

The Texas Star



MARCH 2014

Volume 12

Number 3

Newsletter of the
Texas Master Naturalist Hill Country Chapter

photo by James Rice, taken at the ABK State Natural Area

MARCH 24 MEETING: ALBERT AND BESSIE
KRONKOSKY STATE NATURAL AREA

T E X A S

Master
Naturalist™



James Rice, who is the first Texas Parks and Wildlife Superintendent of the Albert and Bessie Kronkosky State Natural Area, will speak on the past use of the land, its biodiversity, and what is being discovered as it is surveyed and prepared for public visitation.

Everyone is welcome to join us on Monday, March 24, at 7 p.m. in the Upper Guadalupe River Authority's lecture hall, 125 N. Lehmann Drive in Kerrville. Arrive at 6:30 to chat with members and guests.

PRESIDENT'S MESSAGE Vern Crawford

Saturday evenings often find us listening to "A Prairie Home Companion" on our local Public Radio station, and this past Saturday was no exception. As we chopped veggies and prepared supper in our cosy little home, the show's host, Garrison Keillor, entertained his radio audience with his wit and humor, and often with optimism to continue on, regardless of any seeming hardships and today's extremes.

During the opening monologue of this episode's live broadcast, Garrison was more than ready for Winter's grip to finally let go its hold on the land, and for Spring to burst forth in full force with new growth and vigor. Although on the calendar, Spring was still a few weeks away, and Garrison was speaking from his native Minnesota, he nonetheless spoke enthusiastically about the positive signs that Spring was indeed just around the next bend. He spoke of how the still cold days, often with their lows continuing to register below freezing, were none the less becoming less cold on average, and of how each new day grows longer as the sun helps to reassure us that Spring will indeed happen again.

For many of us here in the Texas Hill Country, the return of hummers to our feeders signals the real beginnings of Spring. For me personally, another sign of Spring is the emergence of new tender asparagus sprouts poking their pointy green heads up through the blanket of leaves and mulch, where they have rested during the long nights of Winter. After this, their third year of undisturbed rest and development in their new bed, I'm told that we can finally taste their sweet stalks.

The rest of the garden has already called for using various digging tools to prepare the rich black soil to host this year's assortment of seeds and bedding plants. The magic of Spring, with the blessing of whatever rains we receive, along with some annual tweaking of our drip irrigation system, promises to fill our salad bowls with delicious home grown tomatoes and spinach, along with other treats for our table.

Now, looking out across the Guadalupe at the new greening of our neighbor's pasture is such a beautiful sight. It's reassuring us that Spring is indeed just around the next bend.

Come on, Springtime. We're ready for you!

Vern

The Texas Star is a monthly publication of the Hill Country Chapter of the Texas Master Naturalist program.

This Month We Honor



Initial Certification

David Hopf Pat Hopf Nancy Person Paul Person

Special Recertification

Morgan Williams

2014 Recertification

Jane Crone Ronald Hood Gracie Waggener Kathy Ward

Milestones

Michael Foulds - Bronze Dragonfly, 250 hours

Shirley Nedry - Brushed Silver, 500 hours

Jane Crone - Gold, 1000 hours

Diane McMahon - Polished Silver, 2500 hours

How-to from the Webmaster

Kristie Denbow

The **Breaking News** page on our website highlights chapter members who appear in publications - newspapers, magazines, newsletters, or online. When you see a chapter member mentioned or featured in an article, please send me a copy or link and I will post it to the News page. If a member receives recognition or an award from another group, send me the announcement or details.

Let's acknowledge our members for their achievements and successes! Email Kristie at hillcountrywebmaster@gmail.com.



Congratulations to members who received awards at the February meeting.

From left to right: Sarah Hilburn, Glenn Randow, Tom Collins, Daneshu Clarke, Rheda Boardman, Ann Schneider

From Liz Ross

Invitation to Join the Class of 2014

It was early spring and the Texas Hill Country had just seen a wonderful season of rain when my husband and I started our journey of moving to Kerrville. During our transitional drives throughout that spring, summer, and fall, I marveled at the vast array of wildflowers and grasses that I had never seen or noticed before. Bursts of color and waving fields, previously lain dormant by the drought, seemed to celebrate thanks for the rain. Even the desperate, ghostly oaks spoke to my sense of how majestic our state truly is. Each trip filled our souls with awe.

I was in love with our new landscape and wanted to know and understand it. I began volunteering at the Riverside Nature Center to learn from their dedicated experts. It was there that I heard of the Master Naturalist training program. I had no idea how I would use this invaluable education, but I was excited about all it offered. I entered the program that next fall and throughout the course it became clear that learning was just the beginning. Sharing our experience is the Master Naturalist mission: *“To develop a corps of well-informed volunteers to provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities.”*

The Master Naturalist training is invaluable and enlightening because of the dedicated cadre of lecturers—about 30—who are experts in their fields. Many bring their expertise from the Texas Parks and Wildlife Department. We are also fortunate to have classes from professors of Texas ecology and history, the director of an archaeological site, and our very own Master Naturalist author.

Going through this training made me feel like a kid again. I learned to appreciate humans’ management and preservation of land and water, as well as the beauty and necessity of snakes. I learned how fire, though scary and dangerous, is a good thing in relation to re-growth. And, not to spoil any surprises, I got to hunt for fossils, explore preserved land, and gain great insight into the ways of nature.

In the short time that I’ve been involved with the Hill Country Master Naturalist Chapter, I’ve been inspired by this great group of volunteers. Their love for the Hill Country is obvious and infectious. I hope you will let them inspire you as well.

Become a Certified Master Naturalist. **Applications for the Fall 2014 Training Course are currently being accepted. The deadline to apply is July 14, 2014.** The course will run from August 18 to November 12. The majority of the classes will be at the Texas Lions Camp in Kerrville on Wednesdays from 8:30 a.m. to 1:00 p.m. This year’s class will also be touring and exploring the Fredericksburg Nature Center, Selah Bamberger Ranch Preserve, Riverside Nature Center, Canyon Lake Gorge, Kerr Wildlife Management Area, Love Creek Nature Preserve, and the Cibolo Nature Center.

Visit our chapter website (www.txmn.org/hillcountry) to view a complete listing of the classes. and contact Becky Etzler, Membership Director (hillcountrymasternaturalist@gmail.com) for further information.

The 2014 New Class Committee looks forward to your application and sharing this exciting experience with you.

Liz Ross is a member of the Class of 2013 and the Director of the Class of 2014.

Archeology Study at the Kroc Center Program



Steve Stroutmire, who is past president of the Hill Country Archeological Association, graciously shared some basic facts of Archeology in the Hill Country with 4th and 5th graders in the after-school program. Master Naturalists Betty Clyburn, Sarah Hilburn, Martha Miesch, Pat Nelson, John Sloan, and Mary Frances Watson assisted.



He started his program with some slides illustrating what has been learned about the life of early Native Americans who lived in the Hill Country many years before we got here. Through his description of the landscape and wildlife of the past the students gained a better understanding of how the life of Native Americans differed from ours. He compared the size of bison that used to be plentiful by standing on a chair to represent the animals' height and having one of the students representing an average man stand next to him. That example helped the students to understand the relative size and serve as a memory clue to archeological history.

The students had a chance to examine tools and use a metate, or grinding slab, to experience how Indians made an eatable nourishing grain. Dried black-eyed peas were ground in the same way that seeds and acorns were ground by Indians. The boys and girls took turns grinding with a mano stone and practicing making the peas into a powder.



Wildlife were an important food source and Indians made clever tools that could safely kill massive animals and feed many for weeks. Describing how these tools were made involved showing how the sharp point of a deer antler was used in making the spears that held stone arrowheads. The students went outside with a hand-tooled atlatl to get the feel of how hunters could maximize the thrust of the spear to achieve greater distance and strength for piercing the hide of wildlife they harvested for food. One boy shared his own experience of making an atlatl with a friend and actually using it to hunt deer. Our students never cease to amaze us.

The goal of this volunteer project is to turn students on to the appreciation and love of nature. The Master Naturalist volunteers frequently say they learn along with the students.

photos by Martha Miesch

Butterfly On The Brink?

Monarch monitoring show their migration's in trouble.

By Rob McCorkle

Craig Hensley's lifelong love affair with monarch butterflies began decades ago. He fondly recalls childhood days in Iowa lying on his back in a field and watching swarm after swarm of the delicate-looking insects fluttering overhead, some "cascading" down around him to fuel up on plant nectar for their long southward migration.

Today, Hensley, a Guadalupe River State Park interpretive ranger, has joined a growing chorus of experts warning about the fragile state of the autumn migration of millions of monarchs to their ancestral winter home in the mountains of central Mexico. The U.S. population of the resplendent orange and black butterfly has been suffering a precipitous downward spiral in numbers because of myriad environmental factors, many of them caused by people.



Male Monarch Nectaring on Gregg's Blue Mist

During the 20 years that Western scientists, many working for universities and butterfly monitoring organizations such as Monarch Watch and Journey North, have been keeping statistics on the butterfly's 2,000-mile fall migration from Canada and the northern U.S. to the monarch's winter roosts in Mexico, overwintering populations have fluctuated wildly. Populations that for two decades covered an average of 6.69 hectares of forest plummeted 82 percent in the winter of 2012, covering only 1.19 hectares, or just less than three acres. (A hectare equals 2.47 acres and is estimated to contain up to 50 million monarchs.) Early reports for the winter of 2013 look to be even worse coming out of Mexico, where monarchs overwinter in the oyamel fir forests in the Mexican states of Michoacán and Mexico.

"Monarchs are the new canary in the coal mine," warns Cathy Downs of Comfort, an accomplished Texas Master Naturalist who spends most of her days spreading the dire news of the monarch's plight to adults and schoolchildren alike. "It's very possible that although monarchs may not become extinct in our lifetime, we could lose the migration."

One of Downs' mentors and one of the most respected voices in the Texas monarch community is retired cardiovascular surgeon Kip Kiphart, who lives just outside Boerne and travels the state lecturing on *Danaus plexippus* and providing monarch training. On a chilly, mid-October morning at the historical peak of the fall monarch migration, the affable naturalist joined a handful of volunteers for a butterfly count at Guadalupe River State Park led by Hensley. Texas plays a key role in the life cycle of the monarch, the official state insect of Texas. Both the fall and spring migrants of the monarch population east of the Rockies funnel through the heart of the state on their way to and from central Mexico's Transvolcanic Mountains.

"Hard freezes down in the wintering grounds in 2002 caused a huge loss of monarchs, which roost at 10,000 to 12,000 feet, in what is typically a dry season," Kiphart explains. "Monarchs can tolerate temperatures down to 18 degrees if it's dry, but if it's raining and the mercury drops to below 32 degrees, they can freeze to death. That's what happened."

Over the next two hours at the state park, the intrepid group made its way from the riverside to a portion of a restored 230-acre native prairie. The former mountain cedar patch now sports a diverse array of wildflowers and dozens of native antelope horn milkweed. Milkweed serves as the sole plant species upon which monarchs lay their eggs and upon which their offspring feed.

The morning's resulting tally included a number of different butterfly species (Texas has 450 species), but only one monarch that Kiphart spied through binoculars hitchhiking with a flock of kettling white pelicans winging south. Kiphart pointed out that by this time the previous year, he had already "tagged" 800 monarchs, but could claim only 97 taggings this time.

Fred Urquhart of the University of Toronto first experimented in 1937 with tagging monarchs to try to track their movements. Today, hundreds of Texans net monarchs to attach an adhesive, dime-sized tag printed with a unique number to the butterfly's hind wing. Those who find one of the tagged monarchs (in Mexico, it brings a \$5 bounty) can call an 800-number or go online to report their find to Monarch Watch, a monitoring organization.

Longtime monarch researcher Lincoln Brower of Sweet Briar College in Virginia attributes the monarch decline of the past few years primarily to severe weather, but the overriding consensus of opinion points to habitat loss as the most insidious, long-term culprit. Native grasslands in Canada and the Midwest are being planted with soybean and corn—mostly genetically modified, herbicide-tolerant crops. Corn grown for ethanol production is also helping drive the loss of habitat. Sixty percent of the grassland ecosystem’s milkweed has been wiped out because of the introduction of herbicide-tolerant crops and conversion of land to biofuel crops.

California hosts a separate population of monarchs, which spend winters clustered in eucalyptus trees and Monterey oaks and pines along the coast. There, the removal of aging trees and ongoing development are accelerating habitat loss. In the U.S., 6,000 acres a day fall victim to urban sprawl and development.

In Mexico, habitat destruction resulting from illegal logging, crop burning and fragmentation of monarch overwintering sites for subsistence farming continues to take its toll. While the Monarch Butterfly Biosphere Reserve, a World Heritage Site, boasts official protection status, the land is divided into more than 100 private properties (many of them *ejidos*, or communal agricultural lands), complicating management issues and fragmenting conservation efforts. Water diversion from overwintering forests and a high number of tourists also degrade monarch habitat. Biological impacts, such as mistletoe infestations in Mexico’s host trees, butterfly parasites and disease, also add to the volatile mix of negative developments affecting the iconic insect.

What is it about the monarch in particular—one of the world’s 20,000 butterfly species—that commands such awe and respect? “It’s no one thing,” suggests Mike Quinn, a former TPWD invertebrate biologist also known as the “butterfly guy.” “They’re large, showy, easily identifiable insects whose seasonal appearance in your garden is fairly predictable. They’re nationally and internationally acclaimed for their annual mass migrations and their mysterious navigational abilities.”

Quinn, who has coordinated the Texas Monarch Watch since 2000 and hosts the online Austin Butterfly Forum, points out that because of the monarch’s distinct metamorphoses (four changes in form) and unique migration, the species serves as a classic teaching model. Educators often use the monarch to teach biology, chemistry, physics, geography and other academic subjects.

In Mexican folklore, some indigenous peoples marveled at the seemingly magical appearance of the butterflies in their communities each fall and winter. The butterflies’ annual arrival in alpine villages toward the end of October and first week of November, when Mexico celebrates the Day of the Dead (Nov. 2), led to a common belief that the monarchs were the returning souls of their ancestors.

Though most publicity centers on the fall migration, the returning spring flight north is also critical to the species’ survival. Master Naturalist Downs notes that in the spring, monarchs migrate through Texas on three major flyways, “nectaring and laying eggs along the way.” Successive generations make their way north, and it is the fourth generation of monarchs that makes it to the northernmost range in Canada and later migrates to Mexico.

On their northward journey, monarchs depend exclusively on about 30 different North American milkweed species, predominantly common milkweed (*Asclepias syriaca*), upon which to lay their eggs. Resulting larvae feed on the host milkweed. Emerging butterflies depend on various wildflowers, such as pentas, lantana and mistflower, for nectar on their northward journey to summer breeding sites. The leading edge of migrating monarchs typically begins reaching South and Southwest Texas in the first part of March, spreading into Central and North Texas later in the month and into April.

Monarch movement can be viewed on the Annenberg Foundation’s Journey North website (www.journenorth.org). The program involves 785,000 student observers at 29,500 sites across North America. A number of those volunteers maintain and monitor monarch “way stations.” Butterfly gardens planted with nectar sources and, in some cases, milkweed can be found on both private property and public property such as schools and parks.



Monarch, Returned from Mexico, Nectaring on Anacacho Orchid Tree

More than 6,000 way stations have been established in Texas. Many of those sites are involved in the nationwide Monarch Larva Monitoring Project begun in 1996. The Texas Parks and Wildlife Department offers a "Butterfly Garden" brochure with suggested nectar and host plants. Information about establishing a Texas wildscape that benefits all wildlife can be found by visiting www.tpwd.state.tx.us/wildscapes.

Milkweed, which is not an especially attractive plant, often succumbs to the garden hoe or highway department mower. Because milkweed contains a toxic compound absorbed by feeding monarch larvae, the emerging black, yellow and white striped caterpillars feeding on its foliage rarely become a meal for birds or other predators. Planting milkweed is considered the most important step Texans can take to help monarchs. The three most common native milkweed species found in Texas are antelope horn, green antelope horn, and zizotes. Challenging to propagate from seed, which is sold by a handful of Texas growers such as Native American Seed in Junction, milkweed has become commercially available as small plants in a few select nurseries. Consumers should be careful to make sure that the more readily available tropical milkweed and butterfly weed, with their attractive flower clusters, have not been sprayed recently with pesticides. This can be deadly to monarchs.



Antelope Horns (*Asclepias asperula*) emerging in the early spring at the Cibolo Nature Center, Boerne

The real key to the survival of the miraculous monarch migration, however, lies with gaining an even better understanding of existing threats and sounding the clarion call about the creature's delicate dance on the edge of extinction. Those interested in learning more can attend lectures and workshops listed online by TPWD on the Texas state park events pages, the Texas Master Naturalists, and various butterfly forums.

"If I can leave you with one message," inveterate monarch crusader Downs told attendees at last September's workshop in Kerrville, "It is this: Teach the children."

Monarch Facts

- » Monarchs have a typical wingspan of more than 3.5 inches and an average weight of 0.5 grams (about that of a paper clip), among the largest of North American species.
- » A single monarch female can lay up to 300 to 400 eggs.
- » An adult's lifespan ranges from one to nine months.
- » Migrating monarchs can cover an average of 25 to 30 miles a day.
- » Most monarchs joining fall migration are three to four generations removed from those that made the previous year's journey.
- » In order to grow and develop, monarch caterpillars need milkweed plants; they can increase their weight almost 3,000 times in 10 to 15 days.
- » Monarchs are notably promiscuous, with lifetime mating frequencies of about eight for each sex.
- » Monarchs contain a group of compounds known as cardiac glycosides, acquired by monarch larvae feeding on milkweed, that provide protection by inducing vomiting in many vertebrates.
- » Like birds, monarchs conserve energy by catching updrafts of warm air, called "thermals." Upon reaching the thermal top, they glide toward their destination.
- » There are two North American populations of monarchs divided geographically by the Rocky Mountains.
- » The eastern monarch population migrates each fall to Mexico, while a western population overwinters in coastal forests from California's Mendocino County south to Baja while moving inland in the spring to breed.
- » Monarchs overwinter in dense clusters of alpine oyamel firs in a semi-dormant state, living off stored fats.

text reprinted from The Texas Parks & Wildlife Magazine, March 2014

Thanks to Kip Kiphart for accompanying photos and captions.

Recent Hill Country Naturalist Columns by Jim Stanley:

2/7/14 "Nature is Not Neat"

2/14/14 "Where to Find Our Most Common Native Trees Growing"

2/21/14 "Animal Society is Varied, Complex and Mysterious"

2/28/14 "A Nature Walk to Observe Changes Around Us"

3/7/14 "Bees, Butterflies and Blooms in Winter?"

These and all other previous Kerrville Daily Times columns can be found at
www.hillcountrynaturalist.org

Riverside Nature Center Events

"Wildflowers & Other Natives: Keeping Texas Looking Like Texas," Saturday, March 1 until mid-May. A new exhibit, co-sponsored by Kerrville's Native Plant Society of Texas and Native American Seed of Junction, shows the beauty of wildflowers and other native plants, as well as their role in how people think about Texas' most colorful season.

Gleaner Training Friday, March 21 10-11:30 a.m. Learn how to harvest, clean, and prepare seeds for storage. Experts Barbara Lowenthal and Susan Sander lead the class. Cost TBA.

David K. Langford Book Signing Thursday, March 27 5:30-7:30 p.m. David K. Langford joins us for a remarks, refreshments, and photography event for his book, Hillingdon Ranch: Four Seasons, Six Generations, which provides a portrait of thriving land management. Langford's book is endorsed by Laura Bush, Nolan Ryan, and George Strait. The event is sponsored by Wolfmueller's Books.

PREVIEW OF APRIL

WICKED Family Fun, Saturday, April 1, 7 p.m.

Basic Herbalism, Thursday, April 3 & 17, 5-9 p.m.

First Friday WineShare, Friday, April 4, 6-7:30 p.m. (Date may change)

2nd Tuesday Brown Bag Lunch & Learn, Tuesday, April 8, 11:30 a.m.-12:45 p.m.

Jackie Poole, botanist at Texas Parks & Wildlife, will speak.

Native Healing Garden, Thursday, April 17, 11:30 a.m.-12:45 p.m.

20th Annual SPRING Native Plant Sale & Festival; Saturday, April 26, 8 a.m.-3 p.m.

Annual rite of spring, formerly known as "Earth Day Native Plant Sale & Festival."

All events are open to the public. RSVPs are appreciated.

Please check for changes or cancellations; call 830-257-4837 or email info@riversidenaturecenter.org



As photographers and nature enthusiasts, we live in a state with fabulous diversity. During this past October, I visited a nearby town with a wonderful surprise! San Angelo has an International Waterlily Collection. Thanks to Texas Highway's Magazine, I learned of this little known treasure. I have yet to find a person aware of it. So, I thought it would be a good subject for all to know about.



Or, you may know about it and my photos will encourage you to plan a visit.

The garden is free to the public and open year round. Interestingly, September and October are the springtime for these plants. They produce the most diversity in blooms during these months.



I planned a two day trip as a birthday gift to myself in mid-October. I needed two days to capitalize on the lighting. I wanted morning light at daybreak, normal daylight, and the beautiful light produced at dusk (the magic hour). I hoped for a bonus at daybreak with morning mist to add its surreal effect. I was not disappointed!



For the first time ever, I used a technique that I've thought about for some time. This was the perfect place to give it a try. I wanted to produce a "slide show" with a "time lapse effect." To do this, mount your camera on a tripod and attach a cable release to the camera. Set your camera on "manual," select a shutter speed of 1/100 second and select an aperture yielding a "normal" exposure (visible in the viewfinder; rotate wheel until the needle is in the



middle). Select a lily that appeals to you (making sure you capture the reflection as well). Take a photo yielding a "normal" exposure. Then, with the exposure change wheel, change the aperture to +1, take a photo and then another at -1. This achieves two important changes: first, the minute "camera movement" caused by your rotating the aperture wheel moves the camera ever so slightly which yields the "time lapse" effect; secondly, the change in aperture creates a moody effect when viewed in a "slide show." Move to another lily and repeat the process. It is rather time consuming. But, the results are amazing. And, you are in a very beautiful place anyway! I took 600 images and then edited them to around 250. I build my shows in Photodex ProShow Gold. It is an Austin software company that I've been very satisfied with for the past 10 years. I selected three seconds for each slide and no transition time; this yields a show of 25 minutes or less. That is the maximum attention span for most folks.

I am sure the majority of you are not interested in this technique. So, just go and take conventional photos. Each area of the garden is surrounded by a nice wrought iron fence. It is the correct height to rest your elbows on for tripod-like stability. Check it out at www.internationalwaterlilycollection.com

The Monarch Larva Monitoring Project at Kerrville-Schreiner Park

The Butterfly Garden at Kerrville-Schreiner Park (KSP) was designed and installed in 2000 by the Friends of Kerrville-Schreiner State Park, and taken over by members of the local Texas MasterNaturalist (TMN) volunteer program chapter after the Park was transferred to the city of Kerrville in 2004. The garden is currently maintained by a group of dedicated volunteers and native plant enthusiasts. In 2006 it was certified as a MonarchWaystation and in 2013 it was registered as a North American Butterfly Association (NABA) butterfly garden and habitat.

The Butterfly Garden is approximately 104' x 104' and a deer proof fence protects the Hill Country native plants that support many local butterflies, with an emphasis on monarchs. Nectar and larval plants have been donated by TMN members, the Kerrville Chapter of the Native Plant Society of Texas (NPSOT), local nurseries, and private citizens. In addition to the butterfly population, the garden draws a variety of birds, including hummingbirds.



photo by Betty Gardner

The Butterfly Garden's Monarch Larva Monitoring Project activities began in March 2007. The local Texas Master Naturalist chapter sponsored a two part MLMP training class taught by retired cardiovascular surgeon and long-time MLMP volunteer Dr. Ridlon Kiphart. Kip leads the MLMP project at Cibolo Nature Center in Boerne, TX. As part of this class he helped a group of Kerrville-area volunteers start the MLMP at KSP's Butterfly Garden. Over the past seven years many individuals, including the gardeners, have helped collect MLMP data. Virginia de Wolf, Anne Cassidy, and Alexis McRoberts have comprised the core group of MLMP volunteers.

Virginia de Wolf has led this project since 2007. Ginny sends out weekly reminders and summary reports of the past week's data. She keeps track of and enters the data at the MLMP website. She loves learning about all of the butterfly species that visit the garden, especially monarchs, and about the importance of native plants. She assists Kip in the field work component of his training classes, participates in the annual NABA count at several locations in the area, volunteers at the local nature center, and participates in the annual Guadalupe River clean-up in river areas adjacent to KSP.

Anne Cassidy has been participating in MLMP since 2008. Anne takes over the leadership role when Ginny is travelling. She had her ranch certified as a Monarch Waystation as well as a National Wildlife Federation wildlife management area and participates in a number of nature activities, including monitoring blue bird boxes at The Hill Country State Natural Area in Bandera, Texas, and participating in NABA butterfly counts.

Alexis McRoberts started working with this group in 2009. She also takes on the leadership role when Ginny is not available. She cultivates nectar and larval plants in her backyard, tags monarchs, assists Kip in the field work component of his MLMP training classes, and with her husband participates in docent work for bat emergences at Old Tunnel State Park in Fredericksburg, Texas. Her work has given her confidence to give a program on monarchs to a local garden club and astound her young grandchildren with her insect knowledge.

Other Garden Activities

The individuals who volunteer at the Butterfly Garden have become a very strong community of friends. One of the delights about volunteering is seeing how the activities have grown in the past seven years. Below are a few examples:



photo by Sandra Magee

Kiosk: In 2008-2009 a TMN member, Bob Tanner, built a kiosk for the Butterfly Garden. The materials were paid for by a grant from the Kerrville NPSOT chapter. Sandra Magee, another TMN member, uses the kiosk to highlight information about monarch conservation, display photos and information that help visitors identify butterflies, advocate for the use of native plants in the Butterfly Garden, share an educational brochure she created, and post notices of related events in the surrounding area.

Butterfly walk and associated checklist: In 2010 MLMP volunteer Cynthia Johnson initiated a weekly “butterfly walk,” which starts after our MLMP data collection activities are completed. For this walk participants identify and count the number of butterflies seen in the garden and surrounding area. At the end of each year Sandra Magee compiles the checklists from each walk and creates a summary comparing data collected since 2010.

Workshops for children: In the summer we give workshops for children who are attending KSP’s day camp. We have given classroom tutorials and also have led field trips during which the children can view butterflies up close in the garden.

Winter study group: Last but not least we want to mention our study group, which meets during the cold winter months when there is little we can do outside. At these study groups we discuss butterfly-related topics while enjoying warm beverages and each other’s company.

text reprinted from the February-March issue of MLMP Updates



photo by Sandra Magee

The flags mark milkweed plants.

The View from Rusty Bend



Image by Lucy Griffith

Such Singing in the Wild Branches

...all, all of them

were singing.

*And, of course, yes, so it seemed,
so was I.*

*Such soft and solemn and perfect music
doesn't last*

for more than a few moments.

*It's one of those magical places wise people
like to talk about.*

*One of the things they say about it, that is
true,*

*is that, once you've been there,
you're there forever.*

*Listen, everyone has a chance.
Is it spring, is it morning?*

*Are there trees near you,
and does your own soul need comforting?
Quick, then— open the door and fly on your
heavy feet; the song
may already be drifting away.*

-Mary Oliver

The season of courtship has begun at Rusty Bend. The perfect alignment of light and warmth suddenly triggers a swell of rich birdsong, filling the air with the whisper of spring.

Is there a more peaceful wakeup call than the descending aria of the Canyon Wren? They perch on the porch rail, toss their heads back and belt it out like divas on the stage. For a tiny bird, such a huge song.

The Ground Doves are quite the lovers. We hear their questioning *coo-oo* rise from the pasture hour after hour. When the pair waters at a depression in a large rock, they solicitously take turns. "Your turn, you drink and I'll keep watch. Now, my turn, I'll drink and you keep watch." Their rhythmical bobbing is hypnotic.

Out in the brush, the roadrunner calls for his mate with a loud *kowoo, kowoo, kowoo*. Such a lost puppy sound. The males are said to present lizards or other food gifts to the female, **after** mating. Ah, chivalry. Then, when the nest is built, he will do most of the sitting.

One morning we watch a gathering of the woodpecker clan. The Northern Flicker's *kee yer* announces his arrival; then the Golden-Fronted woodpecker swoops in noisily, even calling in flight, *check, check, check*. Lastly, the Ladderbacks quietly dip in to scurry up and down the oaks. This time of year, a woodpecker's drumming punctuates any walk in the pasture.

All the wrens are so very occupied. Inspecting virtually any cavity, grabbing bugs, or looking for nesting homes. The Bewicks have their territory, and the Canyon Wrens have theirs. The Carolina Wrens flirt on the edges, calling out their findings.

One morning, during our "Spot the Raptor" ritual, Andy finds two Red-Shouldered Hawks side by side in the top of our oldest cottonwood. An inch apart, one faces the river, and the other faces the field. They preen and scratch with their bright yellow talons, the burnt orange bars on their breasts distinctive in the morning sun.

Later that day, they circle over me as I work on our new barn. Playing in the wind with their "gear down," they call loudly to each other. In a sky dance, one spirals up and up and up, and then swoops down elegantly. Wooing in the heavens.

Courtship is so hopeful. "Such singing in the wild branches" reminds us to hit the pause button and take it in.

Lucy Griffith, PhD co-manages the Rusty Bend Ranch with her husband, Andy Robinson. When she is not on her tractor, she practices Clinical Psychology. When the tractor is broken, Andy is fixing it. Both Lucy and Andy are members of the Master Naturalist Class of 2013. Comments are welcome at oodie1950@gmail.com.

Advanced Training

TUESDAY, MARCH 18 7PM SAN SABA CIVIC CENTER, MILL POND PARK, 1190 THOMAS DRIVE
AT 14-066 MONARCH BUTTERFLIES

Cathy Downs, Monarch Conservation Specialist, will present this program, which is sponsored by the San Saba Bird and Nature Club. For further information, call 325-372-7615.

THURSDAY, MARCH 20 7-8:30PM HILL COUNTRY UNIVERSITY CENTER, FREDRICKSBURG
AT 14-057 THE PEDERNALES: CHALLENGES AND OPPORTUNITIES

Dr. Andrew Sansom, Director of the Meadows Center for Water and the Environment, is the moderator for this panel discussion of the economic, social, and ecological value of this river, with a focus on major threats and what is being done to protect it. Free. For more information, go to www.schreiner.edu/water.

THURSDAY, MARCH 20 1-4PM PAINT ROCK RANCH

AT 14-067 PAINT ROCK PICTOGRAPHS AND VERNAL EQUINOX VIEWING

View pictographs with sun markings. This event is on a private ranch one mile north of the town of Paint Rock, on the Concho River. Presenters are Fred and Kay Campbell; sponsored by Llano River Adventures. For details of location and schedule, and to RSVP by March 18, go to <http://www.texasbeyondhistory.net/plateaus/images/he4.html>.

FRIDAY-SATURDAY, MARCH 21, 6-9PM AND MARCH 22, 8AM-4PM MANSFIELD PARK, BANDARA
AT 14-041 WATER AWARENESS WORKSHOP

The seminar will include a discussion of surface and groundwater systems, types and sources of water pollution, ways to improve and protect water quality, and conservation strategies. For more information and registration, go to <http://aqrilife.org/bcwa>.

SATURDAY, MARCH 22 8:30AM-5PM PHIL HARBERGER PARK, 8400 NW MILITARY HWY., S.A.

AT 14-023 WILDLIFE TAX VALUATION WORKSHOP

This workshop in San Antonio will provide information for Texas landowners interested in a wildlife tax valuation for their property. Space is limited, so register in advance; walk-in registrants accepted only if space is available. Contact Matt Reidy at 830-569-3358 or go to matthew.reidy@tpwd.texas.gov.

SATURDAY, MARCH 22 9AM-12PM CIBOLO NATURE CENTER, BOERNE (CNC)

AT 14-039 BASIC BIRDING WORKSHOP

Avid birders and Master Naturalists Tom and Patsy Inglet share tool, tips, and techniques, including using a field guide and choosing a good pair of binoculars. Cost: CNC members, \$20/person; non-members, \$25/person. Go to www.cibolo.org to register

SATURDAY, MARCH 22 208 STATE HIGHWAY 46, BOERNE

AT 14-056 HONEY I'VE GOT THE BEES

Texas AgriLife-Boerne sponsors Dr. Don Fraser on beekeeping on a budget: how to pollinate your plants, produce your own honey, and keep your bees healthy. This six hour class will be repeated on March 29. Cost: \$48/person, including breakfast and lunch; children free with two adult family member registrations. Call 210-860-9558 for time information and to register.

MONDAY, MARCH 24 7-8PM UPPER GUADALUPE RIVER AUTHORITY LECTURE HALL (UGRA)

AT 14-063 ABK STATE NATURAL AREA

James Rice, superintendent, will discuss the Albert and Bessie Kronkosky State Natural Area located in Bandera and Kendall counties.

TUESDAY, MARCH 25 7-9PM MEMORIAL PRESBYTERIAN CHURCH, 601 N. MILAM ST., FREDRICKSBURG
AT 14-069 TEXAS MUSHROOMS: AN OVERVIEW OF MYCOLOGY STUDIES AND IDENTIFICATION
David Lewis will discuss the history of studies of Texas mushrooms, examples of those found in eastern and central Texas, and tips on identifying major genera. Sponsored by the Fredricksburg Chapter, Native Plant Society of Texas.

THURSDAY, MARCH 27 12-1PM CoCoRAHS WEBINAR
AT 14-050 HOW NASA STUDIES EARTH'S WEATHER, CLIMATE, AND HYDROLOGY
Dalia Kirschbaum, Physical Scientist, NASA.Goddard Space Flight Center, will speak. For more information, go to <http://www.cocorahs.org/Content.aspx?page=wxtalk> .

THURSDAY, APRIL 3 8AM-3:30PM COKE STEVENSON CENTER, 440 N. U.S. HWY. 83, JUNCTION
AT 14-060 TEXAS AGRILIFE MULTI-COUNTY WILDLIFE PROGRAM
AgriLife Extension experts will present a program on predators and their effects on wildlife, prescribed fires, water "guzzler" systems, and maintaining wild turkeys.

FRIDAY, APRIL 4 1-5PM KERR COUNTY AGRILIFE EXTENSION OFFICE, RT. 27, KERRVILLE
AT 14-049 NEW LANDOWNER SERIES- KERRY COUNTY SESSION
This is one of a six-part series; the initial session was on March 7 and later sessions (at other locations) will be on May 9, June 13, July 11, and Sept. 12. This session focuses on Live Oak wilt, home use of pesticides, turf, tree, and landscape maintenance, and rainwater harvesting. Cost: \$30/person for each session or \$100/person for the series; \$150 for a couple; payable in advance or at the door. Advance notice of attendance is required so adequate quantities of materials can be provided; call 830-997-3452.

SATURDAY, APRIL 5 10AM-4PM RIVERSIDE NATURE CENTER, KERRVILLE (RNC)
AT 14-068 WELCOME THE RAIN: DROUGHT MITIGATION STRATEGIES
Katherine Napper Ottmers and Markus Ottmers will lead a workshop focused on rainwater harvesting, earthworks, improving water-holding soil capacities, and delivering efficient supplemental irrigation. Bring a lunch; coffee and drinking water provided. Cost TBA. Go to www.riversidenaturecenter.org for further information.

SATURDAY-SUNDAY, APRIL 5-6 9AM-5PM FORT CONCHO HISTORICAL LANDMARK, SAN ANGELO
AT 14-021 GEOARCHEOLOGY
This Texas Archeology Society Academy will provide instruction, laboratory exercises, and field trips focused on how geological and soil formation processes affect archeological sites. For more information, go to <http://www.txarch.org/Activities/academy/aa2014/index.php> .

TUESDAY, APRIL 8 11:30AM-12:45PM RIVERSIDE NATURE CENTER, KERRVILLE
AT 14-048 SECOND TUESDAY BROWN BAG LUNCH AND LEARN
Susan Crawford Tracy will speak on growing ferns. Cost: RNC members, \$4; non-members, \$8; free if joining at the meeting. For further information, or Go to www.riversidenaturecenter.org or call 830-257-4837 for further information.

TUESDAY, APRIL 8 3-5PM RIVERSIDE NATURE CENTER, KERRVILLE
AT 14-052 NPSOT KERRVILLE CHAPTER MEETING.
Sandra Magee will speak on four free native plant books available for tablets and smartphones. These books cover more than 200 species of Hill Country native and non-native plants and provide descriptions and pictures of each plant. Visitors are welcome; for more information, go to the NPSOT website (npsot.org/wp/kerrville/) .

FRIDAY, APRIL 25-27 7:30AM-4PM LADY BIRD MUNICIPAL PARK, FREDRICKSBURG

AT 14-055 WINGS OVER THE HILLS NATURE FESTIVAL

This is the 4th annual festival, which features talks, children's activities, hummingbird banding, a raptor program, and both 3K and 5K nature walks. For general information, schedule, and cost, go to www.wingsoverthehills.org.

SATURDAY, APRIL 26 8AM-3:30PM LADY BIRD JOHNSON WILDFLOWER CENTER, AUSTIN

AT 14-065 NATIVE PLANT SPRING SYMPOSIUM

Dr. Doug Tallamy, author of *Bringing Nature Home: How Native Plants Sustain Wildlife in Our Gardens*, will deliver the keynote address at the center, which is located at 4801 La Cross Avenue in Austin. Cost, before April 18: \$55; for members of NYPSOT and LBJWC, \$50; includes light breakfast and a box lunch, plus full access to the Wildflower Center gardens. Register now at <http://www.npsot.org/springsymposium2014>. Call 830-9997-9273 for more information.

MONDAY, APRIL 28 7-8PM UPPER GUADALUPE RIVER AUTHORITY LECTURE HALL, KERRVILLE

AT 14-065 NATIVE BEES

Michael Warriner, Program Supervisor of Texas Parks and Wildlife Department's Nongame and Rare Species Program, will speak on the significance of native bees for natural ecosystems.

THURSDAY, MAY 1 5-9PM RIVERSIDE NATURE CENTER, KERRVILLE

AT 14-062 HERBS AT TWILIGHT: SEVEN CLASSES FROM MAY 1 - JULY 24

This is the first of seven classes in basic herbalism, focused on using native medicinal and wild edible plants for family health. The class will begin with a "Food as Medicine" potluck meal. Cost for the series: by April 1, \$595; \$575 for RNC members. After April 1: \$695; \$675 for RNC members. For drop-in guests, \$110 per class; \$100 RNC members. Instructors are Sally Garrett, MS and Amy Coward, RN, Certified Traditional Herbalists. For more information, go to sally@earthlightenergies.com.

FRIDAY, MAY 2 10AM-4PM LOCATION TBD.

AT 14-061 BASIC HERBALISM, HILL COUNTRY STYLE: 12 CLASSES FROM MAY 2 - SEPT. 26

This is the first of a twelve session (plus field trip) in-depth basic herbalism course focused on using native medicinal and wild edible plants for family health. The classes will include a "Food as Medicine" potluck lunch. Cost for the series: by April 1, \$1195. After April 1: \$1395.. For drop-in guests (only some classes open for drop-ins), \$110 per class. Instructors are Sally Garrett, MS and Amy Coward, RN, Certified Traditional Herbalists. For more information, go to sally@earthlightenergies.com.

FRIDAY-SUNDAY, OCTOBER 24-26 MO-RANCH CONFERENCE CENTER, HUNT

AT 14-047 TEXAS MASTER NATURALIST ANNUAL MEETING

The newsletter's publication schedule does not allow listing all AT events in each issue. Check the chapter calendar on our website for additional AT.



We meet on the fourth Monday of most months at 7:00 PM. in the Upper Guadalupe River Authority Lecture Hall at 125 North Lehmann Drive in Kerrville.

Join us at 6:30 for our social half-hour.

Everyone is welcome.

Texas Master Naturalist mission:

To develop a corps of well-informed volunteers to provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities.

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The Texas Star is a monthly publication of the Hill Country Chapter of the Texas Master Naturalist Program. News, essays, comments, and ideas are welcome.

Please email them to:

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