



Highland Lakes Steward

November 2010

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MISSION

The Texas Master Naturalist program is a natural resource-based volunteer training and development program sponsored statewide by Texas AgriLife Extension and the Texas Parks and Wildlife Department.

The mission of the program is to develop a corps of well-informed volunteers who provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities for the state of Texas

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PELICANS

American White Pelicans nest in north central states and Canada and winter on or near the coasts of southern states and Mexico, although a small number stay year-round in certain coastal areas.



Photo by Alan D. Wilson - www.naturespicsonline.com

Brown Pelicans are coastal birds which do not migrate and are not found in our area. They are smaller than White Pelicans and are rarely found on fresh water. Brown Pelicans dive for fish while White Pelicans scoop the fish up with their enormous pouched bills. Some Brown Pelicans become quite tame near docks and will beg food from returning fishermen. They fly very low and do not soar in large groups as the White Pelicans do.

White Pelicans in breeding plumage do not look significantly different than when not in breeding plumage although their bill may take on a brighter color. Brown Pelicans, by contrast, acquire much brighter neck stripes and a gold or white crown when breeding. Pacific forms may even exhibit a red pouch.

White Pelicans have a wingspan of 9 ½ feet compared to the Brown Pelicans with

Sherry Bixler

about a 7 foot wingspan. The American White Pelican's Latin name is *Pelecanus erythrorhynchos* and the Brown Pelican's is *Pelecanus occidentalis*. The pelicanidae family also includes anhinga, frigate birds, cormorants, boobies and gannets (all are fish-eaters).

Both species prefer to nest on islands, to avoid nest predation. Both use a scrape for a nest although Brown Pelicans sometimes nest in mangrove trees. Two to three eggs are laid but only one chick normally survives - the oldest chick gets most of the regurgitated food and also may harass younger chicks.



Photo by Mike Childers

In past years, Brown Pelicans suffered from pesticides and from habitat loss and at one point the only viable population was in Florida. They have recovered in some areas but are still on the Endangered list in Texas and Louisiana.

American White Pelicans eat up to 3 pounds of fish a day and can be a problem at fish hatcheries and fish farms. They can live up to 30 years and, if you do the math, can eat over 16 tons of fish in that time.

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Stewardship

An ethic that embodies cooperative planning and management of environmental resources with organizations, communities and others to actively engage in the prevention of loss of habitat and facilitate its recovery in the interest of long-term sustainability

CHAPTER MEETING PROGRAMS

Billy Hutson, Photo by Jerry Stone

Our last meeting speaker, Jerry Birdwell, did a fine job on the subject of "Indians of Texas" and I hope you all enjoyed it. We didn't get an accurate count, as many people didn't sign up, but we estimate 70 or 80 -



the most this year. Particularly interesting was the knapping demonstration to those not familiar with the processes. Although any increase in our knowledge of our hill country is interesting, that subject could actually be useful for those of you participating in the LMAP program. It could come in handy if an Indian mound is noticed on someone's land and you could speak intelligently about it. You might even find a piece of chert and knap an arrowhead or two while visiting-right!

Next months meeting will be replaced by the awards banquet/Christmas party on Dec 1st but the following month on Jan 5th, 2011 will be a talk by John Good. John will talk to us on "Interpreting Nature" and comes quite capable on the subject from his many years in the National Park Service. I've met and interviewed John, who is now retired and living in Burnet, and I know the talk will be interesting, useful, and entertaining. I know it's a busy time of year but try not to miss it. John's an old timer and has a few stories to tell to get his point across.

11TH ANNUAL TEXAS STATE MASTER NATURALIST CONFERENCE



1000 Hours Award—Ray Buchanan & Jerry Stacy



500 Hours Award - Helen Smith, Billy Hutson, Ed Myatt (not present), Shirley Winslow (not present) and Phil Wyde (not pictured)



250 Hours Award - Sammye Childers, Mike Childers, Sherry Bixler



Highland Lakes Chapter Attendees

11TH ANNUAL TEXAS STATE MASTER NATURALIST CONFERENCE



1st Place Art and Best of Show - Art
Sue Kersey



1st Place
Plant Photography
Joan Murkugee



\$150 and a 3rd place Certificate
Exemplary Project
Blanco State Park Wildlife Viewing Station
Shirley Winslow and Deb McClintock

RIPARIAN AREAS: RESPONSIBILITIES OF THE SMALL SHAREHOLDER

Sammye Childers



One hears a lot about how large shareholders should better manage lands especially in respect to riparian areas. The fact is that most large shareholders have made great strides in the past century and are some of the most enlightened environmentalists today. In truth, small shareholders have every bit as much responsibility to the ecosystem as the owners of large acreages and they are collectively and potentially more dangerous to the ecosystem, especially regarding riparian areas. Water flowing over parking lots, industrial sites, roads, and lawns picks up heavy metals, toxics, trash, pathogens, sediment, hydrocarbons, fertilizers, pesticides, and other pollutants. Removal of streamside vegetation for land development, retaining walls and rip-rap has reduced the natural abilities of streams to cleanse themselves. Development, particularly in narrow side valleys and on flood plains, has brought encroachment close to water, with longer lasting effects on riparian areas than any other type of disturbance.

Riparian buffer zones are vegetated areas along both sides of water bodies that generally consist of trees, shrubs and grasses and are transitional boundaries between land and water environments. Riparian zones act as buffers to protect surface waters from contamination and are habitats for a large variety of animals and birds. The width of the buffers is important. Depending on the specific characteristics of a stream and its surrounding areas, the size of buffers can and will vary significantly. Though even a small buffer (i.e. 25 feet) is better than none. The larger the protected area, the more likely it will substantially reduce polluted runoff, provide an effective corridor for wildlife, support fish habitat and ensure many of

the ecological functions of the stream. On highly permeable soils or very steep slopes, buffers should exceed 100 horizontal feet. In developed areas, even narrow bands of vegetation can make significant improvements in water quality, habitat, and the environmental health of a river or stream.

In the case of homeowners, the "worst possible case" is to take heavy machinery into the stream channel or up and down the bank and reshape, dredge, channelize or otherwise alter the stream or banks while denuding them of vegetation. Not only does this destroy the riparian buffer but every cause has an effect and you have created changes that could prove disastrous for a neighbor downstream. Any change or alteration will cause something else to change downstream.

Closely following is a landscape of chemically maintained, closely mown open lawn running straight down to the water. The shallow roots of lawn grasses do not consume nutrients discharged to the groundwater by the septic system, and excess fertilization and chemicals easily contaminate the groundwater and the waterway. Many people object to trees blocking their view of the water. But large deep-rooted trees, pruned to remove low branches, "frame" the view of the water and, if properly placed, can also provide shade during the summer which can translate into a decreased need for air-conditioning.

Where Natural Vegetation Has Been Removed

Revegetate streambanks as well as impervious areas with native shrubs, trees and grasses on as much of the vertical profile as possible. To avoid raising water temperatures, live cuttings can be driven into joints of rip-rap where they will sprout, shrouding and shading the stone. Vines can also help here. Where native streamside vegetation is gone but soil remains, change mowing and cutting practices to allow gradual natural succession of native plants. Better yet, plant groups of attractive native shrubs and trees to hasten buffer restoration. Since the urban buffer forms the boundary between the natural and man-made worlds, the most successful planting design aims for an unmanicured look. Check plant lists for native plants with ornamental value or those that attract birds, butterflies, or other desirable wildlife. Set them in irregular groups of odd numbers of plants for a naturalistic effect and remember that nature never happens in a

(Continued on page 6)

straight line. Raking leaves, clearing brush, and removing fallen logs can significantly reduce the time that runoff is detained and cleaned by the buffer. If you feel you must, restrict tidying up to highly visible areas, and screen the view of the rest with ferns and low growing shrubs.

Benefits of a Functioning Riparian Buffer

- ◇ reduced costs and time expended for mowing and maintenance
- ◇ reduced costs for fertilizer, pesticides, herbicides, fuel, equipment and equipment maintenance
- ◇ avoided costs of bank stabilization
- ◇ cleaner, safer, more attractive water for recreation
- ◇ safer, more reliable drinking water from public water supplies
- ◇ averted costs of building drinking water treatment system
- ◇ flood protection
- ◇ improved ambient air temperature and quality in summer
- ◇ visual screen and noise buffer between land and water
- ◇ preserve important habitat
- ◇ better fishing
- ◇ increased property values

Concerns	Concerns Addressed
It'll block my view of the water.	Many native trees, shrubs, and grasses are fairly low-growing. With a well-designed landscaping plan, you'll be able to enhance scenic views, increase property values and increase your privacy.
I like keeping my lawn looking neat and trimmed.	Some people are concerned that riparian vegetation will look unkempt. Sure, it's a switch from the manicured lawn; however, native trees, shrubs, and grasses at the shoreline or streambank can be a low-maintenance landscaping alternative that is aesthetically pleasing in a very "natural" way.
All that weedy growth will attract rats and snakes.	Actually, native shrubs and trees are much more likely to attract beneficial wildlife, including butterflies and songbirds. The secret is to think about the types of wildlife you'd like to attract, and then choose native plants that provide food and/or shelter for those species.
It's difficult to find native trees and shrubs at my local garden center.	Check local nurseries to see if they can get the plants you want. The Lady Bird Johnson Wildflower Center is an excellent resource (wildflower.org). Also check with Texas AgriLife (tamu.edu) and local Master Gardeners and Garden Clubs.
A bunch of plants won't make much of a difference. If I'm really going to try to stop erosion, riprap will work better and last longer.	Without a doubt, there are certain locations experiencing severe erosion which require rock riprap or other extreme measures. For maximum benefits, establish a vegetative riparian zone in addition to hard armoring by planting native plants above and below the "fix".

These are some common concerns of property owners about using trees, shrubs, and warm-season grasses to protect shorelines and streambanks.

The future of the Hill Country ecosystem, that we all love so much, depends upon what is happening in our backyards as much, if not more so, than the land practices of large shareholders. Hopefully we all will become more enlightened before fresh water, flora and fauna disappear from the landscape. All of us must strive to keep as much native diversity in the ecosystem as possible, and to remember Dr. Rector's suggestion that "Mother Nature is never wrong". We must be aware that the best "fix" is most often to stand back and allow TIME for nature to heal itself. Of course, we must also remember that we humans have already perpetrated deep wounds and perhaps we do have to lend a hand to the harms we have done. May knowledge and good sense guide us in our actions!!

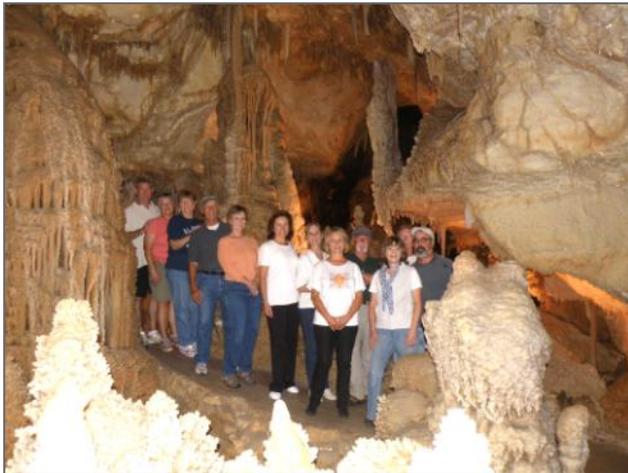
A SHORT REPORT ON THE HLMN TRIP TO THE DAVIS MOUNTAINS

Phil Wyde, Billy Hutson, Ralph Herter

I think that I will start this report with a summary statement. The trip was fantastic! Now I will tell you about how I arrived at that conclusion.

For Linda O’Nan, Sharon Drake, Susan Evans, Billy Hutson, Cindy Sterling, Helen and Dave Smith, and myself, the trip started at 7 a.m. at Dave and Helen’s Smith’s house. What a great start! We had breakfast, good cheer and a brilliant sunrise. Then we split into two cars (Cindy’s and the Smith’s) and headed west. I cannot speak for Cindy’s group, but we got to our first stop, the Caverns of Sonora, in what seemed like no time. I am not sure if this was due to the continuous brilliant repartee taking place in the car or the fact that the speed limit most of the way was 80 mph. Regardless we arrived at the Caverns right on time. Waiting for us were Ralph and Jeffie Herter and Joan and Jerry Stone.

I have been in very many caves, but these caves were truly unique.



There were spectacular formations at every turn and our guide was very congenial and knowledgeable. I forget what the fee to take the tour was (\$7.50?), but it was worth every penny.

After the tour we had the first of a number of picnics that we had on this trip. Then we headed west again – at 80 mph and with more brilliant conversation. It is amazing, but even at that speed we saw a lot of landscape along the way that would please even the most discriminating naturalist (e.g., the South and North Llano Rivers, giant windmills, mesas, buttes, cactus and yuccas). We arrived at Indian Lodge and the Davis Mountain State Park right on time.

I won’t bore you with details about Indian Lodge or the bed and breakfast that Cindy and the Stones stayed at. Let’s just say that no one was disappointed. Instead I will tell you about our hikes – of which there were many!

The first was down into, out of and all around the



canyon at the Chihuahuan Desert Research Institute near Fort Davis. We had a guide pamphlet and points of interest were marked and located all along the trail. We hiked 4 miles, took hours (we had to stop, look at and discuss MANY geologic, botanical and biologic items) and thoroughly enjoyed our adventure. Some of the group went to the botanical gardens located at this site instead of going on this hike. On the next day, those that went on the hike went to the botanical gardens and those that went there the previous day went on the hike. The gardens were not disappointing.



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The next day we hiked at the Nature Conservancy lands not too far from MacDonald Observatory. It was another incredible walk with a fantastic guide (Chris). We saw bear tracks and unusual plants and trees, and enjoyed beautiful weather. We heard (seldom saw) a number of birds. Some of the calls may have been from Susan Evan's iPhone bird application (er, app). During the trip to the Conservancy property and afterwards, we saw mule deer and a lot of very scenic views.

On another hike we walked from a high ridge near Indian Lodge down to Fort Davis. We saw a number of birds, many xeric plants and bushes, lots of geologic formations and as in all of our hikes, many scenic views. Again although it was only a few miles, we managed to take hours. There were so many views, things to see, and items to talk about.



As an alternative on the first day Billy Hutson, Ralph Herter and his wife Jeffe, took a diversionary trip along the border to explore some unique territory of bleak but beautiful landscape along the border which Billy and Ralph explain below.

We explored a narrow canyon (not well marked and left with few footprints) called (I can't remember). It was from 100 to over 200 feet deep and as narrow as 15 feet in many places. It was carved in the local strata by eons of water laced with sand and was full of incredible pools, drops and at last impassable natural barriers that finally halted our desire to complete the venture.

Then we went to the Chisos basin where we did a neat very scenic and plant educational hike while we let the Herter's car cool down from overheating because of the altitude. I'm not kidding!! We experienced the weeping ash juniper trees that are only

found in Texas in the Chisos basin along with many other unique flora.

We also stopped at the town of (don't remember the name) that had a great bar/restaurant that was highly recommended but under renovation. We stopped for lunch and were disappointed because of the renovation but at least they still had beer for the non drivers (me).

We made it back in time for the night time gathering of the Marfa light deferral activities where we all, under the influence of Cab/Merlot/Chardonnay saw them anyway.



I can't wait till we do it again so I can successfully navigate the unknown canyon with my friends the Herters and others, eat at the famous restaurant w/o a name, finish the hike at Chisos Basin, and continue the quest for the Marfa lights (wherever they may be found).

As you might expect from the individuals that made up our group, not all of the time was spent in intellectual pursuits. For example, we spent time eating. Funny thing was that it was often difficult to find a restaurant that was open during the day – almost everywhere. However, every time that it seemed that we were going to go hungry or get disappointed, we found a more unique restaurant than we could have hoped for. I dare say, I don't think I saw anyone who looked as if they lost weight on this trip – or that was disappointed in the food.

We also picnicked two evenings in the Davis Mountains State Park. And they were unusual picnics. We saw more mammals (javelina with and without piglets, mule deer and raccoons) at these picnics than we did during our whole stay. One of the mule deer really got personal with Cindy. I don't know

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what that woman has?! Billy regaled us with “classic” songs, we ate hot dogs and pizza and Ralph and Jeffie made us smores using (really) giant marshmallows. (I think that they were prehistoric.) Some of the people drank a liquid that was reddish-purple and looked much like wine. However, I am sure that it wasn’t since alcohol was not allowed in the park outside of your room. Oh yes. There was a lot of apple pie and it was intoxicating.

I don’t know if you want to count looking for the “Marfa Lights” as an intellectual pursuit or not. But we did look for them and Mike Childers got the most incredible picture (see previous page).

We also walked around Marfa looking at the Marfa court house, its famous hotel, some of its stores and even had ice cream in a “fancy” ice cream parlor.

Linda O’nan and Mike and Sammie Childers spent the last day at the Sul Ross Campus in Alpine going through the Museum and the Big Bend and touring their cactus garden. They also dropped into a greenhouse they had noticed and ended up spending time with the staff who collect Trans-Pecos Native plants for the campus and the Lady Bird Johnson Wildflower Center.

On the last night, many of us went to the Mac-Donald Observatory where we had dinner and then looked at the M15 star cluster and Jupiter through a 107 inch telescope. (Some had gone to the observatory the previous night.) I have to say that the location of the observatory, their facilities and what they do is fantastic. I have included a picture of the 107 inch telescope and one of Cindy Sterling “driving” it into position. As you can see, it was nothing special to her.

I also greatly enjoyed our hostess at the telescope viewing. She had a Ph.D. in chemistry from Northwestern University but was doing this “low level” hostessing and not using her degrees. I don’t think that she was even a little bit sorry. We also heard a spiel from a Ph.D. Physicist/Astronomer from New York and Indiana before the talk. He was sorry (unbelievably bad)!

On Thursday the 21st of October we sped back to Hill Country and Helen and Dave Smith’s house where we had left the cars. Although we went the 80 mph speed limit, Ben and Carol Kowing passed us so fast that they did not even see us. I can tell you that there is nothing wrong with Carol’s right (gas pedal) foot. I think that every one of us agreed that it was really a wonderful trip! By the way, although we did

not send you a postcard, we all “wished that you were there.”



(Three postscripts. 1) I left out a lot of adventures and a ton of views. 2) A lot of thanks go to Sharon Drake and Linda O’Nan for planning the itinerary. 3) A real lot of thanks go to the 16 people that went. They all made great companions and everyone of them contributed to the success of the trip.)

THE STATE OF THE BIRDS

PART I: 2009 REPORT ON POPULATION TRENDS IN THE U.S. FOR THE PAST 40 YEARS*

By Ray Buchanan and Sherry Bixler

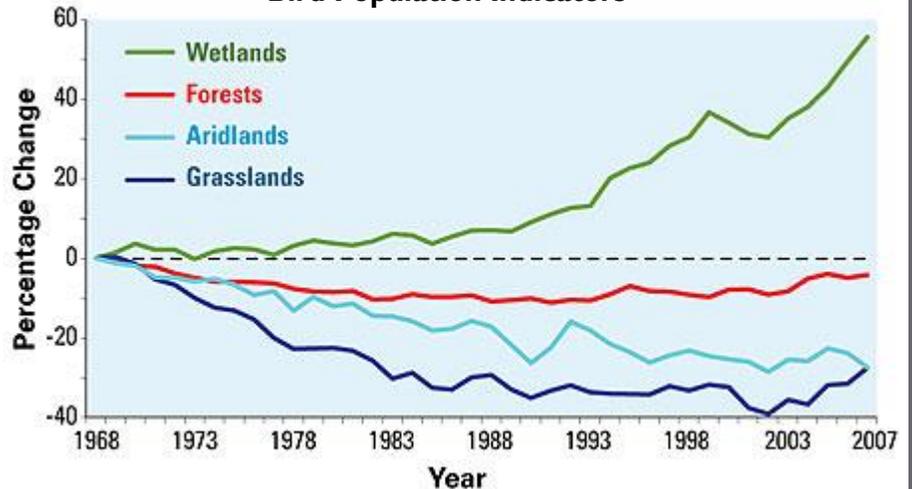
Author's Note: This is the first of three articles about the 2009 and 2010 Reports on the State of the Birds. Part II on how the Report reflects conditions in Texas and the Hill Country will appear in the December issue. Part III will review the 2010 Report on the potential impact of climate change on bird populations and appear in the January issue.

This 2009 Report on the State of the Birds represents the first comprehensive analysis of what has happened to the some 800 bird species in the U.S. over the past 40 years. It provides significant information about

“the integrity of the environments that provide us with clean air and water, fertile soils, abundant wildlife, and the natural resources on which our economic development depends” (p. 3). From a 1968 base line the results show that human activity has contributed to significant declines in six of the seven obligate species areas (where those species that are restricted in breeding to a single habitat live): Aridland species have declined by 75%; Grassland species by 40%; Oceanic species by 39%; while Forest and Coastal species show mixed but declining results. Hawaii is experiencing near disaster with 71 extinct species and 10 more that have not been seen in 40 years. Significant loss of habitat due to human intervention has been reversed by specific cooperative programs (such as the North American Wetlands Conservation Act – “Duck Stamps”) affecting Wetland birds: 139 wetland species have shown steady increases beginning in the late 1970's. (see chart on Bird Population Indicators)

This worrisome report on our birds and our environmental health represents the efforts of an unprecedented partnership of government wildlife agencies and conservation groups. The North American Bird Conservation Initiative – U.S. Committee brought together information from three major sources: (1) information on 365 breeding species collected from 4000 sites through the North American Breeding Bird Survey administered by the U.S. Geological Survey and the Canadian Wildlife Service; (2) for the 120 species that

Bird Population Indicators



breed outside the area of reliable BBS coverage information on trends was gathered from the National Audubon Society's Christmas Bird Count; and (3) trends for 13 waterfowl were gathered by U.S. and Canadian wildlife agencies. In addition to the above the U.S. Fish and Wildlife Service, the American Bird Conservancy, the Cornell Lab of Ornithology, the Klamath Bird Observatory, and The Nature Conservancy provided information and analysis.



Red-shouldered Hawks have responded positively to protection from shooting, banning of harmful pesticides, and abundant prey in urban areas. Photo by Shane R. Conklin

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Various conservation successes recorded throughout this Report (the Bald Eagle and the Peregrine Falcon, for example) do not overshadow the difficulty in altering human activity to provide birds a long-term chance to survive and reproduce. What most threatens the integrity of every major habitat remains residential and commercial development: draining wetlands, destruction of coastal marshes, as well as loss and fragmentation of forests, aridlands, and grass-



Northern Bobwhites have declined by 75% during the past 40 years. Recent Farm Bill initiatives include goals for recovery of bobwhite populations.



Golden-cheeked Warbler is endangered in Texas due to habitat loss
Photo by Greg Lavaty

lands. Farmland species such as meadowlarks and Bobolinks, eastern birds dependent on shrubby habitats such as the American Woodcock and the Brown Thrasher, western desert and chaparral species such as Bendires and California thrashers all share a bleak

fate. As well, forest fragmentation adversely effects the Wood Thrush and the Kentucky Warbler, loss of beach dunes and salt marshes have tragic consequences for the Black Rail and the Seaside Sparrow. 98% of the tallgrass prairie that existed in the early 1800's has disappeared. Because of its conversion to agriculture "grasslands are the most endangered ecosystem in North America." (p. 30). Energy production continues to contribute to habitat loss, reduction in habitat quality, and direct mortality, such as losses of the Greater Sage-Grouse. Although hunting is "no longer a cause of bird population decline in the U.S., thanks to strong regulations and harvest management," (p. 31) intentional killing of birds such as egrets for plumes, shorebirds for food, and raptors for sport has taken a toll. Over the years other natural resources uses, such as the harvesting of 85% of the old-growth forest in the Pacific Northwest, have threatened various species such as the Northern Spotted Owl and the Marbled Murrelet. Overgrazing in the arid regions of the west have degraded habitats in grasslands and streamside areas. Overfishing in oceans have deprived many species of food sources.

Killing of adult birds and eggs and the young by invasive predators as well as pesticides, toxic chemicals, and heavy metals have resulted in significant losses. Climate change and rising ocean levels will contribute to the elimination of island and shoreline nesting areas and potentially disrupt the sync between food production and migratory arrivals.

But progress is being made in reversing the destruction of habitat and direct threats to various bird species. Funded farmland conservation programs, wetland conservation projects, the Conservation Reserve Program, the National Refuge system, and various organizations such as the National Wild Turkey Federation and Pheasants Forever all offer hope for cooperative local and intraregional efforts. Managing for gamebirds contributes significantly to conservation for all birds. Also, urban bird species such as the American Robin and other native species such as the House Finch and the Great-tailed Grackle seem to be thriving.

This Report provides valuable insights into the status of various bird species and the conditions of our environment that are important for us and for birds. Areas where action is needed are highlighted with solid facts and figures. The entire report can be found at www.stateofthebirds.org click on Archive: 2009 State of the Birds Report.

Halloween at the Lilly's

Mike Childers Photos by Sue Kersey

On Halloween this year, Ed and Sue Lilly hosted their fellow Master Naturalists and special guests to a tour of their ranch. It began with a walk along improved trails near the home highlighting many native and adapted plants. Then we began the big tour. Ed had hooked up his tour trailer to the tractor and like any great tour guide, highlighted all we were seeing with great tales and information. There were dozens of native forbs, trees, and shrubs identified with stakes all along the route.

We even got a special presentation from their son who resides on the ranch and is researching 1st hand how to become green on the land. He demonstrated their use of vegetable oil for motor fuel, solar panels, solar air heating for the home, and electric wind power. After a tour of their really huge garden plot, we returned to the Lilly's for a delicious pot luck!

This is not the first and we certainly hope not the last excursion to the always interesting Lilly ranch. Sue and Ed, thanks for a great time!



REPORT ON RIPARIAN WORKSHOP IN EVANT

Ray Buchanan
Photos by Mike Childers

Who can forget the “Rain Machine”? With a big tank of water that simultaneously “rained” on a tall grass tank, a disturbed surface tank, a home yard grass tank, and a barren soil tank with pipes coming out marked as percolation or runoff water, Billy Kniffen or Bryan Davis used this machine to demonstrate what happened to rainwater when it fell on different surfaces. And then they reminded us, or perhaps it was Rangeland Specialist, Barron Rector who said it, that most of Texas was no longer “Tall Grass Prairie” and that most of the rain runs off carrying with it most of our topsoil. And with the knowledge that it takes 100 years to create a new layer of topsoil as thick (or more properly, as “thin”) as a dime, one can become discouraged about overcoming the consequences of excessive grazing and developmental sprawl that have so damaged Texas soils. How can we ever recover all that sedimentary runoff?



Kenneth Mayben at the creek site

Well, the Riparian Workshop that 5 members of the HLMN Chapter (Ray Buchanan, Billy Hutson, Ed Lilly, Sammie Childers, and Mike Childers) attended in Evant, Texas, shed some new light on that question. If a river or stream demonstrates the “Proper Functioning Condition of Riparian Areas”, which was the focus of the day-long workshop, that runoff soil is transformed into a streambed deposition where riparian vegetation becomes established. Shifting the focus from the uplands and a watershed approach to one of “water catchment” in a riparian area, a study of this “natural” functioning of rivers and streams highlights their restorative character and shows us that a “second chance” to recapture the runoff soil has always existed in nature.



Instructors Ricky Linex and Kenneth Mayben (l to r)

As Ricky Linex, USDA – Natural Resources Conservation Service (who conducted the Riparian Session at the State Meet) and his NRCS colleague, Kenneth Mayben, pointed out: in many cases human action has undermined this natural function of riparian areas. Hence, this workshop, sponsored by the NRCS and the Lampasas River Watershed Partnership, pointed out what the “conditions” should be for a proper functioning riparian area and how to act with “proper management practices” in order to allow nature to heal these areas. It is a question of how vegetation, landforms, and wooded areas interact with the water flow so that moisture stays in any given place for the longest possible time. Water that does run off reaches the Riparian area, and if the Riparian area is functioning properly, it will slow the flow and enable water to be absorbed and sediment to be dropped. This in turn will create or enhance a vegetative riverbed and floodplain which is an underground sponge (composed of living and dead vegetation, organic matter, living organisms, soil, and sediment) which maintains the existing water table and a sustained base flow. The results enhance riparian values such as water quality and quantity, forage for wildlife habitats, recreation value, and aesthetic beauty.

Our visit in the afternoon to a creek on the Chris Meis Ranch outside Evant demonstrated the new terminology necessary for evaluating existing conditions and for developing management practices. For example, 145 riparian plants have been designated as OBL

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1ST HIGHLAND LAKES NATIVE PLANT GARDEN TOUR

The First annual Highland Lakes Native Plant Garden Tour was a resounding success! This event was a collaborative effort of the Highland Lakes Native Plant Society of Texas, the Highland Lakes Master Naturalists, and the Highland Lakes Master Gardeners. The garden tour was designed to celebrate Native Plant Week and to see how beautiful yards and gardens can be maintained using non-invasive, native, and well-adapted plants.

We collected 300 lbs of food and had enough participants (sold 180 wristbands) to also make a nice contribution to The Helping Center of Marble Falls.





**Texas Master Naturalist
Highland Lakes Chapter**

Christmas Party

**Awards & Pins
2011 New Officers Installation**

**Wednesday, December 1
LCRA Facility at 8347 FM 1431 (near HWY 29)
6 pm**

Bring Your Own Adult Beverage

Appetizers, Main Course, Coffee and Iced Tea provided

Please **bring** one of the following to feed 8:
Vegetable - Side - Salad - Dessert

Please RSVP by Nov 24

if you and your guest are coming
and let us know what you are bringing.

Lyn Davis ldavis511@gmail.com or
830-596-1766

VOLUNTEER OPPORTUNITIES AND EVENTS CALENDAR

Mike Childers

NOVEMBER EVENTS		DECEMBER EVENTS	
Annual Appreciation Luncheon Inks Lake State Park (location TBD)	18th	HLMN Christmas Party LCRA Facility at 8347 FM 1431 (near Hwy 29)	Dec 1st 6pm
Breakfast w/Birds Inks Lake State Park	19th 8-10am	FUTURE EVENTS	
Geology Rocks Inks Lake State Park	19th 11am-1pm	HLMN Meeting - Interpreting Nature - John Good	Jan 5, 2011
Fishing w/Ranger Inks Lake State Park	19th 4-5 pm	Sparrow Fest Flying X Ranch, Balcones Canyonlands NWR	Feb 5, 2011
Jaunts Inks Lake State Park	20th 2-4 & 4-5pm	2011 HLMN Training Class Start	March 2, 2011
Owl Prowl Inks Lake State Park	23rd 5:30-7:30pm	Boy Scout Camporee Near Llano	March 5, 2011
Breakfast w/Birds Inks Lake State Park	26th 8-10am	Songbird Festival Balcones Canyonlands NWR	April 23-26, 2011
Geology Rocks Inks Lake State Park	26th 11am-1pm	2011 Intnt'l Urban Wildlife Mgmt/Plan Conf Austin, TX www.urbanwildlife2011.org	May 22-25, 2011
Fishing w/Ranger Inks Lake State Park	26th 4-5 pm		
Walk off That Turkey Relay Inks Lake State Park	27th		
Blanco State Park Volunteer Day Blanco State Park	27th		

(Continued from page 13)

RIPARIAN WORKSHOP

(Obligate Wetland – almost always occur in wetlands); or FACW (Facultative Wetland - usually occur in wetlands, occasionally occur in non-wetlands); or FAC (Facultative – equally likely to occur in wetlands and non-wetlands); or FACU (Facultative Upland - usually found in non-wet locations); and or UPL (Obligate Upland - almost always found in non-wet locations). Then, since it is important to distinguish between “colonizer” plants (those with short roots which initially appear on land created by accumulated sediment) and “stabilizer” plants (those with longer roots which can hold the soil against water flows), stability rating numbers are assigned to each

plant, depending on their growth pattern and root structure: from 1 = bare ground that has no resistance to water flow to 10 = anchored rock or logs that are impervious to water flows. Colonizer plants usually have a 3-5 rating, while stabilizer plants usually have a 7-9 rating.

And this 6-hour workshop gave us only an “introduction” to this complex and highly significant subject. Wouldn't it be fun to develop a core of riparian area experts in the HLMN Chapter to help out with actual evaluations and to keep the rest of us informed and fascinated??

Please submit pictures, articles, reports, stories, calendar and event entries, etc. to chili865@gmail.com. Photos should have captions and appropriate credits. The deadline for submissions to each months newsletter is the 10th of the month and publication will be by the 15th.