



A publication of the Lindheimer Chapter of the Texas Master Naturalist Program through Texas AgriLife Extension in Comal County, 325 Resource Drive, New Braunfels, TX 78132

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Late Spring/Early Summer 2010

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Greetings from David

Thanks to the volunteer efforts of one of our very active chapter members, Nancy Perry, the Lindheimer Chapter was recently fortunate enough to receive a generous donation from her employer, CenterPoint Energy, Inc., which supports its employees' community efforts. Below is a copy of the appreciation letter David wrote to Lisa Foronda, Senior Community Relations Manager of CenterPoint Energy, on behalf of our chapter.



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Ms. Foronda,

On behalf of the Lindheimer Master Naturalist Chapter, please accept our sincere appreciation and gratitude for the generous donation to our chapter. We also appreciate the opportunity to have one of your employees, Nancy Perry, as a member of our chapter and the volunteer work she does to facilitate our mission: help children and adults in our community to learn about Texas' natural resources, inspire them to a new appreciation of their environment, and ensure that others will be able to enjoy the natural Texas for years to come.

Again, thank you for being a great corporate steward and contributing to the environmental awareness of Comal County.

David Reel

President, Lindheimer Master Naturalist Chapter

The TMN Mission: To develop a corps of well-informed volunteers to provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities. Many communities and organizations rely on such citizen volunteers for implementing youth education programs; for operating parks, nature centers, and natural areas; and for providing leadership in local natural resource conservation efforts. In fact, a short supply of dedicated and well-informed volunteers is often cited as a limiting factor for community-based conservation.



Nancy (center right: green shirt) and David (center: black shirt), after the presentation of the donation

MEMBERSHIP MANUAL UPDATED!

Below is a copy of the most recent revision to the Chapter Membership Manual which was recently e-mailed to the membership. It is a copy of the changes made to paragraph I on page 10, which provides blanket approval authority to specified organizations for earning administrative hours creditable as volunteer hours in the LMN Chapter. Please also review the criteria for approval of volunteer service projects and advanced training. These criteria remain unchanged.

I. VOLUNTEER SERVICE PROJECTS:

1. Volunteer Service hours are those direct contact hours spent on Lindheimer Chapter projects approved by the Projects Committee. Time spent on chapter leadership positions, such as serving as a board member, may count as service hours credit. Administrative hours completed for organizations other than the LMN Chapter may count as volunteer hours to a maximum of five per calendar year if approved by the Project Committee for the individual member.

The following organizations have been approved for five annual volunteer hour credits for LMN members that participate in these organization's administrative activities. Volunteer hour credits for these organizations will not require individual Project Committee approval. All other organizations require prior Project Committee approval.

RavenStar, New Braunfels, Texas
Gorge Preservation Society, Canyon Lake Gorge
Native Plant Society of Texas, Lindheimer Chapter
The Friends of Guadalupe River and Honey Creek, Inc.
Heritage Museum of the Texas Hill Country, Sattler, Texas

Service projects may be a series of short experiences such as serving on a speaker's bureau, or they may involve the long-term efforts of an entire volunteer team. For a Texas Master Naturalist, the opportunity to do meaningful and interesting work is the reward. TMN volunteers are encouraged to design volunteer projects that are interesting to them and capitalize on their individual talents. There are few constraints, except that volunteer service must be dedicated to the beneficial management of natural resources and natural areas within their communities and surrounding area. Volunteer Service hours credited for the TMN may not be credited from or to another Master Volunteer or other volunteer program.

2. As indicated, volunteers are encouraged to submit self-selected and designed projects for Volunteer Service hours. Volunteers should submit proposed project descriptions to the Projects Committee and include the following: Name of volunteer submitting, date of the submission, a brief description of the project, date(s) of the project, time, location, sponsor or partner, funding, whether the project is one time or ongoing, how many volunteers will be needed for the project to be successful, special equipment required, who is to provide the equipment, how many people and/or acres will be impacted, and what specific activities will be performed by the volunteers.

3. The Projects Committee will review the proposed project. The Projects Committee will inform the submitter whether the proposed project was approved or disapproved within a reasonable time, not to exceed seven days. The Projects Committee will report approved and rejected projects to the Board of Directors at the next meeting. The submitter may appeal a decision of the Projects Committee to the Board of Directors at its next meeting by submitting a request in writing to the Board of Directors.

J. ADVANCED TRAINING:

1. Advanced Training is meant to provide TMN volunteers an opportunity to focus their interests on one or a few specific topics that interest them.
2. Advanced Training opportunities must be approved in advance by the Projects Committee.
3. Acquiring Advanced Training Hours:
 - a. Advanced training courses may be made available directly through TAE, TPWD, chapter-sponsored activities, or any number of short courses provided by universities, conservation groups, or nature centers, etc.
 - b. The Projects Committee must review and pre-approve all advanced training. Educational television shows are not a form of advanced training and will not be approved.
 - c. The Projects Committee will use the following criteria when reviewing and approving Advanced Training:

Does the Advanced Training opportunity:

1. Promote continued learning and development of naturalist skills?
2. Provide the Texas Master Naturalist with knowledge and skills to work in volunteer efforts?
3. Directly train volunteers toward specific programs in need of their services?
4. Provide practical information and training for application in volunteer efforts?
5. Take advantage of local partnerships?
6. Provide the Master Naturalists an opportunity to focus their interests in one or a few specific topics?
7. Build on the core curriculum initially provided by the local chapter?
8. Provide natural resource management issues and information applicable to Texas?

Note: Advanced Training opportunities must meet criteria 1, 2, 6, 7, and 8. It is suggested that the remaining criteria also be a part of the opportunity.

APRIL CHAPTER EVENTS — FOLKFEST and EARTHDAY

Ray Laxson, Earth Day Coordinator

The Lindheimer Master Naturalists made a great showing at these two events this year. Folkfest was held at the Heritage Center on April 10 and 11. We had skins and skulls that we borrowed from Texas Parks and Wildlife and gave a show and tell about some of the common mammals of Comal County. Youngsters who were able to identify at least one animal skin (nearly everyone could identify the skunk) were awarded an antler pendant made of deer antler. As it turned out, every youngster was a winner – we awarded about 150 pendants over the two days. Our Lindheimer Master Naturalist traveling show was coordinated by Caroline Carpenter and had a steady stream of visitors. The show includes a small sand box where youngsters can excavate for fossils, and identify them from our fossil guide sheet. While the youngsters were in the sand box, we talked to the parents about the master naturalist program.



Foreground: Donna Lee at Face Painting table; Skip Johnson middle background w/blue shirt explaining chapter projects; far background Kim Wright at recycling booth; Charles Tubbs taking pictures of the event



Shiela and Mike Shands showing skins and skulls while an unidentified person (end of table) lifts a young fossil hunter digging in the sand box.

Our Earth Day event was held on April 24 at Landa Park. We had 14 exhibits that ranged all the way from fishing to birding to rainwater catchment systems. There was great Chapter member turnout and the weather was nearly perfect. One of our most popular events was our face painting activity, led by Donna Lee. We had 4 painters who must have painted the face of every kiddo in New Braunfels. We also had the skins and skull exhibits and passed out another 200 pendants. The event was coordinated by Roots and Shoots again this year and the events went smoothly. Public turnout for the event was impressive. We are already talking about next year!



HEY MASTER NATURALISTS!!!

Remember, you can come to the classes held the first Tuesday of every month to hear great speakers and earn two Advanced Training hours.

In July, on the 6th, our speaker will be Flo Oxley, botanist at the LBJ Wildflower Center. She will be speaking on the plants of the Hill Country using PowerPoint; then she will be taking the group outside to see and touch and identify the plants we wonder about every day.

Class starts at 6pm, with food at 6:30.



Into the Gorge! – Art Williams

On a sunny May morning a few weeks back, I went into Canyon Gorge for the first time in a couple of years, with the current class, the Free Mesquiteers. There were 16 of us, plus guides, fewer than I had hoped but everyone enthusiastic and looking forward to a vigorous hike through the stark beauty of the gorge. Some in the class had already had a tour of the gorge; the rest only wished they had. But it's a funny thing about the gorge: no one doesn't want to go in, and no one doesn't want to go back.

Our guide was Dr. Bill Ward, probably the most knowledgeable geologist about Canyon Gorge, and his two docents, both Master Naturalists, Pete Bryant of the Lindheimer chapter and Cathy Downs of the Hill Country chapter. Since both docents are able guides in their own right, we knew the gorge would have few secrets from us when the hike was over.

Due to scheduling problems, the Free Mesquiteers will not have a class in geology. So Dr. Bill took some time at the beginning of the tour to talk to them about geologic principles and limestone stratification to help the students understand what they would be seeing. Then we piled into the back of pickups and headed down to the foot of the gorge.

Dr Bill spent a long time in the lower section of the gorge. Clearly, he enjoys this, the oldest part, with its many layers of sediment, different mineral formations and plentiful fossils. There were many questions and much discussion about the phenomena Dr. Bill pointed out or held up. The students sought out examples of the different fossils and when they brought them back to the group, Dr. Bill used them to explain the features of the world a hundred million years ago, and the life forms that existed then. Class leader Charlie Thomas, having done his homework, asked several open ended questions that pleased Dr. Bill, earned Charlie 'attaboys', and enhanced the level of the teaching.

Then it was on to the Hidden Valley fault, that section of the gorge where the side was worn away by

the 2002 deluge to expose a part of the Balcones fault that forms the recharge zone for the Edwards aquifer. It's a fascinating site. Dr. Bill took some time to explain how the fault was formed and why. That generated many questions, and the group spent a profitable half hour in the area, examining the phenomenon, asking questions, and taking pictures.

Alas, time moved on more quickly than we had wished. The three hour tour was going to be at least four hours and we were only about half way up the trail. Dr. Bill then set a vigorous pace to get back on schedule that left us younger (i.e., more recently retired) folks puffing in his wake. We quickly passed over the sights of the upper gorge. But the Free Mesquiteers are an ornery group and some members dragged behind, wanting to examine everything Dr. Bill was passing by. The docents rushed around,

herding the laggards along, but things did not reach the point where they had to bring out the cattle prods. Eventually, everyone was assembled along the spillway.

Here be dinosaur tracks, and the class demanded a stop, regardless of the time. Dr. Bill talked about the creatures that likely made the tracks, and how they were made.



That generated several questions about how the tracks could have hardened and lasted all those millions of years, just for our viewing pleasure. Dr. Bill described the process of hardening and filling in by later sediment, and then eventually erosion to re-expose them. All the students contributed questions or comments to the discussion so it became a seminar *al fresco*.

And then the hike was over, with an enthusiastic round of applause for Dr. Bill and the docents. Because of the quality of teaching and the length of time invested in the tour, this gorge hike counted as a class for the students, one they could use as a make up if they needed it. It was the first time the chapter has tried such an activity. With this experience, we will consider having a similar event as a class integrated into the curriculum.

BARBED WIRE - a Short History — Ray Laxson, Rocking L Ranch

Some historians claim that barbed wire, revolvers, windmills, and railroads helped tame the west. Many books have been written about each of these items. Here is a brief summary on barbed wire.

Prior to the invention of barbed wire, traditional fence materials consisted of wooden rails or stone. In much of the West these materials were scarce or very expensive. Barbed wire came to the rescue.

In the late 1860's several inventors made unsuccessful attempts to produce a barbed wire product. But it wasn't until 1873 that Joseph Glidden filed a patent for an improved wire fence. Although this new wire product was effective and relatively inexpensive, Glidden had a hard time getting farmers and ranchers to try the product. In 1876 a young farm boy from Illinois named John Gates was hired as a sales rep for Texas. After little success, Gates decided a demonstration was needed to 'prove up' the product to the local farmers and ranchers. Gates built an 8-strand barbed wire fence in downtown San Antonio on Military Plaza, and issued a challenge to the locals stating that his fence would hold any cow that had ever been born. And after being challenged by half-wild longhorns, the fence held the cattle and Gates proved his point. Barbed wire sales then went thru the roof.

Glidden's successful barbed wire product set off a flood of barbed wire patents - over 570 - and a number of legal battles over rights to the patents. When the battle was over, Joseph Glidden prevailed and thereafter was referred to as the Father of Barbed Wire. His simple invention forever changed the development of the West. So far there have been over 1,100 designs of barbed wire, and more that 500 patents on barbed wire in the United States alone. New patents are issued nearly every year.

Here at our place we have always had an interest in the types of barbed wire in the old fences that had been installed by the previous owners. We have found one fence that had an uncommon strand of barbed wire and after some research found that the design was patented in the late 1880's. Assuming that the wire was manufactured for maybe 20 years, it was probably installed around 1900. Installation of that old fence likely changed the use of the property forever after. Thank you, Joseph Glidden!



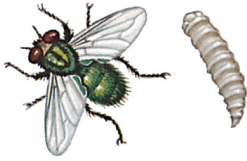
In this photo, the top wire is Brinkerhoff Opposed Lugs, Patent 1879. Note that it is not round but ribbon-shaped.

Second wire is unknown make - probably installed around 1940. It has 4-point barbs, similar to some wire today.

Third wire is ancient - nearly rusted to nothing, found on an old cedar stump that was cut by cedar choppers around 1925.

Last wire is modern 4-point barbed wire.

THE U.S. SCREWORM ERADICATION—Ray Laxson, Rocking L Ranch



Screwworms are parasites that can cause great damage to domestic livestock and other warm-blooded animals. The larvae of the screwworm fly, *Cochliomyia hominivorax*, enter open wounds of the host animal

and feed on the raw flesh. Wounds of any sort, no matter how slight, become infested by the screwworm and if left untreated, would result in the death of the animal within a week or two from toxicity or secondary infection. Navels of newborn mammals are a common site for screwworm infestations. The shedding of antler velvet of deer is also an infestation site. Fortunately, due to efforts of several scientists, the U.S. has been free of this pest since 1966. How this eradication took place makes an interesting story.

As early as 1825, U.S. western states were reporting serious problems with screwworms. By the 1930's screwworms had spread to the southern states where livestock producers were losing \$400 million annually. Several scientists studied the problem in detail.

In the late 1930's Edward Kipling, an American entomologist, realized that the screwworm had a weak spot that might be exploited to wipe out the pest. He determined that the female screwworm fly mates only once – even if the mating does not produce viable offspring, she would not mate again. If scientists could somehow manipulate things so that pairings were unsuccessful, the screwworm fly would disappear.

During the 1940's and 1950's in New Mexico, screwworms were a serious problem. During calving season, every newborn baby calf had to be treated to prevent infestation. The treatment process was to locate the newborn calf, rope the calf from horseback and then hold the calf down while smearing a dark colored evil smelling ointment on the calf's navel. As this was going on, the mother cow, being highly agitated and very protective, often charged the rider and sometimes the horse as well. After being trampled and kicked more than a few times, I left the ranch for work in the oil field where the pay was better and the job a lot less life threatening.

Lifecycle

The screwworm fly is an insect about twice the size of a common housefly. After mating, the female can lay up to 400 eggs at a time and up to 3,000 eggs over its 31-day lifespan.



These eggs can hatch into larvae in as little as 12 hours. Screwworm larvae grow by feeding on the flesh of living animals and after 5 to 7 days drop from the wound and tunnel into the soil where they form protective cases to house the pupae. The fly emerges from the pupal case and are ready to mate again within 3 to 5 days.

Solving the puzzle

In the early 1950's two other scientists with the USDA Agriculture Research Service provided additional pieces of the puzzle. Raymond Bushland devised a way to raise screwworms in captivity, and Herman Muller discovered that irradiated male flies were sterile, but these sterile males could still compete successfully with normal males for mates.

The first area to be tested with a screwworm fly eradication program was south Florida. Between 1957 and 1959 hundreds of millions of sterile male flies were released in Florida, Georgia and Alabama. By mid 1959, there were no screwworm flies in Florida.

Tusklike mandibles protruding from the screwworm larva's mouth rasp the flesh of living warm-blooded animals. A wound may contain hundreds of such larvae. Photo by John Kucharski,



The next stage was to rid the western southern states of the screwworm fly. This effort took longer because of the reintroduction of the fly across the U.S./Mexico border. Texas was screwworm free by 1966 and by 1985 all of the southern U.S. and northern Mexico were free of the fly. Mexico was finally declared screwworm free in 1991. Eradication efforts are still underway in South America.

Effect on deer population in Texas

Prior to screwworm eradication in Texas in 1966, it was reported that 80% of the fawn crop of whitetail deer was lost during years of heavy screwworm infestation on one ranch in southern Texas. Heavy fawn losses combined with other incidental screwworm losses of the deer herd kept the Texas deer population down. In Florida following screwworm eradication, the deer population more than doubled. In Texas, the deer population has tripled over that of 1960.

Impressions Gained Through the Discovery Center at Guadalupe State Park – Laurie Espil-Goode

I had a really neat thing happen to me while volunteering at the new Discovery Center (DC) at Guadalupe River State Park in February this year. It was a cool Saturday afternoon, and the park was somewhat busy, but not too crowded. A large family of cousins and two aunts came into the center and had a good time. Chris, the new DC park supervisor was helping me for awhile, and proceeded to bring out his native animal skulls and hides...well, you should have seen the gathering around him. It was fun to observe the interest. An hour or so later, one of the family members, a 10 year old girl named Krista (from the large family which are all from San Antonio, and which was camping at the park that week-end), came back to the DC to tell me how she had found some tracks of possible animals that Chris had been educating the group on earlier. I went to the mud hole to see what she had found and sure enough there were all kinds of tracks - raccoon, deer, and possibly a large cat - mountain lion or bob cat? Wouldn't that be something if it was? Well, she was such a darling - and her mom and I took pictures of her next to her "find," in the center next to the animal hides, and all in hopes of getting extra credit from her science class. Incidentally, she hopes to become professional ice skater or a scientist. She has written an article for the "Friends of GSP Newsletter," thanks to Tom, our volunteer coordinator. I would never have experienced that precious experience, the enthusiasm and success of a program such as the Discovery Center had I not become a Texas Master Naturalist. This is the best thing I do for myself.

Review of Advanced Training and Volunteer Opportunities Recently E-mailed to TMN-L members

RavenStar Outdoor Education

We are going to be doing our summer camp program again this year and I'm on the hunt for volunteers who would like to come out during our swim times. We have 30-35 rascals this summer and we will be swimming every Tuesday, June 15th, 22nd, 29th and July 6th at Cypress Bend and every Thursday, June 17th & 24th, July 1st & 8th at Landa Park in the spring fed pool. The swim times for all dates are 1:30 pm - 4:30 pm.

If you can join us, or think any of the other TMN's or know of other folks who might be available and would like to join us, please pass on the info.

Thanks!! Kelly

Contact Person:
Kelley M. Clifford
RavenStar Outdoor Education
776 East Torrey Street
New Braunfels, TX 78130
W: 830-626-1776
C: 512-618-3988

<http://ravenstaroutdoors.org/>

The Gorge Preservation Society and GBRA

We're gearing up for another docent training class and looking for new volunteers for Gorge tours. Please help us promote the upcoming class.

Canyon Gorge
2010 Docent Training Class
Coming Soon! Sign Up Now!

August 27, Friday, River/Lake/Flood
September 3, Friday, Biology
September 10, Friday, Interpretation
September 17, Friday Saturday, Geology
September 24, Friday, First Aid

Please call or email us if you are interested and need details.

Jaynellen Ladd: 830-964-5424

jladd@gbra.org

<http://www.canyongorge.org/>

GUADALUPE RIVER STATE PARK

Interpretive Program
3350 Park Rd 31
Spring Branch TX 78070
Tom Anderson:

tanderson4@satx.rr.com
<http://www.honeycreekfriens.com/>

Honey Creek Hikes
9:00-11:00 a.m.
Saturday:
July 3, 10, 17, 24

You are invited to join our trained Honey Creek guides for a walk to Honey Creek. This beautiful stream and surrounding environment is one of the scenic wonders of the Hill Country. You'll learn about both the natural and cultural history of this area during this approximate two-hour hike. Sponsored by the Friends of Guadalupe River and Honey Creek, a suggested donation of \$5 per family or \$2 per individual is requested. Meet at the Rust House.

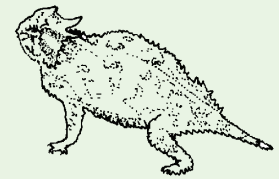


Saturday Night Speaker Series: Use Your Head!
Saturday: July 3
Chris Dooley 8:00-9:30 p.m.

Sponsored by the Friends of Guadalupe River and Honey Creek, a suggested donation of \$5 per family or \$2 per individual is requested. Meet at the Amphitheatre.

Saturday Night Speaker Series:
Whatever Happened to Horny Toads in Texas?
Saturday: July 10
Rollo Newsom 8:00-9:00 p.m.

Sponsored by the Friends of Guadalupe River and Honey Creek, a suggested donation of \$5 per family or \$2 per individual is requested. Meet at the Amphitheatre.



Saturday Night Speaker Series:
Owls
Saturday: July 17
Kim Hoskins 8:00-9:30 p.m.

Sponsored by the Friends of Guadalupe River and Honey Creek, a suggested donation of \$5 per family or \$2 per individual is requested. Meet at the Amphitheatre.

Saturday Night Speaker Series:
Saturday: July 24
Currently not scheduled

Hornsby Bend

Biosolids Management Plant and The Center for Environmental Research
2210 South FM 973, Austin, Texas 78725
(512) 972-1950—Fax: (512) 972-1900
www.hornsbybend.org

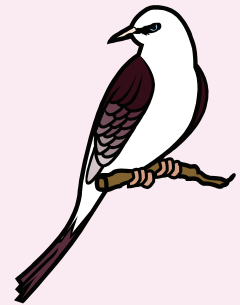
July, 10

Monthly bird survey qualifies for LMN ATH Second Saturday 7:00 am and 4:00pm

Starting in 1999, the monthly Bird Survey has taken place at 7am and 4pm on the 2nd Saturday of the month. We meet at Hornsby Bend in the Center for Environmental Research at 7am for the morning survey [Coffee and donuts at 6:30am] and 4pm for the afternoon survey. All levels of birders are welcome - the survey is a great way to improve your skills since we form teams matching experienced and novice birders. In the morning, we have teams covering different areas of the Hornsby Bend facility and count numbers of all birds seen. We meet again around 11am to tally up the species. The afternoon involves looking for species missed that morning, and we go until sundown. If you'd like to join us for the morning or the afternoon or both just show up at 7am or 4pm. We meet at the CER building which is the first building at the entrance to Hornsby Bend. We'd love your help!

Countdown of species seen (11:00 am)

For more information contact:
Eric Carpenter at ecarpe@gmail.com



July 17 - Monthly Bird Walk qualifies for LMN Volunteer Hours

Monthly Birding Fieldtrip Third Saturday Jan-Nov 7:30 am - 11 am

Our free monthly birding fieldtrip takes place on the third Saturday of each month and departs from the parking lot of the Center for Environmental Research at 7:30 am and ends by 11:00 am. The fieldtrip leader always is a gifted birder who knows Hornsby Bend well, so you are bound to get a promised 50 species minimum and explore new parts of Hornsby Bend.

For more information contact:
Kevin Anderson at coordinator@hornsbybend.org or 512-972-1960

July 31 - Ecological Literacy Days qualifies for LMN ATH Last Saturday of every month 9 am - 1 pm

Combining volunteer work with learning about local ecology, the Ecological Literacy Day at Hornsby Bend begins with several hours of outdoor work - ranging from trail maintenance to habitat restoration to work in the native plant nursery - and ends with at least an hour of learning about local ecology - birds, bugs, and more! Wear boots and work clothing, and be sure to bring your binoculars.

For more information contact:
Kevin Anderson at coordinator@hornsbybend.org or 512-972-1960

Aquarena Center

921 Aquarena Springs Dr., San Marcos, TX 78666

Phone: 512-245-7570

<http://www.aquarena.txstate.edu/>

HISTORIC GLASS-BOTTOM BOAT TOURS TMN-L ATH FOR BOAT TOUR

Tours last 30 minutes. Adults \$9. Seniors \$7.50. Children 4-15 \$6 Children three and Under Free For 60 years riding the glass-bottom boats at Aquarena has demonstrated the importance of water to more Texans than any other setting.

What Will You See?

Since 1946 the glass bottom boat tours at Aquarena Center in San Marcos have given folks of all ages an "in-depth" look at the timeless beauty of the San Marcos river. As the boats glide across the crystal waters of Spring Lake at Aquarena you'll see why ancient peoples revered this place. You'll also see some of the 1,000 springs that form the headwaters of one of the most beautiful rivers in Central Texas; and catch glimpses of the inhabitants here too. Bluegill Sunfish, Channel Catfish, Soft Shell turtles, all call Aquarena home. Back on shore, you can get eye to eye with these river dwellers when you visit the Aquarium. Bring the family to share a walk through the grounds and enjoy the natural beauty of Texas Native plants. Learn together when you visit the Archaeology Exhibit, Wetlands Floating Boardwalk or the Texas Rivers Center exhibit hall. In the Endangered Species Exhibit you'll see some of the fish and reptiles that make this part of the river a federally declared critical habitat. Aquarena is the place to visit for families who share a love of nature and want to teach their kids the value of natural beauty. Aquarena is located in San Marcos, TX: take exit 206, Aquarena Springs Drive, west from IH35. Open 7days a week.



DIVE AUTHORIZATION COURSE LMN ATH FOR DIVING COURSE AND LMN VOLUNTEER HOURS FOR DIVING VOLUNTEER PROGRAM DIVING FOR SCIENCE AT AQUARENA

To register for the Diving for Science authorization course contact Eric Peterson at seaspete@msn.com Once the course is completed individuals have the opportunity to participate in the many educational, research and conservation projects that occur throughout the year. Our Scientific Diving Program helps assure that all diving operations in Spring Lake are procedurally safe as well as environmentally sensitive. Once certified, divers have limitless opportunities to participate in our Volunteer Diving Program.

Scientific Diver Authorization Course (\$230)
Weekly - Two days: Saturday & Sunday

This two day course focuses on The Edwards Aquifer, the Habitat, Endangered Species, Archaeology, State & Federal Regulations governing Spring Lake and advanced diving techniques to ensure protection of this critical habitat.

Research Dives

Once a diver receives authorization to dive in the lake by completing the authorization class, that diver is eligible to participate in research dives. Aquarena Center will maintain an updated list of research projects and diving requirements. The purpose: to match available divers to the diving needs of an appropriate research project.

July: 10th & 11th
August: 7th & 8th

OTHER DIVING FOR SCIENCE PROJECTS:

Long-term monitoring and protection

Texas State University and the City of San Marcos are committed to long term maintenance of the restoration sites. Volunteers with the San Marcos River Foundation and Aquarena's Diving For Science Volunteers will continue to work along the river and underwater, with multiple river "clean ups" annually, coordinating with the University and City on the highest priority needs for volunteer assistance along the river. These volunteer teams will be available to continue the native plant care and invasive plant removal along with Aquarena Center's Lake Maintenance Staff, City of San Marcos 'Adopt-A-River' volunteers, student organizations and the surrounding community. Federal, state and local agencies will provide technical support as teams continue restoration down river.

Aquarena Center Cleanup Programs:

The unique and critical habitat of Spring Lake requires a carefully managed habitat conservation program. The San Marcos River Foundation (SMRF) works with Aquarena to provide the removal of water hyacinth, elephant ear and Asian iris on the first and third Wednesday of every month from 4pm-6pm and the 4th Saturday at 9 am-noon. Volunteers meet at the Wetlands nursery at Aquarena. Expect to get wet and dirty so dress accordingly.

For more information contact: SMRF via: Dianne Wassenich, Executive Director, at 512-353-4628 or Email Diane at wassenich@grandecom.net

Lady Bird Johnson Wildflower Center
 at the University of Texas at Austin
 4801 La Crosse Avenue
 Austin, Texas 78739
 512/232-0160
 512/232-0156 FAX
www.wildflower.org
oxley@wildflower.org

The following Nature Nights qualify for TMN ATH

Nature Nights on select Thursdays in July, from 6 p.m. to 9 p.m. \$1 general admission; free to Wildflower Center members.

Join us for family fun on four Thursday evenings in July. Nature Nights are family friendly explorations of plants, animals, and the ecology of Central Texas. Each evening will host interactive presentations with experts and some of their amazing friends. Learn about reptiles, birds of prey, bees, and wildlife tracking through activities and habitat hikes. More to come, so come on out!



Thursday, July 8: Nature Nights: Reptiles

Meet a few of our slithery friends and celebrate these often misunderstood creatures at discovery stations and habitat hikes. Nathan Jensen signs his children's book *Rattlesnake Rules* at the store. \$1 admission and free to members and Eco-Explorers. 6 to 9 p.m., Thursday, July 8



Thursday, July 15: Bees - you heard the buzz about native bees? Take flight through our gardens and learn about the curious behavior of our winged friends. \$1 admission and free to members and Eco-Explorers. 6 to 9 p.m.

Thursday, July 22: Wildlife Tracking - take a guided prowl through our gardens and trails and look for signs of the kinds of wild animals that live in Central Texas. \$1 admission and free to members and Eco-Explorers. 6 to 9 p.m.

Annual Meeting and Advanced Training—October 22-24th, 2010
 T bar M Ranch Resort & Conference Center in New Braunfels, Texas



Planning for the TMN Annual meeting has been underway, but not quite final yet. We wanted to take this opportunity to alert you to some important items where we need your help!

**Four opportunities exist for you to be able to contribute to
 and be a part of the agenda for the Annual Meeting**

We are seeking our TMN Members to be involved with the training and agenda in the four different areas below:

- Present a Volunteer Service Project
- Present an Innovative Solution to a Problematic Chapter Occurrence—A Chapter Development Opportunity
- Organize and/or Lead a Roundtable Topic
- Short Session Training Opportunity

All submissions will be reviewed upon the deadline with notice given to those that make the agenda shortly thereafter, however everyone will be notified as to whether their submission is able to be placed on the agenda or not. In some categories, not all submissions may be accepted due to time, topic or space. All sessions will be concurrent sessions with other items on the agenda. No pre-registration will be required for these sessions. These sessions generally would include up to 20 participants. All of the information requested is needed for your submission for the final agenda, registration materials and printed conference program. Time spent developing and delivering your training, presentations or round table discussion topic should be eligible for approved TMN volunteer service time through your chapter.

Deadlines for submissions in ALL categories is Sunday, July 18th, 2010

Send your submissions/abstracts to Michelle Haggerty at mhaggerty@ag.tamu.edu

Once received, an email reply/notice will be sent so that you will know your submission was successfully submitted by the July 18th deadline.



TMN-L OFFICERS - 2010

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David Reel**

**Vice President:
Coco Brennan**

**Past President:
Jim Dougherty**

**Secretary:
Irene Newhall**

**Treasurer:
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Art Williams**

**Membership & Records:
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**Communications:
Edie Zaiontz**

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**Volunteer Projects:
Skip Johnson**

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Judy Brupbacher**

**Historian:
Sally Stile**

**Texas AgriLife
Extension Service Advisor:
Glenn Avriett**

**Newsletter:
Janet Siemssen
tmnlindheimer"at"yahoo.com**

**2010 TMN Annual Meeting is Coming to Comal County
Mark your Calendars!**



The 2010 TMN Annual Meeting will be held at the T-Bar-M Resort and Conference Center here in New Braunfels on October 22 - 24.

In addition to interesting and informative sessions, there will be lots of opportunities to help out and meet new people from other chapters, so mark your calendars!

More information will be forth coming as the time gets nearer.

We meet on the third Thursday of every month, except December 7 p.m. at the at the Comal County Extension Office at:

**325 Resource Drive
New Braunfels, TX 78132-3775
Phone: 830-620-3440**

As of this date: Map at:

<http://www.mapquest.com/mq/5- VMrDGXs>

We welcome anyone interested in the various guest speakers' topics and the Texas Master Naturalist program.

For more information about our chapter visit our current website which can be reached via:

<http://grovesite.com/page.asp?o=tamu&s=LC&p=112412>

OR

<http://comal-tx.tamu.edu/>

Please note: We have been notified by Sonny Arnold, Assistant Coordinator, TMN, that our Grovesite webhost will be going away soon, and in its place will be our new and improved Wordpress webhost with a new website design! All of the Chapters are transitioning to the new host, and Texas A & M, Agrilife and the Texas Master Naturalist site already uses the Wordpress program. As soon as we come on line with the new host, we will send out notification. The current website webmaster will be receiving online training, and we will have a uniform site through out the Texas Master Naturalist Chapters and best of all, it's free! Until then, the Grovesite website is still being updated, and will be until we are fully migrated.



Edie Zaiontz, TMN-L Communications & Webmaster

Texas AgriLife Extension Service programs serve people of all ages regardless of socioeconomic level, race, color sex, religion, disability or national origin. Individuals with disabilities who require an auxiliary aid, service, or accommodation in order to participate in meetings are encouraged to contact the Extension Office at: 830 - 620 - 3440 for assistance. The information given herein is for educational purposes only. References to commercial products or trade names are made with the understanding that no discrimination is intended and no endorsement by the Texas AgriLife Extension Service is implied. The Texas AgriLife Extension Service forbids discrimination on the basis of race, color sex, religion, disability or national origin in any term, condition or privilege of employment.



<http://agrilifeextension.tamu.edu/>