Texas Wetland News

and WETLAND CONSERVATION PLAN UPDATE

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TEXAS PARKS & WILDLIFE

JANUARY 2007

MASTER NATURALIST PROGRAM SEEKS APPLICANTS

Twenty chapters of the Texas Master Naturalist program are conducting spring training classes for volunteers wanting to learn about natural resource and conservation management.

The Texas Master Naturalist program, with 38 chapters located across the state, aims to develop a corps of well-informed citizen volunteers who educate their communities about the wise management of natural resources. The main qualification needed to become a certified Texas Master Naturalist is an interest in learning and playing an active part in conservation.

Volunteers who sign up for the program will receive a minimum of 40 hours of training from educators and specialists from universities, natural resource agencies, nature centers and museums. Training topics include interpretation and management of natural resources, ecological concepts, ecoregions in Texas and natural systems management. Volunteers are expected to give 40 hours a year of service in community education, demonstration and habitat enhancement projects. They are also expected to pursue a minimum of eight hours of advanced training in areas of personal interest.

Classes listed on page 10

New Film Explores Playas – The Most Important Wetlands You've Never Heard Of

You may have never heard of, nor seen, a playa wetland. Unknown to most, playas are the most abundant and ecologically important wetlands in the Southern and Western High Plains, recharging aquifers and sustaining wildlife and agricultural economies. Yet despite these benefits, playas remain critically threatened and are fading from the landscape faster than people can even learn they exist.

In an effort to raise awareness and conservation of these vital wetlands, the Playa Lakes Joint Venture (PLJV) – a partnership of conservation groups, landowners, and natural resource agencies – has produced a new film about the wetlands, ***The Playas - Reflections of Life on the Plains***, which is now available on DVD or VHS.

"Anyone who lives in the playa lakes region – farmers, ranchers, hunters, school teachers, community leaders, policy-makers – should see this film," said Mike Carter, PLJV Coordinator. "Every one of us has a stake in securing our future on the plains and we all have a role in playa conservation. Seeing this film will help people understand the many important benefits playas provide and give them the tools and resources they need to take action to conserve them."

(Continued on the next page)

PHOTO: BRIAN SLOBE

Playa Film, continued

The 28-minute film illustrates the values of playas to wildlife, water and people, threats to the wetlands and how people are working to conserve them. The film features sweeping aerial footage of playas captured by hot air balloon and interviews with playa experts, biologists, landowners and community leaders throughout the six-state playa lakes region.

Playas are shallow, seasonal wetlands found throughout the Southern High Plains. They are the primary source of recharge for the Ogallala Aquifer, and support millions of birds and other wildlife. There are more than 60,000 playas in the short grass prairie regions of Colorado, Kansas, Nebraska, New Mexico, Oklahoma and Texas – making them the most abundant wetland type in the region.

Major funding sponsors of the film include: the Lannan Foundation, ConocoPhillips, The Nature Conservancy, Playa Lakes Joint Venture, U.S. Fish and Wildlife Service, Colorado Division of Wildlife, Nebraska Game and Parks Commission, Kansas Department of Wildlife and Parks, Texas Parks and Wildlife Department, Kansas Alliance for Wetlands and Streams and Ducks Unlimited.

The film is available in either DVD or VHS format for $5.95. Contact Debbie Slobe of the PLJV at debbie.slobe@pljv.org to request a copy.

For more information about playas, visit the PLJV Web site at **www.pljv.org** or call Debbie at (303) 926-0777.

PLAYA LAKES
JOINT VENTURE

Texas Master Naturalists – Lindheimer Chapter

The Lindheimer Chapter of the Texas Master Naturalists has been an active partner with the U.S. Army Corps of Engineers (USACE) at Canyon Lake. One of the many projects for which the Lindheimer Chapter provides support is the restoration of the model riparian habitats that dot the USACE property around the lake.

Several years ago, the USACE constructed artificial wetland sites for demonstration purposes and to provide an attractive spot for indigenous wildlife. As maintenance of the sites became increasingly difficult due to manpower shortages in the USACE, the Lindheimer Master Naturalists has volunteered to perform maintenance and restoration of the constructed wetland sites.

The first wetland site – almost fully restored. The naturalists and their helpers removed almost a yard of material that had settled in the pond, divided and repotted the aquatic plants, removed overgrowth that had begun to cover the pond and removed invasive plants that had threatened to take over the entire area. There are three more sites to be restored.

Pictured: Carolyn Hyatt, primary project volunteer, and Chapter President Art Williams

PHOTO: CHRIS SUMMERS

Texas Master Naturalists – Heart of Texas Chapter

The Lake Waco Wetlands is a constructed wetlands complex built to provide habitat mitigation to compensate for impacts that occurred to wetland areas when the level of Lake Waco was raised by seven feet in 2003. Located on about 300 acres on the North Bosque River, the site includes a riparian/bottomlands area along the river and an uplands forested area in addition to about 180 acres that has been flooded to create a functional wetland area.

In June 2006, the Heart of Texas Chapter of the Master Naturalist Program attended Mussel Watch and Amphibian Watch training classes at the Lake Waco wetland area. A Mussel Watch Program has been started at the Lake Waco Wetlands, and an Amphibian Watch Program is planned for the future.

PHOTOS: ANNETTE JONES

The Heart of Texas chapter of the Master Naturalist Program helps maintain the Lake Waco Wetland area by performing cleanup projects to remove trash and debris from the Wetlands.

See the list on page 10 of Master Naturalist chapters in your area offering training classes, and get involved!

New Survey Reveals High Landowner Demand for Playa Conservation

Debbie Slobe, PLJV Communications Team Leader

PLAYA LAKES
JOINT VENTURE

A new survey commissioned by the Playa Lakes Joint Venture (PLJV) found that most landowners with playas on their properties are willing to conserve them, and many say the wetlands are a positive presence on the land, primarily because they attract wildlife.

PHOTO: BRIAN SLOBE

The data signal that playa landowners are a potentially significant market for wetlands and wildlife conservation programs, like those offered through the U.S. Farm Bill, U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program, state Landowner Incentive Programs and other private lands conservation programs.

"The results are encouraging for wildlife and wetlands conservation, especially going into the next Farm Bill reauthorization process," said PLJV Coordinator Mike Carter. "I think we and our partners need to ensure that wetlands and playa conservation programs are given greater attention in the next Farm Bill."

Based on the results of the "High Plains Landowner Survey 2006: Farmers, Ranchers and Conservation," a majority of playa landowners (74 percent) were willing (28 percent 'highly' and 46 percent 'moderately') to plant native grass buffers around playas if given an incentive, which is what Farm Bill programs like the Farmable Wetlands Program and Wetlands Conservation Non-Floodplain Initiative – otherwise known as CP23a – do. Grass buffers protect playas by filtering out eroded soils from surrounding cropland that can wash into and bury playa basins, and by filtering out contaminants from irrigation and storm water runoff.

> **"We certainly have our work cut out for us in educating landowners about playas' link to the aquifer, and that by protecting playas, landowners are protecting their bottom line."**

Survey data also revealed that landowners like playas and the wildlife they attract. Sixty-eight percent of playa landowners say that the wetlands are an 'overall positive' feature on the landscape, with wildlife being the top benefit. Also, landowner (playa and non-playa owners) willingness was fairly significant for many other conservation practices such as removing invasive plant species (52 percent willing) and implementing grazing management plans (48 percent willing).

Survey data also revealed that although landowners are concerned about the future of the Ogallala Aquifer, not all understand playas' crucial role in groundwater recharge. Of 13 possible resources that might warrant additional conservation effort, landowners said they supported 'more conservation than now' for only one – the Ogallala Aquifer. However, about 50 percent of landowners did not know whether or not playas recharged groundwater, when in fact playas are the primary source of recharge for the aquifer.

"We certainly have our work cut out for us in educating landowners about playas' link to the aquifer, and that by protecting playas, landowners are protecting their bottom line," Carter said. "We expect that as more landowners understand this link, we might see a change in how they perceive playas. Perhaps recharge will begin to edge out wildlife in landowners' minds as the most important playa benefit. And perhaps we'll see even greater landowner willingness to conserve playas."

The High Plains Landowner Survey was conducted from March through May, 2006, by DJ Case and Associates on behalf of the PLJV. The 21-question survey was mailed to 1,800 landowners randomly selected from a Farm Service Agency list of agricultural producers in a six-state region that includes portions of Colorado, Kansas, Nebraska, New Mexico, Oklahoma and Texas. Final response was 26 percent (429 respondents). Error tolerances for this sample are +/- 2 to 5 percentage points (95 percent confidence level). Complete survey results and executive summary are available on the PLJV's Web site: **www.pljv.org**

Playas are seasonal wetlands found in abundance throughout the Southern and Western High Plains. There are more than 60,000 playas, or 500,000 playa acres, in a six-state area of Colorado, Kansas, Nebraska, New Mexico, Oklahoma and Texas. Playas are the primary source of recharge for the Ogallala Aquifer and are critical habitat for migratory and resident birds and other wildlife in the region. More than 70 percent of all playas have been altered from their natural state and have lost much of their wetland values. Sedimentation is the number one threat to playas, and more than 50 percent of the wetlands have been buried by eroded soils and are effectively 'fossilized' and no longer function as wetlands.

The PLJV is a partnership of state and federal wildlife and agriculture agencies, national and local conservation groups, businesses and private landowners dedicated to conserving playas, other wetlands and grasslands for the benefit of birds, other wildlife and people in the Southern and Western High Plains. Since the JV's inception in 1989, the partnership has raised nearly $50 million to conduct more than 350 habitat conservation, research and outreach projects in the six-state playa lakes region. The playa lakes region includes: eastern Colorado and New Mexico, western Nebraska, Kansas and Oklahoma and the Texas Panhandle. For more information, visit the PLJV Web site: **www.pljv.org**

Prairie Wetland Restoration at Sheldon Lake State Park

Andrew Sipocz and other TPWD staff. Photos by Andrew Sipocz.

Sheldon Lake State Park is a 2,900-acre nature preserve and low-density educational park, specializing in the introduction of urban youth to the out-of-doors and wildlife. Sheldon Lake is geographically located on Texas' coastal plain, a shelf of very flat lands that gently tip downward toward the Gulf of Mexico. This plain was formed by the many rivers that flow through the state of Texas' interior – as the rivers carry sand, silt, and clay from north-northwest Texas to the Gulf of Mexico, the flatness of the coastal plain causes the river's currents to slow and deposit sediments. Over the millennia, a 100-mile wide or larger, slightly tilted terrace along the Gulf has been formed. Its edges are frayed by many bays – essentially "bite marks" where during past ice ages rivers had cut valleys into the shelf when sea levels were hundreds of feet lower than today due to the fact that massive amounts of water were sequestered in glacial ice sheets. When the sea rose to its present level, it flooded these valleys to form our bays.

Throughout the last 2 million years and perhaps 20 ice ages, Texas' rivers have meandered across the coastal plain, creating new channels and filling in old ones. Many of the old channels that had been filled in the past show up today as surface expressions – miles-long, winding swales are created as the water-filled clay that is deposited into them by floodwaters slowly consolidates – not unlike that utility line ditch in your backyard that always shows back up after a rain no matter how much dirt you put into it. When these swales dried up and exposed the sediment that used to be under water to the wind, these fine sand and silt sediments would be carried from their original resting location to the slightly high prairie, being deposited and building up fields of "pimple mounds." These pimple mounds, also referred to as "mima mounds," are slight, circular dunes one to three feet high and often 30 feet around.

Over time, the effects of this wind erosion on the dry swales would result in a series of circular marsh ponds averaging six acres in size and one to three feet in depth along the length of the swales. When the first European settlers encountered the coastal plain, it encompassed 7 million acres, about one-quarter to one-third of which was marshland embedded in a sea of tallgrass prairie, crossed by great rivers lined with forests. Waterfowl and prairie chickens had abundant habitat, and deer sheltered in groves of trees and brush that grew in the deep loamy soil of crescent-shaped dunes that accumulated on the lee side of the largest ponds, while ivory-billed woodpeckers haunted the gallery forests along the rivers and bayous. This abundance and diversity of plants and wildlife was the geologic legacy of Texas' rivers and the millennia of sediment-reshuffling by wind and water that now has been almost completely erased.

An example of one of the 1930 photos where historic channel scars, pothole wetlands and mima mounds are visible.

Through the process of field work and wetland restoration design, a restoration template was created and overlain on a current aerial photo of the site.

Sheldon Lake State Park lies where the wooded eastern United States and the open grasslands of the west meet near the northern end of the coastal plain. The park was a mix of forest and true prairie – a land where distinct meadows filled with over-the-head grasses were ringed in by tall pine and oak forests. Settlers gave each such meadow a name. The prairie opening at Sheldon was part of Round Prairie and was bisected by Carpenters Bayou.

Carpenters Bayou was sandy and clear-watered, about two feet deep, 100 feet wide and filled with towering baldcypress. I imagine it was a dreamlike tableau when the first settlers traveling into the region broke out of the woods and saw for the first time the meandering line of cypress, with holly and sassafras clumped at their feet, growing within the middle of the vast prairie opening.

Aerial photos of the Sheldon area taken in 1930 show an overgrazed prairie with much of the underlying soil lain bare. The first attempts at rice farming within terraced paddies can be seen along the edges of some ponds, and broad, wet swales show a sparkle where water seeping down toward the Bayou reflected sunlight back to a camera probably mounted on the wing of a bi-plane. Carpenters Bayou was later dammed to capture water for Houston's war industries, which put two to eight feet of water over the prairie and the bayou.

The reservoir that resulted from the damming of Carpenters Bayou and land surrounding the reservoir was given to the City of Houston after the war and was then transferred to the state, which constructed a fish hatchery on the site and operated the property as a wildlife management area. Before the property was transferred to the state, an elevated water canal bisecting the reservoir was constructed, and that portion of the reservoir east of the canal was to be kept drained as a condition of the property transfer. The drained lake re-exposed the bare bones of the prairie and wetland landscape that, by then, had been flooded for about 10 years. A clump of baldcypress that had taken root on a shallowly inundated ridge was left standing high and dry in one of the exposed fields.

The remaining reservoir, Sheldon Lake, now covers about 1,200 acres when full. The rest of the park includes 500 acres leased for crop agriculture and another 1,000 acres of streambeds, bottomland forests, marshes and swamps. Agricultural fields had been reestablished on the bare lands exposed by the draining of the eastern portion of the lake, and a portion of each crop was left in the fields for wildlife to feed on. At some point in the past, large land graders had been pulled across these fields, pushing upland soils into the re-exposed wetland ponds and swales in order to make the land as flat as possible for rice farming and yet also drain into a system of constructed ditches. This imitated what had been done on millions of acres of Texas' and Louisiana's coastal plains for rice agriculture. By the new millennium, the only hints of the site's original complex of prairie, meandering bayou and wetlands appeared to be a few very ancient, tall, and now mostly dead, baldcypress trees sticking up from the inundated channel at the head of Sheldon Lake.

Part of Texas Parks and Wildlife Department's mission includes the restoration of the state's parklands to pre-European settlement land conditions. This would at first appear to be an impossible task at Sheldon, as past landforms and vegetative communities seem to have been completely erased. In addition, initial attempts at wetland and prairie restoration on former rice lands in the region often resulted in the creation of muddy depressions that didn't sustain native wetland plants very well. As Texas' coastal plain soils differ greatly in their

A bulldozer in the process of constructing wetland area #2.

Wetland area #2 after the first good rain.

texture and pH, their ability to support prairie and wetland vegetation also differs. In most rice fields, the uplands have been scraped and lowered to fill wetland areas, creating a situation in which the subsoil is close to the surface. The first restoration efforts didn't take this into account, and marshes were being established on the wrong soil type or worse, on areas covered by subsoils.

The solution to this problem lies within the understanding of how the original prairie and wetland landscape formed out of the coastal plain's geologic legacy, and how humans have altered it for agriculture and drainage. The template for recreating past landforms is evident on current aerial photos in the black and gray patterns of historic wetland and upland soils spread across the region's agricultural lands. These photos, coupled with precise land elevation surveys, soil pits (test holes), and the 1930 photos allowed biologists familiar with the region's geology to reconstruct the park's past land conditions. Modern aerial photos and surveys can be overlain onto the 1930 photos to see how the reconstructions match up with the fuzzy, almost century-old pictures. The resulting template does a reasonably good job of relocating the historic boundaries of forests, wetland ponds, prairie swales and the myriad sandy-soiled "pimple mounds," the small dune formations that once spread across the otherwise clay loam prairies. The template developed for Sheldon even included design criteria such as original wetland depth and vegetation.

Approximately 40 acres within the park's agricultural fields was chosen for a pilot project wherein the historic wetland configuration and vegetation would be restored. The 1930 photo showed several prominent circular wetland ponds within the acreage, and the modern photos also showed darker areas where the ponds once lay, indicating the presence of some wetland soil. A topographic survey was conducted over the wetland restoration area and showed that while the suspected historic wetland areas were up to eight inches lower than nearby historic mima mound areas, they had been sloped to completely drain downslope. Soil pits excavated within these slight depressions showed that the original wetland topsoil still lay buried beneath the upland soils used to fill them. This buried topsoil had a pH of 4.9 or was strongly acidic. Nearby former mima mounds, still present as areas of almost white-colored, silty soil, had had their topsoil almost completely removed by the land leveling process. Their original subsoil, a yellow clay material, lay less than a foot from the surface. The soil pH of the mima sites was 8.5 or strongly alkaline. These results help to explain how past wetland restoration failures may have occurred, as depressions excavated into former mima mound sites would be unlikely to sustain native wetland plants.

The soil pits, in conjunction with historic and current aerial photos and the topographic survey, were used to delineate historic wetland boundaries. In the center of each historic wetland basin, the original topsoil still existed and was unaltered by plowing; therefore, it was relatively straightforward to determine the depth of the original pond. Near the edges of the historic basins where the original wetland topsoil lay close to, or at, the present-day surface, it had been mixed with upland soil by plowing. In this case, the original wetland depth could be determined by identifying how deep the original wetland subsoil should have been buried (using the soil series description in the county soil survey) and then working backwards from there. For example, if it was supposed to have been buried by 18 inches of topsoil and, instead, was found 24 inches below the surface, then it was estimated that six inches of fill had been pushed onto the site. Through careful landscape forensics, a map of historic conditions was developed.

Workers planting wetland area #3.

Wetland area #3 in June 2004.

The wetland boundaries were then staked out in the field, marking an earth-moving contractor's excavation boundaries. The wetlands were also marked with a line of stakes placed to demarcate the line of deepest excavation. Imagine a typical house roof placed upside down with the boundary stakes representing the gutters and the other stakes marking out the ridge line. Though the boundary was highly irregular and the centerline also wound around and was not of a uniform depth, the contractor had no problem envisioning the project and was tasked with creating roughly an even slope from the boundary stakes down to the centerline. The result was a pond with a highly irregular border and greatly varying slopes down to several places that were up to two feet deep. Four basins were excavated, with some of the material being used to construct a slight berm (six inches high at the most) at the bottom of the project's slope to help counteract the grading of the field and capture water, and the rest of the material was placed nearby but off-site. Approximately 10 acres of wetland were restored, and in addition, four mima mounds were reconstructed to a height of about 18 inches and a diameter of 30 feet by carefully scraping up the alkaline, white silt and fine sand that the land leveling and plowing had "smeared" over a larger area. The amount of soil moved wasn't large, as it was a tiny fraction of that amount excavated for a nearby fishing pond, so the cost of the work was about $1,000 per acre of restored basin.

Native wetland plants were plugged into the basins by volunteers organized and supervised by staff from Texas Cooperative Extension's Coastal Watershed Program and local Texas Master Naturalists. Thirty-five species of plants had been previously collected and propagated from nearby remnant wetlands in anticipation of the project. A larger, 100-acre area surrounding the wetlands is being restored to tall-grass prairie. It was recently plowed, fertilized and planted with seed harvested from the coastal tall-grass prairie preserved within the Attwater Prairie Chicken National Wildlife Refuge. This work was done by a company that specializes in prairie restoration.

The 100-acre prairie with embedded wetlands will serve as the park's restoration centerpiece and is envisioned to host a new visitor center, nature trails and interpretive signage. The resulting restored wetlands have been very successful and now provide habitat to ducks, herons, egrets, rails, ibis, snakes, amphibians and even a small alligator. The prairie seed germinated in the summer of 2006 and has provided the beginning of a field of native tall grasses such as big bluestem, little bluestem, and Indiangrass, as well as prairie flowers such as coreopsis.

It is hoped that this restoration project will serve as an example of how the large acreage of rice lands recently taken out of production can be restored to prairie and wetland to provide not only superior native pasture for cattle operations or hay meadows, but also as areas that landowners can use to hunt waterfowl and enjoy nature.

The restored wetland areas in July 2004.

The restored wetland areas in September 2006.

Master Naturalist Training Classes

Texas Master Naturalist chapters offering volunteer training this spring are listed with contact information. Enrollment is limited in most chapters. Some registration deadlines are fast approaching, so contact a chapter near you to see if seating is still available.

ABILENE – Big Country Chapter
Training begins April 2 with a registration deadline of March 20. Call (325) 672-6048 or e-mail g-bomar@tamu.edu for details.

AMARILLO – Panhandle Chapter
Training is being planned for a class to begin in February. For more information, call (806) 676-1483 or e-mail chassell05@cox.net

AUSTIN – Capital Area Chapter
The spring class is full but the chapter maintains a waiting list of prospective members. To be added to the waiting list, e-mail rw.myers@sbcglobal.net

BAY CITY – Mid-Coast Chapter
Class begins February 17 with a registration deadline of February 1. For details, e-mail paulmary0211@sbcglobal.net or call (361) 750-3679.

BRENHAM – Gideon Lincecum Chapter
(Austin, Colorado, Fayette and Washington counties)
Classes start on February 3 with a registration deadline of February 2. For details, e-mail jredden@tconline.net or call (936) 878-1988.

BURNET – Highland Lakes Chapter
Training begins March 1, and registration is accepted until the class is full. For more information, e-mail hlmn@281.com

CONROE/HUNTSVILLE – Heartwood Chapter
Training begins March 10, and the application deadline is March 1. For information, e-mail texasnaturelover@earthlink.net or call (281) 381-3281.

CLARKSVILLE – Red River Chapter
Class orientation is scheduled for April 14, and training begins for this northeast Texas chapter on April 21. For additional information, e-mail asemrau@ntcc.edu

DALLAS – North Texas Chapter
Classes begin February 13. The registration deadline is January 12. Call (972) 964-3506 or e-mail dk.scott@verizon.net for details.

EL PASO – Trans Pecos Chapter
Spring training begins February 21, and registration is due February 14. For specific information, call (915) 842-0346 or e-mail chasgilbert@netzeor.net and list Master Naturalist training in the subject header.

GALVESTON – Galveston Bay Area Chapter
Training begins on March 1, and February 15 is the registration deadline. For complete details, call (281) 534-3413, ext. 3, or e-mail jmassey@ag.tamu.edu

HARLINGEN – Rio Grande Valley Chapter
Classes begin February 7 with a registration deadline of January 25. Call (956) 364-1410 or e-mail gma2tex@sbcglobal.net

HOUSTON – Gulf Coast Chapter
Classes begin February 26 with a registration deadline of February 12. For more information, call (713) 781-9553 or e-mail milliemorgan@hotmail.com

JUNCTION – Western Edwards Plateau Chapter
Members will host an open house on February 13 and begin classes on March 13. The registration deadline is February 16. For details, e-mail scottr@ctesc.net or call (325) 475-2271.

LUBBOCK – South Plains Chapter
Training will begin on March 1, and registration is due by February 15. For more information, call (806) 785-5079 or e-mail samcwhitehead@nts-online.net

NAVASOTA – Tierra Cinco Chapter
The chapter is in the process of organizing and plans to host the first training class in spring 2007. For details about the progress and plans, e-mail carawhitener@yahoo.com or call (936) 825-9242.

Master Naturalist Training Classes

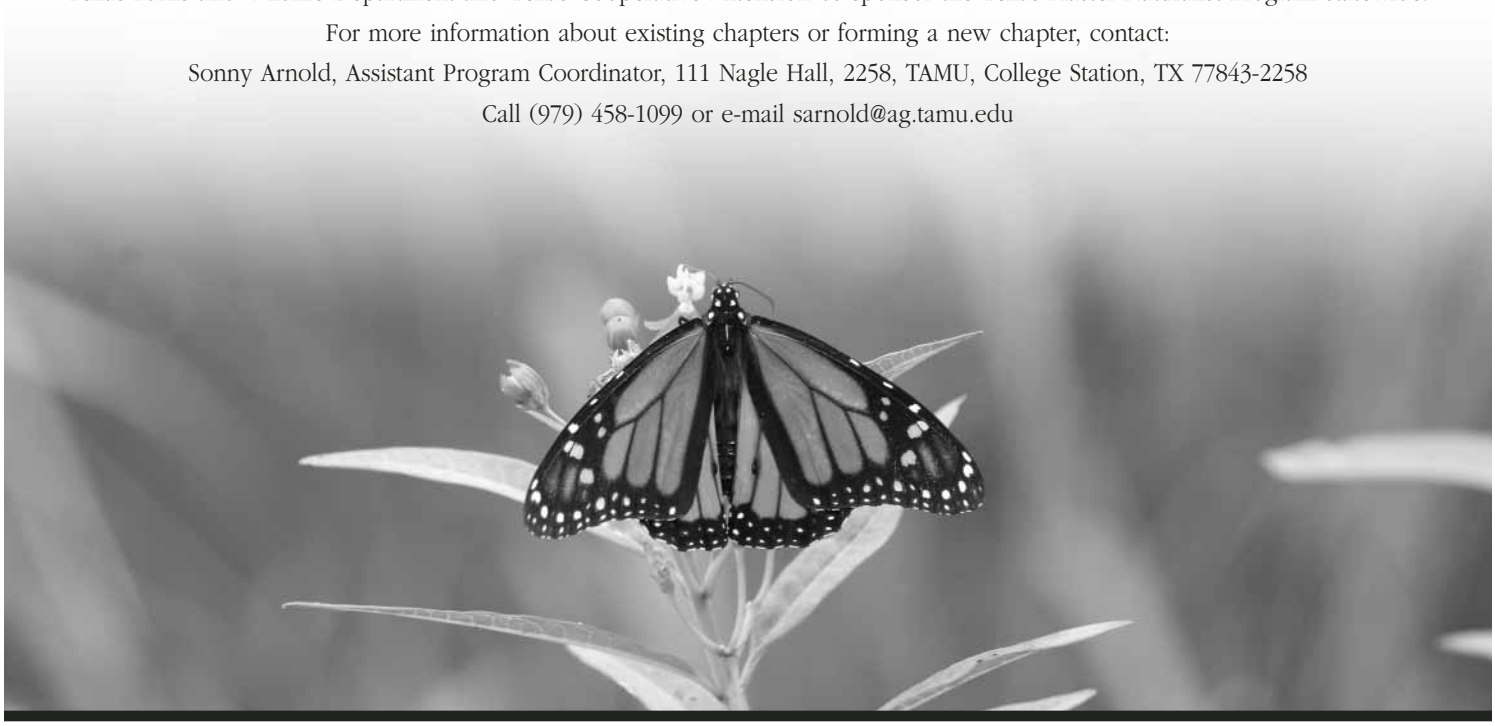
PLANO – Blackland Prairie Chapter
The chapter is sponsoring an open house on January 31 and classes begin on February 14. Applications are due February 12. For complete details, call (214) 538-4444 or e-mail info@bptmn.org

SAN ANTONIO – Alamo Area Chapter
Classes start March 15 with a registration deadline of February 15. For information, call (210) 698-2397 or e-mail aamn@texas.net

TYLER – East Texas Chapter
Classes begin January 20 with a registration deadline of January 6. For details, call (903) 566-9394 or check the Web page at: **www.woodduck.org**

WICHITA FALLS – Rolling Plains Chapter
Training begins in March 20, and registration is due by March 9. For details, call Mark Howell at (940) 766-2383 or e-mail mark.howell@tpwd.state.tx.us

Texas Parks and Wildlife Department and Texas Cooperative Extension co-sponsor the Texas Master Naturalist Program statewide.
For more information about existing chapters or forming a new chapter, contact:
Sonny Arnold, Assistant Program Coordinator, 111 Nagle Hall, 2258, TAMU, College Station, TX 77843-2258
Call (979) 458-1099 or e-mail sarnold@ag.tamu.edu



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If you would like to submit an article or announcement concerning wetland-related activities, initiatives, or workshops* for the next ***Texas Wetland News***, please e-mail the editor at: jennifer.key@tpwd.state.tx.us

*Please note that the newsletter cannot include announcements of for-fee seminars or workshops for which Texas Parks and Wildlife Department is not a sponsor.

QUESTIONS OR COMMENTS?

Your input is a valuable resource and we're always open to suggestions.

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 PWD BR T3200-003 (1/07)

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