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Award Winning Newsletter of the El Camino Real Chapter
Milam County Texas Master Naturalist Summer 2014

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The Eastern Cottontail

Eastern Cottontail (Sylvilagus floridanus) – belongs to the Order Lagomorpha, from the Greek lagos, meaning “hare” and morphe, meaning “form”; and the Family Leporidae, from the Latin meaning “those resembling lepus (hare)”.

Cottontails are seen during twilight hours and at night. They feed on grasses, twigs and forbs and may eat small tree bark and shrubs during the winter. During the daytime they are resting and are normally not seen.

Native to North America, adults weigh 2 - 4 lbs. Being a major prey animal, with a life span of 1 - 3 years, cottontails have adapted a zig-zag running pattern for escape. The average life of a cottontail is 9 months.

Mating is year round. Three to seven litters a year, with three to five young per litter can produce thirty-five rabbits. The majority will not survive the first year.

Nesting consists of the mother digging a shallow ground nest. It is lined with soft grasses and mothers fur. The babies are born blind, naked and helpless. The mother will cover the newborns with more soft grass and leaves to shelter them from the elements and predators.

The name cottontail comes from the underside of the cottony white tail. The cottontail does not hibernate.

Did You Know?

Will a Tarantula shatter and die if it is dropped?

See last page for the answer.

HTTP://TXMN.ORG/ELCAMINO

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Aplodinotus grunniens, the freshwater drum, is a fish that is endemic to North and Central America. It is commonly found in the streams and lakes of Milam County. Although not considered a prize game fish, I have always found the species to be of interest. The generic name Aplodinotus means "single rounded back", and the specific epithet, grunniens, comes from a Latin word meaning "grunting". It is common for members of the drum family, Sciaenidae, to make the drumming or grunting sound. More about how they make that sound later. My interest in the Sciaenidae began many years ago when, as a graduate student, I conducted a study on these fishes for my Master’s Thesis at UT Pan American. The title of the thesis was "Variation and Distribution of Scotopic Visual Pigments in Selected Species of the Sciaenidae". I attempted to describe the ecological distribution of the various species based upon the spectral sensitivity of each species visual pigment rhodopsin that is found in the rod cells of the eye. It is their variable physiology and subsequent adaptability that has allowed this remarkable family of fishes to exploit the multiple niches of coastal and inland aquatic habitat.

The family Sciaenidae is primarily represented by saltwater species that freely migrate between the open sea, bays and estuaries, with forays into fresh water. These species include many of our Texas Coastal game fishes to include the spotted sea (speckled) trout (Cynoscion nebulosus), the redfish or red drum (Sciaenops ocellatus), the black drum (Pogonias cromis), the Atlantic croaker (Micropogonias undulates), the sand sea trout (Cynoscion arenarus), the gulf king whiting (Menticirrhus littoralis) and the southern king whiting (Menticirrhus americanus). These fish can move between these various bodies of water and their differing salinities because they are euryhaline. Euryhaline is described as being tolerant of changes in salt concentration. However, for reproduction these species require the salinities of either the bay or open sea. The lone Sciaenidae in the Northern Hemisphere that is able to reproduce in fresh water is A. grunniens, the freshwater drum.

The freshwater drum has many common names with perhaps gasper goo (also gaspergou), being the most common and interesting moniker. Thus, for the remainder of the article I will refer to freshwater drum as the gasper goo. Other common names that one may run across include shepherd’s pie, perch, silver bass, gray bass, gou, grunt, grunter, grinder, wuss fish, and croaker, and is commonly known as sheephead or sheepshead in parts of Canada. Although the gasper goo is considered a rough fish many anglers claim they are very good eating as well. The commercial harvest of gasper goo is approximately one million pounds per year. The gasper goo does quite well in our streams and lakes and the commercial harvest of freshwater drum at the current rates are sustainable.

The gasper goo is most often found in clear water, but is tolerant of turbid and murky water. The diet is generally benthic (bottom feeder) and composed of macroinvertebrates to include aquatic insect larvae and bivalve mussels. They also may feed on small fish. Included in their mussel diet is the zebra mussel once the gasper goo reaches 9.8 inches of size. However, gasper goo under 14 inches only eats small mussels and rejects larger ones. Larger gasper goo are able to eat larger mussels but are restricted by the size of clumps they can disrupt. Although the gasper goo contributes to a high mortality in zebra muscles they are not having an impact on the spread of this invasive species.

The gasper goo spawns during the months of June through July. During the spawn, females release eggs into the water column and the males release their sperm, with fertilization occurring randomly with no subsequent parental care. The eggs (clutch size 34,000 to 66,500 eggs) float to the top of the water column and hatch in two to four days. With no parental care many eggs and larvae fall victim to predation. Females grow faster than males with the usual gasper goo weighing 2-10 lb, however they can get greater than 36 lb, with the record at 55 lb. They can be long-lived fish with the record being 74 years, however the average is between 6 an 13 years.

The gasper goo is not without its interesting folklore. I have heard many people say that the gasper goo has rocks in its head, and that accounts for the grunting sound as well. Well the gasper goo (Continued on page 3)
does have “rocks” in its head, but they do not cause the grunting sounds. The “rocks” or otoliths are specialized calcium carbonate structures in the inner ear of all vertebrates. The otoliths (2) are used as gravity, balance, movement, and directional indicators in vertebrates, and have a secondary function in sound detection in higher aquatic and terrestrial vertebrates. The otoliths of the Sciaenidae are quite large and get larger with age, in fact they can be used to age fish as they produce growth rings, as do trees. The grunting sound or drumming sound produced by the species of this family is caused by a special set of muscles within the body cavity that vibrate against the swim bladder. Only mature males of gasper go make the grunting sound, therefore it is believed to be linked to spawning.

So if you are fishing for catfish in one of the local Milam county streams and you hook what you believe is a catfish, only to find out is an unexpected and unusual looking fish, then you may have hooked the interesting gasper go. This fish is the only freshwater member of the amazing marine family of fishes the Sciaenidae.

**References**


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[Editor note: Linda Jo has now been given her own “By-line blog” for our newsletters, “My Place in Nature”, which will contain one or more interesting and informative nature stories in a blog like style. She joins Katherine’s “Prairie Tracks” and John’s “What’s in the Water” as a regular series.]

**Distracted by Wildflowers**

Several members of the El Camino Real Chapter traveled to the Gault Archaeological Site on the Bell/Williamson County line near Florence, Texas on Saturday, June 21. While the guided tour of the location of early humans in the western hemisphere was very interesting, I was guilty of being distracted by the wildflowers in the area. In my defense, however, this was my second tour of the Gault site.

Many plants observed at the Gault site, such as Indian blanket (Gaillardia pulchella), prairie verbena (Verbena bipinnatifida), and cactus apple (Opuntia engelmannii), are common in Milam County.

![Indian Blanket](image)
![Prairie Verbena](image)
![Cactus Apple](image)

However, there were just as many plants seen that may also be found in Milam County, but I have yet to personally observe them. Buffalo gourd (Cucurbita foetidissima), black maidenhair fern (Adiantum capillus-veneris) and lemon bee-balm (Monarda citriodora) are examples.
Unfamiliar plants observed at the Gault archaeological site were wood sage (Teucrium canadense), whiteveined verbena (Verbena plicata), the grass hairy erioneuron (Erioneuron pilosum), and horse crippler cactus (Echinocactus texensis). The horse crippler cacti had rocks arranged in a circle around them. Were the rocks there to protect the cacti, human beings, or the longhorn cattle grazing the land?

There were several other wildflowers whose identifications still elude me, such as this herbaceous plant with its interesting purplish flowers.

Next spring, I plan to revisit the Gault site but not with the purpose to increase my knowledge of the pre-Clovis inhabitants of this very significant archaeological location. I want to see what other wildflowers can be observed and identified there. Perhaps you will want to go with me?

The Impaled Scarab Beetle

Many times we detect the presence of a particular wildlife species by the signs left for us to discover. This rainbow scarab beetle (Phanaeus vindex) did not impale itself on the wire barb. A loggerhead shrike or “butcher bird” (Lanius ludovicianus), skewers its prey of large insects and small birds or reptiles on thorns or barbed wire fences to hold it steady while being consumed. It does not have the strong talons as do larger birds of prey.
Texas Master Naturalist Saved Our Marriage!

Did the title catch your attention? It was intended to sound like a banner one might see emblazoned on the cover of a National Enquirer magazine. Hopefully, it did catch your eye and you are reading this. Now I can brag on my husband Wes.

While he is not a member of El Camino Real Texas Master Naturalists he is certainly a master at observing the natural world. But for him, I would miss many of the wildlife sightings around our place. He helps me enjoy the outdoors and perhaps be a better Master Naturalist.

Because he feeds our domestic fowl every day, Wes alerted me to the black-bellied whistling ducks (Dendrocygna autumnalis) that frequently perch on the fence and wait for an opportunity to get a share of the corn.

When the house finches (Haemorhous mexicanus) began visiting the seed feeder outside the kitchen window, my husband let me know and I was able to get a photo.

The day a striped skunk (Mephitis mephitis) was digging for tasty morsels near my vegetable garden, Wes warned me and I was able to observe its activity from a proper distance.

Wes was first to notice that the Eastern bluebird (Sialia sialis) eggs in the nest box had hatched.

He also frequently points out a herd of white-tailed deer (Odocoileus virginianus) grazing in the adjacent pasture.

Wes also informs me of the snakes he discovers, like the banded water snake (Nerodia fasciata) that was taking a nap by the shed.

In short, my husband surprises me virtually every day with yet another creature of the natural world at which we can marvel together.

That, frankly, may actually be a reason our marriage is still intact. Watching wildlife together is fun.

If you are wondering about the fate of the banded water snake, remember that I am a Texas Master Naturalist and my husband, a transplanted Texan, is a master at nature observation. As far as we both know, the snake is still alive and doing quite well. And, by the way, so is the skunk.

And one last photo I had to include, titled: What’s taking so long? I’m hungry!
Alophia drummondii
Tridaceae (Iris Family)

Every time we come to the property in Milam County that we call “The Big Lump” it is an adventure. We never know what to expect as Mother Nature changes the landscape each year. In fact Mother Nature makes changes between each visit. One of the changes I most enjoy watching are the wildflowers. Every year there seem to be an abundance of flowers on this particular parcel of land and I have made myself a goal of learning the genus/species names of these flowers as well as the common names and teaching them to my grandchildren.

I found only 3 stems of this beautiful flower last year so I considered it an uncommon plant but on the most recent visit to “The Big Lump” I found numerous flowers thinly scattered in colonies. After watching the plant over several days I discovered that there are usually several flowers growing in a cluster at the end of a stem and open one at a time for several days in succession. Each flower blossoms for only a day or part of a day. Many seemed to be spent by noon. Thus, if a person is not present at the right time the flower may not be seen.

Growing from a corm, Alophia drummondii is 1-2 feet tall and is usually unbranched. According to my research information it has leaves 1 1/2-2 feet long by 1 inch wide. The plants I found were not this tall. Most of the leaves grow from the base and are conspicuously veined. If the stem is clasped directly at the base it appears folded (pleated) for most of its length. The flowers are cup-shaped to flat. The 3 outer tepals are spreading, about 1 1/2 inches wide, light to deep purple; the 3 inner tepals are dwarfed, cupped or crimped, and usually a deeper purple. The inner portion of the tepals is yellowish, spotted with reddish-brown.

There are numerous common names for Alophia drummondii:
Propeller flower, Purple pleat-leaf, Pinewoods lily, Prairie iris, Pleatleaf iris.

Alophia is a small genus of perennial, herbaceous and bulbous plants in the iris family (Iridaceae).

The species name is for Thomas Drummond (1790-1835), a Scottish botanical explorer and collector in North America.

Resources:
Texas Wildflowers by C. Loughmiller and L. Loughmiller
Wildflowers of Texas by Geyata Ajlvsgi
Lady Bird Johnson Wildlife Center

**Aldo Leopold:**

“All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. The land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively the land.” The Land Ethic (1949).
The Birth and Life of Vultures.

In April, a female Black-headed Vulture laid a couple of eggs in one of the rooms of our old, ramshackle barn. My husband, not wanting them in the barn, threw the eggs away. Then he boarded up their entryway into that room in the barn. Both parents frantically tried to figure out a way back into that room but since their entry and egress was blocked, they finally gave up, moved into the main part of the barn, and proceeded to lay 2 eggs.

On May 1, the first egg hatched, quickly followed by the second one. I have been recording the progress and growth of these baby Black-headed Vultures!

Above you will see the eggs in the barn – hubby’s hand is in the picture to show the size of the eggs. Then the babies hatched, standing there as if to say, “mommy! I’m naked and she’s looking at me!” And the babies grew and continued to grow. They are nasty birds, but they do serve a purpose – cleaning carrion from the roadway and fields.

Every few days I go down to the old barn and take a picture of the babies. One time, when I opened the door, they were right there in the doorway inside. By then, they had grown large enough that they knew instinctively to try to protect themselves. Baby Black-headed Vultures hum, and hiss at interlopers! If we go into the barn, they will scurry to a corner. If we get too close, they hum, hiss, and lunge at us!

One day when I opened the door, I thought a skunk was in there! Later, we heard that skunk is one of the real treats for Black-headed Vultures! I theorize that one of the parents must have brought the babies a treat to eat – skunk! Yuck!

Vulture adults are caring parents and they take turns tending the babies. One stays with them one day while the other hunts for food. The next day, the other one stays while the second parent hunts.

When we get ready to open the door into the barn, we knock on the wall outside, ease the door open, and I say, “we’re coming to see your babies!” The adult has gotten fairly used to us and will move over to the east side of the barn where the large doorway is. Then it will finally flap up over the cattle panel door and land outside on the grass.

Another day when I opened the door to the barn, the babies were again near the door. They flopped around – one always tries to protect the other one by placing its wing over the second one. It did this very close to the door. I leaned over and touched the fuzzy, fluffy, downy feathers on its wing. When it realized I’d touched it, it moved quickly away from me and hissed at me!

The babies are now almost 2½ months old. They are developing their adult plumage under all the downy, fluffy baby fluff. I don’t know how much longer they will be living in the old barn, but the progress has been very interesting!

On Monday July 14 I was in my sewing room and glanced out towards the old barn. There was a black-headed vulture sitting in the grass outside the door. I got the binoculars just to take a look. Well! It seems that it wasn’t one of the parents after all! One of the babies had ventured outside! I don’t know if it has done this before, but this was the first time I saw it. I went out for a closer look with the binoculars and determined that it was indeed a baby. So I came back to the house, got my camera, and went back to where I’d been standing with the binoculars. Wes and I advanced on towards the old barn. The parent that was with the baby flew up in the tree. The baby watched us coming - I was able to get a few good pictures. It finally decided it better head for safety (such as it is) and it went through the cattle panel back into the barn. When I peeked around the

(Continued on page 8)
corner of the barn, both babies were out in the middle of it and they scampered back behind the equipment in there. Then they peeked over the box blade and watched us. When we got too close to them, they started humming (growling). We decided not to agitate them any more and left.

They still have a lot of the downy feathers showing, but they are almost full-grown now. You might be able to see their downy top-knots in the pictures. I suspect within a few more days or a week, at most, they will be out, learning to fly and hunting for carrion! From eggs to adults - how interesting and what fun! And THEN to clean the barn!

Summer Youth Education Program

by Katherine Bedrich

What are ways birds walk, how do they use their beaks to eat, and making a nature journal are some of the topics being presented this summer at The Apple Tree. The Northern Mockingbird has a running walk, Northern Cardinals hop, the American Crow walks like 'I am the boss', and Mourning Doves walk with their heads bobbing. Woodpeckers have beaks to chisel with, pelicans scoop up their food in the water, and many birds have beaks like tweezers to catch insects.

Chapter members involved in the program include: Sherry Colley, Dorothy Mayer, Pamela Neeley, Debbi Harris, Cindy Bolch and Katherine Bedrich; and Joyce Conners from Brazos Valley Chapter.
Observation

Chapter members continue to observe wildlife around the county...
John has seen hog-nosed snakes and rat snakes. Walking through the woods, Donna found a slider laying eggs. Debbi hears a lot of frogs and the Milano Junction Memorial Garden is bursting with color, nectar, and pollen for any one interested. Clyde and Nancy saw their first painted bunting. Sheri and Wesley had a three toed box turtle knocking at the door. Mourning doves and mockingbirds keep Kathy entertained. Dorothy has photos of a visiting skunk. Lightning bugs, lady bugs, and doodle bugs light us up.

Early summer rains painted the fields and roadsides with sunflowers, flowering cactus, horsemint, lantana, milkweed and Indian blanket.

Armadillos, opossums, raccoons, coyotes are roaming the fields, woods and roadways.

Lexington Monarch Garden

In February 2014, (this year) we started a cooperative project with the Lexington Garden Club and the El Camino Real Chapter Texas Master Naturalists, with approval from the Gideon Linsecum Chapter Texas Master Naturalists, to create a Monarch Butterfly Way Station. As you may know, the milkweed growth necessary for the Monarch Butterfly to survive has been severely reduced by herbicides used in fields to allow for crop growth. This is our small part to attempt to help these butterflies during their migrations south in the fall and north in the spring.

We have used the small strip of flower bed which extends the length of the Lexington Senior Center in downtown Lexington. This flower bed is approximately 30 inches wide and 70 feet long, approximately 175 square feet of growing space. Within this small space, we have numerous host plants and nectar sources for not only the Monarchs but also numerous other butterflies. (So far, I've seen an American Painted Lady - my favorite!) This flower bed includes leeks, zinnias, blue salvias, petunias, sunflowers, poppies, plumbago, butterfly bush, cone flower, Russian blue basil, gaura, milkweed, red salvias, verbena, Gregg's blue mist, coreopsis, hyacinth bean vine, and cypress vine. The arbor arch is to allow a little protection for the butterflies from the elements.

Weed cleared

Soon we will be submitting our application for Monarch Waystation Certification for our Lexington Senior Center Garden. Please drive by and admire our efforts and enjoy all the flowers. Please don't pick the flowers - leave them for others to enjoy and for them to go to seed for next year!
Certifications, Etc. By Dorothy Mayer

New since the Spring 2014 newsletter are in this color.

New Member 2014 Certifications: Darlene Anglen, Sheri Sweet, Wesley Sweet, and Nancy Adcock

Our 2014 Re-Certification pin is the Armadillo. Those earning their 2014 pins to date include: Don Travis, Debbi Harris, Katherine Bedrich, Linda Jo Conn, Sandra Dworaczyk, Dorothy Mayer, Donna Lewis, John Pruett, Ann Collins, Darlene Anglen, Sheri Sweet, Wesley Sweet, Cindy Travis, Sue Taylor, Kim Summers and Lucy Coward.

Lifetime to date Milestone Achievement Levels earned include:


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, Lucy Coward, Dorothy Mayer and Phyllis Shuffield.

2500 Hours—Paul Unger, Katherine Bedrich, Cindy Bolch, Don Travis, and Ann Collins.

4000 Hour Presidential Award—Katherine Bedrich.

Our Year-to-Date and Total Accumulated hours for Advanced Training are: 511 and 5,507 respectively. Our Year-to-Date and Total Accumulated hours for Volunteer Events are: 3,955 and 42,018 respectively.

Congratulations to All

Did You Know? Will a Tarantula shatter if dropped?

That’s assuming you pick it up in the first place. Tarantulas have an exoskeleton (that means its skeleton is on the outside) like crayfish and crabs. They shed their exoskeleton regularly - normally by lying on their back. When they are shedding their skeleton, it is a good idea to keep away from them as they will attack due to their vulnerable state. Because the exoskeleton is very fragile, if a tarantula is dropped from a low height, it will shatter and die. Unless you are allergic to tarantula venom, they are harmless to humans (though they pack a painful bite). Some tarantulas can also shoot the "hairs" off their legs which can pierce human skin and cause great discomfort. Some genera of tarantulas hunt prey primarily in trees; others hunt on or near the ground. All tarantulas can produce silk - while arboreal species will typically reside in a silken "tube tent", terrestrial species will line their burrows with silk to stabilize the burrow wall and facilitate climbing up and down. Tarantulas mainly eat insects and other arthropods, using ambush as their primary method of prey capture. The biggest tarantulas can kill animals as large as lizards, mice, birds and small snakes. This photo is of a Mexican Red Knee.