



Ivy Doak, Abigail Miller and Martha Peet discuss their water sample findings.

On Friday, June 10, 2016, sixteen Elm Fork members and 5 guests attended the John Bunker Sands Wetlands field trip. The following members carpooled or drove to Seagoville, Texas: Val Beardsley, Becky Bertoni, Sheri Bratton, Sharon Clark, Jan Deatherage, Ivy Doak, B.H. Hammon, Rita Lokie, Vin Merrill, Abigail Milller, Tom Mills, Marissa Neil, Martha Peet, Ellen Ryfle, Jonathon Smith, and Chuck Thetford.

The Wetland Center resides in the middle of the East Fork Wetland Project located about 25 miles southeast of Dallas, Texas. The Project was designed to divert a percentage of water from the East Fork of the Trinity River into the approximate 1,840 acre man made wetland. There it is cleansed by nature for about a week using a variety of aquatic plants and animals. The water is then pumped back to Lake Lavon for storage, treatment, disinfection and for municipal use by 1.7 million people living in north Texas. It is one of the largest constructed wetlands in the United States.

In addition to the water treatment facility, the Wetland Center and Boardwalk provides education, research, wildlife observation and community gathering opportunities. The Center has partnered with regional school districts, wildlife and conservation organizations, and research institutions to develop premier environmental education programs, specializing in Middle School and High School field studies. Students participate in workshops, conducted by the Center's Educators, and learn about observing and measuring water quality, about using appropriate tools to collect, record and analyze information on water quality and macro invertebrate populations, conduct laboratory and field investigation on water quality and wildlife management, and predict the effects of changes in ecosystems caused by living organisms.

Two of the Center's Educators guided the EFCMN's and guests along one of the many boardwalks discussing the various water filtering plants (reeds, Pickle Weed and cattails, etc.) We then collected water samples which were transported back to the Center's lab for a workshop on using macro invertebrates and aquatic larvae as indicators of water quality in the wetlands. We found freshwater shrimp, water boatman beetles, scud, whirligig beetles, mayfly nymphs', water mites and Ellen Ryfle found an aquatic worm.

After the workshop, we moved into the Center's Gallery where Director John DeFillipo, presented a history and overview of the John Bunker Sands Wetlands project.



Sharon Clark practicing with her eye loupe.

If you were not able to attend the field study trip I encourage you to visit the center in the future. Check out the web site, www.wetlandcenter.com for information and hours open to the public.

Thanks to all who attended the field study trip and be sure to report your 3 hours of Advanced Training in Volunteer Management System, (VMS).



B.H. Hammon and Chuck Thetford identifying macro invertebrates.



Sheri Bratton, Jonathan Smith and Becky Bertoni getting a closer look.

Article and photos from Rita Lokie

Projects on the Move—City Hikes

*Information and photo from
Susan Pohlen*

Maria Freelove was so impressed with her hiking experience at Clear Creek Natural Heritage Center on May 21st that she asked if one or two Master Naturalists would join her young scouts at Hills and Hallows in Denton.

Hills and Hallows was completely off my radar, so I asked a few questions and learned that it is a scout camp in South Denton. After driving out to confirm the location and get a feel for the camp, I determined that it could indeed fall under the umbrella of a Denton City Nature hike activity. Dave Ford and I joined the scouts on June 15th and tagged along on three short hikes to point out several plants, shrubs, and trees.

It was rather surprising to Dave and me that the camp had very little plant diversity. Even poison ivy, which is quite prevalent this year, was nowhere to be found along our route. However, you can tell from this photo that Chinese Privet is the dominant plant species. There is so much in fact, that we suggested they create a maze. I heard one dad say to another, "Eagle Scout project." Don't worry though; we did our best to explain all the potential downfalls of so much Chinese Privet. But complete eradication on this site is not feasible, and it does provide some privacy and a sound barrier from nearby traffic.

“It was rather surprising to Dave and me that the camp had very little plant diversity.”



The human spirit needs places where nature has not been rearranged by the hand of man. Author unknown

Never Underestimate the Power of a Dedicated Master Naturalist

*Information and photos from
Susan Pohlen*



“It’s always nice to know that we naturalists are making a difference,” says Susan Pohlen



Susan Pohlen stands with her friend, Nancy Legler, in Nancy’s yard in North Denton following her yard being designated “yard of the month”. Nancy has been slowly removing her St. Augustine grass and putting in hardier, mostly native plants. She told the awarding committee that she was strongly influenced by her Master Naturalist friend. Many of the plants in her newest bed came either in the form of transplants or seeds from Susan.

Excerpt from “What does it mean to be native?”

By Bill Ward on April 16, 2009

“From my perspective as a geologist, I might define Texas natives as descendants of those plants which were growing naturally in this state at the beginning of the Holocene (Recent) Epoch, which began about 8,000-10,000 years ago, just after the last Ice Age. Of course, it might be difficult to tell if these include naturalized exotic plants introduced by ancient Asian peoples who migrated to the American continents during the last glacial period (Ice Age).”

<http://npsot.org/wp/story/2009/271/>

KANSAS GAYFEATHER

(*Liatris pycnostachya*)



Kansas Gayfeather up close

permission from Highway Dept to save the plant. Lo-n-behold, we found that the Friday road crew had parked all massive equipment and bulldozer within 5 feet of the referenced *Liatris* plant on Friday afternoon. We were in disbelief. I began digging in the rock-hard red clay with hopes of salvaging at least one of the plants. I managed to get two plants out with my sharp-shooter shovel and if there were more remaining in that soil, we decided they would just have to go under the blade. (There are two hind sights to this story: one is that I wish I had had strength and fortitude to keep digging in order to salvage possibly other plants and, two, is that neither of us even thought to take a picture of the event with huge construction equipment looming over the brink-of-death plants).

This is the giant among the *Liatris* wildflowers for sure. In our North Central Texas area we can find *Liatris aspera*, *L. elegans*, *L. mucronata*, *L. squarrosa* and *L. pycnostachya*. However, in my opinion, we got slighted on the *pycnostachya*. It's been sighted sparsely in our immediate area but is more common to the south and southeast of us. I'm aware of plants at Lake Ray Roberts State Park, but have no confirmation of plants at LBJ Grasslands.

“L. pycnostachya is not your normal Liatris even though it is a perennial with a corm-like root structure, ...”

In 2003 Shirley Lusk lured me to one of her secret 'finds' north of Denton for the purpose of digging a *pycnostachya* plant because it was in the pathway of the oncoming road construction crew. OK, I'm game, so she led me to the site near Mountain Springs on a hot Saturday afternoon where she had gained



Shows the perspective in height as Dorothy stands alongside