



Chapter News

A MESSAGE FROM PRESIDENT DAVE

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Happy New Year everyone. I hope all of you had a wonderful holiday season and have recovered in good spirits (from spirits?). I want to thank Mike and last year's board for doing a great job making sure

we all had the opportunities we desired to continue learning and advancing our mission. I know I did. I must admit I also enjoyed picking on Mike whenever I had an opportunity to present something. As you know, he gave as much as he got and maybe a little more. I guess now it's his turn. Maybe I should get him a banjo so he can do some serious picking.

Anyway, I'm glad to once again be able to more directly assist all of you in helping the folks in our county understand and cherish our wonderful natural resources. I know we have a positive impact on our next generation with our environmental programs, and it was heartening to see the Master Gardeners join us in these efforts with a program at their facility.

I would also like to recognize and thank Jerry Krampota for his ten years as Chapter Host, pretty much defining the role. Jerry exemplifies our membership's tremendous energy, drive and dedication. Thank you my friend. And thanks to all of our members for everything you do.

OK, I'd better stop the thanks for now or I'll fill the whole newsletter appreciating all of you. Moving on, I want to remind everyone that a possible Gerhart Prairie rescue may happen sometime in this month. We'll keep you posted.

It's just about time to begin our intern classes for this year. Roy and his instructors are chomping at the bit and we have some great folks ready to go. If there is session you would like to attend, you're welcome to do so, but please check with Roy first. Seating is limited at some of the venues.

OK, that's the business for now and I can play a little. January is a special month, named for Janus of Roman mythology. Janus was a two-faced god. He could reflect on the past and while contemplating the future. The naming is appropriate as January marks both an ending and a renewal (no, we won't get into New Year's Resolutions here).

The year-ending holidays let us reflect on and be thankful for our family, our friends, and our accomplishments. At the same time, we begin making plans for the new year. We too have two faces this time of the year.

I'm sure most of you knew this, but did you also know that January's moon is known as the Wolf Moon among some northern Native American tribes? These nature-savvy people observed the wolf's struggle with the merciless cold, managing to overcome it by finding sustenance from the creatures that fell victim to the temperatures. With the moon showing such clarity this month, the wolves would bellow their mightiest. These noble creatures became their totem representing superiority and victory, being able to overcome any challenge.

And so it is with our members. Lean back and let out a grand howl this month and renew yourselves for the challenges ahead.

See you all soon.

Dave Brandes is the President of the Cradle of Texas Chapter. He can be reached at djbrandes@comcast.net



<http://facebook.com/TMN.COT>

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<http://tmn-cot.org>

The Texas Master Naturalist program is coordinated by the Texas A&M AgriLife Extension Service and the Texas Parks and Wildlife Department.

Texas Master Naturalist programs serve all people without regard to socioeconomic level, race, color, sex, disability, religion, age, or national origin.

Texas Master Naturalist Program Cradle of Texas Chapter General Meeting and Advanced Training Wednesday, January 14, 2015 AgriLife Building, Angleton



8:30 AM - 9:00 AM	Fun and Fellowship Refreshment Team: Garry and Janet Jackson-Ellis, Breana Kitchen, Sheree Muzny, Lorna Witt
9:00 AM - 9:50 AM	General Meeting and Brazoria County History Quiz <i>This meeting is approved for 1.00 hour Volunteer Time.</i>
10:00 AM - 12:00 PM	Program: Protecting the Environment. <i>Take Care of Texas Program, by Stephen Scalise, Coastal and East Texas Outreach Coordinator for the TCEQ Houston Office.</i> This training is approved for Advanced Training. The number of approved hours will be announced at the meeting and will be available after the meeting at http://tmn-cot.org/Advanced/index.html

ELECTION RESULTS

ANGLETON TEXAS — December 10, 2014
 At its general meeting held here today, Chapter members unanimously elected officers and directors for calendar year 2014. Outgoing president **Mike Mullins** automatically assumed the position of Past President.

The following candidates were elected:

- President: **Dave Brandes**
- Vice President **Leo Novak**
- Secretary **Linda Sluis**
- Treasurer **Gerald Forrest**
- State Representative **Ed Barrios**
- Training Coordinator **Roy Morgan**
- Membership Coordinator **Jerry Eppner**



Mike Mullins
Past President



Dave Brandes
President



Leo Novak
Vice President



Linda Sluis
Secretary



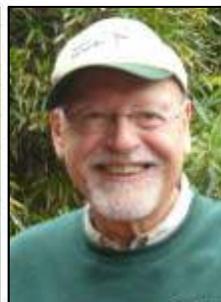
John O'Connell
AgriLIFE Adviser



Connie Stolte
TPWD Adviser



Gerald Forrest
Treasurer



Ed Barrios
State Representative



Roy Morgan
Training Coordinator



Jerry Eppner
Membership

Elected board members assumed their new positions immediately following the election. Advisers John O'Connell and Connie Stolte continue in their current positions.

MEET THE NEW ENVIRONMENTAL EDUCATION SPECIALIST, JEN BROWN



Editors note: Jennifer "Jen" Brown recently joined the staff of the Texas Mid-coast National Wildlife Refuge Complex as Environmental Education Specialist. I asked her to write an article about herself as a sort of self-introduction to the TMN-COT membership. Here it is! My thanks to Jen for sending this article!

—Neal McLain Editor .



I grew up in South Florida and attended Florida International University in Miami. I graduated in 2010 with a Bachelor of Arts degree in Environmental Studies with a minor in Geology. Right after graduation I moved to Louisiana and became an Environmental Education Intern with the Southeast Louisiana Refuges Complex. During that experience, I really connected with the agency and its supporters and that's when I decided that working towards the mission of the U.S. Fish and Wildlife Service is how I envisioned spending my career. Of course, gaining employment with USFWS isn't easy and I was lucky to get my first job as an Interpretive Park Ranger with the Louisiana State Arboretum, located entirely within the boundaries of the state's largest park, Chicot State Park. Eventually, I transferred to Bayou Segnette State Park (one of the state's busiest parks) and moved to New Orleans. But my dream of working for USFWS was still my main goal, so I left Louisiana State Parks and got a job as a Park Ranger at Ottawa NWR in Ohio.

I was a temporary ranger at Ottawa NWR, but wrote and was awarded a \$50,000 grant to improve the EE program and pay for my salary. After that project

ended in fall 2013, I moved to Las Vegas to volunteer in a federal program called AmeriCorps VISTA. VISTA volunteers serve full time for one year with a nonprofit to help build capacity in poverty stricken neighborhoods. When my term ended in November 2014, I had earned a special hiring authority with the federal government and used that to apply for my dream job here at the Texas Mid-Coast National Refuges Complex.

I am very impressed with our current Environmental Education program and plan to make it even better by growing our volunteer base and reaching out to new audiences. I would like to do more outreach with our urban neighbors in Houston, so they can connect with our beautiful refuges.

I just moved to Lake Jackson with my long-haired Chihuahua, Mabel. Southeast Texas is beautiful and I am happy to be back in this part of the country. It already feels like home.

The Texas Master Naturalists are amazing volunteers and field trip leaders and I am excited to get to know each of you.

INTERN TRAINING REPORT

By Roy Morgan, Training Coordinator

The 2015 Intern Class is forming. Class sessions are scheduled for January 28th and the following 15 Wednesdays. At this writing, we only have a few applications in hand. Several more people tell me that they "are a-fixing to" send in their application.

The best way to spread the word about our organization is "one-on-one contact", so if you hear/know of anyone that might be interested, now is the time to talk to them.

Our webmaster Neal McLain has posted our training class schedule and topics on our website.

http://tmn-cot.org/Intern_Training/index.html

So spread the good news...

MEMBERSHIP REPORT

By Jerry Eppner, Membership Coordinator

As of December 30, 85 members have submitted timesheets with a total of 14,708 volunteer hours. The chapter has now accumulated 151,988 hours VT since inception. This is a good uptick, but we are still behind last year, especially considering we added 22 interns this year.

While a good number of timesheets have come in recently, we still lack a few "first-timers". Remember the deadline for submitting timesheets for 2014 is January 7, 2015. That is not far off. So now is the time to fulfill your obligation. Our chapter requires that you submit a timesheet each year to remain active. Several folks are remiss in that area. Failure to do so two years in a row can result in removal from the chapter roster. So let's get them in.

At the December general meeting, members getting recognition will include: Sheree Muzny, who has completed the requirements for certification as a TMN. Recertifying – Ed Barrios, George Bettinger, Mary Holler, Candace Novak, and Shelia Williams. Leo Novak has reached the 250 hour. VT milestone. Also, Michelle Hague, Georgia Monnerat and Chris Kneupper have reached the 500-hour VT, and Michelle Hague has also reached the 1000-hour VT milestone.

Congratulations to all.

PHOTO GALLERY UPDATE

by TMN-COT Photo Gallery Editor Peggy Romfh

What a wonderful variety of species photos has been contributed by COT members in 2014! From birds to fish to plants to insects, COT members have proven to be keen observers of nature in Brazoria County.

The Jimmy Durante of Ducks



The **Northern Shoveler** (*Anas clypeata*) has a bill that is larger at the tip than at the base and is longer than the duck's head.

Shovelers have comb-like teeth (called **lamellae**) that are used to strain food items from the water and mud.

Photo by P. Romfh, Brazoria NWR

Laughing to Adulthood



Laughing Gulls (*Leucophaeus atricilla*) take 2 – 3 years to reach full adult plumage, to which this brownish/gray juvenile readily attests. They are full-time Gulf Coast residents. Photo by Dave Brandes, Sea Center Texas

Merlin the Falcon



Photo by Jerry Eppner, San Bernard NWR

Because of its speed and agility, the **Merlin** (*Falco columbarius*) has been bred for falconry since the Middle Ages.

The merlin is a small falcon that is sometimes called a 'pigeon hawk.' It hunts for flocks of birds in the open but also eats small mammals, lizards, and flying insects.

The merlin spends summers in the Northern USA or Canada but winters in the South.

Indiangrass on the Prairie



Indiangrass (*Sorghastrum nutans*), is a native grass that once grew on prairies throughout the central and Eastern USA prairies. It may grow 3 – 5 feet tall. Photo by Susan Conaty, Nash Prairie Preserve

Red Mulberry – Good to Eat



The wood of the **Red Mulberry** (*Morus rubra*) is of little commercial use, but the fruit is eaten by people, birds, and small mammals.

Photo by Leo Novak, Hudson Woods, San Bernard NWR

Spotted Gar



Found in ponds and lakes, the **Spotted Gar**, (*Lepisosteus oculatus*) may grow to 3 ft. in length. Half of its diet is crawfish, and a specialized swim bladder allows it to live in water with oxygen concentrations <2 mg/L. Photo by Denice Apgar, Mallard Lake

Imperial Moth



The **Imperial Moth** (*Eacles imperialis*) may have a wing span from 3 – 7 inches. The adults do not feed, but the caterpillar hosts include conifer and deciduous trees and shrubs. Photo by Mike Mullins, Sweeny

THANK YOU

Thanks to all TMN members that contributed to the Photo Gallery in 2014. We now have 850 species represented and over 2,500 photos. There have been over 46,000 views of photos on the site since we started counting in mid-2012.

EXPLORING BRAZORIA COUNTY – HANSON RIVERSIDE COUNTY PARK

Photos and Stories by P&P Romfh

Located off Hwy 35 just west of West Columbia, Hanson Riverside County Park is a 35-acre wooded day-use park along the San Bernard River. There was once a ferry landing located on the San Bernard at Hanson Park, but all that remains is a concrete slab to which the guide cable was anchored. The cable prevented the ferry from being forced off course by river current or wind.



Map shows location of Hanson Riverside County Park along the San Bernard River.



Large bucket and other trash was observed floating on the San Bernard after a heavy rain, Nov. 2014



There are beautiful live oak trees at Hanson Park, some with low branches that droop to the ground.



On a hot August day, the river presents a tranquil scene with trees and clouds reflected in the water.

The Water

Our interest in the site started when Pete started measuring water quality in the San Bernard River for Texas Stream Team (Texas State University-San Marcos). The site is far enough upstream that it is not affected by tidal surges and the salinity content of the water is generally zero.

About two miles upstream from the park is the spillway — a low concrete dam — constructed many years ago to provide water for an aviation fuel plant in Old Ocean (now ConocoPhillips). It's only a few feet high but it ensures that saltwater does not back upstream where it would get into ConocoPhillips' intake.

The river is usually brown and shallow at the park. It is not uncommon to see trash floating on the water, especially after a heavy rain.

Turbidity, O₂ and P

Water quality measurements done monthly at the Hanson Park site usually show very turbid water with a low oxygen content and a high phosphorus content, especially after a rain. Aerial views of the area highlight farming activities all the way to the river banks, so soil and fertilizer runoff may contribute to the values seen.

Coliform Bacteria (*E. coli*)

The Texas Stream Team provides petri dishes and culture media for incubation of river water to look for the presence of fecal coliform bacteria. Although coliform bacteria counts are usually low at another site we measure on the San Bernard (near the Refuge), the coliform count at Hanson Park is often high. In November of 2014, after a heavy rain presumably washed cattle waste into the river, the coliform count was >2,000 colonies/100 mL. The EPA criteria for fresh recreation waters is set at 126 colonies/100mL (Source: <http://water.epa.gov/lawsregs/lawsguidance/>)

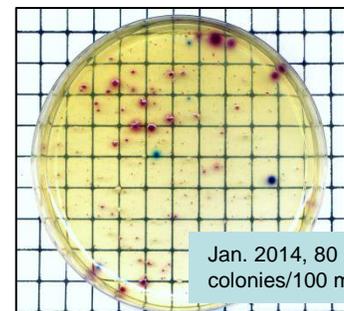
Ferry and spillway photos and information courtesy of Neal McLain



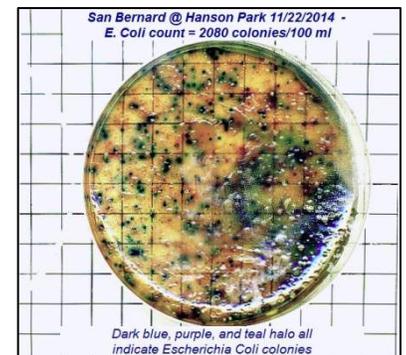
A ferry similar to that used at Hanson Park is shown on the Brazos at East Columbia in this historical photo. Photo courtesy Brazoria County Historical Museum



A spillway is located upstream from Hanson Park.



Jan. 2014, 80 colonies/100 mL



San Bernard @ Hanson Park 11/22/2014 - E. Coli count = 2080 colonies/100 ml

Dark blue, purple, and teal halo all indicate Escherichia Coli colonies

Petri dishes containing culture media and river water from Jan. and Nov. 2014 show moderate to extremely heavy growth of bacteria.

EXPLORING BRAZORIA COUNTY – HANSON RIVERSIDE COUNTY PARK *continued*

Photos and Stories by P&P Romfh

The park itself is filled with beautiful trees and interesting ‘critters.’ We always find something new and interesting on our monthly visits to the park. Many of the live oak trees have low, spreading branches, and the pecan trees tower above, providing leafy shade over nearby picnic tables. We do end up sharing the park with a large number of mosquitoes in the summer!



Left: Green Lynx Spiders (*Epicedia viridians*) are major predators of insects that live in low shrubs.

Center: Iron Worms (Worm millipedes, *Nacreous Americans annularis complex*) are the largest millipedes in North America. They may be almost 5 inches long and have up to 60 segments - twice as large as any other millipede.

Right: The Multi-colored Asian Lady Beetle (*Harmonica hayrides*) occurs in many colors and patterns, including this spotless form. A non-native, it was introduced to North America for aphid and scale insect control and is now widespread.



Left: Puss Caterpillar, Southern Flannel Moth (*Megalopyge opercularis*) looks soft and furry as a cat but contains venomous spines that cause a severe burning sensation and painful rash.

Center: Stinkbug (*Meneclis insertus*) is a member of Hemiptera (True Bugs). It is an herbivore.

Right: Leaf-footed Bug (*Acanthocephala declivis*) was seen on a Chinese tallow leaf. The leaf-footed bug is over an inch long and is also a member of Hemiptera (True Bugs). It is one of several leaf-footed bugs found in Brazoria County.



Left: Broadleaf Woodoats (Inland Sea Oats, *Chasmanthium latifolium*) grows profusely along the river bank. Its seeds are edible and may be made into a flour. The seeds are also eaten by birds.

Center: Pecan trees (*Carya illinoensis*) provide a source of nuts to many birds, opossums, raccoons, and squirrels.

Right: Resurrection Fern (*Pleopeltis polypodioides*) grows profusely on Live Oak (*Quercus virginiana*). Resurrection fern can lose over 75% of its moisture during a drought, curling up into a brownish/gray wad, and still recover quickly after a rain.

TOCKONHOND NATURALIST HAPPENINGS AT SURFSIDE

By Chris Kneupper

A number of changes are in progress for the Village of Surfside Beach, which may be of interest to the Master Naturalists.

Some of these changes involve the property located on the left side of Highway 332 as one comes over and down the Intracoastal Waterway bridge into Surfside, and then straight onto the beach. This undeveloped property is bisected by Bluewater Highway (CR 257). Currently owned by the Cradle Of Texas Conservancy (CTC), the property was set aside as mitigation land by the Freeport LNG project in 2004, and is also currently impressed with a conservation easement. The diagram below is from the Wetland Mitigation Plan by Freeport LNG, and shows various areas of the property cross-hatched based on what type of habitat was found in 2004.



The portion between CR 257 and the beach is known as Tract B (lower center in diagram). Surfside has obtained grant funding from the Texas Parks & Wildlife Department to install some trails behind the dunes on this tract, in part to replace informal trails made by beach trespassers.



All of the activities required under the original Wetland Mitigation Plan were implemented in 2004; however, it is desired now also to improve the educational component of the site by establishing access by raised boardwalk trails on the surface of Tract B and a new interpretative facility adjacent to Tract B. Elevated walkways will provide access to the areas of most interest by following the existing “volunteer” trails, connecting to an Overlook at the Freshwater Pond, built following criteria for dune walkovers established by the Texas General Land Office and the U.S. Army Corps of Engineers.

The second diagram also shows a location for a “Learning Center” near the beach at the very end of Hwy 332, now called the Learning Lighthouse. Surfside has proposed the creation of an educational learning center that would educate the public about the conservation easement, beach system, and natural and cultural resources in the area, to be fashioned after the historic Velasco lighthouse. This facility would sit on Surfside-owned right-of-way immediately adjacent to the southwest corner of Tract B. The original Wetland Mitigation Plan mentions use of an “educational kiosk” for such purposes, so there is a precedent for this type of facility if not the size of it.



Attempts have been made in the period of 2011-14 to gain approval from the Corps of Engineers to allow these changes, when it was learned the Corps preferred elevated trails and for the Learning Lighthouse to not be on the conservation easement (so the plans were amended). Originally, Surfside attempted approval, but they are not really the owners, and didn't succeed. Apparently, the Corps has never encountered the situation for amending a conservation easement, and they seem unable to directly grant permission since it isn't in their procedures. Nonetheless, progress is being made, and an in-person visit in November by two CTC board members and a Surfside representative to the Corps office in Galveston allowed a path to approval to be developed. By providing additional details about precise location of the elevated path, in regards to the habitat types, the Corps has agreed to write a “memo of understanding” that indicates they do not disagree with the plan. One can only hope we will succeed in gaining approval and then see these improvements soon!

TOCKONHONO NATURALIST continued

There has also been progress on using some undeveloped land between the Surfside Jetty County Park and the boat ramp facility operated by Surfside near the Coast Guard station. Surfside has created a historical commission, which has been charged to help facilitate construction of a replica of the original Mexican Fort Velasco.



In the winter of 1821, during the era of Mexican Texas, eighteen immigrant recruits from the Schooner "Lively" landed on the eastern bank of the Brazos River in what is currently modern-day Surfside Beach. Over the course of the next nine years, settlers from the United States began to move into Texas. Some settled in the area next to the beach, and this became known as Velasco. In response to fear of annexation of Texas by the United States, the Mexican Congress passed the Law of April 6, 1830, which halted legal immigration by Americans and established military occupation. As a result, a customs house was erected in 1831 and a wooden post fort in 1832 (Fort Velasco) by the order of General Terán to serve as a customs port of entry. During a major customs dispute, Fort Velasco was the primary target of attack for the Texian militia at the Battle of Velasco in 1832. After the revolution, and prior to the establishment of the capital in Columbia, Fort Velasco housed the government documents of the Republic of Texas.

The publication of the journal in 1999 of a German national and engineer, in the employ of the Republic Of Texas Army, revealed a scale drawing of Velasco in 1836 [page 358, The Journal Of Eduard Harkort, Captain Of Engineers, Texas Army, February 8-July 17, 1836, Southwestern Historical Quarterly, Vol. CII, No. 3, Jan 1999]. The drawing shows a circular fort of approximately 100 feet diameter with a central feature, not unlike the verbal descriptions of the Mexican fort. It is somewhat unclear, however, whether this drawing applied to the 1832 Mexican fort, or perhaps to an artillery battery constructed by the Republic of Texas Army. Since the battery was not circular and was very near the beach and the mouth of the river, this would seem to indicate the 1832 Mexican fort. Interestingly, this is the *only* historical evidence for the *size* of the actual as-built fort.

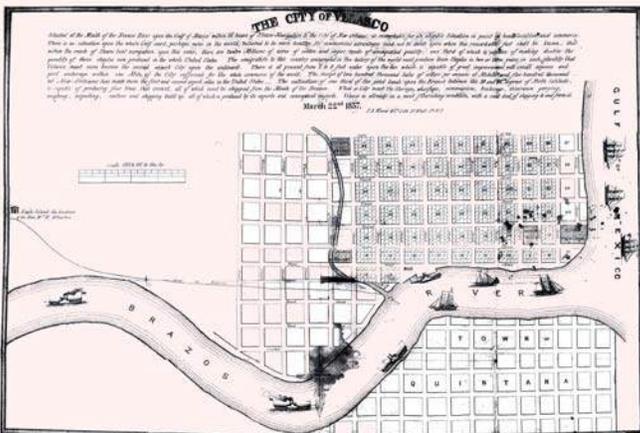
Surfside would like to use land belonging to the Village and also some adjacent CTC land to construct a replica fort, basically in the area shown in the aerial photo below.



Land between Surfside Jetty Park and Boat ramp

An additional grant has been obtained by Surfside for a trail system to be built from the Learning Lighthouse through Surfside over to this area. It includes some preparation work for the site, including creation of an earthen mound for the replica fort. It also includes a full archaeological survey before performing any work at the site. The purpose of this cultural survey would be to see if there were any detectable subsurface remnants of the 1832 Mexican fort. It was thought that modern non-destructive techniques such as ground-penetrating radar, soil conductivity surveys, or magnetometer surveys might be heavily relied upon to search this area.

In closing, it looks like there might be quite a bit for Master Naturalists to be involved with Surfside in coming years.



Plat map of Velasco, 1837

Courtesy Brazoria County Historical Museum

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	Breana Kitchen, Richwood

Chapter Advisers	Connie Stolte (Texas Parks & Wildlife Department) John O'Connell (AgriLife Extension Service)
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TMN-COT Chapter list

- Instructions http://tmn-cot.org/Email_Lists/index.html
- Send messages to TMN-COT@googlegroups.com
- Message Archive <http://tinyurl.com/TMN-COT-Mail>
- All messages are sent immediately.

State Master Naturalist list

- Instructions <http://txmn.org/staying-connected/sign-up-for-tmn-listserv/>
- Subscribe listserv@listserv.tamu.edu
- All messages are held for moderation by the TMN State Coordinator

