



GOOD WATER MASTER NATURALIST
WILLIAMSON COUNTY

RIPPLES

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UPCOMING EVENTS

- 6/11/15 NPSOT Meeting
- 6/22/15 NPAT Meeting
- 6/25/15 GWMN Chapter Meeting
- 7/9/15 NPSOT Meeting
- 7/13/15 NPAT Meeting
- 7/23/15 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

The recent Memorial Day weekend floods broke records in a number of Central Texas locations, but not in Williamson County. On September 8th-10th of 1921, the stalled remnants of a hurricane dropped 38.2 inches of precipitation in Thrall, TX in just 24 hours. At the Brushy Creek juncture along the San Gabriel, the water spread out over ten miles wide. The 1921 storm was the deadliest flood in Central Texas history with at least 215 victims. This catastrophe prompted many flood management measures still in place today. There are some first hand accounts of the 1921 San Gabriel River flooding on the Williamson County Historical Commission site link below.

http://www.williamson-county-historical-commission.org/The_Flood_of_1921_in_Williamson_county_texas.html

McNeil Bridge Mexican Free-Tailed Bats by Mary Ann Melton

The Mexican free-tailed bat (*Tadarida brasiliensis mexicana*) is the most common bat found in the state. The bats emerging from nursery colonies found throughout Central Texas provide great opportunities to see millions of bats depart their daytime roosts and head out for their nightly feeding. While many bat species roost in caves, Mexican free-tailed bats have adapted well to the urban environment, finding bridges to be an ideal environment to raise their pups. Bats live in the I-35 bridges at Wells Branch and Howard Lane in Pflugerville, the McNeil Bridge in Round Rock, and the Congress Avenue Bridge in Austin.

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.

After wintering in Mexico, Mexican free-tailed bats arrive in Texas from February to April. Roosts include mothers and pups with males living in separate, small bachelor colonies. A mother leaves each evening to search for food. A million bats consume 10 tons of insects each night, greatly benefiting local agriculture through pest control. When a mother returns, she locates her pup by scent and call even in densities of up to 500 pups per square foot. The pups begin their flights in late July. August offers the best viewing as the pups have been weaned and join the parents on the nightly flights searching for insects.

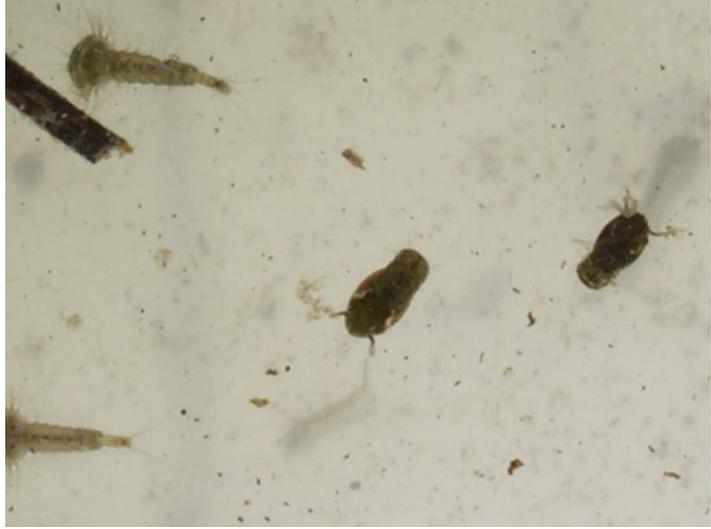
Bats are not a threat to humans, but there are some important safety issues. A bat on the ground or a bat that allows a human to approach is not a healthy bat and should not be touched because it can have rabies. It is also better to use low voices and avoid the use of bright lights or flash to avoid disturbing the emergence patterns.



Mosquitos by Wizzie Brown

Mosquitoes can be very irritating and disrupt outdoor activities. They also are able to transmit various diseases to humans and animals. Mosquitoes are known to transmit heartworm in dogs and they can spread encephalitis (including West Nile Virus), Chikungunya, dengue, yellow fever, malaria and filariasis among humans.

Most female mosquitoes require a blood meal for egg production whereas males feed on nectar and do not bite. Eggs can be laid on the surface of water or in dry locations that are occasionally flooded by water. Some eggs are able to remain dormant under dry conditions for several months. Eggs hatch into larvae, or wigglers. Mosquito larvae live in water and feed on organic debris or microscopic plants and animals. Larvae molt into pupae which do not feed. Mosquito pupae spend the majority of their time at the surface of the water, only moving when disturbed.



Many things can help to reduce mosquito problems around the home. Eliminate all sources of standing water. Containers such as watering cans, buckets and bottles can turn into mosquito breeding grounds. Water should be drained from birdbaths, rain barrels, gutters, flowerpots and pet dishes at least once a week. Children's wading pools should be emptied of water at least once a week and stored indoors when not in use. Tree holes should be filled in with sand or mortar, or drained after each rain. Leaky faucets and pipes located outside should be repaired.

Areas that cannot be drained, such as ponds, can be stocked with mosquito fish that eat mosquito larvae. Dunks can also be used in these areas. Dunks are a small, donut-shaped product that contains *Bacillus thuringiensis israeliensis*. The donut disrupts the life cycle of the mosquito and is non-toxic to humans, amphibians and fish. Dunks are not for use in drinking water sources.

Avoiding peak hours when mosquitoes are active is probably the best method to avoid being bitten. When outside, wear loose-fitting, light colored clothing with long sleeves & long pants. It is a good idea to wear repellent anytime you are outside for long periods of time (we have possible disease-transmitting mosquitoes that fly during the day as well as peak hours). Repellents containing active ingredients such as DEET or picaridin are best. Other repellents containing oil of lemon eucalyptus or other active ingredients can be effective to keep mosquitoes from biting when evening activities cannot be rescheduled, but may need to be reapplied more often. Other products such as citronella candles will also repel mosquitoes, but work best in enclosed areas.

You can find good information on insect repellents here <http://www2.epa.gov/insect-repellents>

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

Antelope Horn: Attracting Monarch and Queen Butterflies by Mary Ann Melton

Antelope Horn, *Asclepias asperula*, is one of several native milkweeds that are an important host plant for both Monarch butterflies and Queen butterflies. The flowers are an important nectar source for adult butterflies. I have had it show up as a volunteer wildflower on my property. It is a perennial that forms a clump that may be upright or sprawling. The mature plant will be between eight and twenty four inches tall. Leaves are long and narrow in irregular groupings between four to eight inches long. The flowers are pale greenish yellow with maroon edging and bloom in round clusters three to four inches in diameter. The five stamens are white with ball like anthers arranged symmetrically. They are a beautiful and unusual flowering plant. Mature seedpods resemble the horns of pronghorns (commonly called antelope.)



This native plant prefers rocky, sandy soils and grows in prairies, pastures, hillsides, brush lands, and woodlands. It requires a medium amount of water and full sun and prefers well-drained soil. The large taproot develops quickly, allowing the plant to flower even in years where rainfall is scarce. While it does attract aphids, the insects do not generally cause it problems. To get rid of aphids, spray the plant and aphids with soapy water or support the plant with your hand and use high-pressure water to force the aphids off.

In addition to the benefits to Monarch and Queen butterflies, Antelope-horn also attracts, bees, birds, and other butterflies.

The plant may be toxic to animals and possibly to humans. The toxicity varies seasonally as well as some plant parts are more toxic than others. The stage of growth also affects the toxicity. In addition, the plants absorb toxic substances: herbicides, pesticides, and pollutants. It is considered a deer resistant plant and livestock also leave it alone. Human sensitivity to the toxin varies with a person's age, weight, physical condition and individual reaction. Children may be more vulnerable because of their curiosity and their small size. The sap can cause skin irritation in humans.

Antelope horn also has some beneficial uses for humans. The sap has cardiac glycosides, which are allied to digitalins used in treating some heart disease. Native Americans brewed tea and used it as a tonic to strengthen the heart. Navahos used it to treat bites from rabid animals. During World War II, the silky down attached to the seeds was used for regular and aviation life jackets because milkweed silk is five to six times more buoyant than cork.

Antelope horn is usually grown from seed planted either in the fall or early spring. Seeds may be collected in June for the following year. It is also possible to propagate with root cuttings in fall or early spring. Seeds can be ordered from Native American Seed and plants may be available at Wrights Nursery in Briggs.

GOOD WATER MASTER NATURALISTS

Betty Jackson In Memoriam



Betty Jackson was a member of Good Water Master Naturalists' first class in 2010. She served on the hospitality committee for several years. She helped spread round bales filled with wildflower seeds at the Taylor Regional Park & Sports Complex to restore a prairie habitat there. After the Bastrop fire, she participated in the Healing Hands – Healing Lands project working with school children to create seed balls for plant restoration in the burn area. She regularly volunteered at the schools in Taylor providing nature education.

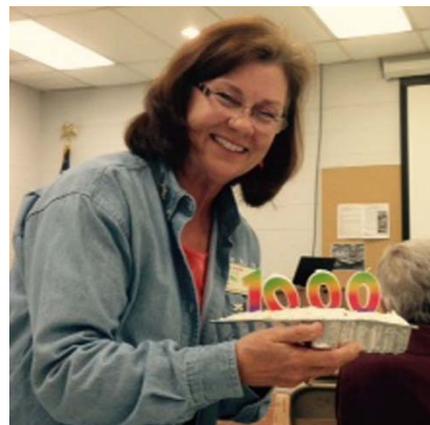
Pam Goolsby's 1000 Volunteer Hours

“Try things, find out what you love to do, and do those things. Don't be afraid to say 'yes' even when you don't know that much because you'll learn by doing. Don't be afraid to say 'no' and just stick with the things you love.”

Pam Goolsby, a member of the Good Water Master Naturalist Spring 2011 training class just logged 1000 volunteer hours. An avid birder, Pam met several master naturalists while serving as a guest host and guide at Lockhart State Park. Excited about the learning and volunteer opportunities the program offered, she signed up for a training class after settling in Liberty Hill.

Pam has earned hours as a board member, helping with youth programs, working at Berry Springs Park and Preserve, supporting the McNeil bridge bat booth, doing citizen science, and volunteering in dozens of other ways. Despite initially thinking the quantitative data collection for citizen science projects sounded a bit boring, Pam gave it a try and was surprised to find a passion for these projects. She especially enjoys bird counts with contributions to eBird and iNaturalist. Last year, she started the Team Bluebird group at Berry Springs.

Pam credits her success to her many friends in Goodwater who have been mentors, colleagues, and teachers. She is excited to serve in those roles for others and says, “There is so much to do and to experience in our beautiful patch of Texas. I recommend anything that makes your heart beat a little faster.”



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