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Good Water RIPPLES

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Master Naturalist Spring Training Class

Join a group of dedicated volunteers committed to preserving, protecting, and enjoying our natural spaces. The Texas Master Naturalist program is jointly sponsored by Texas Parks and Wildlife Department and Texas A&M AgriLife Extension. Training includes soils, backyard habitats, prairies, rangeland management, forest ecology, birds, mammals, fish, insects, botany, climate, geology and archaeology.

Spring 2017 Good Water Master Naturalist Training Class

http://tinyurl.com/GWMNTraining

March 7 – May 25, 2017

40 Hours Classroom Training

40 Hours Community Service

8 Hours Advanced Training

Cost: $150 (includes manual)

The Texas Master Naturalist Program is a volunteer program that develops a corps of well educated "Master Volunteers" who provide education, outreach and service dedicated toward the beneficial management of natural resources and natural areas within their communities for the State of Texas.

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

UPCOMING EVENTS

02/13	WAG
02/23	**GWMN**
02/27	Austin Butterfly Forum
03/06	NPSOT
03/23	**GWMN**
03/27	Austin Butterfly Fourm
04/06	NPSOT
04/27	**GWMN**

GWMN Good Water Master Naturalist
NPSOT Native Plant Society of Texas
WAG Williamson Audubon Group

Check the website for additional events including volunteer and training opportunities. The many events are way too numerous to even think about posting all here!

IN THIS EDITION

A Natural New Year by Hunter Yarbrough

How do a couple of newly minted Master Naturalists celebrate the New Year? By putting on our party hats – um, helmets, lighting up – our flashlights and getting down. About 130 feet down, as a matter of fact.

Just a short 227 miles west of Georgetown, and 40 miles south of the nearest gas station, Kickapoo Caverns is one of the newest additions to the Texas State Parks system. Straddling the Edwards/Kinney county line on the very edge of the hill country, this 6,368 acre park is a wild and remote land. There are 20 known caves in the park, the largest of which are Stuart, and Kickapoo. Stuart belongs to the bats, but if you plan ahead (and bring your own flashlight) you can join a group and explore Tigger's favorite cavern.

Our New Year's Day adventure started at the ranger station in the old Sargent ranch headquarters. Waivers absolving the state of Texas (and our intrepid guides) of any liability for injuries caused by slippery rocks, wobbly rocks, falling rocks, falling on rocks, falling off rocks, angry rodents, arachnids, reptiles, or bad Winnie the Pooh jokes were signed, and we joined 18 fellow adventurers aboard an ancient prison bus for the 4 mile ride to the cave entrance. (There was probably a waiver for the bus ride, as well). The cavern, which is at the top of a short, but steep climb from the end of the road has been a popular local adventure site for at least a hundred years. Graffiti, smudge marks from early torches and damage to the formations is everywhere, evidence an irreverent approach to nature is not a modern phenomenon. Burned rock middens near the mouth indicate native Americans camped here as well, though no evidence exists they actually used the cave as shelter. There's also no evidence the Kickapoo were here and no record that I can find of how the cavern came to carry that name.

Helmets are mandatory for this wild cave tour, and are provided from a one-size-fits-all bin. It's important to be quick here, unless pink flowered headgear is your thing. After a brief lesson on which end of a helmet is actually the front (the flower goes in back), and a demonstration of how to attach a headlamp, we were prepared to journey to the center of the earth. Or, at least as far as we could get in an hour.

The cave has a small, shallow entrance which is apparently not popular with bats. As a result, Kickapoo is almost completely bat free while neighboring Stuart cave hosts a large population of Mexican free-tails during the migratory season.

Just inside the entrance and within the zone of ambient light, Tonja did manage to spot a Texas cave scorpion, *Pseudouroctonus reddelli*. He (or she) politely posed for photos.

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A Natural New Year (Continued from Page 2)

The explorable portion of the cavern is one large chamber bisected by a group of columns that are the largest discovered spelotherms in Texas. The room is dry and is considered geologically dead, though the lower regions of the cavern are supposedly still active. The floor is loose breakdown (rock fall from the ceiling) and careful footing as well as a good bit of up and down climbing is required. Like most caves in Texas, it is also very warm; exploring daily could save you a gym membership. There's not much in the way of decorations, other than the giant cave columns and a few stalagmite/stalactite combinations. One small side chamber does hold a fairly impressive display of helictites, popcorn and some good old cave bacon. (speaking of which, the nearest food is in Rocksprings, so packing a lunch is a really good idea …)

This is an easy cave to explore for both children and adults. Group size is limited to twenty and the pace is slow with ample opportunity to find a rock to lean on. You're not going to find the beauty of Sonora, or the awesome rooms of Natural Bridge, but if you're looking for an excuse to follow U.S. Highway 377 all the way to Mexico, grab a flashlight (and a sandwich) and head out. You won't regret it.

If you plan a trip to Kickapoo, be sure to stop in Rocksprings and arrange a tour of Devil's Sinkhole, quite possibly the most famous cavern in Texas. It's on 40,000 acres land purchased by the state, but kept behind a locked gate to protect the bat population, fishhook cactus, and to keep children from falling in the 350 foot deep hole. They won't actually let you tie a rope to the fence and climb down in there (no matter how many times you show them your dragonfly pin) but it's worth the price of admission just to lean over and look. Morning and evening bat flight viewings are also available. Tours can sometimes be arranged spontaneously, but, like the much more accessible Kickapoo caverns, calling ahead is a good idea.

Tawny Crazy Ants: So Bad, Some Wish for Fire Ants To Return by Dr Hans Landel

Yes, that's right. In some places in Texas, the invasion of tawny crazy ants (Nylanderia fulva) is worse than the red imported fire ants (Solenopsis invicta) that it has replaced. Yes, that's right, too: the crazy ant displaces the fire ant. Both are from South America, where they naturally compete and are kept in check by the full ant community there. The crazy ant has evolved resistance to the fire ant's venom, which combined with its ability to form large, multi-queen colonies and the absence of other population control factors, allows them to outcompete the red fire ant here in Texas. It's the crazy ant's ability to form huge colonies, rather than a sting or bite, that makes it such a nuisance. It will nest in any cavity and literally take over buildings, swarming inside and wreaking havoc with electronics, air conditioning units, and wiring. Outside, "they drive out almost all other bugs, including spiders, through sheer weight of numbers… Even nesting songbirds can be overrun by crazy ants." In order to learn more about the crazy ant as part of efforts to control it, researchers at the University of Texas Brackenridge Field Laboratory (BFL) are focusing on its behavior, and on a species of fungus and of phorid fly that are potential biological control agents. Because of its potential negative impacts in Texas, the tawny crazy ant is a Report It! species as part of the Sentinel Pest Network, a component of Texasinvasives.org. If you believe you have found tawny crazy ants, please report this species.

Dr Landel is the Incasive Species Program Coordinator for Lady Bird Johnson Wildflower Center
Photo Credit: Bastamm Drees, Texas A&M University – iWire Texas Invasives

Master Naturalist Sightings

Above and Below: Sharing bats at the Texas Memorial Museum Wildlife Day on January 28. Thanks to Carole Minnix and Christi Gardener for preparing the activities.

Four pictures below from the Berry Springs Work Day on January 27th.

Below: Junior Master Naturalists explore worms and snails.

Ash Juniper: Value of the Tree We Love To Hate by Mary Ann Melton

Folks with allergies have very little good things to say about the Ash juniper tree, the tree that most folks just call it cedar. It is called a lot of names: Ashe juniper, Ashe's juniper, Mountain cedar, Rock cedar, Post cedar, Texas cedar, Brake cedar, Mexican juniper, Blueberry juniper, Ozark white cedar, Sabino, and Enebro but its scientific name is juniperus ashei. Anyone with allergies tends to hate it because during this time of year cedar pollen fills the air and irritates noses, sinus cavities, and bronchial tubes making it a most hated tree.

Ash Juniper is common throughout Central Texas but grows especially thick west of Interstate 35. It grows well in the calcareous, shallow, rocky limestone soils in the Hill Country. It also grows well in sandy granite soils. It is an evergreen tree with a trunk that twists and branches from the base. They often grow in dense thickets. Trees are either male or female. The males are the guilty party that produces all the golden pollen that is so irritating. The female tree produces beautiful blue berries that attract many birds including the cedar waxwing. Deer and domestic livestock also eat the berries. The thick vegetation of the junipers provides cover for many wildlife species. While ash juniper may reduce the water that flows into the aquifer affecting springs, it also helps prevents soil erosion on the steep slopes of canyons where other vegetation does not grow well. Humans use ash juniper for fence posts, crossties, poles, and even fuel.

Many people do not realize that ash juniper is a native tree with a range from southern Missouri south into Mexico. On mature trees Ash juniper bark shed into shaggy longitudinal strips. The endangered golden cheek warbler requires the juniper because it needs these strips of bark to build its nest. It is the larval host plant for the juniper hairstreak and the olive butterfly. There are plants that benefit from the ash juniper as well. As the ash juniper leaves fall, they decompose into a rich soil that drains well. Cedar sage (Salvia roemeriana) and Cedar Rosette grass (Dichanthelium pedicillatum) grow almost exclusively under the juniper trees. The beautiful Texas madrone tree seems to germinate more easily under ash juniper trees. Some other plants that are often found under ash junipers are American Smoke Tree (Cotinus obovatus), Lindheimer's Silktassel tree)Garrya ovata ssp. Lindheimeri), (White Limestone Honeysuckle (Lonicera albiflora), Lindheimers Garrya (Garrya ovata var. lindheimeri), and Orange Zexmenia (Wedelia acapulcensis var. hispida).

While Ash Juniper is native, it is more widely distributed across Central Texas than it was before the Europeans arrived. The introduction of livestock and overgrazing created conditions favorable for the junipers. The reduction of naturally caused fires removed a natural control mechanism. Junipers do not sprout from their roots when the tops are cut or burned.

Meet Good Water Members

Sandra Spurloch

I grew up in Southeast Texas and graduated from Lamar University in Beaumont with a B.S. Chemical Engineering. I worked in the chemical industry for 8 years then decided to start a new career - stay at home Mom. We later moved to the Seattle area where I worked in the public school libraries, a job I really loved. In Washington State, we enjoyed hiking, paddling and snowshoeing as a family.

We moved back to Texas 4 years ago and began birding with the Williamson Audubon group soon after. I love our parks and trails and Texas Hill Country and Master Naturalists seemed like a perfect way to support and promote them!

Randy Spurloch

I was born and raised in Southeast Texas. There I earned a degree in Computer Science at Lamar University as well as meeting my wife. Together we began our careers in industry that would slowly move us westward until we eventually landed in Central Texas. A "2 year" assignment in Seattle turned into 13 and our family enjoyed lots of outdoor activities that the area had to offer. We returned to our native Texas 4 years ago and started looking for outdoor activities here, which lead us to birding with the Williamson Audubon Group where we met a number of nice people. They informed us of "lots" of other outdoor activities like Amphibian Watch, Bat Viewing, and of course the Texas Master Naturalist program, which my wife and I completed with the Goodwater Fall 2016 class.

The Texas Master Naturalist program has taught us just how much "nature" knowledge there is for us to learn! We hope to make it a lifelong learning project as well as meeting and sharing nature with a great group of people.

Youth Activities Update by Lisa Ward

We loved exploring leaf litter (12/19) and mammals (01/30) at the Round Rock Library as part of the Rockin' Kids Club program. These hands on activities are open to all elementary students. Join us at 4:30pm on Monday, March 20th for Edible Soils or check out other Monday afternoon Rockin' Kids Club activities.

The Junior Master Naturalists started off the new year with a service project removing invasive plants at Berry Springs Preserve. A classroom lesson on invasives helped our 4th-6th graders to prepare, and they also enjoyed a recent lesson on Earth Critters with lots of snails and worms. Upcoming lessons cover Music of the Night and Astronomy to prepare for a Planetarium field trip.

For information about the Good Water Chapter
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