



Texas Master Naturalist Lindheimer Chapter



Featured Plant - Center:
Esperanza, aka: Yellowbells

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A Note from Coco

It's been hot...darn hot! The good news is that Fall is on its way. Ruby-throated hummingbirds have arrived at my feeders, the grasses are going to seed, the Little Bluestem is starting to put out copper-colored leaves and the last bunch of barn swallows is fledging. This has been a year more like the ones from my childhood. Rain early in the summer and the heat fires up for August. I look forward to the changing color of the light and that little tingle in the air that gives me the extra energy I need to work in the yard again, mulching and planting. School will start again soon and Master Naturalist activities will gear up as well.



Photo from businessclarksville.com

One of the activities I particularly look forward to in the Fall is the Texas Master Naturalist State Meeting. This year, the Meet will be at Camp Allen in Navasota, a lovely site and the agenda has something for everyone. The Meet is a great opportunity to get your Advanced Training hours from some of the most well-known experts in the State, as well as to catch up with old friends and make new ones all with the same commitment to preserving and conserving Texas for our children and grandchildren. If you have not signed up, better get a wiggle on, places go fast and you don't want to be left out. Check out the TMN website to register: <http://txmn.org/>.



Photo/Illustration: Michelle Gervais

I want to remind everyone to turn in your hours to our hard-working Membership Chair, Charlie Thomas (sbtxct19"at"gvtc.com), as the hours we work not only provide us with a great deal of satisfaction (and pins!), but turn into real dollars for our two sponsors—Texas Parks and Wildlife and Texas Agrilife Extension Service. If you have any questions on whether a project is acceptable for Master Naturalist hours or if you want to know if a particular class will qualify for Advanced Training, please contact Henry Hahn (hhahn"at"satx.rr.com), Chairman of the Projects Committee. The Committee works hard to make sure projects get a fair review and that they follow the mission of the Master Naturalists.

I would also like to encourage you to join the Board of Directors for the 2013 term. Working on the Board is the most satisfying job of any in the Master Naturalist organization and I have enjoyed it enormously; this is a wonderful group and I have been honored to serve. David Reel, our Past President, is the Chair for the Nominating Committee. Please contact David if you have an interest in serving the organization (davidreel"at"gvtc.com). Don't wait to be asked, after all Master Naturalists are self-starters!

Finally, I would like to thank each and every one of you for your service. The hard work and dedication of this group toward making sure the Texas we know is the Texas our grandchildren will know (only better!) is always a source of pride for me. Hope to see you at the Chapter meetings, we've had some wonderful speakers so far this year and more to come...

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Attention!

Our guest speaker for September will be David Scott, author of "Bird Feathers - A guide to North American Species."

See you there!

Get out there and get dirty! *Goos*

Community Recognition Award — Tye Preston Library

Theresa Frasch



Last year's Community Recognition

Award was presented to the Tye Preston Memorial Library in Sattler for their work in erecting a new building that meets the environmental needs of today, and in surrounding it with native plants, gardens and trails.



Burnham Jones and Roxanna Deane accepting the plaque from Theresa. Others from L to R: Eliziabeth Bowerman, Art Williams, Caroline Carpenter, and Coco Brennan.

Master Naturalist Susan Bogle; the other is the perimeter nature trail that is being put in by Master Naturalist Sue Dallis and a hard working crew. Many chapter members have volunteered hours of work to help complete the two projects.

Earlier this year, Theresa Frasch, chair of the Community Recognition project, presented Burnham Jones, chairman of the library board, with a plaque confirming the library's receipt of the award. Lindheimer chapter president, Coco Brennan, and members of the CRA committee were there to show support. Later, they went to the butterfly garden to see the Mexican plum tree planted by the chapter as a living symbol of the award.

TPM—Library joined two earlier award winners. In 2009, Waste management was selected for its work in developing Mesquite Creek Wildlife Habitat Area, and in 2010 the Parks and Recreation Department of New Braunfels and the Friends of Landa park were given the award for the creative irrigation system installed in the park.

The building contractor used solar barriers and extra insulation to assure energy efficiency. He added a rainwater catchment system for landscape irrigation and controlled parking lot runoff by excavating a detention pond at the bottom of the property. This reduces erosion and improves the quality of the water eventually entering the aquifer.

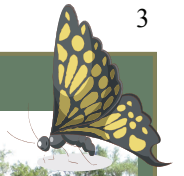
Throughout the building there are environmentally-friendly touches, such as the use of "green" paper supplies and recycle bins.

Outside, the library uses night sky lighting fixtures to minimize light pollution. The exterior cladding of the building is natural stone that blends with the surroundings, and the gardens are filled with native, drought-resistant plants.

As we know, Executive Director Roxanna Deane subsequently approved two major projects. One was the butterfly garden, organized and driven by



A Mexican Plum, *Prunus Mexicana*, a central Texas native under-story tree, was planted by the chapter in the TPML butterfly garden as a living symbol of the award.
(photo: J. Marcus)



TPML BUTTERFLY GARDEN — EARLY DAYS



The ranchland as it was before



The clearing of rocks and cedar...



Leveling and designing



Fence installation



The planting begins at last!



The first bloom



The first Fritillary caterpillar



An entrance gate befitting the butterfly garden!



Rainwater demonstration



The first Queen butterfly



First Kid's Story Time

Open House

Photos contributed by Susan Bogle



Friesenhahn Cave - Sheila Bartram

Photos by Susan Bogle

For almost four years, until January 2012, volunteers from the Lindheimer Master Naturalist chapter helped remove fossils and bone fragments from the Friesenhahn Cave as part of an on-going paleontology project sponsored through Concordia University.

Dr. Larry Meisner, a biology professor at Concordia, received a grant from the 3M Corporation to use the cave for student training and further excavation of fossils. When the grant ran out, Dr. Meisner turned to the Master Naturalists for help in finishing the work of sifting through the previously disturbed material in the cave for valuable items.

The Lindheimer group responded enthusiastically. Sheila and Allen Bartram and Susan Bogle, co-leaders for the chapter volunteers, estimate that over the years the workers took out a ton of material and found thousands of bone and fossil fragments. Most of these items are now stored at Concordia awaiting cataloguing. This project is currently inactive.



Left: Friesenhahn Cave Group: from the left, rear: Mary Hitch (red shirt), Yvette Vollbrecht, Jensie Madden, Dan Madden, Everett Deschner, David Reel, Charles Tubbs, Kevin Amft, Joanne Murphy, Kim Wright. Front row, from the left: Sherry Reel, Ann Tubbs, Edie Zaiontz, Carolyn Deschner.

Friesenhahn cave, located in north Bexar County, has been known as a rich source of fossils from the Pleistocene age for almost 100 years. There was some exploration of the site during the 1920's but it was not until the 1950's that extensive excavation of the cave began, and it continued through the 1970's. Then the cave was "forgotten" and remained unentered.

In 1998, Concordia University got ownership of the cave and the surrounding three and a half acres.

Right: Mary Hitch emerging out of the sinkhole that leads to the cave.





A sample of the bits that the volunteers had picked out of the dirt.



David Wilson sorts through the bits the volunteers were picking out of the dirt.

Mesquite Creek Wildlife Habitat Area—Invasives Removal

Art Williams

Among the many projects being carried out at Mesquite Creek Wildlife Habitat Area (MCWHA) there is one that is a concerted effort to identify the various invasive species of plants that have come in and are crowding out some of our

Right: But not all members are content to just identify invaders. Rich Nielson (Comal Seeders class) brandishes his machete to show he is serious about removing them, while Lois Ricci and Dan Madden (both Roadrunner class) look on encouragingly. Rich plans to add notches to the handle for every kudzu vine he hacks down.



desirable native types. The Lindheimer Master Naturalists are working to identify these invaders at MCWHA, reporting them to a database that tracks such plants all across Texas and other states.

Invasive species identification requires not only strenuous physical exertion, but a lot of thinking about and planning how to do it. That means the work groups must have some spirited discussions on the best way to get the work done.

Left: Monta Zengerle, with his back to us, explains some of the finer points of plant identification while the rest of the group looks on paying close attention. Monta believes in being prepared when he goes into the field and carries most of his worldly possessions with him.



The Tye Preston Memorial Library's Perimeter Trail

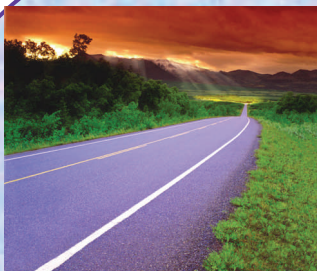
At the Tye Preston Memorial Library (TPML), everyone has heard about the work the Lindheimer Master Naturalists and local garden clubs are doing to create a butterfly garden. But there has been another project under way on the library grounds that is equally ambitious and is being carried out by LMN alone. That's the perimeter trail, that, when it is finished, will run around the library property. It will be a walking trail for the energetic, an access trail for the curious and a learning trail for the kids.



The project is led by Sue Dallis (Comal Seeders class) who, with her NQH Band (No Quitters Here!), have already laid the trail in the upper section of the property. They are presently adding native plants to the area and are accumulating supplies preparatory to moving down hill.

In the picture to the right, Linda Thomas keeps an eye on Sue as she cuts a piece of cedar to size. Workdays for this project are generally Fridays. Watch the Out and About notices for more information. *Art Williams*

Comal County News:



Scenic Texas announces their newest chapter, Scenic Comal County. Committed to preserving the county's landscape, a group of concerned residents want to raise awareness about the negative effects of visual pollution. Their mission is to preserve the scenic beauty of Comal County by curbing billboard proliferation, minimizing light pollution, and cleaning up litter.

To learn more about their efforts, visit: www.sceniccomal.org

Susan Teaches the Kids!

Lindheimer Master Naturalist Susan Bogle spends a lot of time at the Tye Preston Memorial Library, but it isn't always in the butterfly garden. Last summer, she gave a class in the Summer Reading program on "Digging Fossils," and the place filled with kids. Susan talked to them about the geology of the Hill Country, about the difference between a geologist and a paleontologist, and how fossils form from living creatures. The kids liked it all but Susan admitted the loudest applause was for our local star, the Acrocanthosaurus. And they loved going outside to make their own dinosaur footprints. Kids are a tough audience because they haven't learned to hide their boredom or indifference. But have a look at this picture—Susan has them enthralled. She says she's now known by the kids as the "fossil lady." Be sure to greet her that way next time you see her. *Art Williams*



Congress Avenue Bat Program — Karen Sewell



Last summer I was involved with the first year of the Bat Conservation International (BCI) Congress Avenue Bridge Docents program. BCI held a pair of two-hour classroom and one two-hour bridge training sessions that included learning about BCI, the value of bats, general bat ecology, and a detailed history of the Mexican free-tail bats and the Congress Avenue Bridge.

The goal and objective of this program is to make 90,000 contacts and to move 18,000 of those people to a conservation action each season. These actions could include joining BCI, visiting the BCI website (<http://batcon.org>), requesting further information, building a bat house, teaching a bat unit to students, and passing on bat facts to others. Our training at the bridge included a tour and a role-playing session to train docents on what to say if they have five seconds of contact and how to build on each additional minute they have to talk to a visitor.

BCI Director of Education Jim Eggers and Outreach Associate Diane Odegard were great trainers and helped me to feel confident when I was working at the bridge. We used a Yahoo! Group to keep in touch with BCI and the other docents and a calendar enabled us to schedule our nights at the bridge. BCI's goal was to have someone there each Thursday, Friday, Saturday, and Sunday night beginning at 7 p.m. We were supplied with T-shirts that said "Ask me about bats" on the back; tote bags; brochures on bats in general and the bridge bats in particular; gloves and boxes to handle downed bats; and data sheets to record visitor, bat, and weather information each night. I mostly worked Saturday nights.

After the first night, I learned that I could get there as early as 6 p.m. and have many people to

talk to. Most nights there were from 400 to 1,000 visitors and I met so many interesting people. At least half of the people I talk to each night were from out of town, many from out of the country, and I talked with people from Mexico, Canada, Germany, Finland, and England. The knowledge level was broad, ranging from people not knowing why they were there and just following the crowd to those who had been coming to see the bats for years. But everyone I talked to was very friendly and eager to learn. I signed up people to be added to the BCI email list, talked to teachers and told them of the many resources on the BCI website, and pointed people to bat-viewing opportunities near their homes. And the most exciting part was talking to all the children, many of whom had learned about bats in school or thru scouting. Many were so excited and wanted to do something to help the bats. Other topics we covered included the new threat of White Nose Syndrome, the benefits of bats to our ecology, dispelling fears about vampire bats, and rabies.



After training and organizing, we only staffed the bridge from the 4th of July Weekend to early October, but I know the program had a successful first season and I look forward to spring, when the bats return. We ended the year with a special docent evening at Bracken Cave.

BCI has trained several of our Chapter Members who have been docents at the Camden Street Bridge in San Antonio all this past summer. For info. on volunteering with BCI:

<http://batcon.org/index.php/get-involved/volunteer-at-bci.html>

Wouldn't it be **NICE!** tm — Deedy Wright & John Siemssen



Ten years ago, the Boerne Chapter of the Native Plant Society of Texas began a program to promote the use of Texas native plants in landscapes. The program was called NICE!

(*Natives Instead of Common Exotics.*

Here 'Exotics' refers to non-native plants from regions such as Asia, Africa or Europe). The exclamation point was shaped like a drop of water. Although enthusiastically embraced by the state NPSOT organization, it remained up to each local chapter to implement it.

Earlier this year, the Lindheimer and Guadalupe County Chapters of NPSOT saw an opportunity to bring the program to our area. Since neither chapter felt it could support the program alone, the chapters combined their efforts to draw on the talents of both their memberships which enabled them to expand the program to two counties. They used information from the Boerne chapter as a guide and adapted the program to our local situation.

A steering committee of 3 volunteers from each chapter began meeting in January, 2012. The committee met every two weeks for a while as it began to formulate the program based on member input and research. By April the basics were decided on

and work began on producing the materials that would be needed.

Signage for the nurseries, plant care cards, news releases, and PowerPoint presentations for both nursery owners and the public were created. Publicity and education plans were drawn up and approved. All this was completed by the end of June, getting ready for a September kickoff.

Meanwhile a total of six nurseries agreed to participate—three in each county. Representatives for those nurseries and NICE! publicity folks were recruited from the chapters.

A continuing project to put together a picture book showing the more common exotics and their possible native replacements is an on-going effort of the NICE! program. The book will be made available to the nurseries for their reference. However, because of its size, it will take longer than a few months to complete.

The talents and cooperation shown in this effort has been incredible. We are looking forward to a successful NICE! program in Comal and Guadalupe Counties. For more: <http://npsot.org/wp/resources/nice/>

Deedy Wright and John Siemssen are Past Presidents of the Guadalupe County and Lindheimer Chapters, NPSOT, respectively

Yellow bells | *Esperanza*, *Tecoma stans*

The species, *Tecoma stans*, consists of a number of varieties that occur naturally in South Texas and the American Southwest, Mexico, Central and South America as well as South Florida and the Caribbean. They are loved for their display of large yellow trumpet shaped flowers that appear from April through November. It has long thin seed pods in the fall.



Tecoma stans
var. stans "Gold Star"

Esperanza is an irregularly shaped, deciduous shrub that can be 3' - 6' tall and almost as wide (the tropical can reach 9'). It can be cut back in winter and will re-sprout and flourish the following spring. Look for our native variety at native plant nurseries, or start it from freshly collected seed or softwood cuttings. Deer tend to leave this plant alone once it is established.

The variety most commonly found in "big box" nurseries is a tropical, *Tecoma stans var. stans*, or its cultivar, "Gold Star." It has broad leaves, is very cold sensitive, and requires more water than our native variety, *Tecoma stans variety angustata*. This variety occurs in Texas in the Trans Pecos and Big Bend regions. It requires full sun and a well drained soil, and tolerates drought better than the tropical variety. In fact, it is reported to bloom better when allowed to dry out between watering, simulating the summer monsoon rains of the desert Southwest. It can be distinguished from the tropical variety by its narrower leaves (see pictures).



Tecoma stans
var. angustata

Text: John Siemssen - Photographs: J. Marcus and R. Cywinski

Cedar Fever! — Art Williams

I had heard about the water dilemma involving central Texas and the Edwards aquifer, of course, long before I moved to the Hill Country. San Antonio's melee over the Applewhite reservoir went statewide and it seemed to prove the truth of Mark Twain's quip that whiskey is for drinkin' and water is for fightin' over.

When I did arrive in Canyon Lake, and worked in San Antonio, almost the first words my new boss said to me after I told him where I was living, were "I hate those cedars in the Hill Country! They're water hogs! They suck up all the water and starve the real trees, like Texas oaks. An' d'yew know, they were brought in from someplace like Vietnam by immigrants." He repeated this opinion many times during our work together. It was a core belief and he brooded on it.

Although he expressed his sentiments more forcefully than most, I came to learn his opinion of mountain cedars was pretty much conventional wisdom in the midnineties, at least in San Antonio. Since that was where I spent most of my time, that was the opinion I absorbed. "Cedar" (or Ashe juniper, *Juniperus ashei*, one of the major juniper species of Texas, as any Master Naturalist knows) was an evil tree. It invaded our rangeland; it crowded out desirable species; it produced clouds of choking pollen; it burned with fierce intensity causing crown fires in oak and elm motts. And it used water. Boy, did it use water. I saw studies at the time suggesting

a mature cedar used 35 gallons of water a day versus 19 gallons for an oak. Moreover, its dense foliage prevented most rain from reaching the ground. What did get through the branches was stopped by the heavy litter around its base from being absorbed by the soil.

Thus, on the weekends, when my wife and I were trying to finish the house and make a start on landscaping, we looked at our property with dismay. Our ten acres seemed to



*"Cedar fever" generally refers to the powerful allergic reaction many people have to the pollen that male trees of *Juniperus ashei*—commonly referred to as "cedar" or "mountain cedar" locally—release into the air from November to March or April.*

consist of 9.5 acres of cedar and a half acre of prickly pear. I was definitely part of the problem. And I stayed that way for the next eight years or so.

Oh, I hacked away at the cedar around the house in a desultory way and cleared most of a couple of acres. I didn't know then what agarita was except that it stabbed me constantly while I was sawing cedar branches so I took it out too. Collateral damage. That left the Live

oak, the elm and the persimmon. When I cut the grass, the area had a very park-like appearance. A few neighbors, former city dwellers I suppose, stopped to compliment me on my efforts. One woman became almost teary with nostalgia as she told me how it resembled a little park in the Houston suburb where her family had lived. Meanwhile, the other eight acres remained an impenetrable brush.

I retired for the first time in late 2003, and signed up for the Master Naturalists class that was starting in the spring of 2004. It was an accident; I thought I was joining the Master Gardeners. Texas gardening had baffled me for ten years and I only wanted to grow better tomatoes. The MN orientation did not clear things up. It was held in the barn on a freezing Tuesday night. Ernie Lee and Dan Madden nattered on endlessly about volunteer hours and advanced training and certifying until I was completely bewildered, and then they took my money. Ernie was an irresistible closer. He could sell time shares.

Three weeks later, we had our first class. As memory serves, it was Rufus Stephens talking about ecology. I remember only one thing from his entire three hour presentation, and that was a sort of aside, delivered during the break: cedar had a place in the Texas landscape. He didn't promote the tree or try to sell us on its virtues, but he thought it belonged in the state arboretum and should be left in its

natural state, low hanging branches and all. Radical words, even apostasy!

I braced him on his opinion with all the ignorance I had at my disposal, quoting him some of the statements of my former boss—and many others—about the evils of this tree. But Rufus was not to be drawn. He smiled and shrugged and mentioned some bird that needed cedar for its nest, and went back to his presentation. He left me wondering about his qualifications to give the lecture. Then, a couple of months later, we had a presentation on trees of the Hill Country by Mark Peterson, and he said he liked the cedars. He thought they had an attractive shape, especially the old growth that had lost their lower branches. But he was apologetic about this opinion, explaining he was from the north. Ohio, I think. He had not learned to hate the tree from childhood. That made sense to me. Ohio has water as a northern boundary and water as a southern



*David Bamberger hugging an old-growth juniper
(Photo copyright Greg Pasztor)*

boundary, and probably has more lakes in Cayahoga County than all of Texas. What did an Ohioan care about a tree that sucked up water the way the boys did beer at a barbeque?

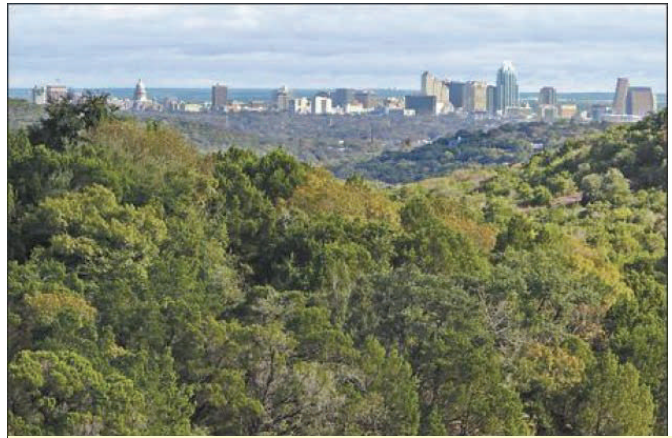
But Mark also left me with one thought that stayed. He said if you clear out all the cedar, when oak wilt comes to Comal County—and it will—you will have nothing on your property but a few elm and the persimmon. Will you be happy then?

Later that year, the class went to Bamberger Ranch for a field trip.

The guide told us in detail how David Bamberger had labored with his crews to remove the cedar, and when he did, how the springs came back. He had left some areas of the ranch still in cedar for the wild life but most of it was gone, and thank goodness. The guide called it an invasive weed.

The next month Doug Dalglish gave his presentation on grasses. During his talk, he showed slides of the areas of John Knox Ranch where they had cleared and burned cedar. His intent was to show that once you got rid of that pesky tree, the ground would recover and produce interesting varieties of bluestem and gamma grasses.

The month after that, Georgina Schwartz came to talk about birds and she put in an impassioned plea to save the cedar. It was critical for the golden cheek warbler (so that was the bird Rufus had mentioned!) and important for many other small birds who found protection in its dense copses. Wagging her finger at the class, she warned



Hillside preserves of Ashe juniper and oak near downtown Austin are home to numerous bird species, including the endangered golden-cheeked warbler. Mature cedar and cedar on steep slopes that is considered habitat for the endangered golden-cheeked warbler were not cut. Established cedar roots also help reduce soil erosion on hillsides. Photo: GILBERT W.

that if we cleared our cedar or even cut off all the lower branches, OUR BIRDS WOULD DISAPPEAR! Do such a thing, and you could never call yourself a Master Naturalist, she said. I sat silent, mute as a fish, pondering the implications of what I had done around the house.

Finally, at the second last class, the big gun appeared: Barron Rector. We've all heard him. He has the assurance of an ayatollah in his opinions, and the eloquence of a stump speaker, corny jokes and all. He spoke mostly on the degradation of the rangeland that happened in Texas in the hundred years after the War of Northern Aggression, but he did talk a little bit about the cedars. He said they had over run the Hill Country when fire had been suppressed as a control. They were a native tree of Texas but needed to be contained on the cliff sides and hill tops where they had first been found. Now, when the trees formed brakes of hundreds of acres, they prevented rainfall from reaching the ground. This was their sin in Barron's eyes. He said the



USDA Plants Data Base: The range of *Juniperus ashei*, also known as “mountain cedar.”

first quarter inch of rain on a cedar forest never hits earth. It was stopped by the tangle of branches. And, since a lot of the rain in our area is a quarter inch at a time, over a year anywhere from one third to one half of the rain we received was caught in branches and evaporated away before it could do any good. He had completed longitudinal studies to support this statement.

The combined impact of this year of lectures left me almost catatonic with indecision, a classic case of paralysis by analysis. My condition was not helped when I stayed involved with later classes and heard the same presenters argue their case over again.

And so it remained for the next few years. I went back to work and didn't have much time to fool with cedars but the odd Sunday afternoon I would whack a few branches off that were threatening the driveway or hit me in the face while

mowing. We had a tense and uneasy relationship, the cedars and I: like a Wall Street investor torn between fear and greed, I still didn't like the tree's vast thickets but I was afraid clearing them would endanger my naturalist *bona fides*. I could not shake the image of Georgina Schwartz wagging an angry finger at me.

In the end, it was good—make that *better*—science that got things traveling again, and it was Barron Rector who provided it. It is Barron's habit when talking to our classes to carry on talking

for 175 of his allotted 180 minutes, and then in a flurry of busyness, pass out at least a dozen extracts while flashing through all the slides he didn't use during his presentation. It is a bewildering time for the students who hardly know what they are being given.

Two years ago, I took a copy of the material, and I did look at it later, especially one item titled “Woody plant encroachment paradox: Rivers rebound as grasslands convert to woodlands”. It's a four page document that after much learned blah, blah, blah, concludes “...for drylands where the geology supports springs, it is (soil) degradation and not woody encroachment that leads to ... declines in ground water recharge...” Soil degradation, not woody encroachment! From 1890 to 1960, the soil of the Hill Country along with much of the high plains was heavily degraded through over grazing. After 1960, as animal numbers fell and the grazing pressure

eased, streamflow in the Guadalupe, the Frio and the Nueces rivers increased. The two academics who produced this paper in 2010, Bradford Wilcox and Yun Huang, noted that the increase came from improved baseflow—the water contributed by springs—despite the land becoming heavily forested with Ashe juniper during the same period. They went on to question the current rationale for restoring current woodlands to savannas. This relies heavily on the belief that doing so will increase groundwater recharge. But no one knows what the streamflow was during pre-settlement times. What if baseflows are higher now than in pre-settlement times because rooting by trees has improved groundwater recharge?

I re-read the paper several times as I considered what this meant to my personal efforts at land management. Juniper was not the water hog originally thought. The paper that stated this finding had been revealed as insufficiently rigorous and based on assumptions. Now I was learning cedar did not prevent—indeed, perhaps encouraged—the recovery of exhausted soils.

This seemed at odds with Barron Rector's earlier statements (and scholarly papers) that told of higher rates of evapo-transpiration and reduced streamflows in areas where woody plants returned. Wilcox and Huang recognized this inconsistency but thought the differing results might be explained by scale. They were working at the level of river systems—watersheds—while the other papers looked at smaller woodlands. I wondered about that. It sounded like the story of the little tailor who kept his prices so low, he lost



money on every pair of pants or jacket he sold, but hoped to make it up on volume.

Still, puzzling over these various research papers and wandering around my own property led me to the decision I began to implement last year. In this I was helped by the drought which, by 2011, was killing the cedar as well as the oak. I began to thin the cedar, not eliminate it, in a two acre spot on the side of a hill. I'm taking out the dead cedar and selected live ones, and trimming all the lower limbs of the ones left.

All but one or two Live oak in this

area are dead as well, so when I am finished, I will have only them, the cedar, the persimmon, and a single mountain laurel that I found buried in the middle of a particularly dense clump. None of the trees I am removing is large; the biggest has a trunk diameter of perhaps five inches. The trunks and larger branches I am using to build windrows across the slopes to slow erosion. The slash I am using for animal covers, or burning.

Astute readers will see the cleverness of this program. Thinning the trees and removing lower limbs will allow sunlight and rain to penetrate to the forest floor. The windrows will result in little terraces forming with extra soil to support the return of native grasses, or at least KR bluestem. The animal covers will protect the little critters that run around out there. And, since I'm working only two acres, the surrounding dense forest will be a home to the birdies who need that kind of thing.

When I described to my wife what I intended to do, she was very impressed. Eyes shining with admiration, she said: "And you came up with this plan after only seven years of Master Naturalist lectures? Amazing!" To my surprise, though, she has declined to participate in the work.

That brings us to the present. Based on the findings of the papers I have mentioned, I expect my efforts to lead to an improvement in water absorption on this two acres. In turn, that should increase the baseflow of nearby rivers. I don't know if it will be noticeable to the summer tubers. I may ask the MNs who do water testing for feedback on that point. I don't ever expect Texans to stop fightin' over water. They're having too much fun doing it. But in my own small way, I'm doing my bit to help the situation. In the 2019 newsletter, I'll report my results.

Juniperus ashei is a drought-tolerant evergreen shrub or small tree, native to northeastern Mexico and the south-central United States north to southern Missouri; the largest areas are in central Texas. It frustrates ranchers because it grows readily when overgrazing and land clearing have removed natural vegetation. The junipers that get established in overgrazed lands are young, vigorous, dense, multi-trunked, and shallow rooted. This makes it difficult for any remaining grasses to compete for water and thrive, especially if they are still being heavily grazed and the soils are impoverished—a vicious cycle. The establishment of grasses after shrubby cedar removal may promote more underground water and spring flow in areas where deep springs already exist. Old-growth Ashe junipers are different from the young "re-growth" shrubs in that they have true trunks, use less water, are slow growing, less foliated and have very deep roots.

http://en.wikipedia.org/wiki/Juniperus_ashei



Texas Forest Service personnel examine the several hundred year old state champion Ashe juniper on private land in Comal County

Note, on the right, the young Mark Peterson !

Additional Information:

Citizens' Tree Coalition: <http://www.treecoalition.org/wills.htm>

Cedar Through the eyes of Wildlife: <http://texnat.tamu.edu/library/symposia/juniper-ecology-and-management/cedar-through-the-eyes-of-wildlife/>

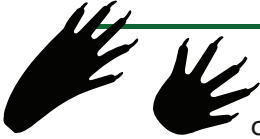
Mountain Cedar—Water Guzzler or Not: <http://npsot.org/wp/story/2010/1393/>

Bamberger Ranch Journal: <http://brp-journal.blogspot.com/2010/04/cedar-rebuttal.html>

Juniper Control and Management: <http://texnat.tamu.edu/library/symposia/juniper-ecology-and-management/juniper-control-and-management/>

Give Cedars a Break: <http://www.dailyonder.com/give-cedars-break/2010/12/17/3088>

Interesting Animal Behavior — Michael Varhola



In the three years since my wife and I moved to Canyon Lake, we have certainly seen some interesting animal behavior around our house. Some of the most fascinating things have included how well so many of the outdoor animals get along with each other, which ones seem to be the most dominant, and how one species will imitate the behavior of another.

One of the most touching examples of animal interaction happened one day during our first year in Hill Country, when we went to put out the food for the local feral cats we help take care of. When we opened the front door, we saw two animals sitting just a few feet away from each other on the walk leading up to the house, one a little lame female cat and the other a fox, both patiently waiting for their dinners!

Then, last spring, a mother raccoon and a new litter of babies started visiting our back patio and scavenging for food, the newborns engaging in all sorts of antics on, under, and around our outdoor furniture (something that seemed to amuse me somewhat more than it did my wife). They did not seem to be afraid of us at all, and the mother would sometimes sit some distance away and glare fretfully while we watched her kits from inside the house but just a few feet away from them.



Eventually, just one of the little young ones kept returning on a regular basis, and we could identify it from its somewhat stubby, peculiarly-bent tail. One night, I looked out, and the tiny raccoon was munching

away on cat foot, while the big orange male cat that lives in the woods nearby watched it intently from just a couple of feet away! He could have easily chased it off or killed it if he had wanted to but obviously was not so inclined and, when it finally left, returned to the food bowl himself.

That forbearance did not help the orange cat much some months later when, while he was standing near his bowl at the far end of the patio, a trio of raccoons came barreling up the steps, causing him to dash to the opposite end of the patio and then escape through the railing.

That did induce me to uncharacteristically lose patience with the raccoons and chase them off so that he could come back and finish his dinner (which he did a few minutes later).

Any number of times a raccoon and a skunk have shown up for dinner together! I certainly would not have anticipated this level of cross-species gregariousness. And it does not seem to be limited to just one particularly friendly



skunk, because I have seen at least two doing it — one of them being a particularly shaggy, nearly-all-white skunk that I have dubbed the “Ghost Skunk.” (Skunks, by the way, have some unique distinguishing characteristics that makes it fairly easy to tell one from another, especially if they are individuals one sees on a regular basis; coat patterns and shape and size of their tails are two main features to note).

When skunks get spooked or annoyed, of course, they raise their bushy tails — which often look as big as the rest of the animal — in a warning that seems immediately recognizable to other creatures. Cats, raccoons, foxes, people, and everyone else keeps their distance when these otherwise cute little animals assume this menacing posture.

I also recently saw a skunk take this maneuver one step further. When the food in a bowl it was sharing with a raccoon started to run low, the animals began to jostle each other for it, in the course of which the skunk raised its tail and started to rub its rear on the raccoon, prompting the latter critter to run off.

Even better, however, is what happened a few days after that. Two raccoons ended up in the same situation and one of them must have been the one I saw with the raccoon — because once they started to jostle, it raised its tail in an amazing display of imitative behavior and rubbed its rear on the other, prompting it to run off for fear of getting sprayed with musk!

A Word of Caution: Raccoons and feral cats are potential carriers of rabies. Direct contact should be avoided.



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sbtxct19"at"gvtc.com

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TMN-LC Newsletter
Summer 2012 Edition:
Janet Siemssen

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.

ADVANCED TRAINING: - Section J of Your TMN Membership Manual

1. Advanced Training is meant to provide TMN volunteers an opportunity to focus their interests on one or more 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) 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.

This newsletter would not be possible without the time and talents of our members. This edition was possible as the result of contributions from these members: Coco Brennan, Teresa Frasch, Sheila Bartram, Art Williams, Karen Sewall, Susan Bogle, Deedy Wright (guest contributor), John Siemssen, and Michael Varhola.

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

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 new website which can be viewed at:

<http://txmn.org/lindheimer/>

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