



OUR MEMBER OF THE MONTH: RICHARD LETOURNEAU



PAGE 2

TEXAS LEAF CUTTING ANTS BY CHAD GULLEY

PAGE 3

NEW BUTTERFLY PAGE 3

WILD IN THE SUBURBS PAGES 4-5

FISH WHERE THE HYBRIDS ROAM BY LUKE CLAYTON PAGE 6-7

WATERSHIELD (SNOT WEED) PAGE 8-9

BILLY Higginbotham MONTHLY TIP PAGE 10

FALL SEMINAR OUTLINE 2012 MAKE-UP CLASSES PAGE 12



PRESIDENT'S CORNER PAGE 13

Join us July 26, 2012 at 6:45 PM, for our Monthly Meeting

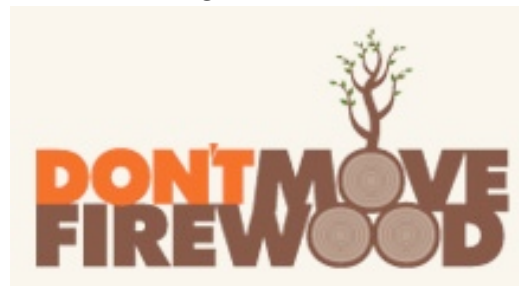
at The Nature Center in Tyler
11942 CR 848, Tyler, Texas 75707

Come to hear one of our ETCMN members
Laura Wilson presents the program:

“Don’t Move Firewood”



The monthly meetings are free and open to the public.
Bring a friend.



*Member of the Month
Richard LeTourneau*

by Barbara Thompson

Roaming the East Texas woodlands along the Sabine river bottoms, as a teenager and young man, was where Richard LeTourneau began his love affair with the wonders and beauty found among the old growth hardwood forests near his hometown of Longview.

But it was a great uncle that introduced Richard to the cruel fact that not everyone understood or appreciated what importance the old growth hardwood forests held and how important it is that we maintain as much of these forests as possible. It was at this time in young Richard's life, that he changed his mind for a lifetime in terms of what he was going to work toward in his life and what he was going to stand up for.

And Stand Up he has. Richard has been a devoted trustee and defender in the fight to maintain as much as possible of our original forests, sloughs, river bottoms and little lakes scattered throughout the East Texas region. He is a real naturalist when it comes to understanding the rich heritage that we have been so fortunate to inherit and how important it is to work hard to retain as much as possible for those that come after us.



Richard has devoted an enormous amount of time working on various committees, boards, and with organizations that sometimes truly do not have the best interest of the lands on their agenda. His involvement has been to present opposition to many of these projects that could be very negative to our entire area. One could spend hours listening to Richard's knowledgeable explanation as to why and how many of the proposed water projects are not only not necessary, but could truly destroy many invaluable sections of our earth.

He has been extremely important in the fight to prevent the Waters Bluff and Marvin Nichols Reservoirs from being developed, as these projects would affect a vast area of East Texas, destroying several of the true treasures that we are so blessed to have. A very interesting fact is that the "Old Sabine River Bottom and the contiguous little [Sandy National Wildlife Refuge](#) are recognized as one the the 14 best old growth hardwood forests" left in the nation. Yet sadly there is still continuing pressure by several special interest groups to allow more water development which is not needed.

During one of our recent East Texas Chapter Naturalist meetings, we heard from Michael Banks, DDS from Jacksonville, Texas who heads a group, [Friends of the Neches River](#), that was created to establish and protect some of the lands along the Neches River. Richard has been working with this group sharing some of his vast knowledge of how the system works and although the group is fighting some big dollar special interest groups, they have been successful in establishing [The Neches River National Wildlife Refuge](#) and gain a Federal designation for the Neches River as a "Wild and Scenic River".

If you would like to view a [60 plus minute interview](#) of Richard LeTourneau conducted by the [Texas Legacy Project: Conservation Archive and Documentary](#), you will be awed by Richard's concern and knowledge, plus learn some very informative and valuable information.



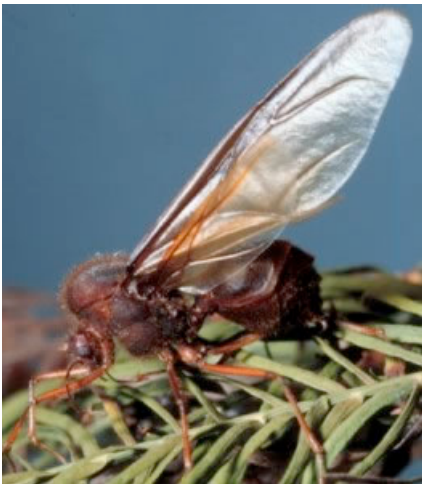
Thank You Richard for devoting so much of your life to protecting all the natural beauty that we have been fortunate to enjoy and for caring enough to help preserve what we have today, plus what you have helped to protect for those who will follow us.

TEXAS LEAF-CUTTING ANTS

Ag Biz News Column
 Chad Gulley
 County Extension Agent—Ag/NR
 Smith County

Have you been seeing large, winged ants lately? These winged species are the male and female reproductive species of the Texas leaf-cutting ant. The Texas leaf-cutting ant causes economic damage to forest lands, landscapes, and even some agricultural crops in Texas.

These ants are also referred to as town ants, cut ants, and night ants to name a few.



The Texas leaf-cutting ant is rust brown in color and ranges from 1/16 to 1/2 inch long with three prominent pairs of spines on the thorax. The queen is much larger and can be as long as 3/4 of an inch long. Leaf-cutting ants are social ants.

In April through June, the winged ants leave the colony on mating flights. This usually occurs on moonless nights. The virgin queen ants carry a small piece of the fungus from the parent colony in a small cavity inside her mouth. After mating, the male dies. The queen then loses her wings and digs a small tunnel or gallery in which she will begin laying her eggs.

She will also begin culturing her fungus garden. Once the eggs begin to hatch, workers will begin going out and gathering foliage of various plants to continue her fungus culture.

Colonies can survive for many years and can contain as many as 2 million ants. Their nests may be 15 to 20 feet deep underground with numerous chambers and tunnels. When I was working on my Master’s degree at SFA, we dug down as far as a backhoe would literally reach in a leaf-cutting ant colony and still did not get to the bottom of the colony. Tunnels were everywhere.

The Texas leaf-cutting ants have mouthparts that are for chewing. Worker ants remove leaves and buds from weeds, small grains, forage and turf grass, fruit and nut trees, and many other ornamental plant species. Pine trees and pine seedlings are targeted when other plant material is scarce. Worker ants can travel more than 600 feet or more along foraging trails that they carry back foliage to the colony. Inside the colony, all the ants feed on the fungus grown on the leaves gathered.

Worker ants can bite. During summer months, these ants feed almost exclusively during the night. Other times of the year these ants forage during the day when air temperatures range between 45 to 80 degrees. These ants are usually inactive on cold, wet or cloudy days.

How can I control these ant species? Control of the Texas leaf-cutting ants can be difficult. In some instances, individual plant treatments with dusts and granular products can help but must be applied frequently. The individual plant treatments do little to eliminate the underground nest. Due to the leaf-cutting ant primarily eating fungus they grow, they do not respond to most ant baits used in the home landscape for other ant species.

The Texas Forest Service has conducted research to help control these ant species especially in a forest management setting. From their research, newly labeled products are now available in forest management areas. Be sure to read and follow all label recommendations when using any product to control this or other insect species. In agricultural sites, control is limited. In the home lawn, landscape, and residential site, some broad-spectrum ant specific baits are available. Again, due to their foraging, diet and size of the colony, control is difficult.



NEW BUTTERFLY SPECIES DISCOVERED



Thee Strymon solitario was recently described and studied at the Big Bend State Natural Area, and in surrounding counties, such as Presidio and Brewster, located in West Texas. The newly described Strymon solitario Texas butterfly was named after “The Solitario” rock formation that can be seen straddling the county line between Presidio and Brewster counties at Big Bend Ranch SNA.

The Strymon solitario, also known as the Big Bend Scrub- Hairstreak, have been recorded before in the Big Bend area as early as October 1944. Majority of the records collected on this species were during late March-April and also again in September.

WILD IN THE SUBURBS

Living harmoniously with animals in the city.

By Rusty Middleton and Richard Heilbrun

When animals inhabit suburbia, sometimes there's unrest in the neighborhood. Some folks will say, "The animals were here first!" Others, "Not in my backyard!" Sometimes opinions change depending on the species, not to mention the quantity.

Whether our neighbors are raccoons, opossums, coyotes, alligators, birds or deer, passionate opinions can erupt in peaceful communities. This is especially the case with white-tailed deer.



In Hollywood Park, a small, incorporated community surrounded by San Antonio, town council elections have swung like a pendulum on the issue of urban wildlife. In 2010, the council voted to amend a 2004 ordinance banning the feeding of deer. Deer feeding is now allowed with certain conditions, much to the chagrin of some Hollywood Park residents.

"My supporters tend to be absolutely deer-friendly," says council member Debbie Trueman. "The deer are an asset to the community."

Former Hollywood Park deer project manager Will Mangum quit his job because of the change. Mangum, who grew up nearby, has strong opinions about deer overpopulation.

The ordinance banning deer feeding was preceded by a steady growth in deer numbers beginning a couple of decades ago, caused by urban growth in San Antonio, overfeeding by otherwise well-meaning residents and the natural ability of white-tailed deer to thrive in urbanized areas.

"The animals that live close to people are mostly generalists," says Texas Parks and Wildlife Department urban wildlife biologist Brett Johnson. "They are the ones that are most adaptable. But the specialists, the animals that occupy a relatively narrow ecological niche, and the large predators — these are the ones that disappear when people move in."

The two sides disagree over the root of the issue. Some people contend that the overabundant deer are unhealthy, cause significant property damage and upset the ecological balance of a community's natural areas. Others disagree with the assertion that the deer are too numerous, and they object to any wildlife management programs because they enjoy observing plentiful wildlife, often citing the wildlife as a motivating factor in their choice of residence. The disagreement typifies conflict over wildlife in urban areas. It's difficult to find solutions when people disagree over whether a problem even exists.

Hollywood Park is not the only community with urban wildlife, not by a long shot. Lakeway, a community just west of Austin, also had a large urban deer population during the 1990s.

"We were finding lots of dead deer every year around town, usually due to collisions with cars," says former Mayor Charles Edwards, who is now Lakeway's deer program manager.

When ideas to thin out the herd were proposed several years ago, tempers flared. The arguments were similar to those in Hollywood Park. But while Hollywood Park plowed on, Lakeway took a different tack. The community collectively took a deep breath and began an extensive awareness and education program. TPWD biologists were asked for advice, and leaders listened to them.

Community forums were held, and referendums helped officials gauge public acceptance of various management options.



Today, Lakeway traps and removes deer in the fall and prohibits residents from feeding them.

Lakeway is often cited as a good example of proper deer management because of the process it took to involve its residents. Truly effective wildlife management in urban areas is the result of efficient community involvement, strong communication and the ability of neighbors to work with neighbors.

Across the state, many other species are joining the growing human population. Driven almost to extinction in Texas, **alligators have made a spectacular comeback** after receiving full protection in 1969. (They were removed from the endangered species list in 1985.) In just four East Texas counties where population studies are conducted, there are an estimated 250,000 alligators, says TPWD alligator program leader Amos Cooper.

Although most alligators live in the coastal counties, their range now extends well into Central and South Texas, from the Rio Grande to as far north as the Oklahoma border. Resident alligators are being studied at Lake Worth, near Fort Worth. This range expansion is due at least in part to the "welcome" sign that we put out for them. Stormwater ponds, water hazards on golf courses and community lakes are attractive to wandering alligators.

For the most part, alligators are model citizens. But when people start feeding them, alligators quickly learn how to get a free meal, and problems can arise.

Continued on page 5

Living harmoniously with animals in the city continues:



© Capt. Edward Tanuz/TPWD

"We have them (alligators) everywhere," says Houston-area Game Warden Kevin Malonson. "It's illegal to feed them, but people do. Then the gators start seeking people out. Sometimes they even bump against kayaks and canoes. I try to educate the public that we're invading their habitat, and we need to learn to live with them. We try to leave them alone if they are in their natural habitat. If you take one out, another one is going to take its place."

TPWD employs nine urban wildlife biologists to help urban residents and city officials navigate the delicate balance of opinions, emotions and science. They work passionately to manage complex and nuanced issues in sometimes very politically and emotionally charged situations. In fact, much of the urban wildlife program is designed to help constituents rely on science and recognize that emotion, while important in understanding perceptions and motivations, should not be the sole driver in a contentious decision-making process.

Urban wildlife "problems" are less about the wildlife and more about the decisions we make in designing our urban areas, as well as the manner in which communities attempt to define and address the situation. Kelly Conrad Bender, TPWD urban wildlife biologist in Austin, describes the process as much more than merely an intellectual discussion. It's a discussion of motivations, perceptions, science and emotion.

"Wildlife and people are tied in a way that many things aren't," Bender says. "When you're dealing with emotions, you don't issue an edict and expect things to work

out. Whether politics or wildlife, all those things issue strong emotions. You have to take into consideration that people are bringing more to the table than what's intellectually right or wrong, whether it's about deer issues, cat issues or even bird issues."

Fortunately, most wildlife populations contribute to a more positive urban environment. Innovative trials at Alder Hey Hospital in Liverpool, England, found tangible health benefits in patients exposed to nature, especially the calls of local birds. Patients undergoing painful bone marrow extractions at Johns Hopkins reported less pain during treatment when exposed to the sights and sounds of local wildlife.

According to researchers at Texas Tech University, homes with a higher diversity of songbirds bring a higher price on the market.

"We collected information on a sample of home sales in Lubbock, conducted bird counts in the vicinity of each sale and recorded the numbers and the variety of both ubiquitous and desirable bird species," write Michael Farmer, Mark Wallace and Michael Shiroya, the authors of the study. They found that homes in bird-friendly areas can bring \$32,000 more than a similar home without appropriate habitat. This difference occurred independently of the house's proximity to public parks and greenspaces, indicating that the landscaping and design choices made by homeowners attracted the urban songbird populations, which benefited their pocketbook.

Research conducted through Texas State University between 2000 and 2002 demonstrated that these landscape choices, when made holistically and purposefully in urban communities, can positively affect bird diversity, an important indicator of ecological health. Bender, one of the authors of that study, says that changing perceptions about wildlife in urban areas can lead to that holistic change.

"When you get that deeper understanding of what is ecologically sound, as

demonstrated in your own backyard, you can see the effects of what is happening in your city, your watershed, throughout the ecosystem," she says.

Many urban backyards thrive with wildlife without disapproval from the neighbors. And sometimes people are motivated to take meaningful action well away from City Hall.

"You see it in Texas Master Naturalists all the time," says Bender. "You see it in State Park Friends programs; you see it in habitat programs like that of the National Wildlife Federation. It's a whole army of people who are motivated."

The Texas Master Naturalist program, a nature-based volunteer organization, capitalizes on the draw of getting involved with wildlife. Many chapters are based in urban areas. Last year, Master Naturalists volunteered on a multitude of projects involving urban wildlife. The list of service projects reads like a Discovery Channel program guide: urban frog pond surveys in El Paso, an urban white-winged dove research project in San Antonio, stream monitoring and raptor rehabilitation in Kerrville, bat surveys in Houston, new parklands in Dallas, wildlife education seminars in Galveston and more. Last year, volunteers donated more than 256,000 hours to benefit local natural areas and wildlife communities.

These Master Naturalists do much more than volunteer their time. They become trusted ambassadors to their communities who can help their urban neighbors adopt a more educated but highly personal connection with wildlife, natural resources and the ecological needs of a growing community.

The interface between people and animals is constantly growing and changing. We have altered the wildlife communities that can thrive in the urban landscape. We create an uneasy balance when we place attractive habitat near our homes and then try to control which wildlife shows up, and in what quantity. "These urban wildlife issues are getting bigger," says Johnson, the urban wildlife biologist. "We need to learn how to live with each other."

Where the hybrids roam

By Luke Clayton Jul 2, 2012

Pound for pound, I'll put the hybrid striper at the top of the list of freshwater fish when it comes to bending a rod or putting a reel's drag system to the test, with the exception, possibly, of the redfish which is really a saltwater transplant. If we really want to get technical, the hybrid striper also possesses some saltwater genes, at least on its maternal side. I've always contributed its willingness to bite to the genetics passed along on its paternal side, the male white bass.

I'll never forget fishing at Tawakoni with Rex Bridges back in the late eighties when we pulled up to Sun Point, dropped some frisky live shad down close to bottom and proceeded to boat 15 hybrids that weighed from 9 to 13.5 pounds in thirty five minutes. My son Matthew caught the 13-pounder and, to date, that's the largest hybrid I've seen boated but the record books prove there have been bigger ones.

Back in 84 John Haney was fishing at Ray Hubbard with guide Johnny Procell when he landed the current and long-standing state record that tipped the scales at a whopping 19.66 pounds. Whether Haney's record will ever be broken in pure conjecture; the only fish certified that came anywhere close to this weight in recent years was an 18.07 pounder from Richland Chambers in '03. It's just possible bigger fish that have escaped the hook are swimming the depths of lakes such as Tawakoni, Palestine, Ray Hubbard, or possibly Cedar Creek. All these lakes have been stocked with hybrids long enough to quality as trophy hybrid hotspots. Richland Chambers reservoir might not have the numbers of fish over ten pounds, simply because it did not receive large numbers of hybrids in those earlier years of stockings by TPWD, but it's a great lake for catching fish in the 4-10 pound range. Lake Palestine is an often

overlooked hybrid hotspot, but one that produces plenty of trophy class fish.

I fish for hybrids often, and with some of the best pros in the state. So, let me take you with me on a whirlwind tour of my favorite lakes for catching hybrid stripers. I've had lots of on the water' experience at each lake and although my ratings might not agree with yours, you can rest assured they come from hours of fishing for these genetically manipulated freshwater brutes! Tactics that produce fish on one lake will work on them all; it's the geographical features of the individual lakes that hybrid chasers have to learn.

LAKE TAWAKONI - Hybrid striper fishing at Tawakoni can best be described as good as the best, and better than the rest! Thanks to aggressive stockings by TPWD and monies generated by the Lake Tawakoni Sportsman Association (LTSA), hybrid stripers have been thrilling anglers at Tawakoni for the past couple of decades. TPWD saw the interest generated by the LTSA and stepped up their already aggressive stocking program. Hybrid striper fishing at Tawakoni is obviously a big deal.

Hybrids are often mixed in with the whites but when targeting specifically hybrids, it's best to switch to big live shad or 4 inch soft plastic shad imitations.. When the big mixed schools of white bass/hybrids are chasing shad near the surface, they are easy to locate and to catch. A good pair of binoculars to keep and eye for dipping egrets, terns and occasionally diving loons and pelicans will help you spot the big schools roaming the open expanses of the mid to lower lake. For the newcomer coming to Tawakoni, the big flats out form the mouth of Wolf Cove is a good spot to begin looking. This area has many submerged humps where the hybrids like to stack up after their surface feeding binges. Many veteran hybrid anglers begin hitting the shallow at daybreak around major main lake points such as

Sun, Cloud, Finger and Autumn Point. During low light conditions, hybrids move into the shallow where they feed on big schools of shad. If the fish aren't active at one point, savvy anglers crank up and head to the next. As the morning progresses, the hybrids push the baitfish out to deeper water where the action often continues on the submerged ledges.

Trolling the waters just out from the dam with buck tail jigs is another effective method of locating and catching hybrids during the summer. Troll until you hook a fish, then stop and cast Sassy Shad on a 1 ounce jig head up close to the rocks, let the bait hit bottom, then work it back slowly to the boat.

CEDAR CREEK- Guide Jason Barber fishes for every species on the lake but says nothing gets his clients adrenaline pumping like the hard runs of those hybrids weighing 5 pounds or more. This lake has some great hybrid striper fishing but many of the fish we catch are mixed in with schools of schooling white bass. Hybrids are by far the most voracious eaters in fresh water. They will gorge themselves on shad so heavily that when landed, their mouths will be full of the smaller baitfish. During mid summer, they also feed heavily on the newly hatched white bass.

There are many good spots here to catch hybrids but the deep flat between Crappie Island and the spillway is hard to beat. In recent summers, egrets have taken the place of gulls and terns in helping us locate feeding fish. If you're new to fishing Cedar Creek, position your boat out from the island and break out your binoculars. Once you see a flock of egrets, or possibly loons or pelicans, ease downwind from the action and make long casts into the feeding fish. You'll catch a lot of sandbass but you can bet the hybrids will be working the outside of the feeding whites.

Hybrids roam continued on page 7

Hybrids roam continued from page 6



Bob Holmes shows off a hard fighting hybrid striper photo by Luke Clayton

"If you can get a big bait such as a 1.5 ounce slab or Sassy Shad on a 1 ounce head down below these smaller surface feeders, you can often entice the hybrids into biting. They like to lay below the white bass and pick up injured shad, tips Barber.

Trolling with a big Hellbender (hooks removed) with a Pet Spoon Trailer behind on a 4 foot leader is also very popular here at Cedar Creek. These rigs can be highly effective when trolled over submerged humps and ridges out from the Key Ranch Estates along the west shoreline in the lower lake.

RICHLAND CHAMBERS- A week before penning this article, I spent a morning hybrid fishing with guide Bob Holmes and, in fisherman parlance; we "tore them up." One ounce slabs produced both white bass and hybrids but 4 inch chartreuse Sassy Shads on a light jig head, worked just below the surface proved the better choice for catching the larger hybrids when they were actively chasing shad near the surface.

Locating and catching hybrids here, as on many lakes, is a matter of locating either surface feeding fish with the help of accompanying birds or burying one's face in the graph and studying the lakes bottom, looking for big balls of shad hanging around submerged humps and ridges. At RC, the big lower lake area knows as the 309 Flats is prime summer hybrid waters but the long ridge out from Pelican Island is also a hybrid magnet.

Regardless where you decide to target these hard pulling brutes, keep in mind they can often be found around schools of feeding white bass. It's sometime possible to locate isolated schools of hybrids but they will more likely be mixed in with feeding whites or possibly even catfish. During the summer months, find heavy concentrations of bait in one of the aforementioned lakes and you won't be far from getting your line stretched by a fish that is quiet adept at stretching line: the hybrid striper!

Blackened hybrid striper - Hybrid stripers are mild flavored fish that lend themselves well to baking or blackening. We enjoy them baked in an oven heated to 450 degrees for about 15 minutes, until the outside of the fillets are crispy. Prep is easy, just dust your fillets with a little lemon pepper and sprinkle on sweet basil liberally. Place a few pads of butter on top of each fillet and you're ready to go.

Blackened striper is best cooked outside in a heavy cast iron skillet. Dip the fillets in unsalted butter then cover both sides of each fillet with your favorite blackening seasoning. Heat skillet until it is white hot. And cook fillets no longer than a couple minutes per side. Add some freshly squeezed lemon just before serving!

Mark your calendars for October 26, 27, 28, when the Master Naturalist State Meeting will be held at Camp Allen in Navasota, TX.

Although details will be announced later, the usual procedure is to arrive Friday afternoon for activities and classes, attend workshops all day Saturday, finish up Sunday morning and head for home after lunch.

The State Meeting is a great place to earn AT and volunteer hours and to meet your fellow Master Naturalists from around Texas, learn from each other, and be inspired. Let's see how many of us can go this year!

From Our Facebook Pages

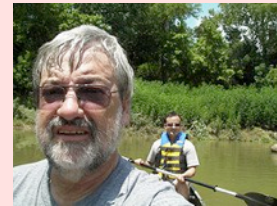


Gloria Rognlie

To Tappa Burt, Mike Gras, and Jim Varnum for their hard work yesterday, (June 28, 2012).

We mounted and prepared temporary labels with the specimen data for almost all of our pressed sepcimens. We then presented Kevin Herriman with the first mountings for his OSBWMA herbarium. All we have to do now is figure out how to get him a specimen storage cabinet.

Thank you everyone. We will be posting our next workshop schedule soon so keep watching. We will also be sending an email with the workshop information.



Michael Gras

It is quite a team we have there documenting changes in flora and confirming old lists. As you know most of the first plants collected were identified under the guidance of [Sonnica Fajardo Hill](#). We collected again today. I have to say to my fellow naturalists, If you have not collected with Sonnica - make arrangements. You will not be sorry. Here she is in her element - observing, documenting, and teaching. http://farm8.staticflickr.com/7126/7502612036_2eccaa6553_b.jpg

Watch your email, Website and TMN Gmail Calendar for the next Herbarium gathering and Join In.

The following information was discovered from many sources (some listed) and by no means exhaustive. By Mary Ann Nilson



WATERSHIELD (*Brasenia schreberi*) [many other names include **snot weed, dollar pad, dollar bonnet, or water target**], is the sampled aquatic plant for educational purposes from the American Legion, Lindale, Texas, July 12, 2012 per Ted Hall, 1st Vice Commander.

This plant is not listed on the United States Department of Agriculture Natural Resources Conservation Service Database as an Invasive or Noxious Weed per Texas Administrative code. 2005. Quarantines and noxious plants, Chapter 19 (24 May 2006). State of Texas. <http://plants.usda.gov/java/noxious?rptType=State&statefips=48>

- Birds: Ducks, geese, and other waterfowl eat the seeds, leaves, and underwater stems
- Herps: Some freshwater frogs use the stalks for building nests.
- Fish: Provides shade and shelter A good plant for the water garden but difficult to establish. <http://www.rook.org/earl/bwca/nature/aquatics/brasenia.html>

Submerged portions of all aquatic plants provide habitats for many micro and macro invertebrates. These invertebrates in turn are used as food by fish and other wildlife species (e.g. amphibians, reptiles, ducks, etc.). After aquatic plants die, their decomposition by bacteria and fungi provides food (called "detritus") for many aquatic invertebrates. Water shield seeds are consumed by ducks and other waterfowl while the roots and stems are consumed by muskrats and nutria. <http://aquaplant.tamu.edu/plant-identification/alphabetical-index/water-shield/>

Edible Uses (<http://www.pfaf.org/user/Plant.aspx?LatinName=Brasenia+schreberi>)

Edible Parts: [Leaves](#); [Root](#).

Edible Uses: The young curled leaf tips, which are coated with a thick transparent mucilage, are eaten as a salad with vinegar, sake and soy sauce, or they added to soups as a thickener [106, 159, 183]. Considered a great delicacy in Japan where they are often bottled and sold in local markets [183]. They are mainly used in the spring [46]. A nutritional analysis is available [218]. Root - cooked [2, 106, 177]. Peeled then boiled and eaten, they can also be dried and stored for later use or ground into a powder [183].

Description: Watershield is a perennial floating-leaved plant, but the long leaf stalks or petiole attached to the lower surface instead of the base or edge reaches all the way to the bottom where they attach to a long creeping root that is anchored in the mud. Leaves are most often green, small oval and shield-shaped two to five inches in diameter, with smooth edges. Stem (or leaf stalk) is attached to the center of the leaf. Rust colored underside. A clear jelly-like coating covers the underside of the leaves and stems on mature weeds.

Flower: The dull purple flowers have sepals and petals that are similar to each other and develops in early summer (July to August) and will emerge from the water stalk with a two day blooming period. Control treatment should be done before jelly-like coating develops. Flowers are solitary and axillary, on stout stalks up to 15 cm long and, at maturity, are above the surface of the water. The flowers are hermaphrodite (have both male and female organs) and are pollinated by Beetles and wind.

Habitat: Grows in lakes, ponds, and slow streams.

Growth Information: Water-shield grows rooted and has rhizomes. Submersed parts of the plant are heavily covered with a mucilaginous jelly produced from secreting glands. Juvenile plants are submersed; the adults usually have floating leaves. The leaves are centrally peltate, floating, alternate, with very long petioles. Leaf blades are 3.5 to 11 cm long, broadly elliptical, rounded at both ends, the margins entire. Leaf blades are smooth on the upper surface and purple beneath.

Interesting facts: *Brasenia schreberi*: The rhizomes produce numerous plants from a given "mother plant". The fruits are nutlike with 1 or 2 seeds, dispersed by water and perhaps animals; they are capable of germinating to form new plants. Plants produce specialized buds (turions)

which break from the stem and are moved by water flow.

In shallow ponds and lakes, water shield may be the dominant species, and its leaves may cover the entire water surface. Once established in an area, growth of other plants may well be inhibited by shading effects of the densely packed floating leaves. Very dense populations of water shield can impede small boat navigation and restrict recreational use (Tarver et al. 1986, Hoyer et al. 1996). The plants are reported to have antibacterial, antifungal activity and to be activity and to be allelopathic to lettuce seedlings.

Cultivation Options : Water shield can be propagated from seeds or by transplanting root systems into shallow water during the early spring. However, water shield can be an aggressive invader of ponds. Watershield Control Options <http://aquaplant.tamu.edu/management-options/water-shield/>

Mechanical/Physical : Water shield can be cut and the roots can be dug up but physical control is difficult because it can reestablish from seeds or remaining roots.

Biological Control Options : There is no known biological control for water shield.

Chemical : The active ingredients that have been successful in treating white water lily include 2,4-D (E), glyphosate (G), fluridone (G), imazamox (G), and imazapyr (E). [E = excellent, G = good] <http://www.midwestaquacare.com/ps/aquatic-weeds/watershield.htm>

Herbicide Application : [Navigate Granular](#), and [Weedar 64](#), are 2,4-D compounds that have been effective on watershield. 2,4-D compounds are systemic herbicides. Systemic herbicides are absorbed and move within the plant to the site of action. Systemic herbicides tend to act more slowly than contact herbicides. [Navigate Granular](#) is a granular herbicide that is easy to apply. [Navigate](#) works systemically to insure control of the roots for long lasting control. [Navigate](#) will trans-locate into the root systems resulting in long term control. It is not necessary to cover the pads with [Navigate](#) just get the granules into the water within the treatment area. No Swimming or Fishing Restrictions. the chance of an oxygen depletion after the treatment caused by the decomposition of the dead plant material.

Continued on Page 9

WATERSHIELD continued from page 8

Oxygen depletions: One danger with any **chemical control method** is the chance of an oxygen depletion after the treatment caused by the decomposition of the dead plant material. Oxygen depletions can kill fish in the pond. If the pond is heavily infested with weeds it may be possible (depending on the herbicide chosen) to treat the pond in sections and let each section decompose for about two weeks before treating another section. Aeration, particularly at night, for several days after treatment may help control the oxygen depletion.

Quantity: One common problem in using **aquatic herbicides** is determining area and/or volume of the pond or area to be treated. To assist you with these determinations see [SRAC #103 Calculating Area and Volume of Ponds and Tanks](#). Many aquatically registered herbicides have water use restrictions (See [General Water Use Restrictions](#)). To see the labels for these products click on the name. Always read and follow all label directions. Check label for specific water use restrictions. <http://aquaplant.tamu.edu/management-options/water-shield/> [Note: I found the listed information on control options. I have not used any of these products.]

Classification: [Brasenia schreberi J.F. Gmel.](#) Click on a scientific name below to expand it in the PLANTS Classification Report.

Kingdom [Plantae](#) – Plants
Subkingdom [Tracheobionta](#) – Vascular plants
Superdivision [Spermatophyta](#) – Seed plants
Division [Magnoliophyta](#) – Flowering plants
Class [Magnoliopsida](#) – Dicotyledons
Subclass [Magnoliidae](#)
Order [Nymphaeales](#)
Family [Cabombaceae](#) – Water-shield family
Genus [Brasenia Schreb.](#) – brasenia
Species [Brasenia schreberi J.F. Gmel.](#) – watershield

TMN 4th Annual State of the Prairie Conference, Kingsville, Dec. 6-9, 2012

We are happy to announce that this year Coastal Prairie Partnership and Native Prairies Association of Texas will be teaming up with Texas A&M Kingsville and the Caesar Kleberg Wildlife Research Institute to present the 4th Annual State of the Prairie Conference in Kingsville, TX from December 6-9, 2012.



Each year this conference brings together the brightest and best prairie restorationists, educators, and conservationists to deliver high-impact lectures and field experiences that connect people from all across Texas and Louisiana to learn the best techniques for restoring, conserving, and teaching about our prairies. This year will be bigger and better than ever, with two days of field trips and lessons about everything from economics of prairie restoration to evaluating which restoration tools to use to building better wildlife corridors.

We hope you can join us, so mark this date on your calendar! If you would like to help with the conference, such as with registration and other logistics, please contact Cheryl Sedivec, 281 346 0099 or cheryl_sedivec@comcast.net (please note that there is an underscore between Cheryl and sedivec. and we can really use your help) Coastal Prairie Partnership 281.660.6683 (cell). Thanks Cheryl!



The 2012-2013 Federal Duck Stamp is on sale across the United States, giving hunters, stamp collectors and anyone who cares about migratory birds and other wildlife an easy way to help conserve their habitat. **Ninety-eight percent** of proceeds from sales of the stamp are used to acquire and protect vital wetlands supports hundreds of species of migratory birds, wildlife and plants.

The new stamps are now available at thousands of post offices, Bass Pro Shops and other sporting goods stores and retail locations across the country, and can also be **purchased online [here](#)**.

Artist: Joseph Hautmann

Just thinkin... From the Main Sea Level on a sea-shore how far is the horizon located?
 The 'horizon' point means a different point, in most cases.

If the earth is considered the sphere, its air belt, thin air belt & higher ion containing belt are treated as concentric circles, each, from sea level be ~ 50, 200, & 450 kms away; called troposphere, stratosphere, & mesosphere, respectively- the names, heights, etc differ your reference. Some other naming is: atmosphere [700 kms- of the 3], ionosphere [with radio & aurora [~700+x kms], thermosphere, & exosphere. the satellites occupy the higher & meteors the lower strata of exosphere.

Ignoring the effect of atmospheric refraction, distance to the horizon from an observer close to the Earth's surface is about $d \approx 3.57 \times \sqrt{h}$ Where d is in kilometres and h is height above sea level in metres.

Examples: For an observer standing on the ground with $h = 1.70$ metres (average eye-level height), the horizon is at a distance of 5.0 kilometres .
 For an observer standing on a hill or tower of 100 metres in height, the horizon is at a distance of 39 kilometres.
 For an observer standing at the top of the Burj Khalifa 828 meters, the horizon is at a distance of 111 kilometres.



Help Prevent Wildfires

During dry and hot weather conditions, wildfires are easily started and can quickly grow into blazes that damage land and property and threaten wildlife and human life. The National Shooting Sports Foundation reminds all who use the outdoors for recreation to consider the potential consequences of their activities in fire-prone environments and offers these reminders:

- Make it a point to know the regulations and rules related to **shooting in areas experiencing dry and hot conditions**, whether on public or private land or at shooting ranges. Many national forests, for example, do not allow recreational shooting when fire restrictions are in effect.
- Consider the **type of ammunition and targets** you are using. Minimize the risk of fires by not using steel-jacketed ammunition, ammunition with steel-core components, tracer rounds or exploding targets in fire-prone areas.
- Remember that equipment, such as cars and ATVs, can have **extremely hot exhaust systems that could ignite dry vegetation**, so park only in designated areas.
- Extinguish and dispose of **smoking materials** safely.
- Follow guidelines to **extinguish campfires**.
- Warn others of potential dangers and behaviors for starting wildfires.
- Report any wildfire you see.
- Spread this message using traditional and digital media.

Texas Native Plant Week

Texas Native Plant Week began in 2009 as a partnership of the Native Plant Society of Texas, the Lady Bird Johnson Wildflower Center, and others. Texas Parks and Wildlife Department and the National Wildlife Federation joined the partnership in 2010.

On June 16, 2009, Governor Perry signed a bill into law that recognizes the third week in October as Texas Native Plant Week. The legislation seeks to recognize the role of native plants in conservation efforts and to create incentive for schools to teach children about the importance of native plants. The Native Plant Society of Texas teamed with State Rep. Donna Howard of Austin to present the bill, which passed unanimously in both houses.

To mark this fourth annual **Texas Native Plant Week, October 14 to 20, 2012**, the Lady Bird Johnson Wildflower Center of The University of Texas at Austin, the National Wildlife Federation, Texas Parks and Wildlife Department and the Native Plant Society of Texas are encouraging the public to learn more about our amazing Texas native plants.

The Native Plant Society of Texas is a 501 (c) (3) not-for-profit organization whose mission is to promote research, conservation and utilization of native plants and plant habitats of Texas through education, outreach and example. For additional information about Texas native plants, visit www.NPSOT.org



August Management Tip of the Month



by: Billy Higginbotham
Professor and Extension Wildlife and Fisheries Specialist - Texas AgriLife Extension Service

If soil moisture is adequate, consider planting a combination of warm season legumes (such as forage cowpeas) and cool-season small grains (rye, oats, wheat) and clovers (red or arrowleaf) for deer late this month or early next month.

The warm-season plants will grow quickly and attract deer during the archery season. The cool-season forages will be available by the first frost and the clovers will last until late spring.

EAST TEXAS CHAPTER MASTER NATURALISTS

The following are some activities that will take place for the remainder of 2012 calendar:

July 26 - Chapter Meeting:
"Don't Move Firewood"- Laura Wilson

August 4 - Archeology - Neal Stillely
(CAD day afterwards)

August 23 - Chapter Meeting:
"Update on Eagle Fest" - Janet Cook

September 8 - Into to TMN
Barney Lipscomb BRIT

September 27 - Chapter Meeting:
Fungi - Mike Gras

October 6 - Urban Systems - Brett Johnson
TPWD

October 25 - Chapter Meeting

November 10 - Wetland Ecology/Herpetology -
Dr. John Placyk, Biology UT
(Chapter Activities Day)

December 1 - Chapter Meeting
Graduation, Awards Ceremony & Party

Jan 26, 2013 - Endangered Species/Ornithology
Dr. Jeff Kopachena

Submitted by Helen Mar Parkins

**Top 10 Invasive Species in the U.S.:
The Plagues of the 21st Century**

The [National Wildlife Federation](#) released a list in 2012 identifying the plagues of the 21st century as, you guessed it, invasive species.

The 10 Plagues:

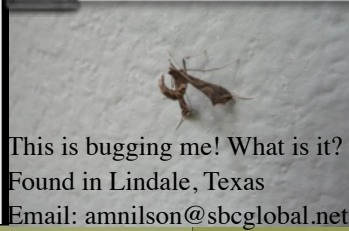
1. Asian carp: outcompete natives
2. Cane toads: secrete toxins that harm wildlife
3. Starlings: damage agriculture and airline industry
4. Kudzu: "Vine that Ate the South"
5. Giant reed: impact ecosystems and infrastructure
6. Zebra mussels: impact food chain and infrastructure
7. Stink bugs: infest homes, gardens and croplands
8. Emerald ashborer: killed millions of ash trees in U.S
9. Burmese python: prey on native wildlife
10. Climate change: exacerbate the invasives problem

These species are impacting the environment and America's economy, [learn more about the Top 10](#) and how to stop the spread of invasive species.

Submitted by Mike Quinn: This is a wonderful interview of Catalina (Brugger) Trail by Monika Maeckle. Catalina was one of the original discoverers of the monarch's overwintering sites in central Mexico. Link to on-line story: <http://bit.ly/LEXrQ8>

Submitted by Jim Varnum
NPAT - Tools and Resources for Managing & Conserving Texas Grasslands - Cooke and Montague Co., Forestburg Community Center, 16617 FM 455, Forestburg, TX 76329 http://texasprairie.org/index.php/news_and_events/

Subjects include:
Quail and Grassland Bird Management in Texas, Range Management with and without Livestock, Benefits and incentives of Conservation Easements, Tour of Dixon Water Foundation's Leo Ranch more.



WE DON'T JUST
WANT TO
SAVE NATURE, WE
NEED TO

Protect Our Future

The Nature Conservancy
Protecting nature. Preserving life.



East Texas Chapter Master Naturalists
FALL SEMINAR OUTLINE 2012
Submitted by Laura Wilson

It's that time again! Graduating class of 2012, these classes are FOR YOU...

**Completion of one or more of these Fall Seminars will have YOU graduating!
Please get with your mentor, Data manager Cindi McCullough, or Laura Wilson.**

These classes are also for NON-members at \$10 each (Each paid \$10 class will reduce your Spring Classes if you desire to take our course.)

- * August 4 Archeology with Neal Stilley (Tyler Nature Center) CAD day afterwards**
- * September 8 Introduction to Texas Master Naturalist (TMN) Barney Lipscomb BRIT**

October 6 Urban Systems with Brett Johnson TPWD

*** November 10 Wetland Ecology or Herpetology – Dr. John Placyk Biology UT**

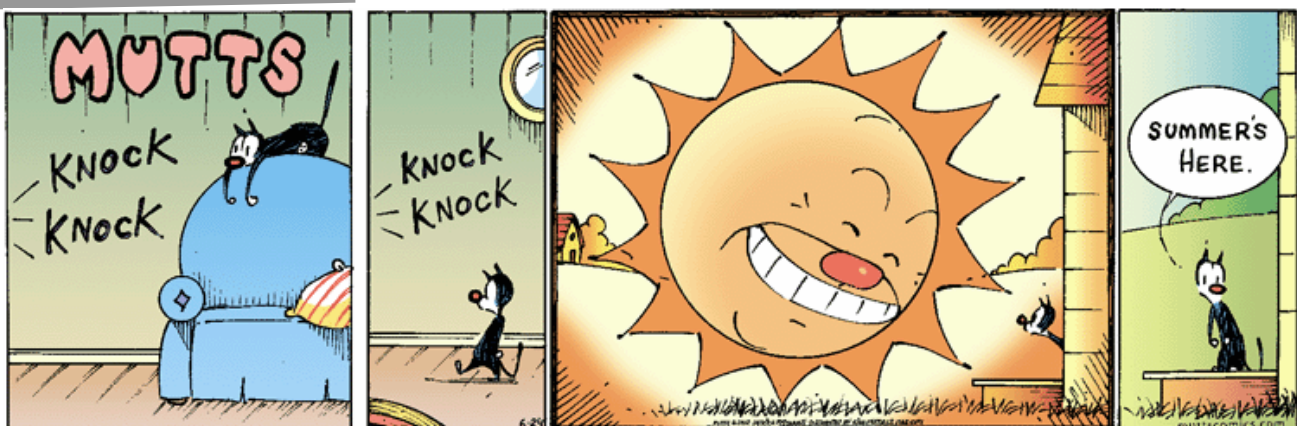
December is our Christmas party and graduation

January 26 Endangered Species or Ornithology Dr. Jeff Kopachena

*** Indicates those speakers have been confirmed**

We reserve the right to make last minute changes due to conflicts with our guest speakers. Scheduled classes are at the Tyler Nature Center; hope to see you there!

Curriculum Committee



President's Corner - August 2012

Summer days are here and so are those hot afternoons when a cold beverage hits the spot. Some of those cold beverages are iced Yaupon tea, (*Ilex vomitoria*), Sumac-aid (*Rhus glabra* or *R. copallinum*), and "Root beer" (*Sassafras albidum* roots and *Smilax rotundifolia* tubers).

Let's look at these beverage and plants that are used to make them.

First let's look at Yaupon Tea, an old time favorite of the South. *Ilex vomitoria* doesn't sound like something you would want to drink but back in the day the Native

Americans brewed the tea into the "Black Drink" a decoction for ceremonies to purge themselves. Modern day use begins by collecting the fresh leaves and let them sun dry or roasting them in the oven at 200 degrees until a dark olive color. Leaves must be sun dried or roasted. Yaupon contains caffeine and is very similar to a commercial tea called "yerba mate" (*Ilex paraguarensis*) from South America. Yaupon is prepared just like bulk ice tea; leaves crushed and steeped in water brought to a boil, for a few minutes and strained. It is then chilled and sugar or honey added to taste. I prefer the new agave nectar (honey)

Next is Sumac-aid, a cold drink made from the mature fruit of *Rhus glabra* or *Rhus copallinum* which is collected in late summer or when fruit is bright red and sticky. Note: some people may be allergic reaction to the oily substance on the outside of the fruit. Cashews and mangoes are cousins of sumac and if you have an allergic reaction handling them (skin rash) you may have a reaction to sumac. To prepare sumac-aid gather fruit and wash in cold water for there may be some bugs. Crush the fruit of three fruit heads and place in a pot and pour warm water over fruit. Note: sumac fruit contains tannic acid and hot or boiling water will leach out the tannins which you want to avoid. Sumac contains malic acid which gives the lemonade tartness to the sumac. Now add sugar or



Neal Stillely

agave nectar to taste and chill and you've got a great cold beverage. Oh, collect a bunch of the fruit heads and strip the fruit and put in freezer bag and freeze for friends and parties.

Now for that "Root Beer", a good friend of mine down Houston way, Carmine Stahl gave me an Arkansas recipe back in the late 70's. This takes a little work but is well worth it, first you locate a *Sassafras* (*Sassafras albidum*) thicket and some *Smilax* (*Smilax laurifolia* or *rotundifolia*) vines. The roots (*Sassafras*) and tubers (*Smilax*) of these plants is what you'll be digging up. The *Sassafras* roots are fairly easy to come by once you locate a thicket or some trees. Just take a sharp-shooter shovel and dig down near the trunk of the tree and gather a small handful of aromatic root, it will smell like root beer and wash with water. Then cut the roots in small sections so they can be placed in a 1 qt. pot. Fill pot with water, bring to a boil and steep for about 3 to 4 min. while letting cool and sugar to taste

Smilax laurifolia or *rotundifolia* vines can be found in the forest and forest edges. The *Smilax* tubers are found several inches below the surface. Just follow vines to the ground once you've ID the leaves, then dig up the tuber using a grubbing hoe (long flat blade and an ax like blade). The amount you want to collect is about the size of 3 to 4 baseballs. Next wash off the dirt and trim the roots off the tubers. Next take the tubers and chop then into small chunks with a hand ax so they can be in a 4 qt. pot. Now cover the chopped tubers with water and bring to a boil then simmer for about 10 min. and let cool.

Ok, after all that work we now can get to actually making the "Root Beer". Take the *sassafras* tea and pour into a 1 gal. pitcher. Then slowly pour the *smilax* tea into the pitcher with the *sassafras* until a good "Root Beer" taste is reached, then chill and relax and enjoy your cold beverage until next time.

Neal

Officers & Committee Chairs

- Neal Stilley - President
- Mike Price - VSH & Vice President
- Janet Cook - Secretary
- Laura Wilson - Treasurer
- Richard LeTourneau - AT
- Cindi McCullough - VHS & Database Records
- Helen Mar Parkin - Membership
- Laura Wilson/Janet Cook - AT & Curriculum
- Jay Dickson - Public Relations & Outreach
- Brenda McWilliams - Trails Maintenance-Tyler
- Barbara Thompson - Newsletter Editor
- Mary Ann Nilson - Newsletter Editor

- Kevin Herriman - TPWD Advisor
- Chad Gulley - AgriLife Advisor

Send \$20.00 Chapter dues to:
 ETCMN attn: Treasurer
 Box 131184
 Tyler, TX. 75713



East Texas Chapter Master Naturalists
 (11942 CR 848)
 P.O. Box 131184
 Tyler, Texas 75713

Monthly Meetings

We meet the **Fourth Thursday** at 6:45pm, at The Nature Center 11942 CR 848, Tyler, Texas 75707

Join us at **6:30 PM** for socializing and let's get to know each other before our **6:45 PM** meeting.

Bring a friend, invite a guest, everyone is welcomed.

Directions to the THE NATURE CENTER:
 Turning off Loop 323, turn onto North State Highway 248 (Also called University Boulevard).

Turn right onto FM 848 (Also called Bascom Road), The Nature Center is located on the right.

East Texas Chapter Texas Master Naturalists do not recommend or endorse items of interest published in [The Woodduck Whistler](#). Items of interest are for information only.

You can read past issues of ETCMN, The Whistler Duck Newsletter by visiting the website at <http://txmn.org/etwd> and clicking "Newsletter" then the month you want to view.

Your news, stories, comments, photos, and ideas are needed.

Deadline is 15th of every month!

Please send items to Barbara Thompson and Mary Ann Nilson at tmn.editor@gmail.com



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The Nature Center, 11942 FM 848, Tyler, Texas 75707