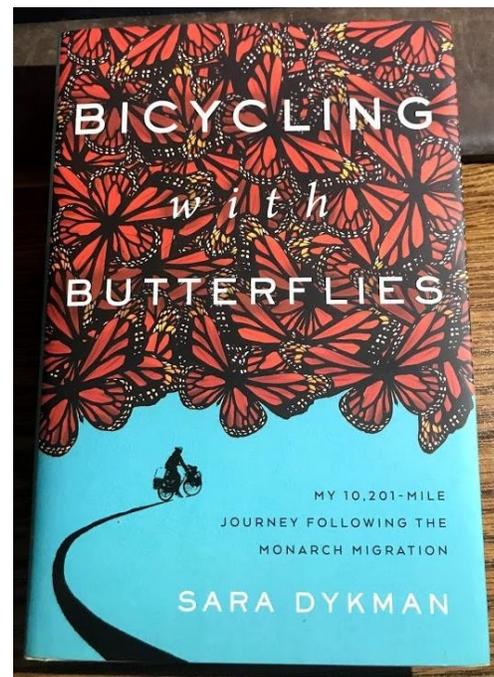
Book Review

Bicycling with Butterflies

Sara Dykman, 2021, Timber Press

Beginning in one of the reserves in Mexico, Sara bikes 10, 201 (!) miles following the monarch's migration. Each chapter follows the dates and the miles she traveled. Along her travels, Sara stopped and presented to many groups about monarchs and the challenges the butterflies face along their migration.

While her travel is impressive, her writing is less so. I found her focus on where she stopped for the night less interesting, and the name-dropping slightly annoying. If you are really into first person adventures, or monarchs, do check it out. If not, it's ok to skip it.





Treasuring Things the Abyss Didn't Want

A common shell worn from its time in the Gulf, ridged, rough and dull, covered with squiggles of worm shell piled over one another like garter snakes emerging after hibernation.

Holes at the ends of the worm shells, entrances into secret tunnels carried atop the shell. Where did the worms go?



Treasuring the complex interplay of life and death and Gulf waters that left this shell on the beach for me to find.

Irmi Willcockson

Title a line from "Sound Thinking" by J. Drew Lanham



Note from Our Volunteer Services Director re: Hours Reporting

I wanted to give everyone an update on a distinction about volunteering with any of our community partners. You cannot claim any hours spent selling products, including plants for any another organization. You can claim any time growing plants, identifying plants and/or teaching about plants. However, counting hours for the actually selling of products, including plants, at any event is against TMN policy.

Keep up the great work volunteering with our community members!

Lisa Morano
Volunteer Services Director

Protect Your Pollinators

As indicated in last month's newsletter, the following is the next article in a series that will review insects that have both a beneficial and harmful effect on humans as a function of the shared environment.

As we have all unfortunately observed, this spring's intense freeze did absolutely nothing to curtail this season's mosquito population. And good spring rains added to the mosquito's preferred habitat. So, we have mosquito numbers this season causing many of us to be concerned. Our concern is not just because the mosquito is an annoying pest, this animal as an integral part of our environment may cause serious, and even deadly illness. While the numbers vary widely a common estimate is that there are one million worldwide annual mosquito caused deaths. And in our area West Nile Virus is a fact of life. It makes you wish that we could just wipe them all out.

But there is another side to the mosquito that perhaps you may not be aware of. The primary food for the mosquito is nectar. This is the same nectar that is the staple for honeybees and butterflies. In the act of consuming nectar, the bee and the butterfly become a primary pollinator of all the types of plants and crops. This is because as they eat nectar, they also gather pollen either deliberately or inadvertently with the result being very efficient pollination of the plants that they subsequently visit. Great stuff! But guess what. The mosquito as it consumes nectar does so in a similar fashion as the bee and butterfly in that it brushes against the flower's pollen and carries that pollen on its body to the next flower that it uses to consume nectar. Thus, the mosquito acts as a pollinator in a similar manner as the bee and butterfly. With declining numbers of pollinators this pollination by mosquitos helps in general pollination service to propagate plants and crops.

Despite this positive attribute we certainly cannot let the mosquito run rampant in our environment. It is simply too risky. Mosquito control is an absolute must. But in the options selected to control the mosquito we need to consider the potential unintended consequence of the choices made for mosquito control. For example, what might be the consequence of the use of automated chemical misters in our yards, of having our HOA's hire broad spectrum fogging services, or our accepting the use of regional aerial spraying. These types of practices not only kill mosquitos, these practices also kill off beneficial insects including the bee, butterfly and other pollinators along with the pool of the general insect population in the area of such treatment. While collectively we clearly need to take necessary control steps, perhaps we can better protect the innocent insects, especially the key pollinators, by selecting such control steps as those recommended by Harris County Public Health. Recommended steps were included in this newsletter's July edition. Also, Texas Parks and Wildlife AgriLife Extension Service Entomologists advocate selective control methods. TPWD encourages an IPM (Integrated Pest Management) approach to pest control with the key goal of an IPM treatment program being the reduction or elimination of the use of pesticides. An example of such control would be to regularly service your gutters to eliminate hidden standing water that creates a mosquito breeding area.



Culex mosquito
iNaturalist observation by
Leanne, Jun 23rd, 2021

Another option is to use “mosquito dunks” that contain BTI (Bacillus Thuringiensis Israelensis) a bacterium that specifically targets the larvae of the mosquito and is harmless to all other wildlife. These dunks affect the mosquito’s gut and cause it to starve. The dunks are safe for all animals except the mosquito and have been approved by the EPA for use in fishponds and watering troughs and can safely be used around the home where standing water may occur. Dunks are not expensive and are typically available at hardware stores like Lowes or Home Depot.

There are no easy answers to effective mosquito control, but with significant declines in pollinator numbers any treatment program should be very mindful of the consequences even if the goal is the control of such a dangerous animal as the mosquito.

Greg Brazaitis



H-GAC’S REGIONAL CONSERVATION FRAMEWORK RECOGNIZED BY NATIONAL ASSOCIATION OF REGIONAL COUNCILS FOR EXCELLENCE IN LEADERSHIP AND REGIONAL COOPERATION

Framework Offers a Blueprint for Supporting Efforts to Preserve and Enhance the Region’s Unique and Diverse Natural Ecosystem

HOUSTON, TX – The Houston-Galveston Area Council’s (H-GAC) Regional Conservation Framework has been honored with a General Achievement and Leadership Award by the National Association of Regional Councils. The award was presented to H-GAC on June 16 at a virtual ceremony held at the association’s annual conference and exhibition. The Regional Conservation Framework has been hailed as a milestone toward a coordinated, comprehensive approach in protecting and preserving the Houston-Galveston region’s unique ecological landscape. It outlines three key strategies – leverage, support, and fund – to strengthen conservation efforts by local governments, community partners, and stakeholders. A resolution of support for the framework was unanimously adopted by the H-GAC Board of Directors in March 2021.

Kristina Michel

In Memoriam – Millie Morgan

It is with great sadness that I announce the passing of Gulf Coast Chapter member Millie Morgan.

Millie passed away peacefully the weekend of June 26th.

Millie will be missed as a fellow master naturalist, an avid conservationist and friend. She became a Texas Master Naturalist with the Gulf Coast Chapter in 2006. She volunteered diligently with our chapter and is well-remembered as a Gulf Coast Chapter class representative and training director and the provider of advanced training for several years. She attended many of the annual state meetings and proudly received the honor of the 4,000 volunteer service hours achievement award in December 2019.

Millie was also well-known within Houston area conservation groups. She volunteered with the Houston Audubon Natives Nursery, The Houston Arboretum plant nursery, and Edith L Moore plant nursery. She was an avid birder who enjoyed traveling throughout Texas discovering and observing all the birds the state had to offer.

It has been wonderful reading the stories and sentiments from Millie's friends and fellow naturalists. She will be missed by all. Here are a few quotes from them:

"Millie and I shared a love of cats and often traded stories. We both enjoyed cooking and reading and when I was laid up with a broken leg, she provided food and reading material. She was so generous." - *Karen H.*

"Millie loved the Astros. She knew all their history. She had the same ability when it came to native plants. She was an avid birder. Rio Grande Valley was one of her favorites". - *Janet N.*

Cheetos! She started a tradition of Cheetos as a snack at the Audubon Natives Nursery. She also took them to special celebrations along with champagne. "Champagne and Cheetos go great together!" - *Mary S.*

"Millie was a wealth of knowledge on plants and taught me a lot. We took birding classes together and traveled throughout Texas birding. She was accomplished at birding by ear. We made quite a team." - *Lisa and Steve M.*

"Millie was one of the first people I met at Edith L Moore NS and she inspired me to become a master naturalist. She was an accomplished baker, renowned for her baked goods! She taught me a lot about birding - *Lisa P.*

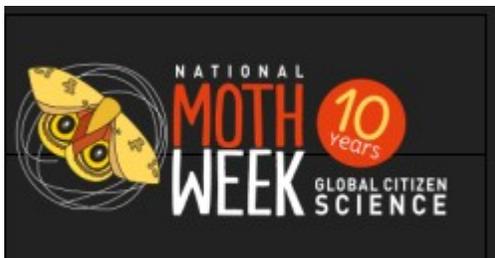
At her request, there will be no memorial service or funeral.

Please remember Millie and think of her the next time you admire a beautiful bird or the wetlands and prairies we have in and around Houston.

Shared by Julia Trimble



Mary Mildred (Millie) Morgan, born February 9, 1948 in Beaumont, Texas to Jack Garret and Exeen Marie (Thiele) Morgan, departed this life June 28, 2021 after a brief illness. Millie was preceded in death by her parents and older sister Exeen Morgan. Friends and coworkers who wish to honor Millie's conservation legacy and love of the Texas Prairies may donate to the Native Prairie Association of Texas, the Houston Audubon Society, or the Katy Prairie Conservancy in her name. A donation to a local animal rescue shelter would honor Millie as well. Please visit www.millerfuneral.com for more information.



July 17 – 25th. Check www.nationalmothweek.org for information or to list your event.

Book Review

Armand Bayou Illustrated – A Life on the Bayou

Mark Kramer, 2021

A bit of Edward Abbey and E.O. Wilson

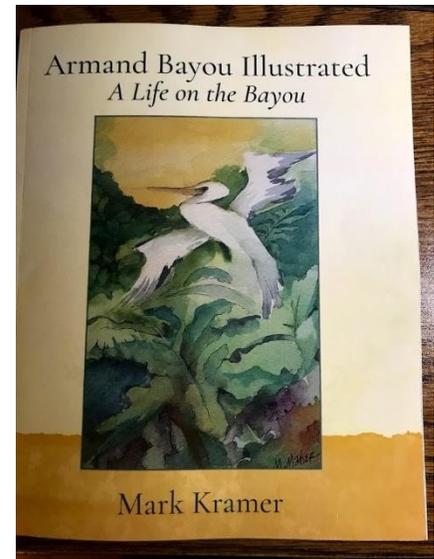
Some of my fellow Master Naturalists will be familiar with a former instructor's claim that Gulf Coast wetlands and prairies are "our Redwoods, our mountains...", and this book is truly an ode to Armand Bayou and its surrounding prairies and woodlands. It is the story of a boyhood and a place.

If you were lucky enough to grow up with free time outdoors, the first part of this book will spark memories of exploration, discovery and joy. This is the Edward Abbey part—a bit wild and reckless—but, oh, so keenly tuned in to the natural world. However, this is not a bayou "solitaire" book at all, because the influence and stories of many special people in the author's, Mark Kramer's, life and the early life of Armand Bayou Nature Center are strikingly told.

History and science are nicely intertwined in the chapters on the establishment of the Nature Center, prairie and bayou ecology, and cultural history. If you have ever read E.O. Wilson's books, you will recognize the easy way facts flow along a narrative stream. Mark does a deep dive into the ecology of prairies and wetland bayous. Ecological changes from human development, the growing understanding of those impacts, the experimentation and fine-tuning of successful ecological restoration methods, and some exciting success stories are recounted in these pages. Stunning images of nature by award-winning photographer, Gary Seloff, brings this place to life on the page. Many other pictures emphasize that PEOPLE were performing these restoration activities—people inspired by people like Mark Kramer.

Perhaps you are not interested in how deep a native prairie grass's roots reach into the soil, or how quickly Chinese tallow trees can destroy a prairie habitat and convert it into a monoculture forest, but you still want to experience the wonders of nature and are not quite sure how to get started. Whether you prefer on foot or in a canoe or kayak, Mark has compiled a great resource for the discovery and exploration of Armand Bayou. What are the highlights in each season? When can you see the best wildflowers? Where can you launch your canoe? What do you need to bring and what precautions should you take? It is all laid out for you to get started.

Each chapter has a resource list at the end for more information, and a species list of mammals, birds, reptiles and amphibians, fish, and plants occurring on the refuge of Armand Bayou is included at the end of the book. There is something for everyone: boyhood adventure, science, history, good stories, great photography—and a foreword so beautifully written as to bring tears to your eyes.



Candice Donahue



 **Organism of the Month**

Gulf Fritillary (*Agraulis vanilla*)

The Gulf Fritillary Butterfly (*Agraulis vanillae*) is a bright orange butterfly that is common throughout the gulf coast region of Texas. This photo was taken at the Houston Arboretum and Nature Center during pollinator week. Gulf Fritillary butterflies were everywhere and were attracted to the colorful basket flowers in bloom. Here you can see the proboscis extending out and into the flower to sip nectar for energy. Females are somewhat darker and more extensively marked. The forewing cell contains three black-rimmed white spots. The undersides of the wings are brown with elongated silvery-white spots. Purple passionflowers are the host plants for this butterfly (not the pictured flower) so they will lay their eggs on them. The larvae may then feed on all parts of the plant.

Photo credit: Adrian Medellin

Source: https://entnemdept.ufl.edu/creatures/bfly/gulf_fritillary.htm