



Highland Lakes Steward

February 2012

Volume 3, Issue 2

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

OFFICERS

President
Fred Franki
ffranki@nctv.com
(830)596-1760

Vice-President
Linda O’Nan
bronan@ktc.com
(830) 693-6126

Secretary
Sondra Fox
msfox@nctv.com
(512) 695-5725

Treasurer
Phillip Mitchell
phillipmitchell@earthlink.net
(830) 693-0184

RED ANTS

By Fredi Franki

I’ve been living in my current home for four years. One of the first things I noticed in the backyard was a red harvester ant bed. As a native Texan I am familiar with red ants, no biggy. But I really did not know much about them. As I did with everything else on the property, I left them alone, wanting to see what would happen. In one of my first Master Naturalist classes, I asked Wizzie Brown, Travis County entomologist, about the ants. Should I get rid of them? She explained they are an important part of the food chain and are non-aggressive. The Texas Horned Toad loves a good red ant bed for breakfast, lunch, and dinner. So I still have the ants and have actually enjoyed watching them. However, I have not seen a Horned Toad----yet.

I believe my harvester ants are *pogonomyrmex barbatus*, common in central Texas. The mound is about 2.5 feet across



5402850

with a single entry in the middle and may contain 10,000 ants. Seems like it has doubled in size over four years. The mound is always bare gravel, no foliage, and located in full sun. The ants like warmth and they want a clear view in case of intruders. Near the edge of the mound is an area called the midden, for pebbles, unusable matter, dead workers, etc. There are foraging trails leading out from the mound into my yard. They established a new trail last fall, a super highway, twice as wide as the others. It goes around to the front flowerbed where it appeared they were after the Maximillian sunflower seeds. The ant mound can be six feet deep and has special chambers for sorting food, for storing food, and for brooding.

There is only one queen who may live 20 years. The mound dies when she dies, there is no successor. The queen can produce 10,000 workers every year of her life! The workers (sterile females) have spe-



UGA2109025

(Continued on page 2)

INSIDE THIS ISSUE:

Red Ants	1
Fred Franki	
March Meeting	2
Linda O'Nan	
The Hooded Merganser and Fish Eating Birds	3
Sherry Bixler	
Gallery	4
Greenbriar, An Often Overlooked Plant	6
Phil Wyde	
Learning and Applying Interpretive Skills	8
Carol Navarro-Adams	
Eco-News	9
Events and AT/Volunteer Opportunities	10

RED ANTS

(Continued from page 1)

cific jobs, nest maintenance, midden tender, forager, and patroller. They can switch jobs during their one year life according to their age or need of the colony. In addition to the workers, the queen produces fertile males and females who leave the colony, mate, and start a new colony.

They are called harvester ants because they gather seeds. They like buffalo grass, three-awn, and Texas winter grass to name a few. They are fond of spiders, grub worms, mites, lice, millipedes and the like. They will eat fertile male/female fire ants. I wish they ate fire ants exclusively! In four years, I've only been stung once when an ant got caught in my shoe. The sting was not bad but if you are allergic it can be quite bad. There is some good information on the internet about destroying or moving a harvester ant bed if it becomes necessary, for example if it is located where children play. There is also good information on treating for fire ants in the safest possible way and protecting the harvester ants. See <http://www.hornedlizards.org/pdf/harvester.pdf>. And there are many other articles. Hopefully you can keep your harvester ant bed and enjoy it as I have.



Paul Dorman provided an overview of the Inks Dam National Fish Hatchery Operation at last month's HLMN Chapter meeting. Photo by Jerry Stone

MARCH MEETING

by Linda O'nan

Join us Wednesday, March 7 at 1 p.m., for our monthly HLMN meeting at the Kingsland Library. Dr. Ned Woodall, an anthropologist from Llano, will present "Little Red Riding Hood, Beowulf, & Pecos Bill: Conditioned Concepts of the Natural World". This presentation explores how culture influences the way the natural world is perceived and manipulated.

Save The Date!

Riparian Workshop

The Trails at Horseshoe Bay
 Wednesday Mar 28 8:30am -3pm
 Presented by NRCS experts
 Rickey Linex, Field Biologist and
 Kenneth Mabin, Civil Engineer.
 Space is limited. Please make your
 reservations by contacting
 Sammy Childers at:
sammyenmike@yahoo.com

THE HOODED MERGANSER AND FISH-EATING BIRDS (LOPHODYTES CUCULLATUS)

By Sherry Bixler

Of the three North American merganser species, the Hooded Merganser is the only one generally found in the hill country. Common Mergansers do not migrate this far south and Red-breasted Mergansers are rarely seen away from the coast.

The Hooded Merganser is also the only merganser with breeding territories south of Canada, Alaska or the northwestern states.

All mergansers are winter residents here.

Male and female mergansers are quite different in appearance with males showing green, black and white coloration. Females of all species are rusty brown but both male and female mergansers have crests. Mergansers also have long narrow serrated bills which enable them to hold on to the fish they catch.

The Hooded Merganser male is strongly marked in black and white and is especially striking when he raises his crest. All mergansers have a distinctive shape in flight, with pointed wings and a relatively long neck.

Mergansers are fish eaters and strong swimmers. They are diving ducks but are classed with the sea ducks. Ducks are divided into dabbling ducks (mallards, pintails, teal, etc.), diving ducks (scaup, red-heads, canvasbacks, etc.) and sea ducks (eiders, oldsquaws, buffleheads, scoters, mergansers, etc.)

A surprising number of bird species rely on fish as their major food source. Other species that dive for fish are kingfishers, brown pelicans, cormorants, anhingas, grebes, and loons. Species that grab fish from the surface area are bald eagles, ospreys, and many seabirds such as gannets, shearwaters and murre. White pelicans, skimmers, terns, gulls and frigatebirds also pluck or scoop fish from the surface. Birds that fish while wading include herons, ibis, egrets and cranes.

Even more bird species eat a diet of crustaceans or mollusks but catch fish to feed to their young. All these birds have evolved so they can swim underwater, dive from great heights, and scoop, spear or skim fish. They are also able to hold on to their catch, better than most fishermen. When thinking about what birds eat, most people think of insects, seeds and berries but fish are easily as important and are vital food for species like the mergansers.



Great Backyard Bird Count

I am putting out a personal challenge to our chapter members to participate in the Cornell Lab of Ornithology's Great Backyard Bird Count this year. The GBBC is February 17-20 and you can count any or all of those days. Count in your back yard or anywhere you would like to spend some time bird watching and counting. Just make sure you do your recording for each place and submit on separate count sheets. Go to www.birdcount.org to learn all about GBBC!

If anyone has any questions call or email me. Take a good look at the Cornell website and even if you only have 15 minutes in your day it will really help the GBBC and our local area so much.

Thanks & Happy Bird Counting,
Sue Kersey

GALLERY

Photos by Jerry Stone

Two-flower Anemone - taken on
12/29 at Inks Lake State Park



Henbit



Oxalis



My First Bluebonnet of the year!

Pink Vervain



Small Bluet

Pin Clover



Crow Poison

Whitlow Grass



GREENBRIER (*SMILAX* SPP.), AN OFTEN OVERLOOKED PLANT

By Phil Wyde

If you have done almost any hiking in fenced, brushy or wooded regions of this area, you will almost certainly have seen greenbrier (also called green briar). I will bet that most of you either ignored this plant or if on an interpretive hike said to those around you or in your charge “Oh, that’s greenbrier,” or maybe “Oh that’s greenbrier, stay away from it.” Indeed, I suspect that even the more experienced Master Naturalists in our group are wondering what more one could say about this noxious, deleterious plant except to add a stream of expletives (for the



more innocent in our chapter like Cindy Sterling and Helen Smith, the word “expletive” means curse word). The main reasons for this general indifference and/or antagonistic attitude is that greenbrier 1) is generally not a very pretty or imposing plant; and 2) it is so prickly and thorny that almost anyone coming in close contact with the plant becomes immediately sorry – and then very mad. I think that is why one of its common names is blaspheme-vine.¹ However, it turns out that there are a number of interesting things to learn about greenbrier. Indeed, some of our members like Billy, Cynthia Castleberry and Deb McClintock may even get excited about the plant. For the rest of us, greenbrier is example of why Master Naturalists need to pay attention to even the plainest and ugliest of plants. They too can be very interesting.

The first interesting thing about greenbrier comes out when you look at its taxonomy. Within the Plant Kingdom, greenbrier has been placed in the division, *Magnoliophyta*; the class, *Liliopsida*; the order, *Liliales*; the family, *Smilacaceae* and the genus: *Smilax*. There are more than 300 species of *Smilax* (greenbrier) worldwide, of which 20 thrive in North America north of Mexico.² Common names include catbrier, prickly-ivy, smilax, blaspheme-vine, “sarsaparilla,” greenbrier or just briar. If you look carefully at what you just read, you should note that impossible as it seems, greenbrier is in the same order as LILIES!

There are two practical reasons that you as a Mas-

ter Naturalist should pay attention to greenbrier. The first reason is that it is so common here in the Hill Country (and east Texas). The second is that it is very easy to recognize almost all year round. Thus on almost any interpretive hike that you take or lead other than those in open fields, you will have something you will recognize and be able to talk about. In fact, with what I am going to tell you, you should be able to impress almost any child -- and even some ordinary adults.

Greenbrier can grow as a simple vine or form dense clusters or brambles. Their hooked thorns allow them to get up and over branches of trees as high as 30 feet. If you have ever tried to remove them, their hold can be tenacious. Surprisingly, the vine does not need to grow on a shrub or tree. I have seen greenbrier vines growing straight up for three to five feet without any apparent support. (This is because as the vine grows it gets thicker and more rigid.) The genus includes both [deciduous](#) and [evergreen](#) species and their [leaves](#) are primarily heart-shaped.² These can vary from 4–30 cm long in different species. (See photographs.) Greenbrier is [dioecious](#) (i.e., can have male and female plants). However, only about one in three colonies have plants of both sexes. The clusters with only one sex form clones, do not form flowers and spread via their rhizomes. Those colonies that have plants of both sex produce clusters of white to green flowers in May and June.² If the flowers are

[pollinated](#), the plant will produce berries that mature in the fall. These are about 5 to 10 mm in diameter and can vary in color from red to blue-black. They are rubbery in texture and each contains a large, spherical seed in the center. If not eaten, the fruit usually stays on the bush through winter and does not readily decay like the berries of many other plants. (Why did I say that?) If eaten, the seeds are passed unharmed in the animal's or bird's droppings.²

Greenbrier vines are very tough to eliminate permanently. If they are cut down, or burned down by fire, they can grow back from their rhizomes. As just mention, their seeds pass through birds and animals without harm and thus can be spread by this way over very large areas. Because of their rigid, thorny stems, trying to remove them by hand is extremely arduous and often costly in terms of ripped clothes and bloody hands, arms and legs. I think that all of this is something that you can talk about on any interpretive hike that you see greenbrier. But I think that it should be done with the "twist" (emphasis) that greenbrier is a very tough native plant (not a sissy import).

I would then mention that for the very reason that humans don't care much for greenbrier, greenbrier brambles provide excellent shelter for small animals (e.g., rabbit, deer, skunk, raccoon, squirrel, possum), birds (e.g., mockingbirds, robin, catbird, mourning dove, goldfinch) and other creatures.^{2,3} Think about it. A predator would have to be pretty hungry to charge into an almost impenetrable mass of prickly, thorny greenbrier bramble after a meal.

Besides providing shelter, greenbrier is also an important food source for a number of animals and birds including wild turkey, beaver, white-tailed deer, rabbits, squirrel, possum, raccoon, wood duck, cardinal, catbird, crow, mockingbird, robin, brown thrasher, cedar waxwing and more. I bet that you are thinking that it is the berries that are the main food source. Well, you would be right that the berries are sought after, especially in the winter when there is not much food available for many wild animals and birds. But you would be wrong if you are thinking that only the berries of greenbrier are edible. It turns out that the stems and leaves are quite edible, and a number of animals including browsers like deer favor them, especially when the vines are young or just leafing out. (Do you think that is why greenbrier has evolved to have so many thorns and prickles?) Indeed, humans can eat the young leaves – if they can get to them. Apparently they have a tangy flavor.⁴ (I am sure that we can confirm this by asking Billy.)

But still other parts of greenbrier plants are used as a food source. (I doubt if even Jerry Stacy knows this.) Certainly looking at greenbrier you would not guess this. That is because the part of the plant that is most edible is underground.² Almost all *Smilax* species either have extensive networks of long, looping, underground stems called stolons, large tubers, or both stolons and tubers. The tubers contain a starch that southeastern Indian tribes used to make into a flour.⁵ This was done by pounding the tubers and then adding water to the resulting mush. After the larger, solid particles fell to the bottom, the smaller particles were poured into another container and allowed to settle out and dry. The resulting meal was mixed with water, sweetened with honey or mixed with corn flour and then fried in bear oil to make "hotcakes or fritters."^{1,5} The meal was also used to thicken soup. I am giving this procedure in some detail because I expect at least Billy and Cynthia to try making some of these greenbrier hotcakes or fritters. In addition to using the tubers, the Indians would eat new greenbrier shoots and growing tips raw or steamed like asparagus.^{4,5}

Greenbrier roots were also used to make different kinds of drinks, including stews and soups.^{1,6} To prepare beer, greenbrier roots were mixed with molasses and water and allowed to ferment. It was then seasoned with sassafras. Tea can also made from greenbrier roots. In fact, in the 17 and 18 hundreds, greenbrier root tea was used as a general tonic to stimulate metabolism, produce sweating, to remove impurities and waste, and to purify the blood.⁶ The tea was also used to treat fever, sores, chronic rheumatism and venereal diseases. It is even maintained that greenbrier root tea enhances weight loss and sexual performance. (I am sure that all of you are now interested in the recipe for greenbrier root tea!) Interestingly, there are present day claims that extracts of roots of some Jamaican, South American and Asia *Smilax* species can cure gout, reduce premenstrual symptoms, reduce premenopausal symptoms and alleviate some skin diseases such as psoriasis and seborrhea. There may be some basis to some [one?] of these claims. Various species of *Smilax* are known to contain steroidal compounds. I am absolutely positive that Billy is no longer reading this article, but out gathering greenbrier to cultivate near his house. I cannot wait to hear if greenbrier root tea really alleviates some of these things. Of course he won't be able to tell me about any alleviation of premenstrual or premenopausal symptoms – unless you believe in male

menopause.

I promised something for Deb McClintock. First, since greenbrier leaves stay green well into winter, they are often used to decorate. They obviously could be used on packages that you did not want someone to open. But more useful to Deb, the berries and roots of greenbrier apparently yield an array of dye colors, including rusty red, tan, gray, olive- and forest green, blue-gray and yellow.^{1,6-11} Although I am listing a number of references, they do not have much detail.

To end this discourse, I hope that you will never look at greenbrier again with total disdain, and that you will talk about this group of plants with some respect and interest on your next interpretive hike.

REFERENCES

Turner, M.W. 2009. Greenbrier *Smilax spp.* in Remarkable Plants of Texas, pp. 270-273. Univ. of Texas Press, Austin, Tx.

<http://en.wikipedia.org/wiki/Smilax>

<http://www.fcps.edu/islandcreekes/ecology/greenbrier.htm>

http://www.ehow.com/how_2081919_identify-greenbrier.html

Coker, W.C. 1944. "The Woody Smilaxes of the United States." J. of the Elisha Mitchell Scientific Society. 60:27-69.

Porcher, F.P. 1869. Resources of the Southern Fields and Forests, Medical, Economical, and Agricultural. Charleston, S.C.: Walker, Evans and Cogswell Publ.

http://www.ehow.com/info_8709283_wild-vining-plants-thorns-kansas.html

<http://www.growingagreenfamily.com/nature-craft-homemade-tea-juice-dye/>

<http://www.utexas.edu/utpress/excerpts/extuledp.html>

http://www.arnatural.org/Wildfoods/Uses_Trees.htm

<http://essmextension.tamu.edu/plantsdev/greenbriar>

LEARNING AND APPLYING INTERPRETIVE SKILLS

by Carol Navarro

In the world of a nature educator there is always room to gain new skills in successfully connecting children to the natural world. It is one thing to have knowledge of the natural world and entirely another thing to effectively share that knowledge on the level of the individual participating in a program. One thing that I have noticed in my career as an environmental educator is that this skill is actually an artful understanding. One can glean a lot about this artful understanding from several brilliant educators like David Sobel. He provides the most succinct lessons in understanding how to reach children at different ages that I have discovered while getting my masters in Environmental Education. His 45 page book, *Beyond Ecophobia: Reclaiming the Heart in Nature Education* is my bible for determining content of my lesson plans for different age levels. As we round the corner in another year of the Great Outdoor Program I highly recommend this short read before you attempt developing new activities or refining the ones we have. The premise of this book is simple; in order to create a connection between children and nature you must first create opportunities for empathy in the natural world. He writes in his introduction, "As adults we know the value of facts and figures, so we wish for children to



know details about nature....yet the names won't stick unless there is a bedding of empathy where that knowledge can take root. When we consider the developmental stages of childhood...we find that there are appropriate environmental activities and accessible ecological concepts for children at different age levels that take into account their cognitive capabilities and psychological needs. " He also suggests building a sense of place. "Children are disconnected from the

world outside their doors and connected with endangered animals and ecosystems around the globe through electronic media.” It never ceases to amaze me how many children, like our beloved first graders ask, “Are there any sharks in the lake or bears in the forest?”, before they venture in.

With the local first graders that visit the park each year we have a wonderful opportunity to facilitate a love bond to the natural world in their backyard/Inks Lake State Park. Sobel teaches that children at this age should not be burdened with environmental disasters, but rather must fall in love with the natural world and to feel comfortable in it before being asked to heal its wounds. One of my favorite authors, nature writer John Burroughs remarked that “Knowledge without love will not stick. But if love comes first, knowledge is sure to follow.” After all, when we examine our own passion for the natural world and our insatiable desire to learn about it, we can go back to the time and experiences that created our love bond for the natural world.

Terry Bartoli has opened the invitation for you to be involved in the creation of new activities for the Great Outdoor Program, or to make adjustments to the ones that we have. You are welcome to make a contribution. In so doing please honor the first graders cognitive capabilities and psychological needs as you make those recommendations. This book is very helpful for understanding the mind and heart of a first grader. This is the age of empathy when we take every opportunity to foster first graders incredible sense of wonder, and tap into their desire to nurture nature and the need to develop a sense of place. They notice every little living thing and want to love it with all their senses. One example and suggestion that I have, is to stop and observe the harvest ants instead of briskly walking by them to the next activity. Let’s stop at this natural area and build it into the fabric of the activity. It’s very likely that this nature moment, like ants vigorously building their home and delivering food to their nest, will foster their love for this creature and indirectly teach them that we respect that every little thing in nature. It is artful to use a site to emphasize every little member of the natural world and to connect them to the whole.

Another recommendation I have is to take the skulls completely out of the GOP program. Skulls are related to death and at this age heady knowledge about skulls goes over their heads and not into their hearts. Perhaps you can make suggestions for a new

activity in its place by taking this experience with the ants and building a whole activity that pairs up signs of animal’s homes with their food source. Butterflies and other insects could easily be added to the mix as well. Or perhaps with the use of puppets that we can produce a matching game with their tracks or their fur? Its spring, everything is giving birth to cute babies to fall in love with. Hey lets show case all that neat stuff that is going on at Inks Lake and in their back yards. Send your ideas to Terry and me and together lets create something relevant and appropriate for our guests.

In addition, I would like to invite you to an opportunity to learn more about this artful understanding. My regional interpretive specialist, Tara Humphries and I are giving a Volunteer Interpretive Workshop on Wednesday March 28th from 8:30 to 3:30 pm. We will share information on how to include interpretive skills in your presentations, tips on program and activity development and the use of object lessons in natural areas, and how to effectively reach diverse populations and more. If you are interested in attending or have any questions, please let Carol Navarro Adams know by RSVP carol.navarro@tpwd.state.tx.us. Once I determine the interest level it will help us to choose the site that can support the number of people signed up for the workshop. As always I greatly appreciate your contributions and love for our backyard and the people that enjoy them too.

Eco-News

(click on headline)

From Bat Conservation International Newsletter
1/2012:

[White Nose Syndrome Confirmed in Europe](#)

From Inside Science News Service: 2/2012

[Northern Forests May Be Losing their
Ability to Trap Carbon](#)

Jacobs Well Flood and other news 3/2012

[Watershed News](#)

VOLUNTEER OPPORTUNITIES AND AT/EVENTS CALENDAR

Mike Childers

FEBRUARY - MARCH EVENTS & VOLUNTEER OPPORTUNITIES

Balcones Training Workshop for Bridges to Birding and Going Buggy Programs Balcones Canyonlands National Wildlife Refuge - Flying X Ranch	Feb 16 9am-4pm
TWA Wildlife for Lunch Webinar Series - Feral Hogs Go To https://texas-wildlife.webex.com the scheduled day and click on the webinar title.	Feb 16 Noon-1pm
Hill Country Conservancy - Lunch and Learn - Global Conservation Efforts Green Pastures Restaurant, 811 Live Oak St., Austin, TX	Feb 16th 11:30am - 1pm
Great Backyard Bird Count www.birdcount.org	Feb 17-20
Warbler Vista Trail Work Day Balcones Canyonlands National Wildlife Refuge	Feb 18 9am-1pm
2012 NPSOT Spring Symposium - www.wildflower.org/springsymposium/ Lady Bird Johnson Wildflower Center	Feb 25-26
2012 Master Naturalist Training Program Begins - Keynote: David Bamberger Kingsland Library	Mar 1 10am-3pm
Ceramics: The Stories Found in Pottery - www.txarch.org/activities/academy College Station, TX	Mar 3-4
March HLMN Meeting - Dr. Ned Woodall, anthropologist Kingsland Library	Mar 7 1- 3pm
Going Buggy Balcones Canyonlands National Wildlife Refuge	Mar 7
HLMN Training Class - Watershed/Groundwater/Aquifers Jacob's Well, Wimberley	Mar 8 10am-3pm
TWA Wildlife for Lunch Webinar Series - Pond Management Go To https://texas-wildlife.webex.com the scheduled day and click on the webinar title.	Mar 15 Noon-1pm
HLMN Training Class - Water issues/solutions for the Highland Lakes, Zebra Mussels Inks Dam National Fish Hatchery	Mar 15 10am-3pm
Spring Star Party at Fort McKavett Fort Mckavett State Historic Site	Mar 17 Dusk-10:30pm
HLMN Training Class - Archeology and Geology Nightingale Archeological Center and Inks Lake State Park	Mar 22 9:45am-3:15pm
2012 Lawn and Garden Show Burnet Community Center	Mar 31
Clean Sweep Inks Lake State Park	Mar 9 8:30am-Noon
Riparian Workshop - Rickey Linex and Kenneth Mabin of NRCS Location to be announced	Mar 28 8:30am-3pm
Interpreters Workshop for Master Naturalists-Tara Humphries, Carol Navarro-Adams Location to be announced	Mar 28th 8:30am-3:30pm

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.

FUTURE EVENTS & VOLUNTEER OPPORTUNITIES

Bridges to Birding - Apr 4,5,11,12,18,19, May 4 Balcones Canyonlands National Wildlife Refuge	Apr
HLMN Training Class - Rainwater Collection, Firewise Landscaping, Grasses Balcones Canyonlands National Wildlife Refuge - Flying X Ranch	Apr 5 10am-3pm
HLMN Training Class - Plant ID by Keys Westcave Preserve	Apr 12 10am-3pm
Going Buggy Balcones Canyonlands National Wildlife Refuge	Apr 13
Great Outdoor Program Inks Lake State Park	Apr 17-20
HLMN Training Class - Invasives and Entomology Blanco United Methodist Church	Apr 19 10am-3pm
TWA Wildlife for Lunch Webinar Series - Riparian Management Go To https://texas-wildlife.webex.com the webinar day and click on the webinar title.	Apr 19 Noon-1pm
Great Outdoor Program Inks Lake State Park	Apr 24-27
HLMN Training Class - Birds and Herps of the Hill Country Perdenales State Park, Johnson City Events Center	Apr 26 10am-3pm
Songbird Festival Balcones Canyonlands National Wildlife Refuge	Apr 27-30
Family Day of the Songbird Festival Balcones Canyonlands National Wildlife Refuge	Apr 29 Noon-5pm
HLMN Training Class - Mammals, Rangeland Management Oatmeal Community Center	May 3 10am-3pm
NPSOT Meeting - Christy Muse, Esecutive Director, Hill Country Alliance Marble Falls Library	Mar 17 1-3pm
HLMN Training Class - Wildflowers, Camera as a tool for Master Naturalists Home of Marvin and Judy Bloomquist	May 10 9:30am-2:30pm
Day in the Park Blanco State Park	May 11
HLMN Training Class - Graduation Celebration and Pizza Party Reveille Peak Ranch	May 27 4pm

For volunteer opportunities and events scheduled at Inks Lake State Park, Blanco State Park, and Balcones Canyonlands, Balcones Canyonlands Preserve, check these websites for information:

http://beta-www.tpwd.state.tx.us/state-parks/parks/find-a-park/inks-lake-state-park/park_events/

http://beta-www.tpwd.state.tx.us/state-parks/parks/find-a-park/blanco-state-park/park_events/

<http://www.fws.gov/southwest/refuges/texas/balcones/>

<http://friendsofbalcones.org/>

<http://www.ci.austin.tx.us/water/wildland/onlineregistration/ecowebevents.cfm>