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Good Water RIPPLES

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Fall Training Field Trip by Mary Ann Melton, photos by Dave Gage

The Good Water Fall Training Class explored Williamson County in an all day field trip. Williamson County has three ecosystems: the Edwards Plateau, the Blackland Prairie and the Post Oak Savannah.

The field trip started at Tejas Camp at the west end of Lake Georgetown. The one-hour hike observed the Balcones Fault, the riparian zone of the San Gabriel River with its flood plain, and many of the plants typical of the Edwards Plateau – our beloved Texas Hill Country.

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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)

UPCOMING EVENTS

01/12/17	NPSOT
01/23/17	Austin Butterfly Forum
01/26/17	GWMN
02/09/17	NPSOT
02/13/17	WAG
02/20/17	Austin Butterfly Forum
02/23/17	GWMN

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!

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Williamson County Fall Exploration Field Trip Continued by Mary Ann Melton, photos by Dave Gage

The group boarded a bus and rode over to Lake Granger and visited two examples of the prairie ecosystem – the Chalk Prairie and the restored prairie east of the dam. The Chalk Prairie is a prairie remnant on land that was too rocky to be tilled for crops. The prairie east of the dam was replanted as a seed bank. There is an area where the seeds have drifted that is forming a lovely natural prairie complete with a gilgai – a depression in the land that forms naturally in prairies and collects water where grasses that need more moisture grow.

A picnic lunch at Friendship Park gave everyone a chance to pause and enjoy the beautiful lake before departing in the bus to the Post Oak Savannah south of Thrall. The route showcased the croplands and pasturelands in the rich blackland soil. As the bus approached the Post Oak Savannah – you could see the ridge with the forested area that signaled the change of ecosystem. The tall majestic post oaks are one of the predominant plants in the Post Oak Savannah along with yaupon holly, winged elm, black jack oak, and more.

Along the route, each small town and the remnants of towns long gone were discussed. The day ended back at Tejas Camp after having seen many of the wonders in Williamson County.

Pecan Weevils by Wizzie Brown

Adult pecan weevils are brownish beetles with a long snout. Larvae are a legless, creamy white grub with reddish heads.

Adults, male and female, cause damage by feeding and/or laying eggs in pecans. Adults typically emerge from the soil, where they have spent anywhere from 2 to 3 years, in early August. Cells are deep within the soil, usually from 4-12 inches below the surface. Drought or hardened/ compacted soil can delay emergence of the beetles. Adult emergence can last over several weeks.

Once merged from the soil, adult weevils move to pecan trees where feeding and mating begin. Females do not lay eggs until 5 days after they emerge from the soil. To lay eggs, the female chews through the shuck and shell to excavate a small area in the kernel. She then lays 3-4 eggs per nut, avoiding nuts that already have eggs. Females live about 3-4 weeks and can lay up to 75 eggs in that time.

Larvae hatch and feed within the kernel. Once larvae are fully developed, they chew a hole through the shell and shuck and drop to the ground to burrow into the soil. About a year later, the majority of the burrowed larvae pupate. Adult pecan weevils emerge from the ground after another year, resulting in a two year life cycle.

Texas A&M AgriLife Extension Service is seeking your assistance in locating possible pecan weevil infestations in Bexar, Hays, Comal and Travis counties. Pecan weevil is a serious pest of pecan and current distribution information for the four county area is only centered around the Wimberley area in Hays county. However, it is felt that other infestations could be within other counties. An infestation of this year's pecan crop can be identified by having 2 to 4 legless, dirty white grubs within the pecan shell or by pecans that have a small round BB size hole in the shell.

If anyone finds a suspected infestation, pecans showing signs of an infestation can be taken to your local county Extension office or mailed to: Bill Ree, P.O. Box 2150, Bryan, TX 77806-2150 for conformation. This distribution information is for educational purposes. Your assistance in this search is greatly appreciated.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600. Check out my blog at *www.urban-ipm.blogspot.com*

Barred Owl – Identifying Distinctive Hoots by Mary Ann Melton

I love to teach children about the Barred Owl, because they love to mimic the distinctive call. The barred owl's call is much louder than the Great Horned Owl and can usually be heard very clearly. It is fun to hear a pair calling back and forth. The call sounds very much like "Who cooks, who cooks, who cooks for you all." To hear the call, visit Cornell University's All About Birds website:

www.allaboutbirds.org/guide/Barred_Owl/sounds

Audubon.org describes the call as: "hoo, hoo, hoo-hoo; hoo,hoo; hoo, hoo-aw!" It is actually fairly easy to learn to make, and I've had barred owls answer me back.

Barred Owls have a round head with no ear tufts and large brown eyes. The eyes are in the middle of round disks with dark eyebrows. They get their name from the various barring on their body - vertical brown bars on a white background on their under part, horizontal bars on the upper breast, and barring on wings and tail.

While Barred Owls are more frequently heard than seen, but in Hutto, I've seen them near Brushy Creek. One sighting was near the bridge on CR 137 and the other was along FM 685. Barred Owls prefer densely wooded areas such as wooded river bottoms or wooed swamps. They are also seen around the San Gabriel River and at wooded areas near Lake Granger. Their range extends through out most of the United States north and east from Texas. They are not found in the most of the western states, but they have extended their range into the Pacific Northwest and parts of Canada. Barred Owls do not migrate. Out of 158-banded birds, none had moved more than 6 miles from where they were banded. However, if a Great Horned Owl is present, a Barred Owl will move to a different part of its territory.

Barred Owls nest in existing tree cavities usually 20-40 feet high in a large tree. Males and females court by bobbing and bowing their heads, raising their wings and calling while perched close together. They male may feed the female during the courtship. They sometimes use stick platform nests built by other animals or man made nesting boxes. They have one brood per year with a clutch of 1-5 eggs. Eggs are pure white with a rough surface. Eggs are incubated 28-33 days. The male brings food while she is incubating the nest and for the young. Chicks are born helpless, eyes closed, with and covered with white down. They fly when about 6 weeks old.

Their diet is varied and includes many small animals such as squirrels, mice, rabbits, birds, amphibians, reptiles and invertebrates. They scan for prey on an elevated perch, but may also hunt in flight. Sometimes they perch over water and drop down or even wade in shallow water pursuing fish and crayfish. Small prey are swallowed whole, but break larger prey into pieces. They sometimes store prey in their nest, a crop of a branch or the top of a snag. While they hunt mostly at night, occasionally they feed during the day.

Leaf Litter – A Valuable Resource by Mary Ann Melton

In Central Texas, late November and early December are the peak of the autumn leaves. They are beautiful to watch as the winds detach them and they fall gently to the ground. They are fun to walk through and children love to play in the crisp, crunchy leaves.

Many homeowners dread the chore of raking and bagging the leaves that cover their lawns, but in reality leaf litter is a valuable resource with important nutrients for the soil in yards and flowerbeds. In rural areas, it may be easier to let the leaves remain and do their job. In urban areas, homeowners often think they should remove the fallen leaves for a tidier landscape or to satisfy Homeowner Association Rules. However, rather than raking and bagging leaves, it is better to mow over them with lawn mowers and leave the remnants to fertilize the grass. As the leaves decompose, they will actually improve the soil for a healthier lawn. In addition the nutrients feed necessary microbes in the soil. Homeowners can also rake the leaves into their flowerbeds for free mulch. Working fall leaves into vegetable garden soil provides benefits of improving the soil texture and workability as well as adding important nutrients.

Another good choice is to create leaf piles and allow them to decompose for future use as a soil additive to improve structure and moisture retention. Using both leaves and grass clippings to create compost will provide nutrient rich material for spring gardening.

Leaf litter is natural mulch that will suppress weeds and fertilize the soil. Leaf litter also increases moisture by absorbing and shading rainwater from the evaporation effects by sun and wind. Leaves also help keep rain water on your yard by slowing runoff allowing more rain to be absorbed into your soil rather than running off into storm drains. This moisture is important to allow natural bacteria and fungi to convert the decaying leaves into nutrients that will help your grass, trees, shrubs and flowers to be healthier. The nutrients from the decaying leaves promote root growth. Mulching with fallen leaves keeps the soil temperature cooler in the summer and warmer in the winter. Leaf mulch prevents the soil surface from cracking crusting, compacting, and eroding from runoff.

Fallen leaves are also important for various animals. Turtles, toads, birds, mammals, and invertebrates use leaf litter for food, shelter and nesting material. Certain species of moth and butterfly pupae winter in the fallen leaves to emerge in the spring. Insects and worms that feed and overwinter in the leaf litter also help to break down the leaves and activate the soil microbes. Many birds will forage through leaf litter looking for insects or fallen seeds.

According to the US Environmental Protection Agency, 13% of our solid waste comes from leaves and other yard debris, roughly 33 million tons a year. Yard trimmings and food residuals are 24% of the US municipal solid waste stream not only filling landfills but also creating methane gases. Methane is a greenhouse gas that is 23 times more efficient at trapping heat than carbon dioxide. Landfills contribute 34% of all man-made methane released into the atmosphere in the US. So . . . using your leaf litter is also an environmentally wise thing to do.

Meet Good Water Members

Kathryn Martin

Kathryn is originally from Northwest Arkansas. She attended college at the University of Arkansas in Fayetteville, AR where she earned a degree in Biology. Following college, she moved to Texarkana with her husband Joel. Professionally, Kathryn has worked in the water and environmental quality fields. In 2013, Kathryn and Joel moved to Springfield, MO where Kathryn attended Missouri State University and earned her Master's degree in Biology. She studied native freshwater mussels and their upper thermal tolerances. Also while in Missouri, Kathryn began volunteering as a Missouri Master Naturalists and as a docent at the local native butterfly house. Kathryn loves being outdoors, gardening, traveling, and cheering on the Arkansas Razorbacks.

Joel Martin

Joel has a degree in chemical engineering from the University of Arkansas. He currently works with area companies to use less water in their processes and reclaim used water. This dovetails nicely into his water focused Master Naturalist interests. Joel likes to go on multiday canoe trips and says some of the best friends he has made has been getting to know people around a fire. He has enjoyed learning about native plants since moving to Round Rock in May. "It is such a different and wonderful biome in central Texas from what I grew up with in Northwestern Arkansas." In his free time he enjoys listening to live music, sports, and brewing beer when he gets a free weekend.

Youth Activity Update by Lisa Ward

Join us at the Round Rock Library for nature lessons and hands on activities for elementary students. On December 19th at 4:30pm, we will explore leaf litter. On January 30th at 4:30pm, we will be making edible soil. All are welcome for this learning fun!

The Junior Master Natualists continue exploring Earth's Wonders with odonates, leaf litter, aquifers, and invasives.

For information about the Good Water Chapter
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