Galveston Bay Area Chapter – Texas Master Naturalists

The Midden

October 2009

Summer is Over *by Mary Jean Hayden, President 2009*

Summer's over and I'm feeling a bit nostalgic for those old September mornings, so hope you'll understand if I nag you a bit about homework, I mean, Master Naturalist work:

1. Are you going to the State Master Naturalist meeting October 23-25 at Mo Ranch? It's a ton of fun and a great training opportunity in a lovely Hill Country setting. We've nominated Julie as Advisor of the Year - she's bound to win and you can be there to congratulate her! Registration includes food and lodging. A Chapter scholarship is available and carpools will be arranged. Before you register at www.regonline.com/TMNconference2009, please let Sara Snell know snellsw@verizon.net whether you have a roommate and/or want to carpool. If you plan to stay in the (cheaper) Milk Barn bunkhouse with us, be sure to put this preference in the note section

2. Have you checked out our re-designed website yet? Go to www.gbamasternaturalist.org click on "Volunteer Opportunities," then click on "Partners, Sponsors and Associates." If an organization is missing, let me or another board member know. Click on "partner and associate projects, programs and events" to verify all opportunities are included and are correctly described. If not, please send any updated information to our web mistress, Carolyn Miles carolynmiles101@yahoo.com

3. If you've been inactive for awhile, busy with the rest of your life, be assured we miss you and would love to see you. How about dropping in for an occasional chapter meeting, AT or volunteer opportunity?

4. Remember that volunteer hours are evidence of the great job Julie does and we don't want to wait 'til the last minute and overwhelm Terry with reports in November. Please turn in your hours as soon as possible.

Okay, that's enough for now, finish your cereal and get going.

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Mel Measeles poses with an antique pick-up at Sea Center.

October - November

ADVANCED TRAINING OPPORTUNITIES

Chapter Meeting – October 1, 2009
Presenter: Anna Armitage, TAMU Galveston, will cover Wetland Ecology and Restoration
6:30 Social, 7:00 Presentation, 8:00 business meeting
Carbide Park 1 Hour AT

Local Prairie Remnants: Their Restoration and Preservation – October 8, 2009
Armand Bayou Nature Center
9 am until Noon 3 Hours AT\
Additional prairie visits to Coastal prairie, League City, Texas City and Challenger Park on Oct 15, 22, 27 and 29th, 9 am until 11 am.
Presenter: Dick Benoit, Louise Bell- project lead
For more information, contact Dick Benoit
RBenoitTEX@aol.com

Shangri-La Trip – November 12, 2009
Visit the beautiful Shangri-La Botanical Gardens and Nature Center in Orange, Texas for a garden tour and pontoon boat trip.
7 am until 5 pm 5 Hours AT
Cost about $35
Presenter: Shangri-La Garden Staff
For more information, contact dianeo@wt.net

Ongoing
Galveston Island State Park
Every Saturday- Beach Explorations
Every Sunday- Bay Explorations
10 am. Meet at the Welcome Center
Tours are 1 to 1 ½ hours long.
Prepare for sun and mosquitoes.
Bring water and family.

STEWARDSHIP OPPORTUNITIES

Project of the Year:
Prairie and Dune Restoration
Galveston Island State Park
Tentative Dates:
September 24, 2009
Oct. 20, Nov. 17, Dec. 15
9 - Noon
Contact: Shirley Foster MFoster689@aol.com

Prairie Pandemonium at ABNC-Oct.17, 9 - Noon
Brazos Bend Prairie Heritage Day, Nov. 7, 9 - Noon
Sheldon Prairie Plant-a-thon, Nov.14, 9 - Noon
For more information, contact Dick Benoit
RBenoitTEX@aol.com

Ongoing Activities:
Mondays – Reitan Point, second and fourth, Contact: Liz Gimmler gimmler@consolidated.net
Tuesdays –
- Sheldon Lakes State Park, Contact: Tom Solomon crandtr@sbcglobal.net
- Texas City Prairie Preserve, Contact: Marybeth Arnold mbarnold@aol.com

Wednesdays – Wetland Restoration Team, Contact: Marissa Sipocz m-sipocz@tamu.edu
Fridays-
- Prairie Friday, ABNC, 9 - Noon Contact: Dick Benoit RBenoitTEX@aol.com
- Sundance Garden, Contact: Trudy Belz trudybelz@aol.com

EDUCATION-OUTREACH VOLUNTEER OPPORTUNITIES

Bay & Island Adventures - Volunteers teach six in-class hands-on modules (water, Galveston Bay, wetlands, coastal prairies, birds, Gulf of Mexico) on a once a month basis in Dickinson and Galveston Schools. Presenters and helpers are needed for eleven 4th and 5th grade classes.
Dickinson Contact: Sara Snell snellsw@verizon.net
Galveston Contact: Mary Jean Hayden
bean1219@earthlink.net

Jr. Master Naturalist Club - Volunteers guide twenty-five 5th graders of Galveston's Austin Magnet School as they conduct experiments, build models and do other activities that give them a deeper understanding of the six topics taught in the Bay & Island Adventures program. The club meets every Wednesday after school and takes six Friday fieldtrips. If you have an interest in conducting one of the modules, helping guide the kids through the activity or observing what goes on, contact Mary Jean Hayden
bean1219@earthlink.net

Education and Outreach Committee - Lots of work to do and 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 Mary Jean Hayden
bean1219@earthlink.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 click on "Volunteer Opportunities," then click on "Partners, Sponsors and Associates" for the list, then click on their website for information and contact.

PRAIRIE *by Dick Benoit*

O N D E R I N G S

The blistering pace of the Prairie Restoration Team almost matched the Texas weather.

Texas City Prairie Preserve has been busy with the newly hatched Prairie Chickens. Feeding them and monitoring them has required intensive dedication.

The **Sheldon Lake State Park Prairie** has nearly 5,000 potted plants at the ready for planting this fall. The cooler weather this fall has the team planning their second annual Prairie Plant-A-thon on Saturday morning, November 14, 2009. Contact Tom Solomon or Jim Duron if you are interested.

Reitan Point Prairie is still struggling with the lack of a water source due to Ike, but Liz Gimmler has prevailed and has planted several hundred one gallon plants with the help of a portable water supply.

The **Galveston Island State Park Prairie** has made great strides in restoration. Adopted as our Project of the Year, clean up after Ike and dune and prairie restoration are well underway. Well over 2,000 *Bitter panicum* plants have been gathered from Sea Rim State Park and planted in the dunes near the dune fences that the stewardship team helped install. See page 12.

The restoration team has helped gather and pot over 1,000 plants for Artist Boat that will plant them this fall with students from Galveston schools.

Armand Bayou Nature Center Prairie has been in overdrive this summer under the ABNC Stewardship Department with Tom Solomon and Jim Duron. Along with having over 5,000 plants ready for planting this fall, a huge seed collect is underway. At this writing over 12 of the large buckets of Coneflower have been collected, with collection scheduled to continue for at least another week. Also planned is the annual Prairie Pandemonium on Saturday, October 17, 2009. Contact ABNC www.abnc.org if you are interested in participating.

"Conservation without action is simply conversation." Let your actions speak louder than your words.

WETLAND *by Diane Humes*

A N D E R I N G S

The dog days of summer are almost over and we are READY for fall! The Wetland Team has persevered, despite heat, humidity, and burning sun, to place 10,000 wetland plants into the tenacious red mud of Buffalo Bend Park. As of this writing, we expect to complete – yes FINISH - planting on Saturday, September 12.

If you build it, they will come; just add water - the wildlife is there. In addition to our family of black-bellied whistling ducks and black-necked stilts, we have observed killdeer and soft-shelled turtles. Also, dragonflies are there to stay; the next generation has already arrived in the ponds. See the dragonfly nymph exoskeletons all over the pickerel weed.

Our next wetland adventure begins soon. Phase II wetland construction is already begun at Sheldon Lake State Park. Scraping and contouring of fourteen shallow wetland ponds is going well and expected to be completed before the end of September. The 67 acres (don't be scared, we can do it!) of wetland will be surrounded by 138 acres of coastal tallgrass prairie. Guided by 1930's era aerial photographs and soil sampling on the ground, the land will be returned to its pre-agricultural prairie/wetland mosaic mima mounds and shallow water, prime habitat for resident and migratory waterfowl. Restoration of the gama grass, switchgrass, spikerushes, sedges, and arrowheads will take about two years, providing endless happy opportunities for getting those volunteer hours.

The subtle hint of coolness to the morning air will undoubtedly begin to invigorate us all. Be the first to sign up for the Wetland Restoration Team. Call or e-mail Marissa Sipocz, 281-218-6253, m-sipocz@tamu.edu.

Wetland Restoration Team fanatics and friends will be especially excited to attend the chapter meeting October 1. Dr. Anna Armitage, from Texas A & M Galveston, will speak about wetlands and wetland restoration, using examples from her projects of what works and what doesn't. Dr. Armitage studies coastal and wetland ecology –salt flats, tidal mudflats, seagrass beds, and tidal freshwater wetlands, with the ultimate goal of understanding such impacted and restored habitats. Bring her all your questions!

Sea Center and Shell Museum AT

by Kathryn Dawson and Claudia Edwards

The Galveston Bay Area Master Naturalists paid a visit to Sea Center Texas and the Brazosport Museum in Lake Jackson on July 15, 2009. The 23 Master Naturalists that attended this Advanced Training activity took a guided tour of the aquariums, fish hatchery and wetlands at Sea Center Texas and saw the collection of seashells, fossils, and minerals at the Brazosport Museum.

The variety of aquariums at Sea Center Texas contained fish of local jetties, bays, and reefs. At the wetlands, participants viewed terns diving for fish and were introduced to wetland plants and their modifications. For example, mangroves have finger-like root extensions that project above the soil to collect oxygen from the air. In this way, they are able to grow in soils lacking oxygen.

Red Drum *Sciaenops ocellatus*

Perhaps the most interesting part of the trip was the hatchery. In an effort to increase fish stocks in the wild, Sea Center Texas raises about one-third of the redfish and speckled trout stocked in Texas bays. Employees capture male and female speckled trout and redfish and contain them in environmentally controlled indoor drums, each holding one female and one male. Females are held for four months and males for one month. Female fish are conditioned to produce eggs through controlling light and temperature in the drums. In this way, two reproductive periods are obtained from the fish instead of their natural cycle of one period per year.

After fertilization, the new larvae are harvested and immediately transferred to open indoor water drums where larvae are left to develop for 3 days. On day 4, translucent egg larvae (about the size of grains of cream of wheat) are transferred to outdoor culture ponds. There the fish are maintained to develop for 30 days. On day 31, the culture ponds are drained, the young fish captured and put in holding tanks on vehicles, then immediately transported and released through large feeder tubes into various banks along Galveston Bay.

Master Naturalists an Integral Part of 2009 Sea Turtle Patrols

by Steve Alexander

In mid-July, researchers at Texas A&M University at Galveston concluded their third year of sea turtle patrols on the upper Texas coast. This year, their patrol and monitoring efforts were aided by 15 GBAC-Texas Master Naturalists.

Those participating in the 2009 nesting season were Steve Alexander, Jack Clason, Brenda Dawson*, Bev Frannea, Ellen Hufft*, Melissa Line*, Julie Massey, Mel Measeles, Barbara Rabek*, Carlos Rios*, Fran Ryan, Donna Schnitker*, Paul Shack*, John Sharp*, and Bev Williams. Members of the 2009 Training Class represented eight (identified by*) of the 15 patrollers. Thanks Class of 2009 and all others who participated this year!

In 2009, Master Naturalists not only took part, but also contributed significantly to sea turtle patrols. Our group of volunteers, for example, covered 50% of all patrols done on Galveston Island. In addition, Master Naturalists helped excavate eggs from four nests and helped tag one female Kemp's ridley named Smarttie.

Smarttie was found May 2 nesting on Hershey Beach on west Galveston Island and was fitted with a satellite transmitter before her release. As of late August, Smarttie was still transmitting data to researchers. To view her movements and present location, check out *www.seaturtle.org/tracking*.

Sea turtle tracks on the beach. *Photo by Steve*

Kemp's ridley eggs in a nest cavity. *Photo by Steve Alexander.*

For the entire Texas coast, the 2009 nesting season set a new record. A total of 197 Kemp's ridley nests were found this year compared to the old record last year of 195 nests.

However, on the upper Texas coast, dunes and beaches ravaged by Hurricane Ike had fewer nests this year as compared to last year. Last year, a total of 15 turtles nested along beaches from Bolivar to Surfside, but this year only seven turtles nested on this same stretch of beach. Not surprisingly, the stretch of coastline south of Surfside, a stretch little effected by Ike, had a substantial increase in nesting (one nest last year compared to nine this year).

After nesting season was over, patrollers were treated to a "thank you" party at Sea Isle. Many of us had the chance to meet Carole Allen, Gulf Coast Director of the Sea Turtle Restoration Project and founder of HEART (Help Endangered Animals-Ridley Turtles). Carole is a true defender of the Kemp's ridley, her passion obvious as she talked about the loss of

two ridley turtles in a shrimp net discarded near the Bolivar ferry landing. Later, as we talked about the low number of nests on the upper Texas coast this year, she said, "They'll be back."

This statement was reassuring since we all were disappointed by the low number of nesting sea turtles this year. But as sure as dunes and beaches heal themselves, they will be back.

At Texas A&M University at Galveston, plans are already underway for the 2010 nesting season. Funding has been secured and a new graduate student, Jeanine Stewart, will fill the shoes of Christi Hughes. Christi, who has overseen patrolling, nest excavation, and tagging the last three years, will graduate in December 2009. All of us who have worked with Christi will miss her, but life, and graduate students, must move on. We wish her well and look forward to working with Jeanine.

And Master Naturalists are already planning for the 2010 nesting season as well. On Saturday, February 27, we will have a three hour workshop on sea turtles. This workshop will give those interested a chance to learn about sea turtle biology, to hear the latest sea turtle research at Texas A&M University at Galveston, to listen to experiences from Master Naturalist patrollers, and to sign up to participate in the 2010 nesting season.

Removing eggs from the nest cavity. *Photo by Barbara Rabek.*

If you have some interest in participating next year, talk to some of those who participated this year and mark February 27th on your calendar.

Tools of the Trade AT

by Diane Olsen

It was quite the day at Challenger Park learning different tools that we need as Master Naturalists. The day started out with a presentation about observation skills by Diane Olsen. This group of good observers was surprised at the things that they didn't see. Then on to photography with Mel Measeles. Mel passed on tons of information about taking the perfect picture. Who knew that the owner's manual was just chock full of information and advice!

We then went outside to practice on the very sunny, very hot day. The balcony from the classroom was a perfect place to take pictures, as was the small lake that was along side. Mary Jean Hayden then taught us how binoculars work and the proper way to use our binoculars. Back outside we went to find the objects that Mary Jean had hidden. We also got good looks at a yellow crowned night heron and lots of dragonflies.

After lunch Dick Benoit took us on his lifetime journey into journaling. The value of journaling was made clear by years of descriptions and drawings and their value in the scientific realm. He reminded us that not only writing down our observations and taking data is important but also sharing that information is where the value lies. Then, what for many of us was the most challenging, knot tying. Vic Madamba handed out ropes and demonstrated his top ten knots. This is an art that many of us will have to continue practicing for some time to come. It was a day filled with learning and laughter. All in all, another great Advanced Training class.

Seeds: Big Batch on the Bayou

by Diane Humes

Hidden from the public eye on the west bank of Armand Bayou, dramatic events have occurred. Following a controlled burn in January of this year, approximately 20 acres of Texas coneflower have bloomed and set seed, estimated to have a potential yield of up to two tons! Since this species is reported to make 554,000 seeds per pound, this calculates to more than 2 billion seeds! This has inspired a heroic effort by nature center staff and volunteers to try to collect and take advantage of this bumper crop.

What forces might have conspired to bring about this massive seeding? Some species, especially trees, are known to synchronize seeding over wide geographic areas and produce huge quantities of seed some years, at irregular intervals, following years of limited seed production. Called mast seeding or masting, this phenomenon is thought to be a response to environmental cues, most frequently extremely low or high temperature at time of flower development. The result is a quantity of food (acorns or beechnuts) that overwhelms the seed predators (mice, squirrels), leaving the excess seed to become the future generation.

Seeds that remain on the soil surface usually either germinate or are eaten by predators. Seed burial, often by animals such as ants and squirrels, is the first step in becoming part of the persistent soil seed bank. Once buried, seeds avoid predation and germination, which usually requires stimulation by light. Most seeds remain in the soil for short periods of time before succumbing to soil fungi or bacterial pathogens, but some, especially hard, dry seeds, may remain for many years. The oldest viable seeds yet found were between one and two thousand years old.

Texas Coneflower
Class: Magnoliopsida
Order: Asterales
Family: Asteraceae
Genus: Rudbeckia L.
Species: texana (Perdue) P. Cox & Urbatsch
Synonym: Rudbeckia nitida Nutt. var. texana Perdue

Rudbeckia species are used as food plants by the larvae of some Lepidoptera species including Cabbage Moth and Dot Moth.

The name was given by Carolus Linneaus in honor of his teacher at Uppsala University, Professor Olof Rudbeck the Younger (1660-1740), and his father, Professor Olof Rudbeck the Elder (1630-1702), both of whom were botanists.

Annuals and short-lived plants have the most abundant seeds in the soil seed bank; these species also produce the most copious quantity of seed. Small seeds and round, compact seeds are most likely to persist in the soil. These traits are the same as those that allow seeds to survive passage through a gut. Are the adaptations the same, or is incorporation into animal dung a first step to burial in soil? The numbers of seeds decrease with soil depth, as might be expected; seed densities vary greatly with habitat. Under

woodlands and grasslands, seed densities are in the hundreds to thousands per square meter; disturbed habitats such as arable fields have tens of thousands of seeds in the same volume of soil.

Although hard, dry seeds may be physically dormant in the soil, i.e., the embryo is dry until the seed coat is broken, most seeds are more truly described as quiescent. Most seeds are imbibed – full of water – and carry on respiration and protein synthesis while awaiting the proper cues for germination. Such cues are mostly dependent on temperature and light and adapted to the needs of each species. Seeds may cycle in and out of dormancy stages, but germination is irreversible once it begins.

Coneflowers in seed; ready to be harvested.
Photo by Allan Treiman.

In many plant communities, fire has been shown to stimulate growth and germination of many species. The specific compound is not known, but something is present in smoke, charred wood, and heated soil that greatly contributes to seed germination. Fire removes litter from the soil, increasing soil surface temperature and daily temperature fluctuations, as well as exposing seeds to light. Fire may change the nitrogen content of soil, increasing fertility and pH, which will also favor the increase in nitrogen-fixing bacteria. All of these factors can act to stimulate seed germination.

Nature is complex and the prairie on Armand Bayou Nature Center's west bank has been actively managed for years to restore the prairie. A number of factors this year may have come together – hurricane, drought, controlled burn, heavy spring rain, high summer temperatures – to produce the biggest batch of seeds ever. They will be sown this spring in highly visible areas. Keep watch for 2 billion Texas Coneflowers on the prairie!

Sources:

Baskin, Carol C. and Jerry M. Baskin. *Seeds: Ecology, Biogeography and Evolution of Dormancy and Germination.* Academic Press, 2001.

Fenner, Michael and Ken Thompson. *The Ecology of Seeds.* Cambridge University Press, 2005.

Silvertown, Jonathan. *An Orchard Invisible: A Natural History of Seeds.* The University of Chicago Press, 2009.

Panic Over Bitter Panicum

by Vic Madamba

Panic over bitter panicum? Not really, it's a grass or dune grass; but let's start at the beginning.

The sand dunes at Galveston Island State Park were eroded away by Hurricane Ike. A berm was constructed by FEMA contractors to take the place of the lost dunes. Our chapter helped to revegetate these new dunes by collecting a particular grass that held the dunes together. That grass was bitter panicum, *Panicum amarum*. Andy Sipocz of Texas Parks and Wildlife Department had searched far and wide and finally located this much needed grass at Sea Rim Park State Park, near Sabine Pass. Dick Benoit coordinated a collecting trip that departed from the LaPorte TPWD office at 8 am, July 23. Approximately three hours later with a potty break halfway, we arrived at Sea Rim State Park. The park was also devastated by Hurricane Ike with just the main building still standing in ruins. After a short briefing about the park by Andy, he directed us to where the bitter panicum were waiting to be relocated. With trowels and gloves we pulled the grass by it roots making sure to leave enough to re-grow. Bitter panicum grass, sometimes called running beach grass, ranges from New England to Mexico, and is a warm season dune grass. There are three other species of dune grasses: American beach grass (a cool season grass), Sea oat grass (a warm season grass found further South along the Texas coast) and the Saltmeadow cordgrass (although not a true dune grass, it does trap sand). Natural dunes are formed by wind and wave action, but without a means of holding the sand dune in place, dunes would shift from place to place and even form sandbars. Dunes are not permanent, especially with storms like Hurricane Ike, but without dunes, sand would blow further inland and the sand would be lost from the dune making process forever. Reconstruction of sand dunes can be expensive since a combination of bull dozing, fencing and even dredging may have to be accomplished. At Galveston Island State Park, bulldozing and fencing were used. However, without dune vegetation, the dunes would eventually disappear. The optimum solution would be to replace the dune grasses with a combination of all four species of dune grasses, but in this case; we used what was available. The group collected six buckets with over a 1000 bitter panicum grass stems which was great work for just a team of nine! The panicum grass planting at GISP was scheduled for the 30th of August. Those that went to Sea Rim to collect Panicum grass were: Andy Sipocz, Shirley Foster, Diane Humes, Rebecca Smith, Dick Benoit, Art Chapman, Nathan Veatch, Tom Solomon and Vic Madamba. Planting on the 30th took place on the sand berm on the beach side of Galveston Island State Park. Thanks to everyone that participated in the planting. We also had an unexpected group from the Conroe Community Church that showed up and volunteered to plant. Thanks to all of you.

Batteries, Batteries and More Batteries.....Help!!!

by Margaret Canavan

Are you inundated with battery-draining electronics? Digital cameras, flashlights, radios, remote controls, clocks, and on and on and on. Are you hoarding used batteries because you're not sure how to dispose of them? Have you tried using rechargeable batteries and found them less than satisfactory?

What's an environmentally-conscious person to do?

Unfortunately, non-rechargeable batteries are NOT recyclable at all. They can only be discarded. That means they go into landfills, where if not in properly sealed containers, the toxic materials in them leach out and will eventually become part of our life (or someone's life) again in an unpleasant way. Even if well-sealed, they are not a useful addition to landfills.

Rechargeable batteries can be recycled once their useful life is over, and component materials can be separated and reused. They may be returned to many retailers, including Office Depot, Radio Shack, and Best Buy. Many of our local public recycling centers also accept them.

Rechargeable technology has improved over the years, but not all batteries and chargers are created equal. Your dissatisfaction with the performance of rechargeable batteries may be due to how they have been charged. Fast charges tend to shorten the life of batteries. Most inexpensive fast chargers do not control the charge current and do not detect when the battery is fully charged. There are now "smarter" chargers available which can check the status of batteries, charge them at slower rates, and "recondition" batteries which you thought were at the end of their useful lives. There are even solar chargers (would have been useful after Ike!).

Take some time to educate yourself and reconsider rechargeable batteries. An overview of different types of chargers is available at http://www.greenbatteries.com/batterychargercompare.html. Amazon.com has an amazing array of reviews of various battery chargers, by consumers and self-proclaimed experts (don't miss the "N Lee the Engineer" reviews; he must spend all day testing such things!) Rechargeable batteries cost a bit more, but when properly maintained they will quickly pay for themselves. And you won't have a bag of dead batteries in the back of that kitchen drawer. And you'll feel good.

RID YOURSELF OF USED NON-RECHARGEABLE (ALKALINE) BATTERIES!

Bring yours to the Master Naturalist Chapter meeting and we will take them to the safe disposal site at Ellington field.

Guppies from Julie

by Julie Massey

Save These Dates for the State Master Naturalist Conference!

Where can you roast marshmallows, sing songs around a campfire, enjoy starry nights, learn about our state's resources and make new friends?

The State Master Naturalist Conference, of course!

The State Master Naturalist Conference will be held at the Mo Ranch near Hunt, Texas, from October 23-25, 2009. Make plans to join us and meet Master Naturalists from across the state! To register, visit the website at https://www.regonline.com/TMNconference2009

Prairie Preserve Honors

Dick Benoit was recently honored by the City of League City with the naming of the new Dick Benoit League City Prairie Preserve! The 44 acre

preserve is on Highway 96. Dick was recognized by the League City Council on August 25 with family and friends in attendance.

Congratulations Dick!

Plans for the Spring 2010 Class are Underway!

I know it seems like a long time from now, but the spring 2010 Class will be here before we know it! The class will begin on February 18, 2010. Help spread the word about the new class! Potential class members can contact me at 281-534-3413, Ext. 2, 2 or by email at jmassey@ag.tamu.edu.

The Training Class Steering Committee will be working on new ideas for the class! If you would like to volunteer, please drop me a note or give me a call!

Save the Date - Saturday, March 6, 2010!

So what is special about March 6, 2010? Master Naturalists will have the opportunity to volunteer with the Regional National Ocean Science Bowl Competition in College Station!

National Ocean Science Bowl (NOSB) is an academic competition that tests high school students' knowledge of the marine sciences including biology, chemistry, physics and geology. The 2010 competition focuses on marine technology! Volunteers are needed for all aspects of the competition from registering teams to serving as judges - training will be provided!

Save your Saturday, March 6, 2010 for NOSB! More information will be available this fall! If interested in volunteering, please contact Julie at jmassey@ag.tamu.edu or 281-534-3413, Ext. 2, 2.

Have a terrific fall!

Julie

AgriLIFE EXTENSION
Texas A&M System

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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

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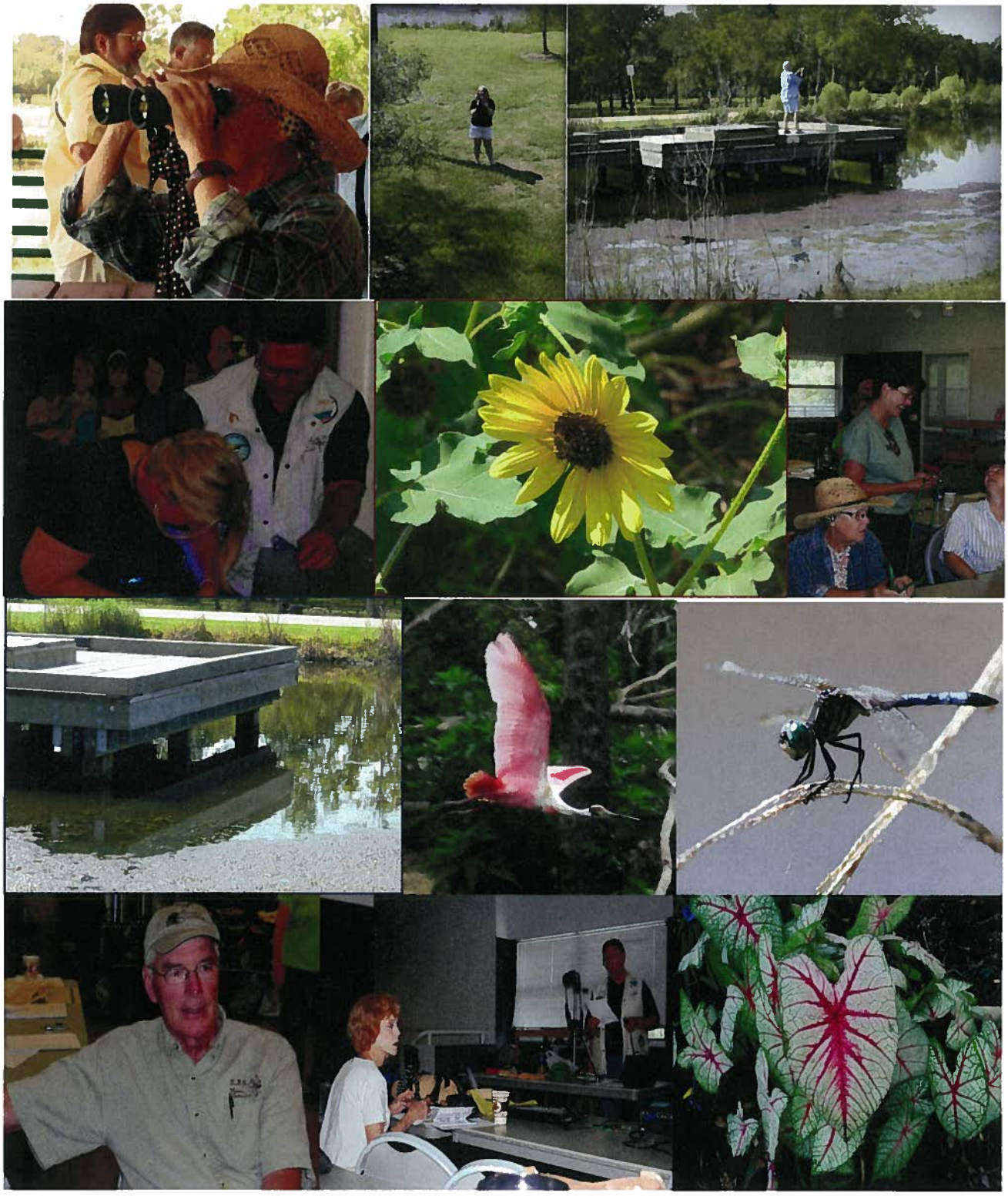
For comments on this issue or to suggest content for future issues, please contact **Nathan Veatch at 281-480-6985** or by e-mail at nveatch@swbell.net

***The Midden* Deadline**
For the December Issue

November 2

If you have Advanced Training or Volunteer Opportunities, please submit information to Diane Humes
treimanhumes@earthlink.net

TOOLS-OF-THE-TRADE STUDENT PHOTOS



TOOLS-OF-THE-TRADE STUDENT PHOTOS

Thanks to Mel Measeles for teaching the photography class and arranging the photos on this page. And thanks to all our photographers for a great job!