TEXAS Master Naturalist SM

TEXAS PARKS & WILDLIFE

TEXAS A&M AGRILIFE EXTENSION

The Texas Master Naturalist program activities are coordinated by Texas A&M AgriLife Extension Service and Texas Parks and Wildlife. Texas Master Naturalist and Extension programs serve all people regardless of socioeconomic level, race, color, sex, religion, disability or national origin.

Los Caminos

*Celebrating and sharing our experiences along "**the roads**" we take through nature.*

Award Winning Newsletter of the El Camino Real Chapter

Milam County Texas Master Naturalist Summer 2013

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Green Tree Frog

Did You Know?

What is this?

See last page for answer.

Prairie Tracks by Katherine Bedrich

Crawdads

Crawdads, crawfish, crayfish—however you prefer to call them — are in the Order Decapoda, of the Animal Kingdom. Decapod means ten legs. Related to the lobster, crab and shrimp, the first pair of legs develop into the front claws. They are used for defense, capturing prey and to move and pick up objects. The other four pair of legs are for walking.

Crawdads belong to the subphylum Crustacea. They are water dwelling arthropods having a crust like exoskeleton of chitin. The exoskeleton is shed up to ten times the first year. The molted skeleton is eaten by the crawdad for its calcium and phosphate nutrition. At the time of the molt, the skeleton is soft and the crawdad is most vulnerable. If the crawdad can survive its fourth year, it will be full grown. Most crawdads live less than 2 years, in captivity some have lived 20-30 years.

Freshwater invertebrates feed at night on worms, aquatic insects, and plants; crawdads spend days resting in a burrow; an underground moist shaft near a water source. Round mud balls are made above ground forming the entrance to the burrow. During the summer heat and dry periods, the burrow is closed with more mud balls sealing the top. The burrow is usually dug by an individual crawdad. Territory is defended aggressively by the male, sometimes resulting in a claw being removed. This claw will grow back.

Crawdads have good eyesight with two independently moveable eyes. When they are threatened, escape is by flipping the abdomen and swimming backwards. Predators include raccoons, snakes, turtles and grackles. Scavenging in the water, crawdads cleanse their water habitat of detritus and carrion. Crawdads cannot survive in polluted and con-

(Continued on page 2)

taminated water. Their presence can be an indicator of a healthy water area.

Mating in the fall, fertilized eggs are attached to the females swimmerets on the underside of her abdomen. She can carry up to 800 eggs. These may hatch in 2 to 20 weeks depending on the water temperature. These newly hatched crawdads will stay attached to the mother until their second molt, when they are released to be on their own.

Sources:
- Texas Crawdads by: Sterling K. Johnson and Nathan K. Johnson
- www.arklive.org/crayfish
- www.fcps.edu/islandcreek/ecology/crayfish

Story and photos by Katherine Bedrich

The Hognose Hoax

by Donna Lewis

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Eastern Hognose Snake (Heterodon platyrhinos)

Recently I had a fascinating encounter with this little nonvenomous Texas native snake.

I was working in my office and I heard my dog barking outside. Not just any bark like she does at a bird or a car, but THE BARK I have now come to know as the "I have a snake cornered" bark.

So I know to be quick and get out there to see what she has.

If its nonvenomous, I have a little more time to react, but if it is not I really have go into action fast for everyone's sake.

My dog is a Brittany Spaniel which is a hunting dog. She is going to hunt anything that moves. I cannot change her nature. So I have developed my own snake catching kit that I keep by the back porch at all times year round. It consists of a tall plastic garbage can with a rectangular top and two shovels.

I grab it and go to where my dog is dancing around trying to bite the snake. Luckily I see it is a hognose and won't hurt anyone - well maybe a little bite, but nothing serious. My dog on the other hand wanted to do serious damage to the snake.

So I get the shovel and gently guide it into the garbage can I had placed on its side beside the snake. In it goes and I have saved it! Yay!

Next it puts on a wonderful show for me while at the bottom of the garbage can. I could have sold tickets to this show it was so good.

The little guy or gal coiled and rolled round and round. Then it flipped over showing its white underside and at last its tongue hung out of its mouth and it played dead.

Really fantastic! But of course I knew it was a show.

I took it back to the rear of our property and slid it out of the can so it can move off. It isn't sure it's safe yet so it continues to play dead for exactly 21 minutes! I know because I backed away some distance and watched to see how long it would lie there.

I was worried something might try to get it before it moved away. But at last it very slowly came back to looking around and then moved off thru the woods.

Goodbye my little friend.

By Donna Lewis. Photos from Duke University, Jeffrey Pippen.

Pollinator Week June 17-23, 2013

by Katherine Bedrich

What is pollination?

Pollination happens when a grain of pollen is moved from the anther (male part) of the flower to the stigma (female part). With this act, seeds and fruit are produced to insure a new generation of plants.

Plants can be pollinated through self-pollination, water and wind pollination, and with the help of the animal kingdom. Bees, butterflies, beetles, flies, wasps, and moths are some of the insect pollinators. Birds, bats, and other small mammals help with pollination.

Bees are the most important pollinators. Nearly 4000 species of bees have been identified in the United States as native. The size can be from one eighth of an inch to over one inch long.

Over 80% of our food is produced with the help of pollinators. A healthy ecosystem is supported through pollinators working at keeping the air clean, soil stable, and water quality high. Other wildlife also benefit with a healthier environment to live in and raise their young.

Ways we can help pollinators are by having nectar and host plants available. A water source and habitat for shelter will provide the space needed for pollinators to survive.

Without them, we (humans) would have to change our way of life.

To find out more about Pollinator Week check out this site: www.pollinator.org/pollinator_week_2013.htm

Katherine Bedrich – June 2013 - -- pollinator photos – kb)

Hairstreak on Beebush

Bee on Salvia

Skipper on Blue Mist Flower

Wasp on Oregano

Monarch Butterfly Garden Project

by Debbi Harris

The Milano community project, "***Bring Back the Monarchs***" to the Milano Junction Memorial Garden has had tremendous community involvement and support - even visiting Oklahoma residents were impressed!

We created an awesome garden to enjoy, attended various training courses, learned how to build a cedar trellis to provide shelter for our little critters and we got to tag and release several Monarchs from this new site! How cool is all that?

This beautiful and productive Butterfly Garden was built starting with a vacant city lot and was done with 100% volunteer efforts by Master Gardeners, Master Naturalists and other community members, creating many new friendships in the process. Yet most importantly, this project has already brought in several Monarch larvae!

Several volunteers have also noted other species of butterflies and moths enjoying this wonderful garden as well. It's just amazing to see how we have worked together for the good of the Monarchs and other valuable pollinators.

As our way to further enlighten our community and members, we have offered courses on: Attracting Pollinators using Native Plants; Introductory and Advanced Monarch courses; Sex in the Butterfly Garden; and Mycology is Better than Yours-Tx Mushrooms. Over 100 residents of Milam and surrounding Bell, Brazos and Lee counties have attended these courses and have increased their knowledge on the importance of pollinators to us and the natural world.

We have also continued our efforts with our youngest residents by presenting a Butterfly course to Rockdale Elementary students on our beautiful Monarch Butterfly. Just ask those bright little ones what FRASS is, I am confident they will educate you quickly. In our future, we will be offering a few more courses, including Know your Milam County Milkweed and how to create a certified Waystation.

Stop by some time - come enjoy the beginnings to a beautiful garden and park in downtown Milano!

Were you aware that 90% of our food crops eaten each day require pollination--yes, they do so just give thanks to a pollinator next time you see one.

If you are interested in learning more about those beautiful little butterflies or would like to be included in future events, feel free to e-mail:

Debbi Harris: milanojunctionmemorialgarden@yahoo.com.

We do believe ... We Shall Build It and They Shall Come ... and they HAVE!

So, as our garden grows and we ALL have helped increase the Monarch Butterfly population, we clearly can see that . . . FRASS HAPPENS!

[Story and photos by Debbi Harris] Continued next page.

The Layout

Planting in Process

Garden is Growing!

Garden is Complete

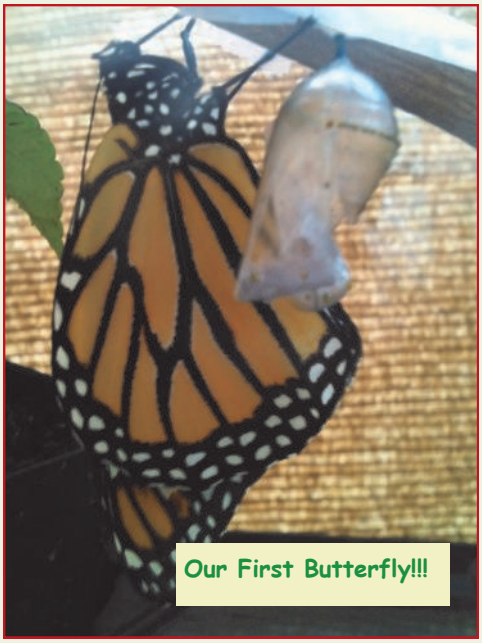
The Trellis Queens

Flo Oxley Mycology Training

Tagging and Releasing

Tagging and Logging

Fruit of our labor



Our First Butterfly!!!

If a Tree Falls in the Woods ..... by Dorothy Mayer

If a Tree Falls in the Woods, and Nobody Hears, Does it Make a Noise?

You betcha! When something as massive as a tree falls, there is definitely noise.

My husband and I still marvel at the number of trees we hear crashing down when we sit outside in the evenings. After the two recent droughts of 2009 and 2011, I got pretty paranoid about trees dying. But we have gotten used to hearing them and I've come to accept this as a natural and necessary process of life. After all, life is a circle of … well, life.

However, the loudness and duration of the sound made by this particular tree crashing definitely got our attention. Time for mourning? Maybe so, but, maybe not yet time for grief.

While I cannot help but wonder how many critters this tree homed over its long lifetime, this is really not the end. There had to be numerous birds, mammals, reptiles and insects that considered this tree home. When I start thinking along this line, I am less sad. After all, the tree is no longer a massive shade tree, but likely still home to many species. In a way, it will live on.

I cannot help but wonder if Mama Coon went scouting about the morning after the loud crash, only to return home to gather her young and take them out to explore the new playground in the neighborhood. When those roots pulled up from the ground, they left about a 4 to 5 foot hole underneath. No telling what critters will still take shelter in the massive tree now lying horizontally rather than vertically. Finally, the tree will slowly return completely to the ground and provide a rich compost for many new plants to grow.

Now, I cannot help but find a deeper lesson in the life of this one huge tree. Did this tree have tons of offspring? Probably, but not guaranteed. Maybe, like me, the tree will have no offspring with exact DNA. But, did this tree make a difference? Did this tree leave a unique mark on the world?

I would venture to say, the answer is: "yes, you betcha!"

[Story and photos by Dorothy Mayer.]

The Endangered Species Act

by Katherine Bedrich

THE ENDANGERED SPECIES ACT – 40 YEARS OF CONSERVATION

Congress passed the Endangered Species Act (ESA) in 1973. The Act recognized our natural heritage is of "esthetic, ecological, educational, recreational and scientific value to our Nation and its people." It expressed concern for our native plants and animals which were in danger of becoming extinct. For that purpose, the ESA protects and recovers species and ecosystems within their natural range.

Species listed as "endangered" are those in danger of becoming extinct in their natural range.

"Threatened" means a species may become endangered within the near future.

Milam County possibly has two endangered species listed:

The Houston Toad, Bufo houstonensis and Navasota Ladies'-tresses, Spiranthes parksii, a species of orchid. Both species are endemic to Texas

Endangered Species Act Benchmarks:

99 percent saved from extinction: Of the more than 1,400 plants and animals placed under the care of the Act over the past four decades, 99 percent have been saved from extinction. To date only 10 species protected under the Act have been declared extinct, and of these, eight were very likely already extinct when they were granted protection.

90 percent recovery rate: A recent study of more than 100 protected species across all 50 states found that 90 percent are meeting or exceeding federal recovery guidelines and moving toward eventual removal of protected status

The Endangered Species Act is the strongest law for protecting biodiversity passed by any nation. Its purpose is to prevent the extinction of our most at-risk plants and animals, increase their numbers and effect their full recovery — and eventually their removal from the endangered list.
Currently the Act protects more than 1,400 plant and animal species in the United States and its territories, many of which are successfully recovering.

On May 17, 2013, the 40th Anniversary of the Endangered Species Act, Chris Harper, U.S. Fish and Wildlife Private Lands Biologist presented a program to the community on the history of the Act.

Check out this link to watch a video on the ESA…

http://www.fws.gov/endangered/ESA40/index.html

(Katherine Bedrich – June 2013 – Houston Toad photos taken by kb, Navasota Ladies Tresses from repository.tamu.edu)

Orphaned Baby Raccoon

by Dorothy Mayer

My daughter Sarah, who lives an hour away, called a couple weeks ago to say she had found an orphaned raccoon and wondered what to do for the baby. Since I am in contact with numerous rescue people, I offered to come get him and get him to a rescue. Originally, I thought I would get him and keep him a few days to play with him before turning him over to an expert. But, those plans did not quite work out like I had hoped.

Sarah had heard the baby crying loudly all day long that Sunday in a tree behind her house. That evening he finally fell out of the tree and continued to cry loudly. She researched a bit on the internet what to do. She tried to give him water but had no luck. Then, she fixed a box and put him in the box and set it underneath the tree in hopes the mother coon would return to get him.

Since I know babies need to be kept warm and my daughter had to go to work very early the next morning, I went and got the baby and brought him home with me that night. I thought he would nurse a bottle with kitty replacement formula as recommended on the internet, But, no matter how hard I tried, he just was not interested in that fake substitute for Mama and her milk. I finally gave up about 3a.m. and put him in a carrier with an electric heater right in front of it. After that, his cries became less frequent and much quieter.

The next day I tried repeatedly to get him to take the bottle to no avail. So, about 3pm, I decided that being responsible for an orphaned coon was more time-consuming than I had hoped. Therefore, I began my search for a responsible rescue. The first one I called was located nearest to me in Bryan, Texas. But, she would be traveling a lot during the month of June, so could not take him. Luckily for me and for little Woody, the next rescue I called specializes in raccoons and was very willing to take him. So, we loaded up to meet her in Brenham, TX.

Linda, a volunteer with Lone Star Wildlife Rescue, seemed excited about taking Woody into her experienced hands and assume his care. She assured me that he would have siblings to play with and even a hammock for lounging.

I am happy to report that Woody is doing great in his new home with 2 surrogate siblings. And, his foster mom reports that over a week later all 3 boys are doing great. She even let me help name her other 2 younger rescues. Together we decided to stick with a Wood related theme with the names. So, she now has Woody, Leif, and Forrest who will grow up and be released together sometime next year.

Since coons run in packs in the wild, I think this was the best possible outcome for Woody, the baby who fell from a tree and is the color of wood.

I used to think that a raccoon would be a really neat pet, but since I have come to realize that things do not always work out the way we have in mind and I have learned that wildlife should remain in the wild. After taking Woody to Linda, I have had time to do a bit more research on raccoons as pets and I absolutely know that I did the right thing for both myself and for Woody.

One article I read was very specific in explaining that raccoons are very cute and sweet for about the first year. After that, their wild instincts along with physical maturity come into play. They make dens in your couch, tend to tear your window blinds, become way less cuddly, more smelly, and weigh about 40 lbs. Also, by the time most realize that they do not really remain so cute and cuddly, they have imprinted on humans and releasing into the wild becomes next to impossible for them. So, before you think of making a pet of an orphan, give Linda a call 713-822-5038. I am very grateful there are people such as Linda out there ready to give their care and time to help the orphaned critters live a life like they are meant to live.

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I sent my article to Linda at Lone Star Wildlife Rescue and got this nice response:

Very nice! Lone Star Wildlife Rescue is a non-profit with all volunteers, no paid staff. I ordered a five-pound bag of KMR, Kitten Milk Replacement for a total of $76.69, bought $18.68 of grapes, some of which I'll get reimbursed, but mostly it turns out to be part of my money and all of my time. I love it! Not for the faint of heart but this labor of love is most rewarding in restoring successfully what was meant to be wild.

Thank you again for caring so much to make the effort to help this little guy get back where he belongs.

Please visit www.lonestarwildlife.org for more information.

Those Darn Cowbirds!

by Don Travis

If you ask a number of birders "What's your least favorite bird?" I suspect the Brown Headed Cowbird would be near the top of the list. What is it about this practice of laying eggs in other bird's nests (brood parasitism) that has so many birders up in arms? Aren't you glad their orphaned eggs get cared for by other mothers? No? Well, ok. But let's see how this breeding process got started.

Eastern Phoebe nest with just one itty bitty cowbird egg—isn't that nice & cozy?

Back in the days when the American Bison ruled the Great Plains, along with Native American Indians, there was a bird known by the Indians and early settlers as a buffalo bird. This bird helped eat pesky insects bothering the bison, picked seeds out of their excrement and helped to propagate native plants. And they followed the herds wherever and whenever they roamed, even during breeding and nesting seasons. So what can they do about raising their young in such a traveling environment? The existence of their species can't continue if they can't reproduce, right? Those darn buffalo wouldn't carry nests on their backs, so what's a mother to do?

They did the best they could and found other nests to deposit their eggs, putting them in the good hands of another mother bird to nurture and raise on their behalf. And of course if there wasn't enough room in the nest for the mother's own eggs, well maybe she won't miss one or two!

This all worked pretty good (at least from the buffalo birds perspective) until the 1800's when the buffalo herds and wide open prairies began to disappear – to be replaced by fenced pastures and cattle. So these creative birds adapted and started keeping company with cows, eating insects in the grass, ticks on the livestock, and seeds and grain from nearby farms. And they took a new name – cowbirds.

There are two native species in North America, the Bronzed Cowbird of the Southwest and the Brown-headed Cowbird common throughout the US and Canada. Even though there's no need to roam like they used to, they instinctively lay their eggs in the nests of more than 200 species of other birds, much to the dismay of bird lovers and conservationists.

Since many of the host species are smaller than cowbirds, the young cowbirds tend to dominate the nests, crowding out the others and hoarding the food. Hence their survival comes at the expense of other species, and affects bio-diversity.

Those !!!! Cowbirds!

In Honor of Jan "Owl Puke" Wise

By Linda Jo Conn

In April during a visit to the Lady Bird Johnson Wildlife Center, I snapped a photo to share with Jan Wise, our animated and knowledgeable owl expert, and with fellow Master Naturalists who have enjoyed showings of the entertaining video of Jan's "owl vomit" presentation to a group of students at the Learning Tree Day Care Center in Cameron earlier in the year.

For the third year, a great horned owl has nested in a niche of a rock arch going into the main courtyard area of the center. She was certainly a celebrity that day. Groups of visitors stopped to gape up at and take photos of the unmoving stoic. Serious photographers had cameras on tripods set up to catch the perfect pose. Oblivious to the interest she was creating, the owl sat above the busy comings and goings of the center's visitors.

[To see the famous "owl vomit" video, go to www.youtube.com/watch?v=jKizSiBlrp4]

Thoughts Prompted by Observing Dung Beatles

by Linda Jo Conn

Sometimes when I am walking the dogs in the evening, I pause to watch a "tumblebug" at work. The small black beetle labors furiously at its curious task. As it rolls a ball of manure into a larger and larger sphere, it is oblivious to my interest in its actions. Intent on propelling the orb over all obstacles in its path, the insect never becomes distracted from its mission. Relentlessly pushing and maneuvering, its remarkable stamina and determination are worthy of admiration.

"Where do you want to be a year, five years, ten years down the road? What are your goals in life?" I can still hear the words of the interviewer echoing in my ears, asking me these simple questions frequently asked of job candidates.

Goals? What were my goals in life? Did I want to become obscenely wealthy? Did I need a powerful position in a nationally known company? Did I desire to be recognized as a saint, a perpetrator of great and kindly deeds? Did I aspire to be the parent of truly superior children or the flawless mate of my spouse?

My aspirations in life have been simple, yet I still struggle to convince myself that the remarks of those who pass through my life are not always worthy of a second thought. Like the persistent tumble bug diligently persevering in its task, I too strive to become oblivious to the comments made by the world above me.

[Ed. The above is a repeat of an article titled "The World Above Me" done by Linda Jo for the Lexington Leader July 27, 2000.]

According to the Texas A&M AgriLife Extension field guide to insects website, there are a number of dung beetles or "tumblebugs" in the subfamily Scarabaeinae that are important in recycling animal feces. Many dung beetles, the species that caught my attentions, roll dung into round balls which are used as a food source and brooding chambers. Other dung beetles bury the dung wherever they find it, while third group neither roll nor burrow. They simply live in manure.

Most species are dull to shiny black and 1-3/8 inch or less in length with wing covers (elytra) that may have ridges (striae). They are often attracted to lights at night.

Eggs, deposited in the excrement, hatch and C-shaped grubs (larvae) feed on the dung. The grubs develop through several stages (instars) before pupating within cells in the remains of the excrement.

Dung beetles are currently the only animal, other than humans, known to navigate and orient themselves using the Milky Way.

[Article and photo by Linda Jo Conn]

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Certifications, Etc. By Debbi Harris

New since the Spring 2013 newsletter are in this color.

.Our 2013 Re-Certification pin is the Monarch Butterfly, Those achieving their 2013 pins include: Katherine Bedrich, Cindy Bolch, Ann Collins, Lucy Coward, Dorothy Mayer, Don Travis, Sherry Collie, Linda Jo Conn, Debbi Harris, Donna Lewis, John Pruett, Jeannette Patschke, and Cindy Travis.

Lifetime to date Milestone Achievement Levels Awarded include:

250 Hours—Paul Unger, Ann Collins, Katherine Bedrich, Cindy Bolch, Paula Engelhardt, Don Travis, Debbi Harris, Joy Graham, Lucile Estell, Shawn Walton, Anne Barr, Ed Burleson, Connie Roddy, Dorothy Mayer, Lucy Coward, Donna Lewis, Sue Taylor, Phyllis Shuffield, Sandra O'Donnell, Jim O'Donnell, Vivian Dixon, Sandra Dworaczyk, Cindy McDaniels, Sandra Dworaczyk, Janice Johnson, Gary McDaniels, Kim Summers, Rusty Thomas, and Cindy Travis.

500 Hours—Paul Unger, Ann Collins, Katherine Bedrich, Cindy Bolch, Paula Engelhardt, Don Travis, Anne Barr, Donna Lewis, Phyllis Shuffield, Lucy Coward, Debbi Harris, Dorothy Mayer, Sue Taylor and Connie Roddy

1000 Hours—Paul Unger, Ann Collins, Katherine Bedrich, Cindy Bolch, Don Travis, Paula Engelhardt, Debbi Harris, Donna Lewis, Connie Roddy, Sue Taylor, and Lucy Coward.

2500 Hours—Paul Unger, Katherine Bedrich and Cindy Bolch

Our Year-to-Date and Total Accumulated hours for Advanced Training are: 387 and 3713 respectively. Our Year-to-Date and Total Accumulated hours for Volunteer Events are: 6,310 and 30,717 respectively.

Congratulations to All.

Did You Know? A Face That Only a Mother Could Love?

This is a Star-nosed Mole (Condylura cristata), found in eastern US and Canada. Noses come in all shapes and sizes—button, Roman, bulbous, hooked—but this one is really unique. This functionally blind mole's nose has 22 small tentacles, which contain about 25,000 touch sensors known as "Eimers Organs" and over 100,000 nerve fibers. Clearly this little nose is many times more sensitive than a human nose—even if it is just a bit more ugly. It is said they have the best sense of touch (smell) of all animals. They can decide in about 8 milliseconds if something is edible—about the maximum speed that neurons can travel.

This mole is also unique in that it is the only one that can swim. And the nose again plays a big role here in finding food under water. They do this by exhaling air bubbles near an object or scent trail, then sniff the air to really process the scent. It eats small invertebrates, aquatic insects, worms, mollusks, small amphibians and small fish. Predators include the red-tailed hawk, great horned owl, skunk, weasel, large fish and … domestic cats. [Source Wikipedia]