GOOD WATER MASTER NATURALIST
WILLIAMSON COUNTY

RIPPLES

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UPCOMING EVENTS

7/22/15	GWMN Book Club
7/23/15	GWMN Chapter Meeting
8/11/15	Williamson Audubon Group
8/13/15	NPSOT Meeting
8/17/15	NPAT Meeting
8/27/15	GWMN Chapter Meeting

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!

NOW YOU KNOW

Williamson County protects five endangered species, and one, the Coffin Cave mold beetle (Batrisodes texanus), is found only in Williamson County. This eyeless troglobite, a creature that lives its entire life in cavern darkness, is a little over a quarter centimeter in length. Specimens have been found throughout local karst limestone including Inner Space Cavern, Off Campus Cave, Coffin Cave, and Karankawa Cave. However, many of these systems as well as smaller caverns have been negatively impacted by human activities and may no longer provide a habitat for the Coffin Cave mold beetle. Efforts to protect this and other creatures include the recent purchase of Karankawa Cave for Williamson County Conservation Foundation oversight to offset SH195 development.

Registration for GWMN Fall Class by Mary Ann Melton

Fall 2015 Good Water Master Naturalist Training Class
September 8 – December 8, 2015
http://tinyurl.com/GWMNTraining
40 Hours Classroom Training
40 Hours Community Service
8 Hours Advanced Training
Cost: $150

Texas Master Naturalists are people who still like to play in the dirt and are willing to get their feet wet and their hands dirty. Master Naturalist training starts with over 40 hours of expert instruction about the natural world with a focus on Williamson County. Topics include soils, backyard habitats, prairies, rangeland management, forest ecology, birds, mammals, fish, insects, botany, climate, geology and archaeology.

Registration is now open for the Good Water Master Naturalist Fall Training Class. The class will meet on Tuesday evenings from 6:00-9:30 p.m with additional field trips on Saturdays. Continued on Page 2

Junior Master Naturalists for 4th-6th Graders

Junior Master Naturalists Wild for Wild Things gives youth in 4th-6th grade the opportunity to explore local wildlife in Williamson county. With Thursday evening activity programs at the Georgetown Rec Center and several Saturday field trips, the $85 ($65 for residents) fee provides over 25 hours of learning and fun. Class starts September 10. Registration starts August 1 and includes a t-shirt as well as program completion patch.

http://txmn.org/goodwater/georgetown-junior-master-naturalist-program/

Fall Training (Continued from Page 1)

Former students comments on the Master Naturalist Training Class include:

So pleased I did this class, it has been a very enjoyable and rewarding experience, with wonderful lectures, fun and informative field trips, Jims Birding at Berry Springs, Wayne's Riparian walk at Booty's Crossing and the Excavations at the Gault site were my favorites, some places I never realized existed. The leaders, members and my classmates were most welcoming and supportive. My love of nature now has a deeper understanding and appreciation. – Maggie Bond

I enjoyed the Master Naturalist training classes very much because of the level of the instructors, because of the range of the classes and because of the introduction of further training and volunteer opportunities that became available. – Rana Sanders

I really enjoyed the instructors and field trips. I feel like I learned so much. I met a bunch of great new friends also. Would highly recommend the class. – Diane Capron

The Master Naturalist class was certainly an alarming eye opener in regard to being a good land steward! For me some memorable moments were being introduced to Aldo Leopold by Wayne Rhoden, the grave concern of water shortage in our near future from Gene Chisolm, and the final sermon from Dr. Barron Rector on the failures of society in regard to the land which brought back childhood church memories of feeling like the preacher was singling me out for my role in the catastrophe, my sins against the land. – Mike Farley

Good Water Chapter has an exceptional training course for those interested in our local wildlife and habitats. If one has a desire to learn about nature and lend a hand in its preservation, this is an excellent path to take. Knowledgeable guest lecturers and fun field trips add to a rewarding classroom experience. The spring class was the most enjoyable few months I've had since relocating to Texas. – Cindy Graham

Master Naturalist certification starts with 40 hours of classroom and field trip expert training. To complete the certification process, each volunteer completes 40 hours of service and an additional 8 hours of training. To maintain their certification each year, volunteers are encouraged to take their knowledge and volunteer for 40 hours and take 8 hours of additional training.

The Texas Master Naturalist program is a joint venture between the Texas Parks and Wildlife Department and the Texas AgriLife Extension service. The Good Water Chapter of Master Naturalists is the Williamson County chapter. Master Naturalists are trained volunteers who can do interpretation about the history, ecology, and natural elements of state and local parks, help build and maintain trail systems, help local residents and landowners learn best practices in managing their land and create urban wildlife habitats, and help with improvements in our parks.

During 2014 and 2015, Good Water Master Naturalists (GWMN) of Williamson County have done many things throughout the county. In Cedar Park, invasive plants are being monitored and removed. In Hutto at the landfill is a beautiful pollinator garden, a joint project between the Native Plant Society and Good Water Master Naturalists. At Berry Springs Park & Preserve near Georgetown, amphibians are monitored each month, native plant seeds are collected, and the barn is being restored. At Lake Granger, there is work being done on the prairie restoration east of the dam in partnership with the Native Prairies Association of Texas. In both Georgetown and Hutto, several groups of children are learning more about the natural world that surrounds them. There are a number of Texas Stream Team monitors who check water quality at several locations in Williamson County each month.

Start training September 8 to join this active, fun group dedicated to preserving and protecting the outdoor spaces of Williamson Count. The class will meet on Tuesday evenings from 6:00-9:30 p.m with additional field trips on Saturdays. Cost is $150 and includes the comprehensive Texas Master Naturalist Program manual as well as a one year membership to the Good Water Chapter. For couples who plan to share the manual, there is a discount for the second student. For more information, including Registration and the Training Class Calendar visit our website: http://txmn.org/goodwater/texas-master-naturalist-training-program/

The Chorus of Green Tree Frogs Resonates through the Night by Mary Ann Melton

The full chorus of green tree frogs (Hyla cinerea) that are singing near my home is amazing this year. A full chorus occurs when many amphibians call at the same time rather than a solitary or a pair. The green tree frog sounds a little like a saw. Untamed Science describes it as "quonks" or "queenk-queenk-queenks." The Nature Works website describes it as "quank-quank." To hear it, visit the Texas Parks & Wildlife website: http://tinyurl.com/Green-Tree-Frog. Amphibians make their calls by inflating throat patches called vocal sacs.

I have also been seeing green tree frogs frequently. Green tree frogs have smooth bright green bodies with lateral stripes that may be white or yellow. The belly may be light cream or green. Eyes are yellow. They may have small yellow spots on their back called dorsal spots. Tree frogs have long toes and sticky toe pads for climbing and clinging to tree branches. The last bone in their toes, the terminal phalanx is shaped like a claw. They tend to walk rather than leaping. Size ranges from 1 ¼ to 2 ½ inches long.

Green tree frog's range extends from the Atlantic states down to Florida westward to Arkansas and the central and eastern parts of Texas. They live along the edges of lakes, ponds, streams including marshes and cypress swamps, preferring areas with ground cover and aquatic vegetation. Nocturnal, they may be found sleeping during the day on the undersides of leaves or other moist shady spaces.

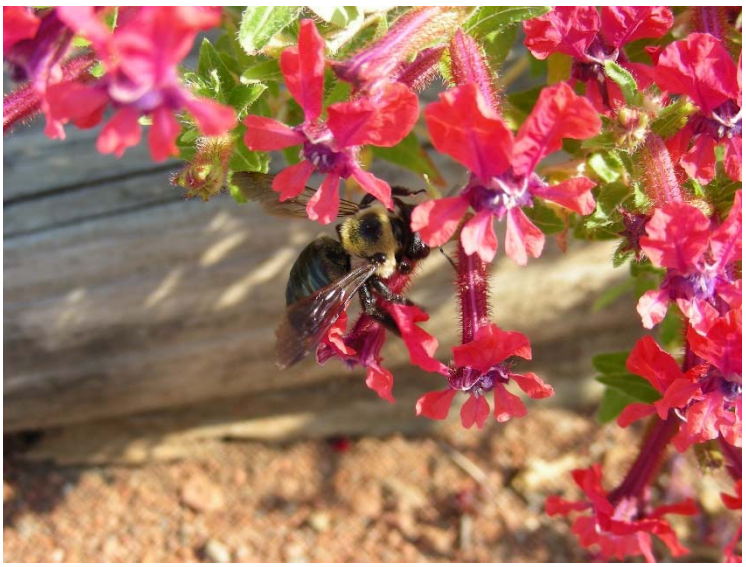
Breeding season begins in March and extends through October. Large groups of males congregate and vocalize to attract females. The females lays up to 400 eggs in a jelly envelope attached to aquatic plants in shallow water. Tadpoles hatch in a week and mature into frogs in two months. Tadpoles begin life-eating vegetation becoming insectivores as adults. They feed on flies, ants, crickets, beetles, moths, and other invertebrates. Green tree frogs coloring provides camouflage protecting them from the many species that eat them.

Frogs are considered indicator species. Indicator species are organisms (plant or animal) whose presence, absence, or abundance reflects a specific environmental condition. Amphibians breathe through their skin making them more sensitive to environmental changes.

To learn more about local amphibians, there are three Texas Amphibian Watch sites in Williamson County. The Devine Lake group meets on the first Saturday of the month at sunset. The Lake Creek Dam group meets on the 2nd Saturday each month at sunset. The Berry Springs group meets on the third Saturday also at sunset. An Amphibian Watch records the air temperature, water temperature and other weather conditions and then listens and watches for amphibian activity. The official monitor has been trained to recognize the various amphibian calls. Sometimes it is only one or two calling to each other, trying to attract a female or maintaining their territory. Sometimes it is a full chorus where many of the same species are singing together, filling the night with their beautiful calls.

Carpenter Bees by Wizzie Brown

Carpenter bees are one of those insects that can be viewed by people in two varying ways- as a beneficial or a pest. If they are in your garden and helping to pollinate plants it's great, but things can be put into a negative light when these insects burrow into wood and cause damage.



Carpenter bees look similar to bumble bees, but they have a shiny, hairless abdomen. They are ½-1 inch in length and are typically black and yellow. Male carpenter bees have a whitish spot on the front of their face. Only females have a stinger, but usually do not sting unless very agitated or held in someone's hand. Males cannot sting, but can be territorial and harass insect or other animals (including humans) that enter their space.

Carpenter bees get their name because they use their mandibles to chew galleries in wood creating round, ½ inch diameter holes. Holes often have coarse sawdust near the opening. Holes may have yellowish-brown staining below them from where the bees defecate before entering the nest.

Galleries are rounded and may sometimes cause damage to structures. The galleries are provisioned with pollen/ nectar loaves. An egg is laid on the loaf and the section is portioned off with a mixture of saliva and sawdust. Adults feed on nectar.

Nest may be created in exposed wood on structures, wooden decks or wood shingles or siding. Painted and treated woods are less preferred, but are not unsusceptible to attack. These bees do not eat the wood, but instead excavate it for nesting purposes.

Carpenter bees overwinter as adults, often in old nesting tunnels. Adults emerge in spring with males usually appearing before females. The females will excavate new tunnels in wood and create the pollen ball to lay an egg on. The eggs hatch within a few days and development to adult take 5-7 weeks. Adults generally emerge in the summer, but they do not create new galleries. They will clean out old galleries to serve as overwintering sites.

Carpenter bees are similar to Bumble bees in that they are generalists and visit many types of flowers as well as having "buzz pollination". "Buzz pollination is where the bee grabs onto the flower, moves its wings rapidly and vibrates the anther which dislodges pollen. Some plants are more efficiently pollinated with buzz pollination.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600.

Swift Fest – August 29. 2015 – 5pm to 10pm – Jonestown by City of Jonestown

Hundreds, if not thousands, of chimney swifts stop off for part of the year in downtown Jonestown, Texas. They begin arriving in mid-March and stay through the end of September. During this time, the small birds make a historic cistern in the middle of downtown their home. After a day spent feasting on insects, the swifts return in the evening to their cistern home en masse, a tornado-like sight that is fascinating to see.

In celebration of this phenomenon, the City of Jonestown hosts Swift Fest, a festival centered around the'swift drop.' It includes fun games and activities for families, nature-themed vendors, live music and culminates at the cistern, where everyone gathers to watch the birds come home for the evening.

Visit http://www.swiftfest-jonestown.com/ or call 512-339-9432 for more information on the festival fun.

Mosquito Repellents by Wizzie Brown

As you have probably noticed, we have a bumper crop of mosquitoes this year, so make sure you take the proper precautions while spending time outside. Common advice such as avoiding standing water and dawn/dusk helps avoid peak mosquito areas and times, but dress and repellent are particularly critical for outdoor activities.

DRESS - When outside, try to wear long pants and a long sleeved shirt in light colors. I know it's getting hot, but if you can stand getting a little hot, it can reduce the number of mosquitoes that can reach your skin.

REPELLENT - The Center for Disease Control (CDC) recommends using a product registered with the EPA (Environmental Protection Agency) containing one of the following active ingredients: DEET, picaridin, or IR3535. In addition, some products containing oil of lemon eucalyptus (OLE) or its lab synthesized equivalent, PMD, are often encountered but not recommended. When using repellents:

• Read labels and follow instructions. Some products may be irritating to the eyes and skin for some people. Others, particularly OLE, may contain allergens. In addition, some products are not appropriate for children.

• Apply while outdoors and only to clothing and exposed skin. Do not apply repellent underneath clothing!

• Do not spray repellent directly into your face. Instead spray your hands with repellent and rub it onto your face.

• Do not allow children to handle repellents.

• When wearing repellent, wash hands before eating, smoking or using the restroom.

Many factors play into how long a repellent will last for a person. Some of these are:

• Products come in different concentrations (or percent of active ingredient). This is provided on the label.

• Some people are more attractive to mosquitoes than others (and no scientific research has proven that it is because of eating garlic, taking vitamin B, using tobacco products, etc.). A person's genetic code plays a large part on what makes a person so attractive to mosquitoes.

• Frequency of application and level of activity (sweating) determine how much repellent is on the skin.

As a word of caution, there are products that combine sunscreen and insect repellent. The CDC recommends that if you need sunscreen and repellent, that you choose two separate products. Sunscreen should be applied more often than repellents.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600.

McNeil Bat Flight Interpretation – Fridays at Sunset

Join us at the McNeil Bridge on Friday evenings at sunset to watch the Mexican Freetail bats fly out!

From April through September, Good Water Master Naturalists volunteer at the McNeil Bridge on Friday evenings to help educate the public about the bats. The McNeil Bridge has approximately 1.8 million bats in residence. The timing of the bat exodus from the bridge varies throughout the summer and is affected by heat and humidity. For best viewing, plan to arrive well before sunset and wait patiently to view the beautiful spiraling exit flights. The show can last for an hour or more.

Christi Gardner Earns 500 Hour Pin by Mary Ann Melton

Good Water Chapter's Christi Gardner earned her 500 hour pin in June. She says, "To get a 500 hour pin you have to have passion. Usually passion about one area. For me that area is bats. I have been learning and teaching about bats for over 30 years. My knowledge and love of bats has quadrupled since I started volunteering at McNeil Bridge and Congress Avenue Bridge in Austin. My knowledge has grown from working with people who are bat rehabbers at CAB. Learning from people who live with bats and work with them daily has been an eye opener." Congratulations, Christi!

MEET GOOD WATER MEMBERS

Mike Farley

I was born in Joplin Missouri in the early 60's. I was raised by my Mother, but would see my Father twice a month. I was heavily drawn into the natural world during my youth.

I moved to Texas in 1989. I am a machinist with nearly 35 years' experience, including 26 years at my current employment.

My wife Carol and I had our first child, a son, in 1997, and a daughter in 2000. We homeschool them and it keeps us very busy in addition to our regular jobs. We have been married 28 years.

My interests include Gardening, Food preservation, Geology, Archeology, Paleontology, Botany, Entomology, Aquatic systems, and Space exploration.

I am currently enjoying harvesting a variety of wildflower seeds for volunteer work and look forward to many future projects and meeting other naturalists.

Lisa Ward

As a mother, teacher, and scout leader, I have a passion for sharing my love and respect for the outdoors with children. I joined the Good Water Master Naturalist program in 2014 to develop my own knowledge and find new opportunities to foster others learning. The best part of class was getting home to share what I learned with my sons Kadin (8) and William (5).

Within GWMN, I enjoy the Junior Master Naturalist and summer camp programs, but much of my volunteer time is devoted outside to the BPSA 7th Trailblazers traditional scouting group. The group is open to boys and girls of all ages, and I support curriculum and activities for our Chipmunk (ages 3-5) and Otter (K-2nd grade) sections.

In my life outside of the naturalist realm, I teach online in the Information Technology program for Walden University, play viola in the Williamson County Symphony Orchestra, and enjoy running.

For information about the Good Water Chapter
http://txmn.org/goodwater or goodwatermn2@gmail.com