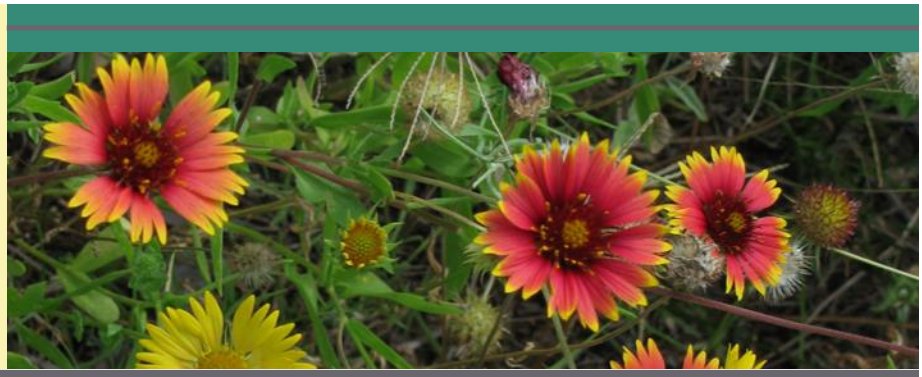
T E X A S
Master Naturalist ™
HIGHLAND LAKES CHAPTER



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MISSION

The Texas Master Naturalist program is a natural resource-based volunteer training and development program sponsored statewide by Texas A&M AgriLife Extension and the Texas Parks and Wildlife Department.

The mission of the program is to develop a corps of well-informed volunteers who provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities for the state of Texas

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Happy Trails To You

By Linda O'Nan

Photo by Mike Childers

Hiking is a great outdoor experience that many of us master naturalists enjoy. It deepens our appreciation for plants and animals alike, as well as just the shear physical pleasure of moving and clearing your head. Share your summer nature encounters on the trail with us in next month's *Steward*. I'm sure there will be a lot of armchair travelers that would enjoy hearing about your adventures! There are more than a thousand miles of trails throughout Texas. You need not explore far in the Highland Lakes to find a great trail. Besides our wonderful nearby state parks and natural areas--Inks, Pedernales Falls, Blanco, Colorado Bend and Enchanted Rock, don't forget Balcones Wildlife Refuge, LCRA parks, and Austin city parks. Of course, private facilities like Reveille Peak Ranch, Canyon of the Eagles, and Selah-Bamberger give us access to unbelievable trails to explore. One of my favorite trail guides is 100 Classic Hikes in Texas by E. Dan Klepper. The author and I would be good hiking buddies because he loves to stop for anything flowering, flying or crawling—just my speed! Don't let the summer heat totally derail your outdoor plans—just be prepared, go early, and stay hydrated to stay alive. Hiking alone is never a good idea. Besides, it is too much fun to draw friends closer and see new and wonderful things together. A shared laugh on the trail is just the best. I still chuckle when I recall slurping out of the tube of a camelback water hydration pack and another hiker asking if I had brought my own oxygen…ha. The health benefits of hiking are certainly undisputable. It feels so good to get outside and see something interesting other than your local gym. Of course, as good naturalists it goes without saying to "leave no trace". Hope when you are planning some summer fun, take a hike. It's good for the soul (sole?). Remember no HLMN meeting in July, so plenty of time to get out there. See you on the trail. Can't wait.

Texas A&M AgriLife Extension
Texas Parks & Wildlife

Inside this issue:

Please submit pictures, articles, reports, stories, announcements, etc. to

chili865@gmail.com.

Photos should have captions and appropriate credits. The deadline for submissions to each month's newsletter is the 10th of the month and publication will be by the 15th.

Balcones Canyonlands Wildlife Refuge Spring Programs

by Joan Mukhergee

Balcones Canyonlands Wildlife Refuge hosted another high record of school children in grades 3 to 5 at the refuge's Spring activities. We had eleven programs of Bridges to Birding and Going Buggy, as well as two hands-on workshops on aquatic life. Twenty four Master Naturalists participated, most from Highland Lakes, along with other refuge volunteers and staff. Rob Iski heads up these and other recreation programs at the refuge. Thanks to Rob and volunteers, there were a lot of happy faces this spring.

Going Buggy teaches about insects and Bridges to Birding about birds, with an emphasis on the endangered golden cheek warbler and black-capped vireo. Both programs are designed to reinforce the Texas science curriculum by having the children experience and enjoy seeing in the field the concepts they have studied. The programs take place at Doeskin Ranch off RR1174. In addition to learning, the children enjoy the beauty of the valley and its flora and fauna. Come see Doeskin now; it is a fairy land of twisted leaf yucca in full bloom.

The 2013 Songbird Festival (April 26-29) also hit a new record with 879 visitors and 101 volunteers. We had many birding trips including trips with guides from every major birding tour company. There was a native plant tour with Diane Sherill and Bill Carr and I did a tour of Birds, Butterflies and Blossoms. (I was grateful to my golden cheek who put on a great show.) Many participated in the photography contest, a new event. On Sunday Jonathan Wood put on an excellent raptor show which included every North American falcon including the gyrfalcon. The fire crew provided barbecue and didn't run out of food this year. Other programs included Spider Joe, photography, scavenger hunt, Creekside Critters, and building birdhouse. 180 Nature Ranger Passports were handed out to families that the kids could get stamped at 11 activities. We had great nature-oriented vendors and an attractive new festival T-shirt . For the business oriented, this year we made a small profit thanks to many dedicated, hard-working volunteers.

Congratulations to the 2013 Graduating Class!

Photo by Jerry Stone

(R ro L): Teri Garret-Benge Rhonda Kurtzman, George Brugnoli, Sunny Mazzan, Lori Greco, Susan Downey, Karyn Parker, Cris Faught, Betty Cruikshank (2013 Class Coordinator), Morgan Beck, Minnie Eaton, Jo Ellen Cashion, Bob Caruthers, Karen Lundquist, Melissa Duckworth, Paula D'Orsogna, Ralph Herter (2013 Assistant Class Coordinator). Not pictured Allan Wolfe and Rebecca Nunnally.

Happy Bird Families

By Sue Kersey

Here are a couple of fun pictures. A new birdhouse made by David Patton with a Missouri license plate from my Aunt Helen's last car and a Bewick's wren couple has two babies in the wonderful birdhouse now. The Golden-fronted woodpecker pair had two babies also and the two in the picture on my home-made suet are the male and one of his young. The entire family comes daily for my suet and we love having them. They also love fresh oranges and I make sure they are always out for them.

Friends of the Upper Highland Lakes Nature Center (UHLNC)

by Billy Hutson

I want to, very very much, thank the group of nature center friends who helped make the opening of the nature center trails a success. We were essentially rained out but still had three hardy stations for the fun and nature education of the approximately 80 attendees at our stations. There were hundreds of attendees at the program and I think we got all the kids and their parents.

This was a rewarding program for us naturalists and a return to dignity for the participating wounded veterans. As you know, this was a Veterans Day celebration but the military exhibitions were limited because of the weather. The crowd of attendees was beyond belief, even in the rain. The idea and promotions of Vol Montgomery, the governors office and "Serve Who Serve" brought together all the attendees for a free day of military exhibitions, nature education and lifted our spirits toward the appreciation of the true meaning of Memorial Day.

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See the several related pictures here of the event and catch Pete Smith working as busy as a beaver.

One anonymous UHLNC/MN attendee had the following to say "I am so glad that I was at RPR even though the weather was the pits. I met some amazing people and felt the spirit and emotions of the day. It was a truly moving program."

Things will slow down now for the summer with an occasional interpretive hike or survey of birds and/or flora but will pick up in Sept. when we can start the revamping of the three buildings we have material for, and a bird blind or two.

If you wish to participate in the surveys this summer just contact Jerry Stacy or Sherry Bixler. And who knows, maybe we'll have the money to build the main building center soon!

Stay cool this summer!

Summer Tanager

By Joanne Fischer

There are approximately 200 species of Tanagers in the world and some feel that no other group of birds exhibits the brilliance and variability of plumage than the tanagers. Most of them inhabit the hot, humid forests of Central and South America with only four tanager species breeding in North American (Scarlet, Summer, Hepatic and Western) and only one breeding in the Hill Country of Texas - the Summer Tanager.

The Summer Tanager is a medium sized, somewhat chunky bird with a moderately heavy beak that is yellowish or horn-colored. The species has a high degree of sexual dimorphism. The male Summer Tanager is bright red and in fact, the only entirely red bird in North America. Some have referred to it as the summer "red bird". The female is a much more drab yellowish olive green. Immatures resemble the female, however, often first spring males will display a variable amount of both red and yellow feathers.

Tanagers feed on insects and berries (and are known occasionally to visit peanut butter suet feeders). They seem to prefer and somewhat specialize in eating bees and wasps. They will often catch a bee or wasp in mid-air and kill it and remove the stinger by beating it against a branch before eating it. They will eat bee and wasp larvae as well, and are unwelcome visitors around beehives

The Summer Tanager arrives in Texas from Mexico and South America in April and breeding occurs in May and June. Tanagers inhabit mixed pine-hardwood forests and build loose cup-like nests on horizontal branches which are constructed of coarse materials such as stems, twigs, grasses and bark. The nests are lined with softer materials like fine grasses and downy materials from plants. The female lays three or four bluish eggs that are speckled with brown. The eggs hatch in about 12 days and the young are fed primarily on insects by both parents.

The Summer Tanager has a beautiful song which resembles a robin. When the males arrive in spring they spend much time singing from the tops of trees which is their way of establishing a breeding territory. Once established they will sing from mid-heights in trees and therefore are a little more difficult to spot.

Having grown up in Wisconsin and Minnesota I was used to being serenaded by the American Robin – especially at dawn and dusk. When we moved to the Hill Country I missed the robins. However on one of our first nights sitting outside enjoying early May weather I heard a bird singing which sounded very much like a Robin. But I knew that Robins did not inhabit the Hill

Country in the summertime (at least not out in the country) so I asked a couple of friends what I could have heard. Unfortunately, no one I asked was familiar with the song of a robin so they were of no help. Then I saw the "red bird" in the tree top and after looking it up in my trusty bird book I read that "the Summer Tanager's song resembles a robin's" – mystery solved - and now I always anticipate and enjoy the Summer Tanager's return each spring.

Enthusiastic Children and Fantastic Volunteers Make HOP 2013 a Great Success!!!!!!

by Phil Wyde

The Hatchery Outdoor Program (HOP) for 2013 is over, and enthusiastic children and fantastic volunteers DID make it a great success. Here is the proof. We had five sessions, each 3 to 3.5 hours long. At the sessions we hosted four schools: (Colt Elementary, Packsaddle Elementary, RJ Richey and Llano Elementary), 473 4th and 5th grade children and nearly 40 adults and teachers. After each session I offered to give them 2X their money back if they were not satisfied. I not only did not get any offers for a refund, but got wonderful verbal thank yous and notes such as the following one from Wendy Keele, 5th grade teacher at RJ Richey Elementary School:

"I just wanted to say thank you to you and all of the other staff at the hatchery. Our 5th graders loved the time we spent there and were excited about the things they got to see, touch, climb, taste, experience and learn!! I look forward to speaking with you in the fall and scheduling another trip for our future 5th graders. Thank you!"

(For those of you that are more astute, please note the word "taste." What do you suppose got that put into the note? Hint. Ask Marvin and Jerry.)

As far as the enthusiasm of the children, look at the pictures below!

Fredi talking to the children at the Casting Station

Children at the Fish Morphology Station

Is She Having Fun?

At the Runway Looking at Paddle Fish, Albino Fish and Other Live Fish

Before talking about the volunteers, you should know that we had six stations that we had at each HOP session.

An Overview of the Hatchery (a slide show presentation held in the Education Building). Linda Fleming gave this talk to every session on every day. Emphasis was put on an overview

of the Hatchery's missions and the diverse skills and education needed by Hatchery workers.

A Hike Up the Hill looking at and discussing the ecology and geology at the bottom, along and on top of hill. Marvin Bloomquist and Jerry Stacy slow talked the socks off the kids.

A Watershed Demonstration discussing the importance and role of Watersheds and the problem of pollution. Although good every day, it was particularly fun to watch the Watershed Demo people on the day that it rained and the demonstrations became a kinetic study.

Solar-based Image Making using flowers, leaves and other natural things. Penny, Cathy and all the volunteers at this station seamlessly mixed craft and nature.

Fish Morphology and Catfish Production at the Hatchery. The children got to hear Hollis and Lyn Davis wax poetic about fish scales and other fish parts – and see these things up close; they also to see live catfish eggs, catfish fry and George Brugnoli and Celia Escamilla at their best. (Did you know that there were 43 catfish fry to milliliter?)

Rod and Reel Basics with casting into floating rings. (Getting the gold fish "lure" into the floating square a minimum of 5 times earned one the coveted title, "MASTER CASTER.") Keeping the rods and reels in working condition was a Herculean task and kept a lot of people busy!

Some volunteers did not man a single station, but were guides or cart drivers. All of these had a multitude of tasks including handling crises. They were all outstanding!

Now to the FANTASTIC volunteers. Normally I like to point out the most outstanding volunteers, those that stood In this case, every single volunteer was outstanding. They manned the 6 stations, rain or shine, disabled or able, and always displayed passion, zeal and intellect. I would like to list these Friends of Inks Dam National Fish Hatchery, Highland Lakes Master Naturalists and independent volunteers both because they were the ones that did the work and that you would like to have on your team in your next event. (If I left your name off, it was purely unintentional and don't think for a minute that I did not very much appreciate your help. Phil Wyde)

THANK YOU ALL VERY MUCH!!!!!!!!!!!!!!!!!

OUTSTANDING HOP 2013 VOLUNTEERS

Linda Fleming	Judy Parker	Morgan Beck
Jerry Stacy	Lori Greco	Sammye Childers
Marvin Bloomquist	Sondra Fox	Mike Childers
Sharon Drake	Dennis Ellison	Karyn Ponder
Terry Bartoli	Nancy Ellison	Chris Fraught
Cathy Hill	Rebecca Nunally	Judy Bloomquist
Penny Nichols	Becky Brazeale	Pam Walt
Richard Nichols	Paula D'orsagna	Joan Stone
Celia Escamillia	Pat Campbell	Jean Schar
Lyn Davis	George Brugnoli	Sherry Bixler
Hollis Neier	MJ Hansen	Fredi Franki
Billy Hutson	Susan Morgan	Tom Ashcroft
Sue Kersey	Linda O'Nan	Helen Smith
Sheryl Smith-Rodgers	Elaine Barnhill	Marjorie Dearmont

Pest of the Month
Coreopsis leaf beetle (*Phaedon desotonis*)
Native species out of control

Photos and text by Sheryl Smith-Rodgers

You know how one thing often leads to another? In April 2012, my husband James and I were pulling invasive Malta star thistle from our adjoining property (which we dubbed The Meadow) when I happened to notice how some plants along the street were covered with tiny bronze beetles. THOUSANDS of them! When I squatted for a closer look, I heard them topple off the leaves and hit the dirt like rain.

What the heck were they?

I took *lots* of photos, then emailed them to Ed Riley, a beetle expert at Texas A&M University. "This beetle is *Phaedon desotonis*," he wrote back. "It was named in 1983 from a single specimen from northeast Alabama. It was later found at other southern Appalachian localities, where it was found feeding and breeding on a rather uncommon host plant, a *Coreopsis* sp. Now why is it so common in Texas and elsewhere? This is apparently a case where a relatively rare plant-feeding insect species has 'jumped' from its rare native host to related common hosts and is now expanding its geographical range. I have been sent specimens from wildflower nurseries, where this beetle was reported devastating cultivated *Coreopsis*."

"*Coreopsis*–or related genera–are also very common roadside plants in many southeastern states," he continued. "The beetle is now recorded from several states, including Arkansas, Florida and Texas, and I suspect it is found in all intervening states, too. In 2012, I have noticed very large numbers in the College Station area similar to what you show in your images. The beetles we see now (April 2012) developed this spring from eggs deposited from adults that overwintered last winter. I suspect population numbers will remain high for a few years, then will probably adjust downward, in much the same way most populations of new exotic insects fluctuate after introduction."

Ed was right. The demonic beetles AND their larva exclusively targeted our stiff greenthread (*Thelesperma filifolium var. filifolium*). Grrr! They decimated most of the species in The Meadow and then headed toward our backyard, where they chomped on our lanceleaf coreopsis (*Coreopsis lanceolata*). In their wake, the vegetation stood browned and bedraggled. However, many of the plants survived and later rebloomed.

In the meantime, I mailed Riley (at his request) a small vial filled with beetles preserved in alcohol so our observations could be recorded in the TAMU Insect Collection. "I suspect we will not see numbers of

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A Wildscape Classroom

By Sheryl Smith-Rodgers

Our yard in Blanco is located within walking distance of our three public schools. I'd always thought it'd be cool to have students come over and use our property, which is a certified Texas Wildscape, as an outdoor classroom. I'd proposed the idea to a couple of teachers, and one seemed very interested. But nothing happened.

Finally, this past May, science/P.E. teacher Pam Meier took me up on my offer. For the last four Wednesdays of the school year, she and three students in her special-needs P.E. class walked over to our home and spent a class period touring our yard.

I showed them Gulf fritillary and pipevine caterpillars. They saw the similarities among three plant species in the Solanaceae (nightshade) family and looked at two milkvine species (antelope horns and purple milkweed vine). I pulled up a Malta star thistle and discussed the invasive species (now Pam plans to educate all her students about Malta star and keep pulling it from the campus yard). We talked about our purple martins (which later lost their four eggs and left) and why we trap house sparrows.

On their last Wednesday, as soon as the group arrived, I pointed out a shrill birdcall and asked if they remembered what it was. Hmmm. It's baby, I hinted. It's our statebird, I hinted some more. Mocking....bird!

"I just love being here!" Pam exclaimed when she and the girls stepped into our back yard. Thanks to recent rains, our Wildscape really is lush and green.

After identifying some plants, they ate their picnic lunch on our back patio, and we chatted about summer plans. Before everyone left, I gave the girls each a flame acanthus and/or blue mistflower to take home.

"Wait a minute," I said as they headed back to school. "Hear that screechy call? What's that again?"

"A baby mockingbird!" the girls exclaimed.

Mission accomplished!

P.S. Yes, Pam plans to return next fall with students and continue the outdoor classroom period in our Texas Wildscape. I'm hoping to expand the program to the other schools.

Pest of the Month

(Continued from page 9)

this beetle like this again or maybe only for the next few years," he wrote me.

How to control them? We tried spraying the pests with soapy water, but that didn't help. Ultimately, I knocked them off my lanceleaf coreopsis into a small bowl of soapy water. During the winter, I found them under oak leaf at the base of my coreopsis and drowned them, too.

Fast forward to this spring. Yes, *Phaedon desotonis*–now named the coreopsis leaf beetle–appeared in The Meadow and took out many greenthreads. They also appeared on one coreopsis plant in the back yard. Then they disappeared. From view, that is. I'm sure some adults and larva are still lurking somewhere. Thankfully, their destruction wasn't as severe as last

A Hundred to One

By Becky Breazeale

During the H.O.P. last month, our group was at the base of Overlook Trail, looking and learning from Jerry about the Red harvester ants. Joan S. pointed out a centipede crossing the Trail and told the students the "odds" of us seeing one were few, but not to touch it because it could be painful. I wondered - do they sting or bite and remembered something strange about the centipede from my Naturalist Training. When I got home, I turned to the insect book that my good friend gave me and found that the centipede has a venomous bite that is very painful, but not deadly to humans. The venom is stored in a gland of the front claws and is injected into the bite made by the centipede.

Courtesy of flickr.com

Centipedes are characterized by having at least nine pairs of legs, not 100 as its name suggests and are not insects, but invertebrates. This particular centipede was a Giant Desert Centipede *Scolopendra coleoptrata* with about 20 pairs of legs (each body segment has a pair of legs). It had a red head, black shiny body, and yellow legs. These centipedes live in dry scrublands and deserts of south-west USA and Mexico and are 16-18cm (6-8in). It hunts for insects which is expected, but also can capture animals larger than itself such as small rodents and lizards. Our centipede had two back legs that stuck upward and looked like antennae. This confuses a predator into attacking the back of the insect.

The centipede that we encountered was very active and colorful which could have tempted someone to pick it up and play with it. But if you ever see a Giant Desert Centipede with "what looks like a hundred legs to one body", don't gamble by picking it up as it is a dangerous species and should not be handled.

Resources:

Walters, Martin, The Complete Illustrated World Encyclopedia of Insects, Hermes House, London, 2010.

June Meeting

Flow Oxley enthralled, entertained, and educated us all at our meeting June 5th. The subject was endangered species and we all went extinct during the meeting - you had to be there.

Photo by Jerry Stone

Junction and Sonora Field Trip

by Betty Cruickshank

On June 7 and 8, fifteen people participated in the first of the trip committees planned events for 2013.

Our first stop was Junction, where we toured the Native American Seed Company. Emily, Weston, and Bill Neiman, along with George Cates taught us about native plants, rain gardens, and water collection systems as well as giving us the grand tour of all aspects of their seed company. They have some very innovative ideas and their homes and offices use only rain water. Several in our group commented that this was the best AT they had ever done.

The afternoon allowed some free time to rest, tour the local winery (the owner was a master naturalist), or visit the historical museum in Junction before proceeding to South Llano River State Park. Bertha Schmalfeldt, the park interpretive ranger, led us on the short hike to one of the park's 3 bird blinds. She talked about the history of the park, the plants and animals, and explained about the birds found in the park. In the bird blind, we were able to see many painted buntings as well as orchard orioles, lark sparrows, black throated sparrows, and several others. We spent some time next to river and agreed this was one of the prettier parks in Texas.

Saturday morning we made the drive to just past Sonora, to the beautiful Caverns of Sonora. It has been designated as a National Natural Landmark by the United States Department of the Interior and has over 95% of the formations in it still growing. On our private tour, we learned about the formation of the cave and its history as well as getting to see what I think is the most beautiful cave in the United States. If you haven't been, make plans to do so.

Following lunch in Sonora, we traveled home with plans to bring friends and family back to this beautiful area.

Female Orchard Oriole

Seven Book Review

by Kim Bacon

You ever read through a pile of books and find yourself sitting around wondering what was the next piece of fine literature that was gonna pass by your eyes?

Not that I'd been necessarily reading *fine* literature from that big ole pile of books. Although I did place a lot more credence in the non-fiction plausibility of *World War Z* and *Everything You Wanted to Know about Zombies* than a certain HLMN member (whose initials are PW) was willing to entertain on a long drive to Galveston last November.

So, while I was sitting, and congratulating myself on actually reading all the books in the pile (which included, among others, the two aforementioned books, *The Secret Diaries of Miss Miranda Cheever*, A Jack Reacher novel (Tom Cruise? Really?), a self-help book called *Full Catastrophe Living* (which I am pretty sure I could have written myself)), and wondering what I was gonna read next, I picked up a copy of the Native American Seed Catalog.

It was just there, OK?

And, right there on page 49, was a list of seven books, which promised that if I read them, in order, I could "learn what has occurred over the course of human history that got us to where we are right now."

Well, boy howdy, that seemed like a good deal, seeing as how every day the politicians are busy ignoring how we got to where we are right now while the lobbyists, environmentalists, everyone under 30, and that guy who stopped by my house trying to get me to plant a Yard Farm in my front yard all seemed to know how we got to where we are as well as how to get us back to somewhere else. Got that?

So, I procured the seven books:

1. *1491 New Revelations of the Americas Before Columbus* by Charles C. Mann,

2. *Cabeza de Vacas' Adventures in the Unknown Interior of America* by Cabeza de Vaca

3. *One Vast Winter's Count* The Native America West before Lewis and Clark by Calloway

4. *The Worst Hard Time* by Timothy Egan

5. *Hard Scrabble* by John Graves

6. *Ishmael* by Daniel Quinn, and

7. *A Short History of Progress* by Ronald Wright

Here are my short reviews.

1. **1491.** Well, in short, there was more to the natives who were here before Columbus than I was taught in 4th grade Texas History class. Interesting read, but I thought it a bit repetitive and thought the book could have been a bit shorter. **Three stars**.

2. **Cabeza de Vaca.** Now, CDV wrote an interesting diary. It's a short book, but full of intrigue. How could the Spaniards have been so dumb? Well CDV pretty much explains it. It was a vastly more interesting story than what I learned in 4th grade Texas History and all in all, CDV had it pretty good. This review is not to be construed, for any reason, to be blaming Mrs. Collins at Post Elementary School for the discrepancies I have noted in the 4th grade curriculum of the early 1960's. **FIVE STARS.**

3. **A Vast Winter's Count.** I had high hopes. I needed a map and a native American tribe genealogy chart to read this. It was definitely too much detail to be an easy read. I thought this should have been a college textbook, complete with a Native American Shaman assistant to get me through it. Full disclosure: I set it aside and hope to finish it sometime this decade. However, if you already have a really thorough knowledge of Texas Indians, go for it. **Two Stars.**

4. The Worst Hard Time. Stop reading this and go buy this book right now and sit down and read it. If you thought a drought was the sole cause of the Dust Bowl, think again. Great book, great writing. Read it. Now. **FIVE STARS.**

5. Hard Scrabble. John Graves is one of my people. And judging from the number of HLMN members who retired to small ranches, I think you'll understand what he is saying pretty well. I'd like to think the land and people he channels still exist, but I doubt they existed in large numbers still even back in 1961 when this was written. You can't borrow my copy. **FIVE STARS.**

6. Ismael. I read this back sometime when it came out in the early 1990's. Don't remember anything but the title. Not reviewed yet.

(Continued on page 17)

Texas Longhorns

by Phil Wyde

Figure 1. Texas Longhorn. Picture taken near Llano, Texas by PW.

I know, I know. Texas Longhorn cattle are not wild (at least now). However, they are exotic, a part of our landscape, and they have been in Texas a long time – and for a significant amount of that time they were wild. In addition, there is so much that I, and I suspect some of you, do not know about them.

Of course, the characteristic that this bovine is most noted for is its exceptional horns. In mature bulls these can be 7 feet wide. (Apparently the horns of cows and steers are not that much smaller.) These horns vary in shape, having various tilts and twists. Some horns can have as many as three twists.[1]

Texas Longhorns are also noted for their size and longevity. They often weigh between 1,000 and 1,500 pounds and are not considered as mature until 10 years old.[1]

One of first things that I thought of when deciding to write about Texas Longhorns was how they came to be called TEXAS Longhorns and not Oklahoma, New Mexico or Mexican Longhorns. One might think that they should be called Spanish Longhorns since it turns out that Texas Longhorns are descended from cattle brought over from Spain by Christopher Columbus to the Caribbean island of Hispaniola in 1493, and from cattle taken to Mexico by Spanish colonists between 1493 and 1512.[1,2] Over the next 2 centuries, these cattle were moved north, arriving in the area that would become Texas (i.e., here) near the end of the 17th century.[1] Throughout these years, following the practices used in Spain, these cattle ranged freely on the open range. Of course, many escaped and became wild – and remained so for more than another 100 years. It was during this period that these cattle

evolved many of the characteristics that they became famous for (e.g., drought tolerance, disease resistance, low calving mortality and endurance).[1,3,4] However, they still had not yet developed their long horns, and it is for this reason we cannot call them Spanish or Mexican Longhorn cattle.

So where and when did the long horns of Texas Longhorn cattle evolve? Most accounts suggest that this occurred when settlers from the United States came into this region (i.e., in the 1820s and 1830s) and started collecting and mixing feral Mexican cattle with the eastern cattle that they brought with them.[1,5] Many of the latter were descended from English long horned Herefords – and the majority view is that it is from these long horned English cattle that the Longhorns derived their long horns. In addition to the lengthening of their horns, the hybrid cattle had alterations in their color and body size. They did not, however, have any reduction in their robust nature. Regardless of exactly how these changes took place, sometime between 1846 and 1860 the half wild Texas Longhorn had become a recognizable type with animals four or more years old generally having extremely long horns.[5]

Figure 2. Texas Longhorn. Picture taken on "Slab Road," Kingsland, TX.

It is worth spending a moment on the color of Texas Longhorns. The colors of these animals are amazingly diverse, ranging from "bluish-grey and various yellowish hues, to browns, black, ruddy and white.[1,5,7]" Moreover, their spots and patches are sometimes sharply outlined and sometimes "dirty-speckled.[7]" (Compare the borders on the spots and patches on the black and white Texas Longhorn shown in Fig. 2 with the borders on the large patch on the Longhorn cow shown in Fig. 1.) Despite this diversity, the most common coloring in Texas Longhorns remains a mix of dark red and white (see Fig. 1).[1]

With the ending of the Civil War and huge declines in the wild buffalo herds, the popularity of Texas Longhorn cattle soared.[5] Private and collective ranches raising Texas Longhorns spread from this time throughout Texas and northward. Probably the main reason for the increased regard for Longhorns was the accessibility of huge tracts of open range filled with free Great Plains grass. The Longhorns and their owners thrived in this environment and soon Longhorn cattle and ranchers filled much of the region. At first the Texas Longhorns were driven to nearby markets and to Indian and military reservations in Arizona and New Mexico. In 1867 this changed when Joseph G. McCoy, an Illinois cattle dealer, started shipping cattle from Abilene, Kansas, to the Union Stockyards in Chicago. It was now possible to supply relatively inexpensive Longhorn beef to the large populations that existed in the cities of the North.[5] (This trade greatly helped the Texas economy.) Longhorns proved to be ideal trail cattle; despite the stress of these harrowing

drives, and unlike many other breeds of cattle, they often managed to gain weight during these drives. Of course, these cattle drives and the men that managed them became the basis of hundreds of stories about the "Old West."

However, the popularity of the Texas Longhorn did not last. The leaner beef of the Longhorn became less desirable than that of Durhams and other breeds of cattle that had richer beef. In addition, the new and rapidly spreading practice of fencing of land with barbed wire brought an abrupt end to open-range ranching. Fencing also made possible controlled breeding, and with the end of limitless free grass, it became much more desirable to raise cattle that matured faster than Longhorns. Ranchers began to cross Longhorns with other strains of cattle including short horn Durhams and Herefords. The offspring of these mixes grew rapidly and had much more fat in their beef.

These changes caused the number of Longhorns to diminish rapidly and by the 1920s the great Longhorn herds had decreased so much that by 1927 it was feared that the Longhorn breed would go extinct. It was saved from this ignoble fate by the United States Forest Service and others who collected small stocks to breed and maintain in Oklahoma and different Texas state parks. Since 1948 the official state Texas Longhorn herd has been housed at Fort Griffin State Historic Site. Smaller herds can be found at Possum Kingdom State Recreation Area, Dinosaur Valley State Park, Copper Breaks State Park, Palo Duro Canyon State Scenic Park, and Abilene State Park..[8] In 1964, the Texas Longhorn Breeders Association of America was formed.[5] This organization maintains a registry of purebred Texas Longhorns and works hard to perpetuate the breed.

Interestingly, the future of Texas Longhorns seems assured for other reasons. In this time of drought and the increase of poorer pastures, the ability of Longhorns to resist disease, to do well on meager pastures and maintain low calving mortality has revived the breed as beef stock. In addition the recent emphasis on healthy living has brought lean beef back into favor. (Lean beef has reduced cholesterol and calories compared to richer beef. Indeed, it is purported that Longhorn beef contains about the same amount of cholesterol and calories as chicken of the same size.[7)] Other alleged advantages of lean, and hence Longhorn, beef are that it cooks more quickly and has less shrinkage than the beef with more fat.[7]

Breeding of Texas Longhorns can be profitable. Prices in excess of $40,000 are not uncommon at auction for superior animals; the record appears to be $170,000 paid in 2004 for a Longhorn cow.[6] I am not sure how much of a money maker this is, but because of their gentle disposition and intelligence, Texas longhorns are increasingly being trained as riding steers.[1,7] Please don't ask me why anyone would want to ride a cow – or worse a bull.

Harking back to the old days, why didn't the Indians hunt the feral or open range Longhorns? According to one source, the native Indians preferred the meat of the tamer and easier to kill buffalo.[9] (That statement says something about the toughness of Texas Longhorns.) In addition, the Indians found more uses for buffalo hides, horns and bones than they did for longhorn leather.[9]

I want to strongly recommend that you take time to bring up Reference 9 on your computer and read what it has to say. It is short, but full of interesting information. For example according to this history of Texas Longhorns, wolves that followed the migrating buffalo herds remained shy and wary of the mean and often deadly longhorn cattle. In addition, it is stated that a single Longhorn cow needs 10 acres of good grass a year (Great Plains type grass) for feed – and 15 acres if the ground is dry and scrubby. Still another interesting fact, an average Longhorn cow would have about 12 calves during her lifetime.

The following is also from Reference 9. I am quoting since I think that the paragraph paints a vivid picture of the times. "During the Civil War, the unattended Longhorns proliferated. By 1865, about 5 to 6 million Longhorns resided in Texas, and most were unbranded. Many Confederate Army veterans returning from the war built up herds by claiming unmarked cattle and branding them. At that time a steer was worth about $4 in Texas-that was if you could find anyone with the $4. In Chicago, Cincinnati and other meat-packing and market towns up North, that same

steer sold for about $40. The problem was getting the steers to market. More than 250,000 steers were driven toward Kansas and Missouri in 1866, but many didn't make it because farmers, worried about tick fever, would turn them back, and thieves would strike the herds. In 1867, Abilene, Kan., at the railhead of the Kansas & Pacific, opened up as a major market and became the first of the cow towns. For the next two decades, Longhorns hit the trails on long but generally profitable drives. There had actually been long drives earlier-such as to New Orleans in the 1830s and to California during the gold rush-but the era of the great trail drives did not begin until after the Civil War."

Here are some more interesting facts about Texas Longhorns.[7] Texas Longhorn cows give birth "easily" and often reliably produce a calf every year when bred. The calves are small at birth, and the cows apparently have larger pelvic areas than most other cattle species. These two traits make giving birth easier for Longhorn cows than many other cattle species. Moreover, as indicated above, Longhorn cows can be bred into their teens – so that it is relatively easy to increase the size of a herd. In addition, frozen semen can be readily transported throughout the nation and used in breeding programs. Thus cows can be bred with different bulls each year. This latter ability greatly increases the genetic pool and strengthens the breed.

Although they originated in the American West, Texas Longhorn cattle can live in many other environments.[7] The Texas Longhorn Breeders Association of America states that the breed "thrives in climates from the hot, damp coastal regions to the harsh winters of Canada." Moreover, they can graze on a variety of grasses and other plants. This means that farmers or ranchers almost anywhere in North America (and many other places) can raise Texas Longhorn cattle.

Longhorn cattle are also known for their intelligence.[7] They have been trained to pull carts and wagons, can be ridden and apparently respond well to commands with training.

So you see, Longhorn cattle are not just another "pretty face."

References:

- **http://en.wikipedia.org/wiki/Texas_Longhorn**
- **Rouse, J.E. 1977. *The Criollo: Spanish Cattle in the Americas*. Univ of Oklahoma Press, Norman, OK.**
- **McTavisha, E.J., Deckerb, J.E., Schnabelb, R.D., Taylor, J.F., and Hillis, D.M. Hillis. 2013. "New World cattle show ancestry from multiple independent domestication events". *PNAS*. doi:10.1073/pnas.1303367110.**
- **Barragy, T.J. 2003. *Gathering Texas Gold*. Cayo Del Grullo Press, Cayo del Grullo, TX.**
- **http://www.historynet.com/texas-longhorns-a-short-history.htm**
- **Herskovitz, John. Texas Returns to Passion of the Longhorn *Reuters* via *Environmental News Network*. November 26, 2004.**
- **http://www.ehow.com/about_6325822_texas-longhorn-cattle-information.html**
- **http://www.tshaonline.org/handbook/online/articles/atl02**
- **http://www.historynet.com/texas-longhorns-a-short-history.htm**

Book Report

(Continued from page 13)

7. Short History of Progress. Not read or reviewed yet.

Well, did the books deliver? Do I now know how we got here? These books are not a bad start, but they are just a start. There's several whole layers left out of the mix (which I don't think will be covered in the remaining two books or the rest of a Vast Winter's Count), but I did enjoy the exercise. Should you read 'em? Sure. Well, most of 'em.

Hill Country Science Mill

by Deb McClintock

Members of HLMN met in Johnson City, Texas to follow up on an invitation from Bonnie Baskin to tour the Hill Country Science Museum (HCSM) in its early construction stages. We met Holly Barton, HCSM Project Manager, and Russ Whitlock, Superintendent at Lyndon B. Johnson National Historical Park and members of his leadership team at the Park. The group met in the main room of the mill which was most definitely under construction. As a matter of fact, the entire mill is under major renovation bringing Bonnie's vision of a science museum to life. We toured the site and given a vision of the science stations, glass housing over the silos, computer stations and other tools to teach science. In short, converting the mill site into an interactive, hands-on thematic exhibits and programs – coupled with exposure to science mentors and real-world applications of science students will gain insights into exciting scientific and technical principles that are relevant to their lives. The target date for the Hill Country Science Mill to open is November 2014.

We moved outside to Town Creek which runs between the HCSM and the LBJ National Historical Park and thru downtown Johnson City. This is to be our first project with the HCSM, to help identify possibilities and recreate the riparian area around Town Creek and document our efforts as a teaching tool for visiting students. As a group we walked thru the site, across the bridge and got an idea of the physical relationship between the mill and the park. Ideas were traded and stored away. Phase I, II and III were discussed but the clear need was to involve the National Resource Conservation Service (NRCS) to help us make a master plan. Plans to identify and remove invasive plants were put on hold until we understood exactly what we wanted to do. **Mark your calendar for September 19th all day for the NRCS Riparian Workshop and planning session**. Exact location and time will be announced closer to September. We will all be happier doing outside work in late September and October!

We continued our walk on the LBJ National HIstorical Park path along Town Creek and followed the pathway to the Settlement. Since the two entities share a boundary, the thought is that we can do a continuing project in this area as part of Phase II & III. More to come on that.

In all a good time was had by all as we adjourned to the Pecan Street Brewery and discussed possibilities further!

Gallery

By Jerry Stone

Catclaw Mimosa - Photo taken at the Trails of Horseshoe Bay 5/15/2013.

Rose Gentian - Photo taken at the Trails of Horseshoe Bay 5/15/2013.

Salt Marsh Caterpillar - Photo taken at the Trails of Horseshoe Bay 5/15/2013.

Square Bud Primrose - Photo taken at the Trails of Horseshoe Bay 5/15/2013.

Two Leaf Senna - Photo taken at the Trails of Horseshoe Bay 5/15/2013.

Yellow Stonecrop - Photo taken at the Trails of Horseshoe Bay 5/15/2013.

Gallery

By Jerry Stone

Lady Bird's Centaury - Photo taken at Slick Rock Creek in Horseshoe Bay 5/17/2013.

Lindheimer's Morning Glory - Photo taken at Slick Rock Creek in Horseshoe Bay 5/17/2013.

Wild Onion - Photo taken at Slick Rock Creek in Horseshoe Bay 5/17/2013.

Sweat Bee - Photo taken at Slick Rock Creek in Horseshoe Bay 5/17/2013.

Bordered Patch Butterfly - Photo taken in Horseshoe Bay 5/20/2013.

Lemon Beebalm - Photo taken in Horseshoe Bay 5/20/2013.

GALLERY

By Jerry Stone and Mike Childers

Sensitive Briar - Photo taken in Horseshoe Bay 5/25/2013.

Granite Spiderwort - Photo taken in Horseshoe Bay 5/25/2013.

Delta Arrowhead - Photo taken at the Trails of Horseshoe Bay 5/26/2013.

Purple Milkweed VIne - Photo by Mike Childers taken on our property 5/8/2013