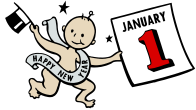


Texas Master Naturalist, Elm Fork Chapter

January 2013

Volume 14 Issue 1



Newsletter

Susan's Perspective – January 2013



Special points of interest:

- * Changing of the guard—notes from incoming president
- * Run away zebra mussels
- * Prairie grasses losing ground
- * New “digs” for Elm Fork Chapter
- * Our littlest Master Naturalists



Photo courtesy D. Thetford

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When I joined the **Elm Fork Chapter** in 2007 I had no idea how much it would impact my life. We had just purchased a wooded lot in Northern Denton County, and like so many homeowners we were about to leave our mark on the Eastern Cross Timbers. As a Texas transplant I was not familiar with the ecoregions of North Texas, and I couldn't identify more than a couple of trees growing on the property. I'll be the first to tell you that I still have a lot to learn. However, being a member of the Texas Master Naturalist program has made me a better landowner and a better steward of the land in general.

In the years since joining the Elm Fork Chapter I've been the Lake Ray Roberts Project Manager, first chapter Member-at-Large, Project Coordinator, Vice President, and now President. Several members have approached me in the last few years and commented that I must really like the administrative aspect of our chapter. When I inquired why they reached that conclusion, the answer was surprising, “Because you do it all the time.” The truth is that I believe I'm a better person because I'm a Master Naturalist. That makes the program valuable to me, so I want to help ensure its survival and growth.

I believe most of you also feel very strongly about the Master Naturalist program and our chapter. In fact, lately there seems to be a renewed energy in the chapter. Perhaps this new energy will be the catalyst for you to get more involved in the health and direction of Elm Fork Chapter now and in the future. I invite you to join me and the other Board members as we embark on our journey this year.

Susan Poblen, President

Elm Fork Chapter recognizes recipients of service awards prior to year-end festivities



**Many awards
were given for
volunteer
service**





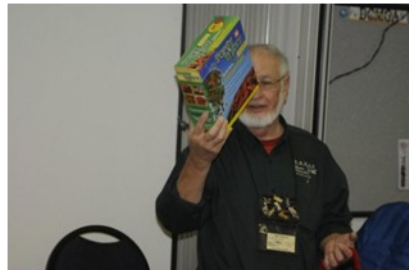
And completing
questionnaires was
part of the mix





The party gets
under way







Then forward to
delicious food and
friendly
conversation



Merci

Jeri Marold and Linda Cox for
organizing the party and
coordinating the food with
assistance from Janet
Laminack and Donna Wolfe —
you're keepers!



All photos courtesy—
Owen Richards

Just because ...



Kestrel by Al Key via Susan Pohlen

Several months ago I made a plea for photos that I could keep in my "stash" and I received SO many gorgeous photos that it has been difficult to choose which to put in each newsletter. Many have been used and a number I am still holding for future use. I just wanted to share a few with you.

In this New Year as you are out and about Master Natural business—or just for fun—take a photograph and send it to the newsletter so we all may enjoy it!



Owen Richards

Butterfly—Paula McCormick



Wanda Odum, Newsletter
wodum10043@aol.com or
wodum10043@reagan.com

From Jan Hodson

Our two newest Junior Master Naturalists!

Tayla and Jabin Ward joined the JMN program last year as members of the Nature Club. Some of their service hours included volunteering at their church.

Congratulations Tayla and Jabin!



Resource Move

I want to send out a thank you to **Beverly Lyttaker, Diana Hatch, and Marian Kester** for helping me with packing and inventory of the resource room.

You ladies are priceless!

Jan Hodson

From the courthouse

Thank you **Leadership Advisory Board members, EFCMN board members, and DCMGA board members** for attending the Commissioners Court breakfast and interpretive event on December 18! Here's a photo taken by one of our 4-Hers, Kaitlyn Kilpatrick of Linda Williams (LAB president) presenting a check representing the dollar amount of volunteer service to Judge Mary Horn. This year's check represented **over 51,000 hours** — up again from last year!



Thank you for your service throughout the year; it makes a difference to Denton County!

Janet Laminack

County Extension Agent—Horticulture

Texas A&M AgriLife Extension



Photo—Denton Record Chronicle

From Peg La Point

Amy Benson-U.S. Geological Survey

Zebra Mussels in the Upper Trinity River Basin

At our **February 21** meeting, U.S. Geological Survey researcher **Christopher Churchill** will discuss the invasive zebra mussel and its progress through North Texas.

The definition of an “invasive species” often includes a non-native organism that incurs substantial economic (human) or ecologic (environmental) harm. In the Upper Trinity River Basin, we are currently faced with several invasive species and others are spreading towards our region. These species include aquatic and terrestrial plants and animals. Invasive species are often difficult, if not impossible, to eradicate.

Environmental impacts of invasive species include alteration of community composition, biodiversity, ecosystem functioning, and ecosystem services. Invasive species cause billions of dollars in damage each year in the US alone. A substantial portion of the associated expense is a result of *ex post facto*, “after the fact,” control measures. This is especially the case for aquatic invasive species.



The zebra mussel (*Dreissena polymorpha*) is an invasive freshwater bivalve. This species has specific life history characteristics that allow it to spread and reproduce quickly. The species has spread across half of the North American continent in less than 20 years. Zebra mussels were first discovered in Lake Texoma in 2009. They have spread from the Red River basin into the Trinity River basin (Sister Grove Creek, Lake Ray Roberts, and Lake Ray Hubbard). The future range of this species is in question, but may include most surface waters in Texas.



The definition of an “invasive species” often includes a non-native organism that incurs substantial economic (human) or ecologic (environmental) harm

Christopher Churchill was born in Wichita Falls and is married with two daughters. He received his Bachelor’s and Master’s degrees at Midwestern State University with a major in biology and a minor in chemistry. His thesis research was in the field of molecular biology, focusing on snake venoms.

In 2009, Christopher began a Ph.D. degree program at UNT where his area of research is invasion biology using the zebra mussel as a study organism. In his position as a student biologist with the USGS, he has designed, implemented, and become the Project Chief for the Zebra Mussel Monitoring Program for North Texas (ZMMP). The ZMMP is an ongoing regional program designed for early detection of new zebra mussel invasions and for monitoring of established zebra mussel populations in the North Texas area. The ZMMP currently covers nine lakes, four river segments, a water treatment plant, and a raw water transfer pipeline.

Benthic Monitoring and City Nature Hikes
—this month's featured projects—

PROJECTS CORNER



If you would like to see your project featured, please send your information to the newsletter as we would like this to be a monthly section. What better way to educate members on what the Chapter is doing and help them choose where to serve?



From Adelaide Bodnar

Benthic Monitoring Project-2012

The **Benthic Monitoring Project** was initiated in 2001 and is coordinated with the City of Denton Watershed Department as part of their overall Water Quality Monitoring program. Each month we monitor four stream sites covering the three watersheds that run through the city.

The terms benthic and benthos are derived from the Greek for “depths of the sea”, but are also used in freshwater biology to refer to the zone and macroinvertebrates at the bottom of freshwater bodies of water, including both standing and running waters in lakes, rivers and streams.

Aquatic macroinvertebrates are good indicators of stream quality because they are affected by the physical, chemical and biological conditions of the stream, are sensitive to the effects of pollution and are relatively easy to sample and ID.

At each site samples are collected using D-frame dip net from a riffle, a pool and a bank side. Each sample is transferred to white tray and participants then spend 30 minutes picking out insects and putting them in alcohol-filled containers for later identification.

At the same time we collect and test water samples for pH, Dissolved Oxygen and Conductivity and as well as making observations about the stream condition, weather and temperature. These reports go to the City of Denton Watershed department before being forwarded to Texas State University, along with reports from about 800 other volunteers in the state.

The following week volunteers meet in the City of Denton Laboratory and using microscopes, manuals and books identify the benthos. The insects are identified down to Family level in scientific classification. We then count the number in each family and use this information to calculate an Aquatic Life use for each site.



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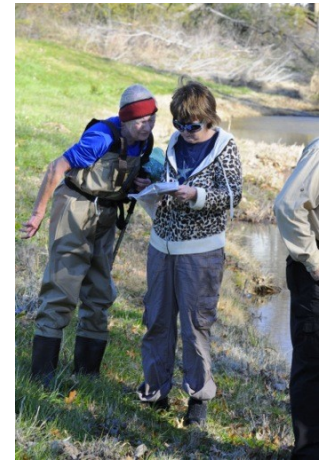
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Photo legend

1. Collection of a bank sample using a D-frame kick net-Adelaide Bodnar and Vin Merrill
2. Transfer of sample from net to tray
3. Collection of a riffle sample-Vin Merrill
4. Collection of a pool sample-John Bodnar
5. Don Morrison and Dale Meyer pick insects
6. Larry Brennan, Kay Crowe, Vin Merrill and John Bodnar pick insects
7. Water turbidity is measured using a Secchi Disk
8. Samples for Dissolved oxygen are collected
9. Field observations are made by Faith Fielder and Adelaide Bodnar
10. Testing of Dissolved Oxygen samples
11. Conductivity measurement is made by Faith Fielder
12. Don Morrison, Dale Meyer, Raquel Bryson, Abigail Miller, Vin Merrill and Marilyn Turnage pick insects
13. Don Morrison separates insect Families in the laboratory.
14. Don Morrison, Larry Brennan, Adelaide Bodnar and Kay Crowe
15. Don, Larry, Adelaide and Vin
16. Vin, Adelaide, and Larry



9



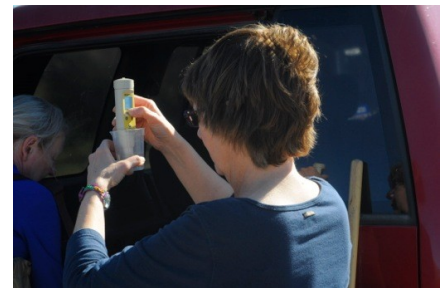
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CITY NATURE HIKES MASTER NATURALIST PROJECT #080313

If you love to hike on dirt or mud trails in hot or cold weather and expound of everything in trail's-view, you may want to volunteer your energy and knowledge to this project.

This is a Master Naturalist (MN) project that evolved without premeditation or planning, just evolved. Here's a little background to trigger your interest.

About 7 years ago, while Tracy Durmick and I were working together on the Calhoun Elementary School Outdoor Learning Center garden, we had lengthy discussions about her desire for a job utilizing her studies and training in Parks & Recreation activities. With proper credentials, she landed a job with City of Denton Parks & Recreation Department, in October 2006, as the Outdoor Recreation Coordinator.

She formulated her ideas into a diversified plan for the City, and asked if I would help with her hikes. Thus, I volunteered to invite my Master Naturalist friends to help, with the stipulation that she promote 'Master Naturalist' in each promo. A deal.

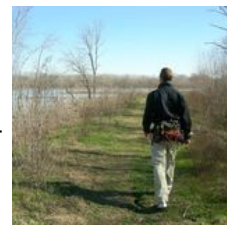
The Parks Director requested Tracy to promote the city's two newest parks, Cross Timbers Park and Clear Creek Natural Heritage Park as part of her overall plan. She agreed and we unfolded a plan for hikes.



1 I invited MN friends who were knowledgeable in various trail-hiking subjects, and who were also interested in hiking through the parks. The chemistry worked.

Dave Ford, as a member of this committee, and as current MN Project Leader, recommended that this monthly activity should/could become a Master Naturalist Project. And, with his encouragement and guidance, the committee evolved into a Project named, **City Nature Hikes**, a project number, #080313, and a leader, Dorothy Thetford.

I then invited various knowledgeable (outsider) friends to make trial hikes with the committee to further train us in various subjects, i.e., birds, trees, erosion, soil, prairie, rookery, watershed, etc. Our committee evolved into an interesting, fun, cohesive group of 'teaching-docents.'



2

Tracy and I collaborate on dates and subjects for her 8-10 yearly hikes, each intermingled among her various other outdoor recreational activities. We've advertised the hikes with special interests, i.e., Tree ID, Wildflowers, Birding, Animal Tracks, etc. Tracy has recently added her newly-created, after-school program called, The Natural Guard Project. These groups now include the Denton County Probation Department students and the International Baccalaureate Science Club students of Calhoun Middle School.

Our **City Nature Hikes** are advertised in the city's PLAY Magazine, which is produced and distributed to Denton citizens twice a year. Registrations for the hikes go directly thru the city's Parks Department, and, during the past 6 years we've guided hundreds of city and county hikers, girl scouts and boy scouts who are working on individual merit badges, UNT, TWU and Denton high school science clubs, garden clubs and special interest groups.

The purpose of our committee continues to focus on "introducing the public to its city parks."

If you feel you are knowledgeable in one or more 'trail' subjects, and you're interested in 'hiking and teaching' simultaneously, let me know. Are you a 'tree' teacher, a 'bird' teacher or possibly a 'wildlife habitat' teacher? We have a place for you!

Respectfully submitted,

Dorothy Thetford, Project Leader

Dorothy & Tracy

City Nature Hikes Committee
MN Project # 080313
dorothythetford@ymail.com



Photos: (1) Cross Timbers;
(2) Clear Creek—city of
Denton parks

A WELL-TRAINED MASTER NATURALIST PROBABLY KNOWS . . .

In 1971 Texas designated Sideoats grama as the official state grass. This grass is a native species of prairie grass that is found on rocky hillsides and dry, open grassland; and is a nutritious food for foraging and livestock. The name “side-oats” refers to the small oat-like seeds that uniformly hang down on one side of the seed stem. Look for flowers of bright purple and orange.

BUT DID YOU KNOW . . .

In 1972 Oklahoma designated Indian grass as the official state grass. This is one of the major grasses that covered the prairies before the settling of the state. It is a perennial bunchgrass, prominent in the tallgrass prairie ecoregion, along with big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scapanium*) and switchgrass (*Panicum virgatum*). Indian grass can grow as tall as 8 feet with flowers of gold and purple.



http://www.epa.gov/glnpo/image/viz_native2.html

Symbol: SONU2
Group: MONOCOT
Family: Poaceae
Duration: Perennial
Growth Habit: Graminoid

Indian grass—*Sorghastrum*



Larry Allain @ USDA-NRCS
PLANTS Database

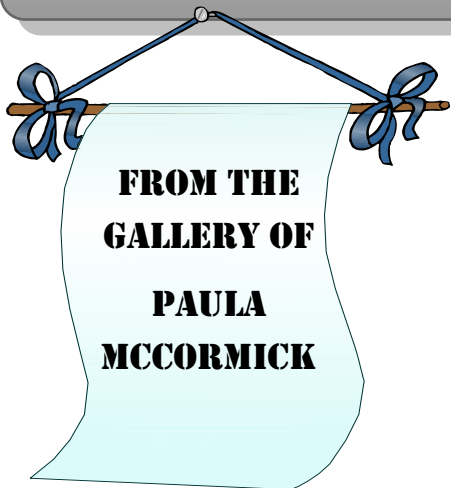
Symbol: BOCU
Group: MONOCOT
Family: Poaceae
Duration: Perennial
Growth Habit: Graminoid

Sideoats—*Bouteloua curtipendula*

“The North American prairie is one of the most endangered ecosystems on earth. The grasslands of North America began to form about 20 million years ago, but in some areas up to 99 percent of the prairie has been destroyed (in just the last 125-150 years).”

http://www.statesymbolsusa.org/Texas/Grass_Sideoats_grama.html

“FIELD NOTES IN FOCUS”



Black and yellow Argiope



with prey

Featuring Master Naturalist photographers—
flora and fauna as you see them

**Joseph A. Carroll Courts Building,
401 E. Hickory Street, Suite 125, Denton, TX
76201-9026**

This is the new semi-permanent home of **AgriLIFE Extension office** and the **Elm Fork Chapter**. Chapter will meet here beginning **February 2013**. See general driving instructions below:



Information and photo taken from
<http://dentoncounty.com/locations/ccb.asp>

Driving Instructions:*

From Dallas:

1. From I-35E traveling North take the Ft. Worth Dr. exit, Turn right at light.
2. Ft. Worth Dr. turns into Carroll Blvd. at the light for Eagle Dr.
3. Turn right on Mulberry.
4. Make an immediate left into the Parking Lot of the Joseph A. Carroll Bldg.

From Fort Worth:

1. From I-35W traveling North, merge with I-35E South.
2. Take the Ft. Worth Dr. exit, turn left at light.
3. Ft. Worth Dr. turns into Carroll Blvd. at the light for Eagle Dr.
4. Turn right on Mulberry.
5. Make an immediate left into the Parking Lot of the Joseph A. Carroll Bldg.

***If parking lot is full, additional parking is available
in the lot across Mulberry (south side.)**



Trivia

Judge J.A. Carroll's
Residence (ca. 1870's)

http://mikecochran.net/Joseph_Carroll.html

Texas Master Naturalist
Elm Fork Chapter
Texas AgriLIFE Extension

Joseph A. Carroll Courts Building
401 E. Hickory Street, Suite 125, Denton,
TX 76201-9026

940-349-2883

*Education, Conservation,
Preservation, Restoration*

We're on the web

www.txmn.org/elmfork

OUR MISSION . . .

"to develop a corps of well-informed volunteers who provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within our community"



Sharon Barr wears many hats along with a friendly smile! Here she has donned her "hiking hat" as she leaves from City Nature Hikes after volunteering her services. Sharon's pioneering work in setting up our current webpage is greatly appreciated. *Photo—courtesy D. Thetford*

Members of the Board 2013

PRESIDENT—Susan Pohlen

IMMEDIATE PAST PRESIDENT—Rob Roy

VICE-PRESIDENT—Van Elliott

SECRETARY—Judi Elliott

TREASURER—Jeri Marold

CLASS REPRESENTATIVE—Martha Peet

MEMBER-at-LARGE—Marian Kester

COMMITTEES:

Communication:

Martha Peet, Monica Chaffin,
Wanda Odum

Projects: Dale Meyer

Publicity: Jan Deatherage

Training:

ADVISORS:

Janet Laminack, Extension Agent

Kelly Lauderdale, TPWD

Monthly Chapter Meetings

9:30 a.m. preceded by a social time at 9:00 a.m. on the third Thursday of each month.

Chapter meetings are open to the public.

Next Annual Meeting January 17, 2013

Installation of Officers and Awards

Location: **Steven E. Copeland Government Center, 1400 FM 424,
Cross Roads, TX 76227**

<http://dentoncounty.com/Locations/GetLocationMap.asp?BCode=51>

February 21 meeting—Christopher Churchill on Zebra mussels in Upper Trinity River Basin

Location: **Joseph A. Carroll Courts Bldg., 401 E. Hickory Street,
Denton, TX 76201-9026**

Board Meetings

The Board meets each second Thursday of the month at 9:30 a.m. The Board last met January 10, 2013. Next meeting February 14, 2013.



Board meetings are open to members.