



# Chapter News

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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.

## A MESSAGE FROM PRESIDENT DAVE



"Youth is like spring, an over-praised season more remarkable for biting winds than genial breezes. Autumn is the mellower season, and what we lose in flowers we more than gain in fruits."

—Samuel Butler

Yes, it's pumpkin time. And this year that means VMS will be with us in all its might. From what I can tell, the transition is going very well. Thank you all for that. The next big push will be getting everyone's historical hours into the system this month. Once that happens the implementation will be complete.

At our last meeting our Brazoria County Library System favored us with some snacks and presented us with a lovely thank you card signed by all of our county librarians. We posted it on Facebook, but it's likely that not all of us use Facebook. Since the card is to all of us, I've reproduced it here for you. See Page 4.

Our environmental education sessions have now begun again with our local school districts. We could sure use some more help. Check out our calendar for some upcoming sessions and come see what all the fun is about. Also, I haven't fallen in the water yet while seining in the estuary.

If you have any seeds from the Aquatic Milkweed (*Asclepias perennis*) Chris Kneupper distributed last October and would like to share them with USFWS, please bring them to our next meeting for Chris. Our local USFWS office is becoming involved in an effort to grow thousands of native milkweeds. Please remove them from the pods and air dry for a few days before packaging them

Hope to see all of you Wednesday, October 14.

—Dave

Dave Brandes is the President of the Cradle of Texas Chapter. He can be reached at [brandes@tmn-cot.org](mailto:brandes@tmn-cot.org)

## HELP WANTED!

By Mike Mullins, Nominating Committee

Fellow Chapter members it is time to start the process of electing/appointing a new Board for next year. We have several openings and are in need of some dedicated members to fill them. The Board meets the first Wednesday of every month for about two hours unless the President feels we do not have enough business to justify a meeting.

First the Chapter would like to thank the following members that are asking to be replaced for the superb job they did this year in moving the chapter onward and upward.

We are in need of nominees for the following elected Board positions:

- **Vice President** to replace Leo Novak. Duties: monthly programming and replace President in his/her absence.
- **Training Coordinator** to replace Roy Morgan. Duties: new class training with the assistance of several other Chapter members.
- **Secretary** to replace Linda Sluis. Duties: record minutes of Board and general meetings and present them for approval.

Please don't worry if you haven't done some of this before because there is lots of help to get you up to speed. If you would like to offer your services for a particular position or any of the positions or have questions please contact: Ed Barrios, Jerry Eppner, Roy Morgan, Pete Romfh or me.

—Mike Mullins  
979-799-5127



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

**Texas Master Naturalist Program  
Cradle of Texas Chapter  
General Meeting and Advanced Training  
Wednesday, October 14, 2010  
Texas AgriLife Extension Building  
21017 County Road 171  
Angleton, Texas 77515-8903**



<b>8:30 AM - 9:00 AM</b>	<b>Fun and Fellowship</b> Refreshment Team: Ken Arnold, Barbara Bruyere, Louis Peltier, Carolyn Schlein, Pam West
<b>9:00 AM - 9:50 AM</b>	<b>General Meeting</b> Talk by Mike Mullins: <i>Can we make a difference with small acreage tracts?</i> <i>This meeting is approved for 1.00 hour Volunteer Time.</i>
<b>10:00 AM – 12:00 PM</b>	<b>Program:</b> <i>Improving Southern flounder management through characterization of habitat effects on juvenile sex ratios</i> <b>Speaker:</b> Dr. Lindsay Glass Campbell. Post-Doctoral Research Associate <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 <a href="http://tmn-cot.org/Advanced/index.html">http://tmn-cot.org/Advanced/index.html</a></i>

: Dr. Lindsay Glass Campbell is currently a Post-Doctoral Research Associate appointed through North Carolina State University investigating Southern flounder juvenile sex ratios. This project is funded by a Saltonstall-Kennedy Grant from NOAA with cooperative work from Sea Center Texas.

She is familiar with the area as she received her BS from Texas A&M University at Galveston and then continued to her Master's degree from Texas A&M University working on settlement and condition of Southern flounder in the Galveston Bay estuary. She then moved to North Carolina State University to work on her PhD. Her project focused on direct and indirect effects of hypoxia on juvenile fish in the Neuse River estuary. During this time



**Collecting tissue samples from juvenile spot (*Leiostomus xanthurus*) while investigating hypoxia effects on growth.**

*Photos courtesy of Lindsay Glass Campbell*

she developed an interest in joining laboratory biotechnical techniques to application and real world fisheries problems. She did not think she would ever move back to the Houston/Galveston area, but in 2013 her husband's job moved them here!



**Lindsay holds large black drum while gill net sampling with TPWD**

After working for Texas Parks and Wildlife Department in Dickinson, she used her contacts there and those in North Carolina to develop the current project investigating wild Southern flounder sex ratios in both Texas and North Carolina and their implications on management practices.

*See Abstract, Page 3*

## OCTOBER GENERAL MEETING AND ADVANCED TRAINING continued

*Improving Southern flounder management through characterization of habitat effects on juvenile sex ratios*

### ABSTRACT

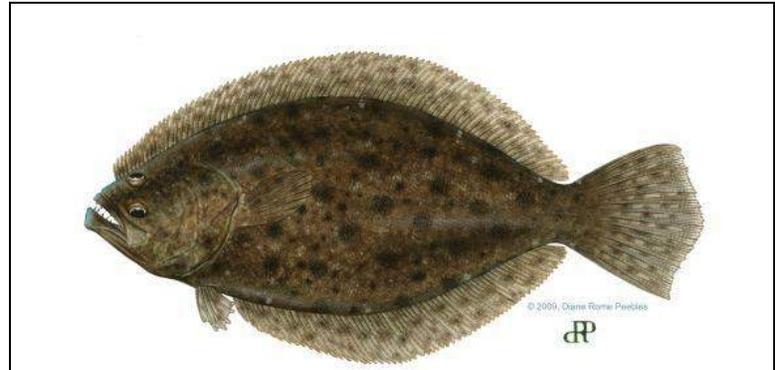
Southern flounder support valuable fisheries in the southeastern US. Importantly, growth is sexually dimorphic and these fisheries are heavily dependent on the larger females. Southern flounder also show temperature dependent sex determination, with warmer culture conditions producing predominantly males. These two factors make accurate estimation of sex ratios critical for assessing spawning stock biomass and management.

However, extensive studies of wild juvenile sex ratios have not been undertaken. We assessed juvenile sex ratios, in conjunction with water temperature recordings, using gene expression and genetic markers to identify the sex of the fish, in both Texas and North Carolina in 2014. Texas had cooler than average water temperatures during the sex determination window, with later temperatures warming to masculinizing range, however wild caught Texas flounder had 43% males and 46% females overall.

North Carolina showed wide variability in temperature, but similar in all locations; however northern sites had 46% females while Neuse River estuary and southern sites only had 21% females. Collections continued for 2015 with wild southern flounder in Texas again showing close to 50/50 sex ratios.

We also evaluated the sex ratios of southern flounder in the Texas stock enhancement program with control settings, some experimental temperature trials, and fish stocked into cages in the wild. This study represents a new approach to assessing habitat and yearly temperature variation effects on sex ratios for predicting spawning stock biomass in these valuable fisheries that are critically dependent on production of females.

—Lindsay Glass Campbell



Southern Flounder *Paralichthys lethostigma*

© Diane Rome Peebles

Used by permission

<http://www.dianepeebles.com/>

The southern flounder and Gulf flounder and other flatfish are compressed laterally and spend most of their life lying on the bottom or swimming along the bottom on their side. They have prominent eyes and a large mouth with large, sharp, pointed teeth.

Southern flounder and Gulf flounder are known as left-eye flounders; the eyes of the adults are always on the fish's left side. The opposite is true for other species of flounders, halibut, and all the species of soles, whose eyes are on the right side.

The left or "up" side of the southern and Gulf flounders is light olive brown to dark brown or nearly black, with many blotches and spots of darker and lighter color. The eyeless "down" side is white or dusky.

Southern flounders may have scattered large spots but they gradually disappear as the fish grows older. The scales are small. Flounders can modify their coloration and patterning to match the bottom.

Source: The University of Southern Mississippi  
Gulf Coast Research Laboratory,

<http://www.usm.edu/gcr/public/fish/flounder.php>



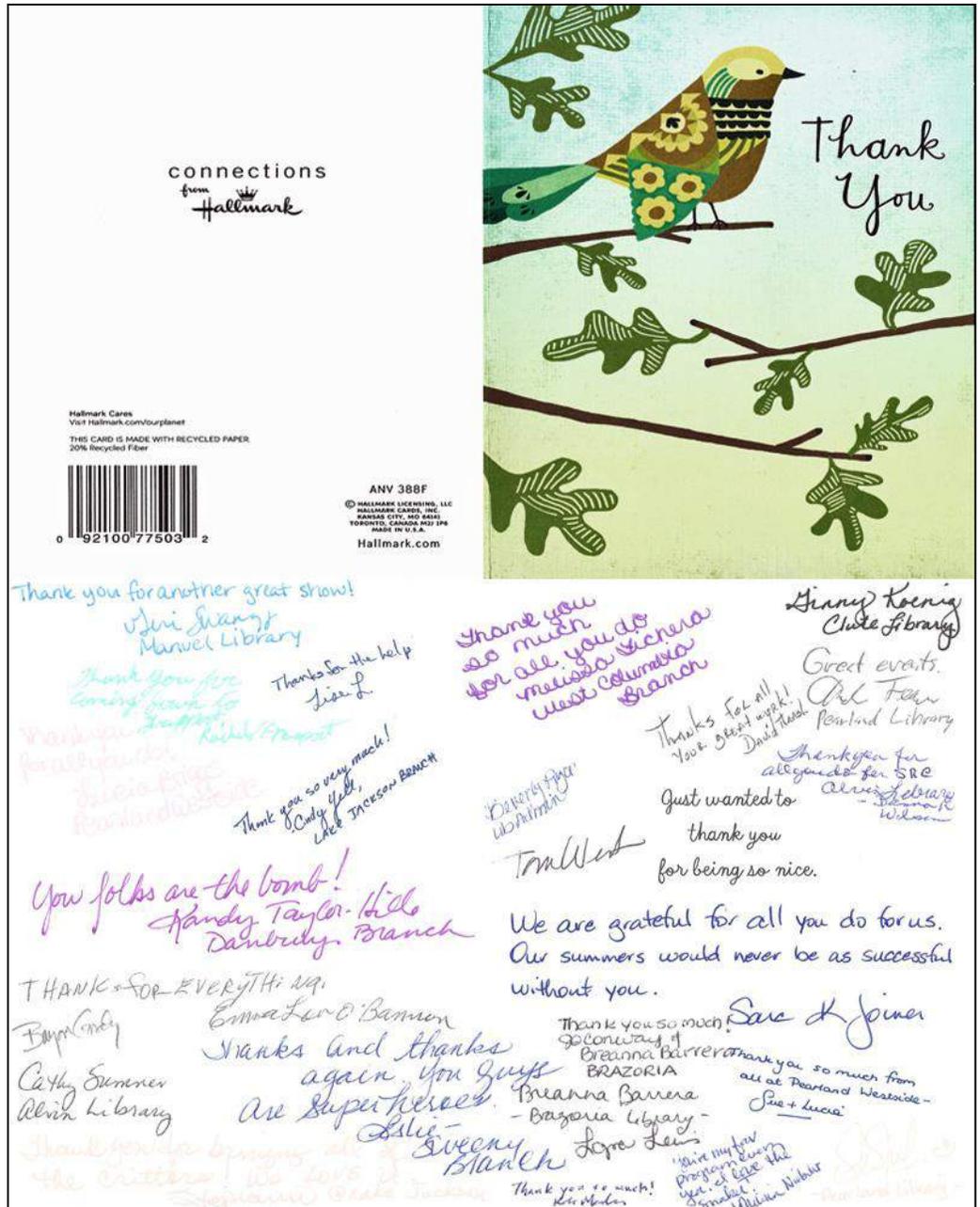
Xtreme Hummingbird Xtravaganza 2015, at Gulf Coast Bird Observatory. For more XHX photos see Page 9.

### A MESSAGE FROM PRESIDENT DAVE continued

Here's the thank-you card we received from the Brazoria County Library System thanking us for the environmental education programs we've presented at county libraries. It bears the signatures of all county librarians.

A special thanks to Ruby Lewis for leading this program.

*Editor's note: the breakfast was pretty good too!*



**Below** - Five successive stages of the eclipse of the moon on the night of February 27, 2015 as seen from Lake Jackson, Texas. Photos by Dave Brandes.



## MEMBERSHIP REPORT

By Jerry Eppner, Membership Coordinator

As of September 30, ninety four COT members have turned in timesheets totaling 11478 hours of VT. Fifty-six members have started on their VMS journey and reported 331 hours VT on the new online time reporting system. So we are off to a good start.

As I, too, learn the VMS from an administrator's perspective, I have learned that it has a lot of potential, both in ease of use and in our ability to recall information entered. But, like any computer system, it is not very forgiving. It only has one way to read what you put in. Although for the most part, entries have been correct, the two biggest errors have been \*1) not choosing the correct opportunity code and (2) not resetting the code or type of activity if you enter more than one VT or AT activity on the same episode. For mistake one, just look at the documents in the VMS resource section on the COT website homepage (left margin). Peggy has developed some excellent resources covering virtually every activity we do as a chapter. So download those resources, study them and life will be much easier for me and for you.

Once you save a logbook entry, you can edit several of your inputs, but not the opportunity code. You will just have to delete and start over. For error two, if you go in to enter a VT activity, and once you complete that entry you want to enter some AT or a different type of VT, you need to go back to the top of the logbook page and reset the opportunity code before proceeding. Just takes some practice. Let the transition team know if you need help. We are here to facilitate where needed.

Due to my vacation and the VMS transition, we will not recognize members for milestone achievements at the October general meeting, but I anticipate a long list in November. You guys are doing well!

## SUSAN BROWN – DEEP and HWEEP



**CHURCHILL, TEXAS** -- September 1, 2015. US Fish and Wildlife Service has appointed Susan Brown as interim coordinator of the DEEP and HWEEP programs. By the time you read this, Susan will have already administered three DEEP events and has announced several more. Those of you who participated in the three programs have already met Susan.

Susan has had an extensive career in nature-related positions. She holds advanced degrees from Evergreen State College, the University of Washington-Seattle, Florida Atlantic University, and the University of Washington-Bothell.

Susan earned a Master of Fine Arts degree at UW-Bothell. Her MFA thesis was a collection of illustrated historic fiction stories inspired and informed by inscriptions on gravestones dating from the 1780s to World War I found in Scotland, England, Wales and Seattle. The artist book edition of the MFA thesis, *Love & Courage: Historic Fiction*, has been included in several exhibitions in the USA and other countries.

Several examples of Susan's art works can be seen at <http://www.victoriantravel.com>.

Contact info for Susan Brown:  
979-236-8950 (cell)  
[susan.brazoria@gmail.com](mailto:susan.brazoria@gmail.com)

For information about DEEP and HWEEP see  
• <http://tmn-cot.org/DEEP/index.html>  
• <http://tmn-cot.org/HWEEP/index.html>

## THREE MEMBERS of CLASS of 2015 EARN 2015 RECERTIFICATION

### ANGLETON, TEXAS –

September 9, 2015. At its regular chapter meeting held today at the Texas A&M AgriLife Extension Service, three members of the Class of 2015 recertified for Calendar Year 2015. Graduates included Mike Bettorf, Vicki Kirby, and Anna King.

Each graduate received a certification pin and a Certificate of Achievement. The awards were presented by Jerry Eppner, Membership Coordinator.



Jerry Eppner (Membership Coordinator). Mike Bettorf, Vicki Kirby, Anna King, Dave Brandes (President, Cradle of Texas Chapter).  
Photo by Neal McLain

## OCTOBER EVENTS – VOLUNTEERS NEEDED!

### Three big events coming up this month!

- **October 3** – **BUFFALO BAYOU PARK GRAND OPENING** – Buffalo Bayou Park, Houston – Details below
- **October 17** – **FALL KIDS FISH FEST** – Challenger Seven Memorial Park, Webster – Details below
- **October 17** – **KBR KIDS DAY** – Buffalo Bayou Park, Houston – See Page 7

**VOLUNTEERS ARE NEEDED FOR ALL THREE EVENTS**



### TMN-COT Volunteers Needed!

**Saturday, October 3, 10:30 pm – 6:00 pm (set up)**

**Saturday, October 3, 1:30 pm – 6:00 pm (public)**

Volunteers needed for—

- Reptiles
- Butterfly Encounters
- Birds of Prey Programs
- Meet with members of the public
- Teach kids about nature
- Set up before event starts
- Take down at end of day

Location:

Buffalo Bayou Park Greentree Nature Area  
(North side of bayou east of Waugh Street Bridge)

Maps:

Road: <http://tinyurl.com/BufBayouPark>

Events: <http://tinyurl.com/BBPGO-E-map>

To volunteer, contact

Ruby Lewis

979-549-0940 (h)

[rubylewis77515@gmail.com](mailto:rubylewis77515@gmail.com) :

or

David Plunkett

979-297-3322 (h)

979-418-1411 (c)

[doplunkett@sbcglobal.net](mailto:doplunkett@sbcglobal.net)

Approved by TMN-COT for up to 4.00 hours of  
volunteer time plus travel.

**VMS CODE PO: USFWS**



### TMN-COT Volunteers Needed!

**Saturday, October 17, 8am – 12pm**

Volunteers needed for—

- Registration/Sign-in,
- TPWD Go Fishing Educational Kiosk,
- Casting Practice Instructors,
- Rod & Reel Repair & Distribution,
- Fish Cleaning Station,
- Monitoring & assisting children
- Service learning volunteers while fishing.

Location:

Challenger Seven Memorial Park

2301 W. NASA Blvd.

Webster, Texas 77598

281-332-5157

Map: <http://tinyurl.com/Challenger-Seven>

To volunteer, contact

Christina Hartman

[chartman814@gmail.com](mailto:chartman814@gmail.com)

713-305-9718

Approved by TMN-COT for up to 4.00 hours of  
volunteer time plus travel.

**VMS CODE PO: Other**

# KBR KIDS 2015 DAY ON BUFFALO BAYOU

By David Plunkett and Neal McLain

**Get ready for *KBR Kids Day on Buffalo Bayou!*  
Saturday, October 17, 2015, 11:00 AM to 3:00 PM  
Buffalo Bayou Park, Houston, Texas  
Volunteers needed!**

This will be the third year for volunteers from Friends of Brazoria Wildlife Refuges (FOBWR) and volunteers from TMN-COT to participate in KBR Kids Day. This year's Kids Day may be the second-largest educational outreach event in the history of our chapter — exceeded only the Buffalo Bayou Park Grand Opening on October 3.

Again this year we'll be a big part of the "wild" with a major effort that includes two Birds of Prey programs, all our reptiles (snakes, turtles and alligators), a Butterfly Encounter, signs/banners, and the FOBWR display board/literature.

One big change however: this year's KBR kids Day will be at the new "Water Works at Sabine Street" on the west side of the Sabine Street bridge. See map below.

Participation in this event is a continuation of the U.S. Fish and Wildlife Service's *Urban Initiative*. This initiative recognizes that most people today live in cities and are unaware of the location or value of our national wildlife refuges.

Six National Wildlife Refuges within 60 miles of the center of Houston are included in the Houston Initiative:

- Trinity River NWR northeast of Houston
- Anahuac NWR southeast of Houston
- McFadden NWR southeast of Houston
- Brazoria NWR south of Houston
- San Bernard NWR south of Houston
- Attwater Prairie Chicken NWR northwest of Houston

We need volunteers! More than 20 volunteers participated last year. To volunteer for this year's event contact one of the volunteer coordinators:

### TMN-COT

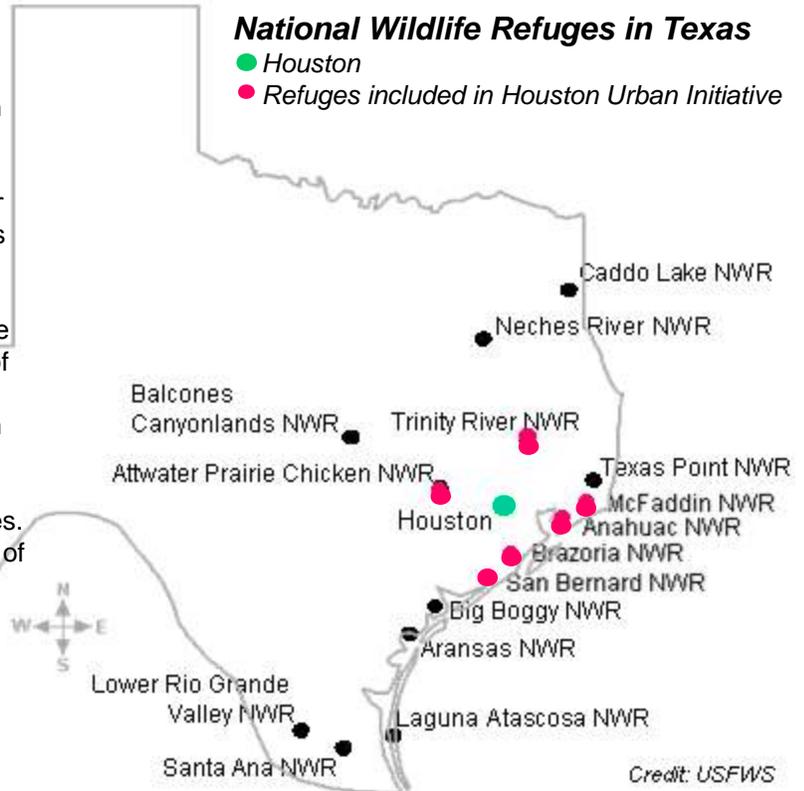
Ruby Lewis,  
979-549-0940 (h)  
[rubylewis77515@ymail.com](mailto:rubylewis77515@ymail.com)  
**VMS CODE PO: USFWS**

### FOBWR

David Plunkett  
979-297-3322 (h)  
979-418-1411 (c)  
[doplunkett@sbcglobal.net](mailto:doplunkett@sbcglobal.net)

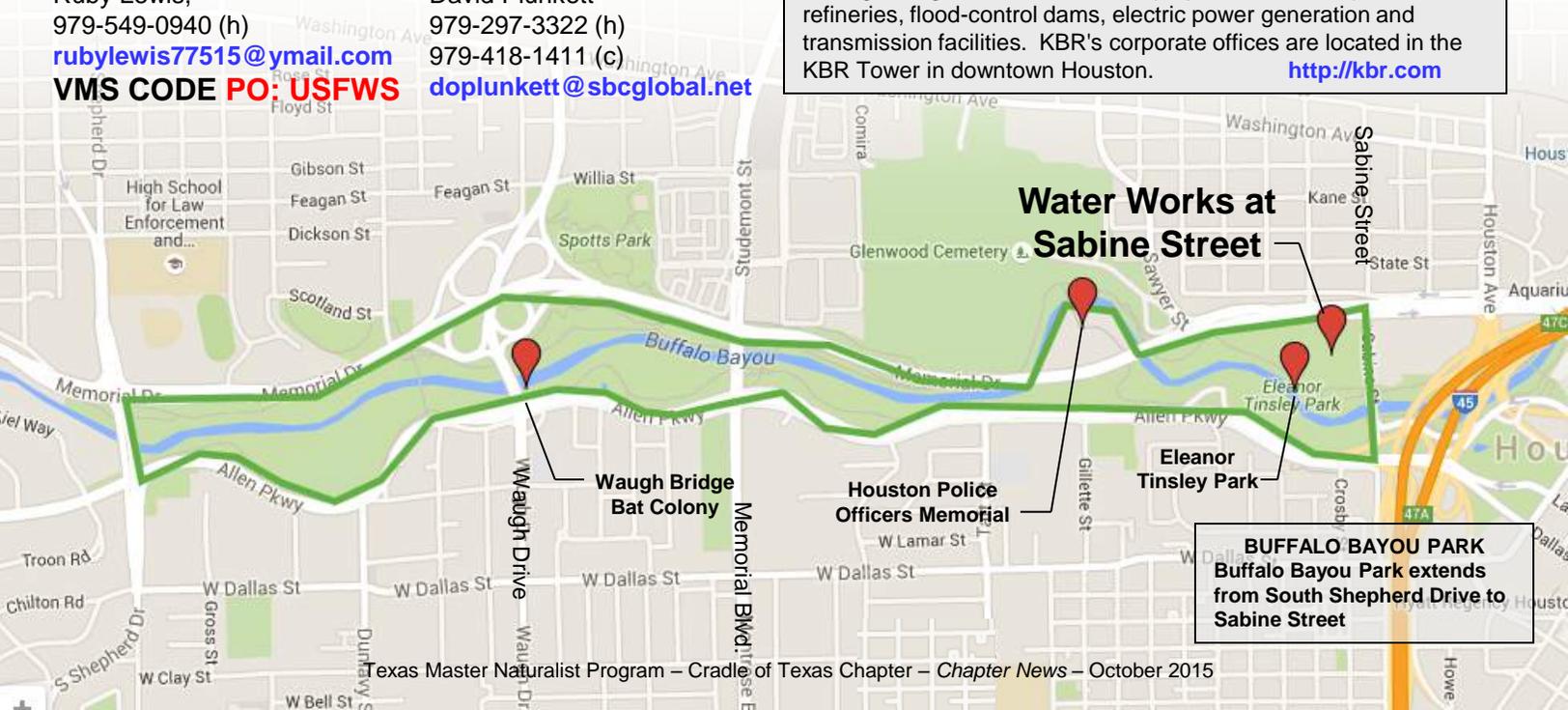
### National Wildlife Refuges in Texas

- Houston
- Refuges included in Houston Urban Initiative



### What is KBR?

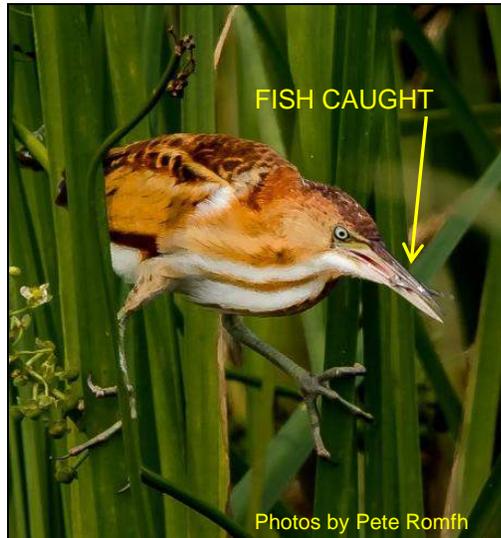
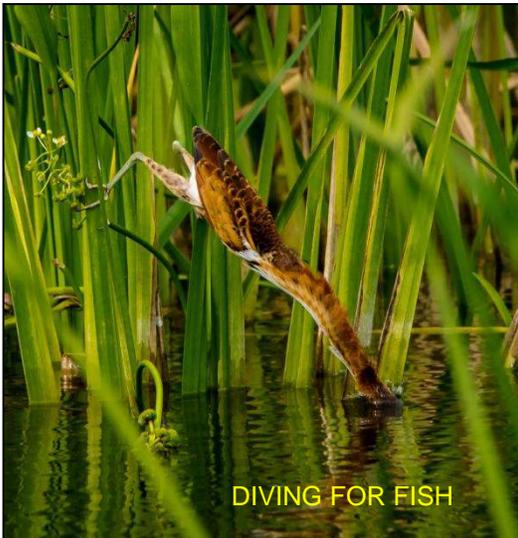
KBR, Inc. (formerly Kellogg Brown & Root) is an American engineering, procurement, and construction company, formerly a subsidiary of Halliburton. It traces its history back to 1901. KBR manages large-scale construction projects such as airports, oil refineries, flood-control dams, electric power generation and transmission facilities. KBR's corporate offices are located in the KBR Tower in downtown Houston. <http://kbr.com>



## Photo Gallery Highlights by Peggy Romfh, Photo Gallery Editor

Have you ever seen an alligator leaping out of the water with a turtle or bird in his giant jaws? Baby grebes riding on their parents' backs in the water? A hermit crab crawling out of its shell to 'stare' at you? We are always delighted when we are able to see those special moments in nature — and even more so if a naturalist captures a photo!

### Least Bittern (*Ixobrychus exilis*) at San Bernard NWR



Because the Least Bittern can grasp cattails and reeds with its long toes, it can feed in water that would be too deep for larger herons to wade in. At 11 inches high and less than 4 oz, it barely moves the reeds even when it lunges, head down, to catch a fish.

Contrast this fishing method with that of the American Bittern, which is usually seen camouflaged among reeds in wetland habitat.

In late August, several least bittern were seen at San Bernard NWR..

### Seaside Dragonlet

The Seaside Dragonlet (*Erythrodiplax berenice*) is the only dragonfly in the Western Hemisphere that is restricted to salt marsh habitats. It breeds on saltwater and lays eggs on a bed of algae. It may be seen perching horizontally on marsh grasses.

Jerry Eppner captured the photo of this female dragonlet at Sea Center Texas, but seaside dragonlets have been seen in many intertidal zones along the Coast.



Photos of over 1,000 Brazoria County species may be seen in the TMN-COT Photo Gallery!

### Plankton in Drum Bay

The Photo Gallery has been enhanced by a series of phytoplankton and zooplankton photos taken by Dave Brandes. On the left is *Coscinodiscus sp.* (a Phytoplankton); on the right is *Tintinnid sp.* (a zooplankton). The two classes of phytoplankton (dinoflagellates and diatoms) are both represented in the species photos in the gallery.



**Don't be a crab – pick up fishing line and keep Texas wildlife safe!**



## ***Xtreme Hummingbird Xtravaganza (XHX) Celebrated September 12 and 19 at GCBO with Support from TMN-COT Volunteers***

Pictures tell the story of the support provided by TMN volunteers, from parking cars, helping with the “Adopt a Hummer,” Nature Store, Junior Ornithology Booth, Butterfly Plant Sales, Parking, and Photography, giving Presentations (Barbara Burkhardt) and staffing the COT Public Outreach area with alligators, snakes, and turtles.

Over 50 birds were banded and adopted on Sept. 19; over 20 were banded on Sept. 12 under somewhat soggy conditions. A Carolina wren, Yellow-breasted Chat, and Blue Grosbeak were among birds banded in addition to Ruby-throated Hummingbirds. Barbara Burkhardt gave a presentation on September 12 on “Gardening for Hummingbirds.” Cliff Shackelford, State Ornithologist, presented on September 19.



Master Naturalists in photos above include (left to right):

- **Row 1:** Mel McKey waiting for the first arrivals, Anne Lange working on Adoption requests with Chris Eberly, Executive Director at GCBO, and Betty Bouley, typing up Hummer Adoption certificates
- **Row 2:** Roy Morgan talking to satisfied attendees, Ed Barrios working at the butterfly garden plant sales, and Jerry Eppner at the Junior Ornithology table
- **Row 3:** Barbara Burkhardt finishing her presentation; Candace Novak holding a baby alligator at the TMN Reptiles area, and Neeta Allen sharing a snake with attendees at the TMN Reptiles area

# XHX Photo Story, continued



Master Naturalists in photos with some of the many attendees, include (from left to right): **Large photo at top:** Candace Novak, Joan Simonsen, and Neeta Allen with many attendees at TMN Reptile Interaction area **Row 2:** Kim Richardson with snake **Row 3:** Ruby Lewis with baby alligator, Joan Simonsen with box turtle **Row 4:** Christina Hartman with snake, and Layna Lewis walking an alligator on a leash, and Becky McClendon with adopted Yellow-breasted Chat.



XHX Photos by P&P Romfh

### CRADLE OF TEXAS CHAPTER OFFICERS

President	Dave Brandes, Lake Jackson
Vice President/Program	Leo Novak, Lake Jackson
Secretary	Linda Sluis, Richwood
Treasurer	Donald Sabathier, Pearland
State Representative	Ed Barrios, Lake Jackson
Past President	Mike Mullins, Sweeny
Training Coordinator	Roy Morgan, Lake Jackson
Membership Coordinator	Jerry Eppner, Lake Jackson
Volunteer Service Coordinator	Pete Romfh, Houston
Advanced Training Coordinator	Peggy Romfh, Houston
Outreach Coordinator	Ruby Lewis, Angleton
Chapter Host	Pam West, Freeport
Publicity Coordinator	Richard Schaffhausen, Alvin
Publications Coordinator	Neal McLain, Brazoria
Class of 2015 representatives	Patty Brinkmeyer, Brazoria
	Jill Carroll, Pearland

Chapter Advisers	Connie Stolte (Texas Parks & Wildlife Department) John O'Connell (AgriLife Extension Service)
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Newsletter Editor	Neal McLain, Brazoria
Newsletter Writers	Peggy Romfh, Dave Brandes, David Plunkett, Jerry Eppner, Mike Mullins, Neal McLain

Website	<a href="http://tmn-cot.org">http://tmn-cot.org</a>
Facebook	<a href="http://facebook.com/TMN.COT">http://facebook.com/TMN.COT</a>
E-mail Listserv	<a href="http://tinyurl.com/TMN-COT-Mail">http://tinyurl.com/TMN-COT-Mail</a>



### MASTER NATURALIST EMAIL LISTS

#### ***TMN-COT Chapter list***

- Instructions [http://tmn-cot.org/Email\\_Lists/index.html](http://tmn-cot.org/Email_Lists/index.html)
- Send messages to [TMN-COT@googlegroups.com](mailto: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](mailto:listserv@listserv.tamu.edu)
- All messages are held for moderation by the TMN State Coordinator

*Chapter News* is published monthly on the first day of the month by the Texas Master Naturalist Cradle of Texas Chapter. Submissions are welcome. Submission deadline is 5:00 PM the next-to-last day of the month. Submissions should be sent by email to *Chapter News* Editor at [tmn.cot@gmail.com](mailto:tmn.cot@gmail.com). Submissions may be edited for clarity.