

# The Midden

Photo by Barbara Rabek

Galveston Bay Area Chapter - Texas Master Naturalists

Dec 2010

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## President's message by Diane Humes, President 2010

Our Chapter members have lots to celebrate. Texas Master Naturalists now belong to 42 chapters in 178 counties throughout the state. The total contribution of the 5900+ volunteers is thought to amount to \$4.64 million for last year and \$23 million since the program's inception. Our Chapter's contribution is quite significant; we account for fully 10% of the total volunteer hours and 7.5% of the advanced training hours.

Volunteer hours are especially important for funding the Master Naturalist program and others as well. Seems that we now fall under a new granting program which provides a much better match and MORE MONEY to fund us. The new grant program has more stringent requirements than the previous program, but also gives MORE MONEY. Thus, the new signature requirements on our "time cards" = higher level verification, but yield MORE MONEY.

Keynote speaker at the State Meeting was Andrew Samson, former executive director of the Texas Parks and Wildlife Department, executive director of the Texas Nature Conservancy, and founder of The Parks and Wildlife Foundation of Texas, now Executive Director of the River Systems Institute. He shared his vast knowledge of Texas conservation efforts, but spoke eloquently about the need to engage children with the natural environment.

I think this has two facets; one bringing children outside and, two, helping them to want to come outside again. I am reminded of my own children, particularly when they were little and "helping" me to shovel snow. Our agendas were quite different, but they loved being outside and I did finish the task, perhaps in a slightly altered fashion from my own expectations. Andrew Samson spoke of kids' joy in learning to skip stones across the lake; we all need to take time to share the outdoors with children. Just like us, children respond well to food, fun, and friendship.

Many thanks to all who have worked so hard this year and faithfully submitted their hours. It has been a lot of fun this year and I look forward to lots more fun in the mud, on the prairie, at the beach, in the classroom.....



"Texas Master Naturalists - Changing Texas one hour at a time!" - by Dick Benoit

## Next Chapter Meeting

December 2<sup>nd</sup>

Annual Awards Meeting

6:00 (earlier time)

Bring a side dish to share

## December and January Activities

### ADVANCED TRAINING OPPORTUNITIES

**Chapter Meeting** - December 2  
Annual Award Meeting  
**6:00 (earlier time)** Bring a side dish to share.  
Carbide Park

**Brazos Bend Campout** - Jan 28-30  
Brazos Bend State Park  
Hours AT - Varies by classes attended  
Watch your e-mail for details.

#### Ongoing

Galveston Island State Park  
Every Saturday- Beach Explorations  
Every Sunday- Bay Explorations  
10 am. Meet at the Nature Center  
Tours are 1 to 1 ½ hours long.  
Prepare for sun and mosquitoes.  
Bring water and family. (Begins again in March)

#### Heritage Book Study Group

First Monday of every month  
Texas City Prairie Preserve  
10am-Noon 2 hours AT  
Contact: Elsie Smith (409)945-4731  
In January we will be reading:  
*The Wilderness World of John Muir* by Edwin Teale

### STEWARDSHIP OPPORTUNITIES

#### Project of the Year:

#### **Prairie and Wetland Restoration Horseshoe Marsh**

The Project of the Year at Horseshoe Marsh will continue through out the year. We are restoring island habitats ravaged by Hurricane Ike. If you can attend please contact Dick Benoit [rbenoit@aol.com](mailto:rbenoit@aol.com)

#### **Ongoing Activities:**

**Mondays** - Reitan Point, second and fourth, Contact:  
Liz Gimmler [gimmler@consolidated.net](mailto:gimmler@consolidated.net)

#### **Tuesdays** -

- Sheldon Lakes State Park, Contact: Tom Solomon [crandtr@sbcglobal.net](mailto:crandtr@sbcglobal.net)
- Texas City Prairie Preserve, Contact: Marybeth Arnold [mbarnold@aol.com](mailto:mbarnold@aol.com)

**Wednesdays** - Wetland Restoration Team, Contact:  
Marissa Sipocz [m-sipocz@tamu.edu](mailto:m-sipocz@tamu.edu)

#### **Fridays**-

- Prairie Friday, ABNC, 9 - Noon Contact: Dick Benoit [RBenoitTEX@aol.com](mailto:RBenoitTEX@aol.com)

### EDUCATION-OUTREACH VOLUNTEER OPPORTUNITIES

Bay & Island Adventures - Volunteers teach 6 in-class hands-on modules on a once a month basis in Dickinson and Galveston Schools. Presenters and helpers are needed for eleven 4th and 5th grade classes. Contact: Sara Snell [snellsw@verizon.net](mailto:snellsw@verizon.net).

Jr. Master Naturalist Club - Volunteers guide 25 fifth graders of Galveston's Austin Magnet School as they conduct experiments, build models and do activities to gain a deeper understanding of the topics taught in the Bay & Island Adventures program. The club meets Wednesdays after school and takes 6 Friday fieldtrips. If you have an interest in guiding the kids through the activity or observing what goes on, contact Sara Snell [snellsw@verizon.net](mailto:snellsw@verizon.net).

Education and Outreach Committee - We can use your help developing a speakers bureau; responding to requests for exhibit booths, fieldtrip guides and presenters, planning Camp Wild and Treasures of the Bay; and developing a library of education-outreach materials. Contact Sara Snell [snellsw@verizon.net](mailto:snellsw@verizon.net).

Partner and Associate Programs - Many organizations sponsor guided walks and education programs or need volunteers to man their nature center. Go to [www.gbamasternaturalist.org](http://www.gbamasternaturalist.org) click on "Volunteer Opportunities," then click on "Partners, Sponsors and Associates" for the list, then click on their website for information and contact.

### UPCOMING OPPORTUNITIES

#### 14th GBAC Spring Class - February 17, 2011-

Remember how much you enjoyed your class?

Preparations are starting for our 14th class in our 10th year as an organization. We will be looking for volunteers to ensure this class will be successful and filled with food, fun and friendship. Be watching for your Alan Wilde e-mail asking for your help.

For information contact a class coordinator, Deborah Howard, Sue McManamen, Barbara Rabek, Sara Snell, Beverly Williams

## Prairie Ponderings by Dick Benoit

This column may read more like Prairie Wonderings rather than Prairie Ponderings. A lot of progress is going on in the prairies and related prairie activities.



At the State Meeting I gave a talk titled, "Galveston Bay Area Chapter's Prairies Partnership-Projects for Every Preserve". It mainly depicted the different projects highlighting the people that make them happen. Another theme was that possibly in the past few years, if we have not had an increase in the amount of prairie plants in our area, there at least has been significant progress. Sara Snell brought together a poster Exemplary Project, "Prairie Exploration Explosion, A Decade of Progress", on our chapter's prairie progress and won a first place in the competition at the state meeting and its \$400 prize. Speaking of awards, Tom Solomon also was the recipient of the Synergy Award that he received on November 3, 2010 for his outstanding contributions to prairie restoration in our area.

In the past month over a dozen buckets of clay, soil, and seeds have been used by youth groups to construct seed balls, which is about 5,000 seed balls!

We received communication from Anahuac National Wildlife Refuge stating they have reestablish the area where we had a Gulf Fritillary Butterfly Garden and wanted to know if we are interested in returning and restoring our garden we had before Ike washed it away. We are still working on our project of the year with the Houston Audubon at Bolivar Marsh Prairie. We have seed collected for the project at the Nash Prairie and the Brazoria Wildlife Refuge these past two months, with another collecting trip planned in December.

We are waiting to begin a commitment to working on the Prairie at Galveston Island State Park, but we have been tangled in red tape in this endeavor.

This last section is about our main prairie progress this year at our main sites.

Armand Bayou Nature Center Prairie has had over 12,000 one-gallon plants planted so far this year with the possibility of another 3,000 planted by year's end. That would be the equivalent of about 30 acres of restoration. Sheldon Lake State Park has had over 8,000 one-gallon plants planted so far this year with the possibility of another 2,000 planted by year's end. That would be the equivalent of about 20 acres restoration.

Texas City Prairie Preserve has had over 2,000 one-gallon plants planted so far this year. That is the equivalent of about 4 acres restoration.

It has been a very active year on the prairies. So a great thanks to all those committed to restoring the most endangered ecosystem in North America.

## Wetland Wanderings by Diane Humes

Mason Park Five Years Later...

The Wetland Restoration Team (WRT) was born out of the idea of creating a stormwater treatment wetland along Brays Bayou as part of a giant Harris County Flood Control Project - Project Brays. The Stormwater Wetland at Mason Park would test the efficacy of the three created wetland ponds to slow down stormwater from the adjoining neighborhood and improve water quality before returning the water to Brays Bayou. The WRT was in charge of planting native vegetation along the bayou that would withstand flooding and be pleasant to look at in a

public park. Monthly water testing began with Texas Watch/Texas Stream Team, along with planting the marshes.

Five years of water testing yield interesting observations and further questions.

1. Stormwater is really, really dirty, with very high bacterial levels, low dissolved oxygen, and wildly fluctuating pH levels. Bacteria is most likely from yard runoff i.e. dog or chicken poop, and may be growing in the stormwater pool.

2. Wetland ponds have significantly lower bacterial counts than either the storm drain or the bayou water. Dissolved oxygen levels increase in the wetland, but are highest in Brays Bayou.
3. High conductivity readings in Brays Bayou correlate with periods of drought. Wetland readings are consistently low.
4. Salinity levels have been consistently low at all sites.
5. Drains between the wetland ponds become clogged with trash and debris, which may be a source/incubator for bacteria.



It was assumed that the only two sources of water in the wetland were stormwater and rainwater. However, it

seems to me that there must be underground connection with Brays Bayou and the wetland ponds, as the ponds have never gone dry, even in drought.

Bacterial levels have been so high that it was feared we had "connection" with sanitary sewers or an illicit pipe. However, stormwater levels are not constant, and become severely reduced in a drought, so the stormwater is just dirty all on its own.

Water leaving the wetland is greatly improved in dissolved oxygen and bacterial levels. The wetland showed its resilience in Hurricane Ike; plants withstood at least 15 feet of water. Many animals have been observed in the wetland - water birds, fish, snakes, beaver, insects, turtles - in other words, anything that can get there. People jog along the paths and enjoy the peace amid the city. It is a bit of an oasis in the urban jungle.

The Wetland Restoration Team has moved on to other projects - presently working hard at Sheldon Lake State Park. Water testing continues at Mason Park, thanks, in part, to our chapter helping out with funds for *E. coli* testing supplies; data will be presented at the Restoring America's Estuaries Conference November 2010 in Galveston.

## Report from the State Meeting 2010

by Diane Humes, Sara Snell, Dick Benoit

We won! For the third year in a row, our chapter won first place for Exemplary Chapter Project Display!!! Sara Snell set up the display, "Prairie Explosion - A Decade of Progress", and talked her way into first place. The award was \$400.



Ten members and spouses attended this year: Dick Benoit, Julie Massey, Debbie Howard, Diane Humes, Sara Snell, Nelda Tuthill, Odie and Marie Asscherick, Mel and Shirley Measeles. We also had the pleasure of

meeting up with former members, Alex Ybanez and Gail McAdoo, and friends from other chapters.

For those of you who missed it, 38 out of the 42 chapters attended and 362 attendees made this the largest meeting ever. Our chapter was well represented for attendance and awards. Michelle Haggerty and Sonny Arnold presented 87 milestone awards to attendees; in our chapter, the 500 hour milestone award to Nelda Tuthill, the 2500 milestone to Marie Asscherick, and 5000 hours to Diane Humes, also a 1000 hour pin to former member Gail McAdoo.

In addition to Sara's display, Dick Benoit presented "Prairie Partnerships - Projects for every Preserve" and Diane Humes presented "Tenners". Everyone attended classes, the setting was Hill Country beautiful, food was great, and keynote speakers were inspiring. We are weary and happy to be heading home, but enjoyed a fun and productive weekend with fellow master naturalists.

Next year, the meeting will be back at Mo Ranch, October 21 - 23, 2011, so mark your calendars. In honor of our tenth anniversary, let's fill a bus so everyone can go!



Fun at the State Meeting



## Growing up on Galveston Beaches by Sara Snell

(Editor's note: Sara was in the Spring 2004 Class and wrote this article as a class assignment..(In the photo, guess which one is Sara?)

One of the reasons I want to become a Master Naturalist is to be a "door opener," to share my passion for the beauty of our Galveston Island and its sun-drenched beaches. The beautiful, rolling waves of the Gulf of Mexico, the sandy beaches and wondrous beachcombing have always been part of my life. For those of us who were fortunate to be BOI (Born on the Island), there always will be "sand between our toes." Both my parents were also BOI's, along with their families. Going to the beach was an event enjoyed by my relatives when the ladies still wore hats, dresses and stockings, and the gentlemen wore hats, ties and suits as they strolled the seawall or picnicked on the sand.

I have early pictures of me splashing along the shore and skating on the seawall. Both my sisters and my brother dipped their feet in the Gulf before they could walk. I remember walking the seawall, in the 1940's and 1950's, and being able to go down any of the many steps leading to the beach and actually finding a sandy beach. The sand, at that time, extended all the way from Stewart Beach to 61st Street, where we could drive onto the beach and continue driving all the way to San Luis Pass. We would look for the landmark of our favorite stopping point, the old Moody ranch house with its windmill and tall chimney. The ranch house is still standing, but I don't know for how long because the so-called "progress" is sweeping away the beautiful West End that I so fondly remember.

Blue crabs were plentiful, and we would set lines along the surf to catch them. All the kids checked the crab lines, and no one needed a fishing license to have fun



netting "the big one." If the crabbing wasn't good in the surf, we would head to any of the bridges along Stewart road or to the East End flats. If you haven't experienced fresh crabs cooked on an open fire with the smell of spices wafting in the breeze on the beach, you have really missed a memory.

Family gatherings and weekly outings with a roaring campfire and sizzling wieners, or a bubbling pot ready for the crab-catch are happy memories. My friends and many of the neighborhood children were fortunate enough to be included in these outings and even today nostalgically retell stories of fun on the beach.

The old "Blue Goose," as we lovingly called the family station wagon, was loaded with crab nets, coolers, picnic supplies, chairs and kids sitting all in between. Times were very different then; the whole beach was our playground. When night came and the fire flickered, we would all stretch out on blankets and gaze at the thousands of stars, listen to the crickets chirp and the waves' gentle roar. Being able to have fires, catch and boil crabs and enjoy the beach at night were common practices, again a lost opportunity to experience today.

My parents were the "door openers" to the wonderful world of the sand and sea, not only for me, but also for the many adults and children who joined us on the family adventure. My dad taught us to swim, find sharks' teeth and sea beans, body surf, and build campfires. My mom taught us the beauty of seashells and driftwood and the

wonderful creative things you could do with them. They also shared this passion with their grandchildren, and so the legacy continues.

My children also grew up enjoying the sand and sea. Our favorite spot was and still is at the end of the road along the current Galveston Island State Park. My children are grown now, but we still pack our vehicle with coolers, picnic supplies and chairs and have outings on the beach whenever we can. Unfortunately, the fun of crabbing in the surf with a blazing fire is only in stories of times gone by. However, jars of shells and sharks' teeth and the special piece of driftwood are still part of our households. We still can't pass up the treasures found while beachcombing.

And so I continue the legacy my parents taught me. I passed on the love of the sea and sand to my children, and I am now finding other ways to share that knowledge with the children who visit the beach with me, and through the wonderful opportunity of volunteering at the Galveston State Park.

(Sara is the lady standing on the left.)

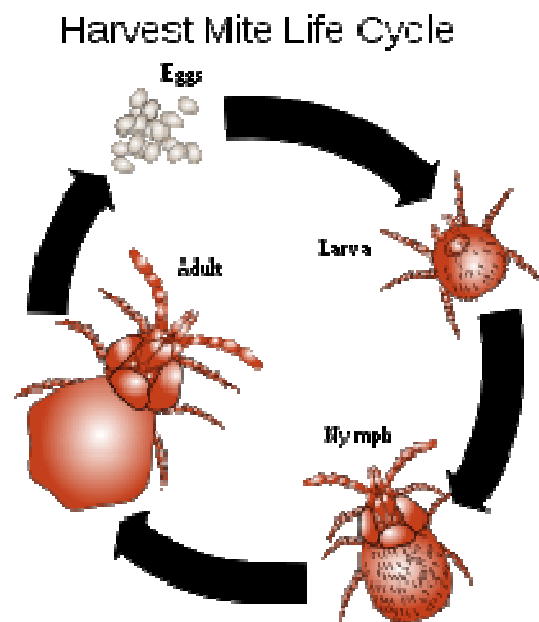
## Little Mighty Mite or Who is Alfred Dugès? by Diane Humes

Of the top ten organisms to avoid when out in the field along the Texas Gulf Coast, the list would surely include fire ants, asps, ticks, mosquitoes, snakes - copperhead, cottonmouth, coral - alligators and poison ivy, but the most bothersome of all for the amount of sheer misery inflicted, should be the "little mighty mite", the chigger. "There is no creature alive," writes natural history biologist Nina Bicknese, "that can cause more torment for its size than the chigger."

Chigger" is the name given to the parasitic larval form of a red mite or harvest mite. In Texas, two species are the most annoying to humans. Both may inhabit the same region, differing in their respective habitats. The most common, *Trombicula alfreddugesi*, likes fields, tallgrass, and weedy areas, wild berry patches, and forest edges, also favorite sites for birds and rodents. *Trombicula splendens* prefers swamps, bogs, rotten logs, and stumps.

Larvae are nearly microscopic - 0.17 - 0.21 mm (1/150 inch) in diameter; therefore, nearly invisible and practically impossible to avoid. Larvae prey on whatever passes by, preferring birds, mammals, including rodents, reptiles, some amphibians and humans - the last is not the preferred hosts, but they suffice.

Harvest mites are grouped with spiders (arachnids) in the family Trombiculidae. Harvest mites have four life stages: egg, larva, nymph, and adult. The larval stage is the only parasitic part of the life cycle. Adult and nymph



harvest mites have 8 legs, are red and are gigantic compared to the larvae at 1.3 mm (1/20 inch). They live in the soil and leaf litter, peacefully scavenging for eggs of springtails (tiny soil insects), isopods, mosquitoes and smaller arthropods, even plants. Harvest mites are, in turn, eaten by small salamanders, beetles, ants, centipedes, larger mites, and spiders.

Adult females lay eggs in clusters in damp soil, under a leaf or around roots, about 15 per day - to about 400 eggs. Egg-laying commences in spring when soil temperatures reach 60° F. Chiggers can have one to four generations each year in Texas. Adults die shortly after mating and/or egg-laying; however, adults who are around in the fall may overwinter, and start over the following spring.

After 6 days dormancy the round eggs hatch; the clusters of the 6-legged and reddish larvae need shade and moisture, and, after another 6 days, they need to feed. They climb a stem and lurk in tall grass or bramble bushes for a potential host to pass by. Then they jump on. They are long-legged for their small size and can crawl quickly, reaching from a human ankle to waist in 15 minutes.

They do not suck blood, but feed on skin cells by injecting digestive enzymes - "spit" - and dissolving the tissue, upon which they then feed. They do not actually "bite," but instead form a hole in the skin called a stylostome and chew up tiny parts of the inner skin. This precipitates an allergic reaction within 3 to 48 hours, causing severe irritation and swelling. The intensely itchy welt can irritate for days - long after the larva has died or fallen off!

Larvae may remain attached to a suitable host for 3 to 5 days, unless disturbed. Once finished feeding, they fall off, rest in the soil and change into the nymph forms, which resemble adults. Once past the larval stage they are no longer parasitic, but eat plants. Nymphs become adults; the entire life cycle takes 50 - 70 days.

As a naturalist, it is wise to learn how to deal with chiggers. Seasonally, they are most active and bothersome during the warm months from late spring into late fall. They require high humidity or their bodies will dry out. They are attracted to a host by exhaled carbon dioxide. Of course, you cannot stop breathing, but you can take precautions.

Chiggers can take hours searching for a suitable spot. With people, they wander around the body until reaching a place where clothing touches the skin or creates a constriction. They are looking for thin skin; women and children are more susceptible to the misery inflicted. Welts usually occur at the ankles, waistbands and belts, behind the knees, in the groin and armpits. Chiggers do NOT burrow under the skin.



To help prevent this misery, wear loose-fitting, tightly-woven clothing. Spray shoes, socks, lower legs, waistbands with mosquito repellent or dust with sulfur powder. Tucking pants inside socks and wearing boots might help. A hot shower or bath within an hour or so of potential exposure can remove chiggers; launder your clothing in hot water to prevent re-infection.

Once welts occur, stay calm. Treat symptoms with antihistamines and/or hydrocortisone containing lidocaine or benzoane to control itching. The nail polish treatment is a myth, since the chigger is long gone once the itching starts. Itching can last up to two weeks, hopefully less. Keep welts clean to prevent infection. Swear to never get chiggers again! Count your blessings -no North American species causes serious harm, but an Asian species, *Leptotrombidium deliense*, carries the causative agent for scrub typhus and can make you very ill.

The common species, *Trombicula alfreddugesi*, the cause of all our scratching, was named for Dr. Alfred Dugès (1826 - 1910), a physician born in France who moved to Mexico in 1852, settling in Guanajuato. He was quite well-known as a naturalist; he collected new specimens, published numerous scientific papers in herpetology, botany, and entomology and directed the local museum, later named the Museo Alfredo Dugès in his honor. He achieved the dream of scientific immortality, as his name lives on with the chigger, reminding me of the old Chinese proverb: "Be careful what you wish for!"

## Guppies from Julie

### Master Naturalists Honored

Texas Master Naturalists Becky Edmondson and Tom Solomon received the Synergy Awards from the Citizen's Environmental Coalition in early November!



Becky was awarded the Community Activist Award for her work with the Willow Waterhole Greenspace Conservancy in Houston. The Community Activist Award is presented to an individual who has worked at the grassroots level to improve our environment.

Tom Solomon was recognized for his leadership in prairie restoration and received the Army and Sarah Emmott Conservation Award. This award is given to an organization or individual for outstanding work in the field of conservation.

Congratulations, Becky and Tom!

### Calendar features Master Naturalist Photos

Steve Upperman may be new to our chapter but not to photography! Two of Steve's photos are featured in the 2011 Texas Sea Grant photo calendar that is hot off the press. Check out Steve's photos for April and May in the calendar. Calendars will be available at the December chapter meeting and I bet we can get Steve to sign them for us!

Congratulations, Steve!

### 2011 Training Class

Have you missed the Texas City Dike field trip with our fabulous instructors, Nathan Veatch and Steve Alexander? Well, now is your chance! The Dike is open and the field trip is back!

Volunteer to help with the spring 2011 training class and enjoy field trips and exciting speakers! Contact Sara Snell at 281-309-0276 or [snellsw@verizon.net](mailto:snellsw@verizon.net) to volunteer!



*Improving Lives. Improving Texas.*

Texas AgriLife Extension Service programs serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability, or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Court of Texas cooperating.

## *The Midden*

This newsletter is published by Galveston Bay Area Chapter - Texas Master Naturalists.

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For comments on this issue or to suggest content for future issues, please contact Nathan Veatch at 281-480-6985 or by e-mail at [nveatch@swbell.net](mailto:nveatch@swbell.net)

## *The Midden Deadline For the December Issue*

### January 9

If you have Advanced Training or Volunteer Opportunities, please submit information to Diane Humes [treimanhumes@earthlink.net](mailto:treimanhumes@earthlink.net)

