

T E X A S

Master Naturalist™



HIGHLAND LAKES CHAPTER



Highland Lakes Steward

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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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President's Message

Phil Wyde

This is my third year being a Highland Lakes Master Naturalist. I still remember reading the newspaper ad and wondering whether I should apply or not. My doubts were not caused by thoughts of tromping through nature. I have always loved the outdoors. My misgivings were about whether I would like the people or enjoy being in a social group. I really am not a great socializer. Indeed, I had spent my previous 30 years working with mice, rats, cotton rats and other laboratory animals – on purpose. People often frustrate me.

I am sure that you are wondering if I have any regrets, or frustrations. I have to say, “no,” without reservation to the former and few to the latter. I have thoroughly enjoyed the things that I have done as a Highland Lakes Master Naturalist. I have walked on land that I could not have if I wasn't a Master Naturalist. I have learned about ashe juniper, cowbirds, riparian habitats, geologic formations, native bees, and much more. I have had great fun painting, mowing, cutting limbs, untangling fishing lines, weeding, risking life and limb to see an eagle, tramping through briars, cactus and muck, and much more. I have gotten to help a lot of children and interact with a number of parents. However, I have to admit that I have not always been successful in my endeavors. For example, I have gotten nowhere trying to help Mike Harris with his English.

How about the people in the HLMN? I have to say, again without reservation, they have been great! I have

especially enjoyed palling around with rangers, county agents, ranch owners, and other colorful people. I have also greatly enjoyed the varied personalities and diverse talents of the members.

I will end here by saying that it is April in the Texas Hill Country and my yard is bursting out with blossoms, flowers, green leaves, new buds and even developing fruit on my fruit trees. My calendar is filled with HLMN events and other things. I have no doubt that other things will pop up (right Cindy?). And some things will be incessant. For example, trying to help Billy Hutson and Helen Smith with their fishing, meeting Sue Kersey's expectations or learning to say BIAN (K)co and Buc(K)hanan. But all in all, I am really glad to live in the Texas Hill Country and to have joined the Highland Lakes Master Naturalists.

Programs from the Oatmeal Cowboy

Billy Hutson

Next months meeting on May 5th will be at the Kingsland library and will include a presentation on Reptiles and amphibians by Robert Lindsey with live data. Also we will get to hear Phil mispronounce every ones name and any other two or more syllable word he happens to mutter.

Lunch before will be at the Junction House at 11:30am and I will try to get the buffet again if possible (yummy chicken livers!!!!).

I hope everyone enjoys this newsletter and will thank Mike ChildERS for his efforts. See ya next month.



Past Programs from the Oatmeal Cowboy

Billy Hutson

Our March meeting was attended by 59 people and the Kingsland Library room keeps shrinking. At this rate we will have to rent the Houston Astrodome by the year 2020. Most of us may still be around then.

The special guest speaker was Steve Nelle (pronounced Nell E) and his cohort Rick Linex, and it was most educational.

Then, as a new tradition whenever possible, we went on a field trip to Inks Hatchery to view and discuss their semi riparian area and the good and bad of it all. We actually practiced our new found knowledge. And we received 2 advanced training



Steve (with cowboy hat) and Rick (far right) at Hatchery
Photo by Mike Childers

hours along with our volunteer hour for those that made the entire afternoon.

Lunch was at the Junction house with a prearranged buffet and those wonderful chicken livers. I was smart this time and got ahead of Terry Bartoli in line so I could get enough on my plate.

I have received from Steve a copy of his presentation for any master naturalist to use for their own edification. I have tentatively scheduled Steve for next spring to give us a full day of riparian and at his suggestion it will entail a good example of a healthy riparian area and a bad one after a morning lecture.

For the April meeting we met at the Oatmeal Community Center for a presentation on Bird banding by Judy Bell a past federally licensed bird bander. Judy is very gracious with her volunteer time

in educating people across the nation from the RV she lives in regarding bird lore. It's a pleasure knowing someone else outside our group that enjoys giving back. Her talk was great and I learned form it for sure.



Judy Bell presented with Bird House Photo by Jerry Stone

After the meeting most of us went to Indian Springs Ranch for a two hour interpretive walk and some light refreshments. Please thank Helen and Lyn when you see them for the hors d'oeuvres and their superb waitressing. They were supposed to wear short mini skirts and low cut blouses but always



Indian Springs Ranch

Photo by Mike Childers

change their minds when I ask them to do that. It couldn't have happened w/o them.

Now ya'll can say you've been to Oatmeal, the second oldest community in Burnet county. This could be quality conversation during one of your future double martini parties when you are holding your martini glass with the little finger extended and conversing with a Senator or movie star. Mention my name!

Millennium Seed Bank Project

Fredi Franki



Graphics Courtesy of Kew Millennium Seed Bank

Members of the HLMN seed collection team recently visited the LBJ Wildflower Center to help process Texas Ash seeds. Ash trees in the northeastern U.S.A. are succumbing to an infestation of the emerald ash borer. The Wildflower Center is part of a research and storage project aimed at eradicating the pest and conserving ash trees. HLMN collected the Texas Ash seeds at Billy Hutson's place in Oatmeal. Mexican Ash seeds were also collected near Penny Nichols home in Kingsland. Our team has done other collections for the Wildflower Center as part of the Millennium Seed Bank project in the UK. Last fall we harvested seeds of Drummond's Wood Sorrel and Lindheimer's Morning Glory on Marvin and Judy Bloomquist's property.



Pictured are (below) Ralph Herter, Billy Hutson, Judy Bloomquist, and Fredi Franki removing the tiny ash seed from the very small fruit. In the above photo, Minnette Marr of the WFC is talking to us about the gallery of digital seed photos recently put online. From the left is John McClintock, Billy Hutson, Minnette Marr, Linda O'Nan, Judy Bloomquist, Ralph Herter, Lyn Davis, and Jerry Stacey. Others who helped that day are Billie Gunther, Bonnie Mikels, Marvin Bloomquist, and Mike Harris. The main tools required for this project were your finger nails, a scalpel, and a large dose of patience.

Canyon Gorge Hike

Mike Harris

The tour of Canyon Lake Gorge on March 23rd was very educational and a great day out.

The gorge is about one mile long, hundreds of yards wide and up to fifty feet high, which was carved through Glen Rose limestone in July 2002.



Full Group Picture

Photo by Phil Wyde

Early on June 29th 2002 the Canyon Lake was below the 909ft mark - above mean sea level - and then it started to rain. A low pressure system migrating westward from Florida, combined with a flow of deep tropical moisture from the Gulf of Mexico, moved over the south of Texas. The system hit a wall of high pressure and stalled over Central and South Texas. For eight days the storm system continued to draw moisture from the Gulf, triggering massive storms and 35 inches of rain fell.

On June 30th the Guadalupe River was closed to recreational activities due to swift river currents flowing. By July 3rd 107,000 cu.ft/sec of water was flowing, measured at the Spring Gauge on the Upper Guadalupe, some 43.75ft deep, where it is normally at 2ft. On July 6th at close to the dam, the flow measured at 67,000cu.ft/sec - down from 107,000 cu.ft/sec -but at 1245pm the depth was measured at 950.15ft which was 7ft above the spill level of 943ft.

This was the first time since the Spillway had been in use since the reservoir dam was commissioned in 1964. Normally the flow out of the reservoir is 350cu.ft/sec. Nine people were killed by the flood and forty eight thousand homes were destroyed or damaged. No one, luckily, was killed near the spillway as the campers and those threatened by rising waters were ordered to go to safer areas as

the waters started to rise.

The flood sheared off the softer top limestone rock from the spillway and left the 111 Million year old bed rock completely exposed. It carved its way through the Glen Rose limestone, took out the FM306 road as it swept by and not a blade of grass could be seen when geologists went to investigate very soon afterwards. In the bed rock, imprints of a three toed 20 ton carnivore biped's foot print can easily be seen walking up-river as it were as well as a 40 ton herbivores quadrupeds foot prints, When this animal walked, its hind foot almost exactly fell into the fore foot's print. Many thousands of fossils can be seen at the Gorge.

The Gorge Preservation Society (GPS) is a local citizens volunteer group, who have partnered with the Guadalupe Blanco River Authority (GBRA) and the US Army Corps of Engineers from the Fort Worth district. The US Army's presence is to regulate how much water is released into the lake when the water height exceeds the 909ftmsl (at 909 and below GBRA operates the discharge). Their remit is

The Lead docent was Coco Brennan (pink shirt) , a former member of our Highland Lake group, now with Hays county. Photo by Susan Evans

to provide water to the local municipalities, and to provide flood damage reduction to the Guadalupe River Basin below the lake. They also provide the amenities for camp sites and water recreation.

Their presence there makes the Canyon Gorge

Canyon Gorge Hike (cont'd)

a federal site and stops the public from entering without the necessary permit. This limit's the amount of damage to the Gorge by reckless behavior.

The Dam, which is 974ft msl was built to control flood water that originated in the Guadalupe River watershed and for the GBRA to have a stored water supply available for citizens in the Guadalupe River Basin in times of draught.

We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. ~Aldo Leopold, *A Sand County Almanac*

Master Gardener Trip to Botanical Gardens

The Master Gardeners Club is sponsoring a trip to the Botanical Gardens in San Antonio.

Date: May 18, 2010
 Time: 8:30am
 Where: Meet at Wal Mart
 Cost: \$26.00 (Includes bus transportation, admission, and tour)

Master Gardeners are still signing up but to assure adequate participation, there is a waiting list. If you would like to have your name on the list please contact **Billie Gunther @ 281.250.3826** or email billiegunther@gmail.com.

You will be notified on April 22nd if space is available. Payment will be needed only if you are notified.

Master Naturalist Bird Booth at the 12th Annual Hill Country Lawn & Garden Show!

We had a wonderful day at the Lawn & Garden Show, selling books, suet logs, suet and Aldo Leopold garden benches. I want to thank Ed Myatt for making the suet logs and provided us with the garden benches. We had one bench in our drawing and the winner was Jake Nicholson who was thrilled when he picked it up. Ed also made suet logs and Lyn Davis and Helen Smith provided the suet for the logs. I provided the recipe for the suet and we had lots of folks very interested in making it. We sold books for \$370 which I have already taken over to Sandy at Naturally Curious. She wanted me to thank everyone that helped sell her books. She was so thankful for our sales. We got a lot of birding questions and folks sure were interested in the Feeder Pole system from WildBirds Unlimited.



The Drawing for the bench took in \$156. Bill Luedecke shared his profits on the book sales with us for a addition of \$40. And the suet and suet logs took in \$205. So our profits were good for the show.

Thank you to all of you that made the show so much fun! Your sales team was Phil Wyde, Terry & Susan Bartoli, Lee Kinard, Sondra Fox, Penny Nichols, Ann Cook, Susan Evans, Judy Bloomquist, Ben & Carol Kowing, Mike Harris, Bill Luedeck and Mike Kersey. Thanks to Ray Buchanan to helping to take down the booth. Special thanks to Robert West for bringing in our big sign. Our chapter is full of talented members that have a great love of life and nature. I always love to see the group have so much fun and do so much good for our community.

With abundant gratitude, Sue Kersey

Artists Among Us - Maggie Booth



“Cositas:” little things. They are what you make of them: guardians, or talismans, spirit figures to watch over you and yours. Born of the earth, they are shaped with clay, bones, feathers, seeds, and the imprint of herbs and grasses. They are embellished with small objects that I have collected over the years. These are things that once belonged to others; now they take on a different meaning and are closer to the elements from which they came. They aren’t really planned and the results often surprise me. They are my way of honoring the land, its people and its animals.

I am a native of Texas, born in Austin, raised in Houston and a graduate of Southwest Texas University (now Texas State). After living in Houston for nearly 40 years, I moved to Galveston in 1995, in order to escape city congestion, and to renovate a 100-year-old house. There I started classes in ceramics at Galveston College and built a studio in the basement.

After 10 years on the island, I needed a change of scenery. My love of nature had been nurtured over a lifetime of summers spent at my grandparent’s ranch, near Marble Falls, Texas. I now live on a part of that same ranch, re-christened the Red-Tail Ranch. My partner and I designed, built, decorated and moved into our new house, where I now have a kiln and spacious studio among many childhood memories. This rich environment has provided new inspiration for my work.

I have also come to understand the land and its inhabitants in a new way by becoming a member of the Native Plant Society and the Highland Lakes Master Naturalists. It is a pleasure for me to share my expression of that awareness with you.

My work is now being shown at the Riverbend Art Gallery in Marble Falls where there will be an artist reception featuring me and my creations on Fri. Apr. 30, 5:30-7:00. It is located near the entry of the parking lot of Chili’s and the River City Grill.

The Deer Mouse

Joan Mukherjee

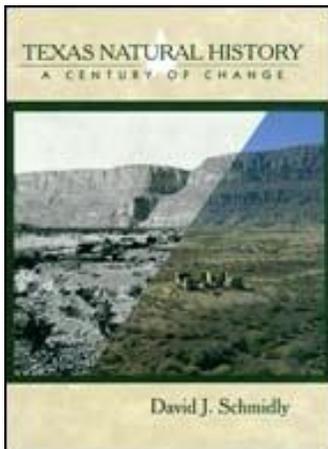


I have a drawer on the porch where I keep odds and ends that I use on the porch. One day I opened the drawer and there was a big pile of chewed paper and cloth in its middle. I suspected a mouse nest and threw it in the wastebasket. Next time I opened the drawer I found that it had all been brought back to the drawer. Again I threw it away. The third time that it appeared I took it far out to the barn to dispose of it. A few days later I opened the drawer and here was just a partial nest and as I looked a little deer mouse came up over the edge of the drawer and just stared at me. I could see she was saying “Don’t you dare! Don’t you dare!” What could I do? I just closed the

door. When I opened it a couple of days later the nest was complete and she quickly poked her nose out and stared me down again. The next time I needed a hook and opened the door there she was with her babies. That drawer now belongs to Mrs. Deer Mouse and her family.

Recommended Reading

Betsy Bouchard



David Schmidly, *Texas Natural History. A Century of Change* (Texas Tech University Press, 2002)

Think about this: in 1900, the human population of Texas was less than three million, and San Antonio, the largest city, was home to about 53,300 souls. Today, Texans number more than 20 million. In

1905, you most likely were a farmer, rancher, or lumberman. If you were going anywhere, you travelled by horse or by rail, and you were likely to encounter wolves, bear, and antelopes on the way.

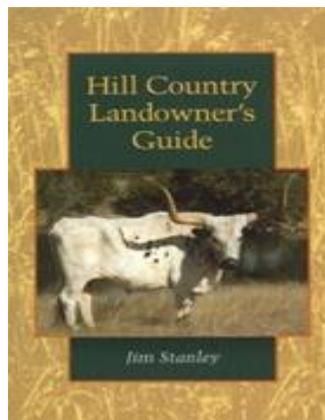
We know that the Hill Country we see around us—vegetation, rivers, and animal life—has changed in the last century. Knowing just *how* different the natural world was a hundred years ago is crucial if we are to conserve a functioning eco-system in our urbanizing environment.

David Schmidly's grand overview looks to the past and then points us to the future. He begins his study by reproducing the 1905 journals of Vernon Bailey, Chief Naturalist for the U.S. Biological Survey, along with many photographs from the period. Bailey and others trekked thousands of miles through the Gulf Coast salt marshes, Blacklands Prairie, and an unsettled, nearly undisturbed West. These federal agents were a hardy bunch, travelling by mule in isolated areas, usually undersupplied, using their own money to meet their costs, sometimes clinging to canyon walls to capture nesting birds or mountain goats. The method used to survey an animal population was to collect a large number of species from each ecological region, and then compare them to those from other regions to determine how each species had evolved in response to its environment. In primitive camps, the researchers had to preserve their specimens, keep voluminous notes on both the habitat and the details of their specimens. They worked with local ranchers, some of whom were careful observers; all were hunters. Bailey found that preservation of species such as badgers, prairie

dogs, ferrets, pronghorn antelope, bears and mountain goats was already becoming an issue. To join Bailey in his studies is an excellent way to learn how a naturalist works. I enjoyed his meticulous descriptions of the animals he trapped or shot and his encounters with the locals. I didn't linger in the sections on rodents. The *Survey* is also a tribute to those in government who had the foresight to document a passing world.

In the final chapters of the book, Dr. Schmidly looks forward from the present day to project trends and assess the impact of human activity on wildlife. According to him, the Hill Country area is particularly critical for wildlife species as we face more habitat destruction from development, land fragmentation and isolation. It is important to see conservation in Texas from a regional perspective, he argues, and I doubt any Master Naturalists would disagree.

David Schmidly is a biologist, former President of Texas Tech University, and on the Board of the Nature Conservancy of Texas. *Texas Natural History* runs to almost 500 pages, with numerous appendices of scientific and common names of animals and plants. If your bookshelf is full, his book is available at the Marble Falls and the Burnet public libraries.



Jim Stanley, *Hill Country Landowner's Guide* (TAMU Press, 2009)

Master Naturalist Jim Stanley's *Landowner's Guide* is the book I needed five years ago when I moved back to my beloved family ranch. The cattle ranch had been a gathering place for my family since the 1920s, but I had never been responsible for caring for it. The only native plants I could identify were cedar, cactus, and stinging nettle (bad); bluebonnets and agarita (the berries from which my grandmother made jelly) were good. With the *Landowner's Guide* in my hands, I would have been more focused and confident in planning for the future of the ranch.

Recommended (cont'd)

Betsy Bouchard

The small volume outlines a conservation philosophy, a short natural history of the land and how it is now, the problems a new rancher will encounter and ways to deal with them, and the best practices to conserve and enrich the land, wildlife, and our experience of both. The *Guide* has been my companion recently as I have started managing the cedar along Slick Rock Creek. The author is not dogmatic in his approach to the still-controversial topic of cedar "management" (as opposed to eradication). He describes the many approaches to controlling cedar and other brush, weighing the pros and cons of each. Happily, he also suggests ways to help the land recover from our mechanical intrusions, a topic most literature ignores.

The book touches on other topics of concern to conservation-minded landowners: managing for songbirds, native plants and grasses, land restoration, dealing with deer, fire protection as well as prescribed burning. Because it is a handbook, the author cannot go into depth on every topic, but he provides an index of locally available, expert help and native plant lists. Jim, a research chemist, and his wife Priscilla are Texas Master Naturalists, and the guide covers much of the content of our classes in a manageable and thoughtful way.

Monarch Butterfly Monitoring Class

Sondra Fox

Our HLMN chapter held a training session on April 6th to learn to monitor milkweed by participating in the citizen science Monarch Larva Monitoring Project developed by researchers at the University of Minnesota to collect long-term data on larval monarch populations and milkweed habitat. The main goal of the project is to better understand how and why monarch populations vary in time and space, with a focus on monarch distribution and abundance during the breeding season in North America.

We had 22 participants attending the training which included classroom presentations and "in-the-field" observations of milkweed found on the Bloomquist property (monarch eggs were

found!). Hopefully, most of this group will commit to monitoring milkweed for this project.

If you need other milkweed information to go with Marvin's pictures (next page), there are at least



Sondra Fox and trainees

Photo by Jerry Stone

110 species of milkweed in North American and 25 in Texas. [Wildflowers of the Texas Hill Country](#) by Marshall Enquist lists seven in the genus *Asclepias* found in Central Texas. All states but Alaska have at least one variety of milkweed. Our Hill Country area is vital to Monarch butterflies, especially in the spring, when they are migrating north from over-wintering in Mexico. They are desperate for nectaring plants after not having eaten for up to 6 months and need the milkweed for laying the first generation of eggs. (further info on P. 9).

Antelope Horn

Marvin Bloomquist

One of the more unusual flowers in our area is the Antelope Horn milkweed (*Asclepias asperula*). Not only is it a popular nectaring plant for many butterflies but it is also a host plant for Monarchs and Queens. They normally begin blooming in late March although this year they seem to be on a little later schedule. Although low growing they are often seen on roadsides. Caterpillars and butterflies feeding on milkweed become toxic to birds and as a result, with few exceptions, birds learn to recognize and avoid them. Antelope Horn is a perennial so once established it will come back every year. It is difficult to transplant and some of our Master Naturalists have not had much luck planting the seeds either. So if you have some consider yourself fortunate.

Antelope Horn (Cont'd)

This large plant growing on the Bloomquist Ranch near Kingsland was already in full bloom on March 30 last year and had nectaring butterflies. Later in the summer it was eaten to the ground by the caterpillars.

This are the seeds being dispersed after the "horn" broke open in early June.

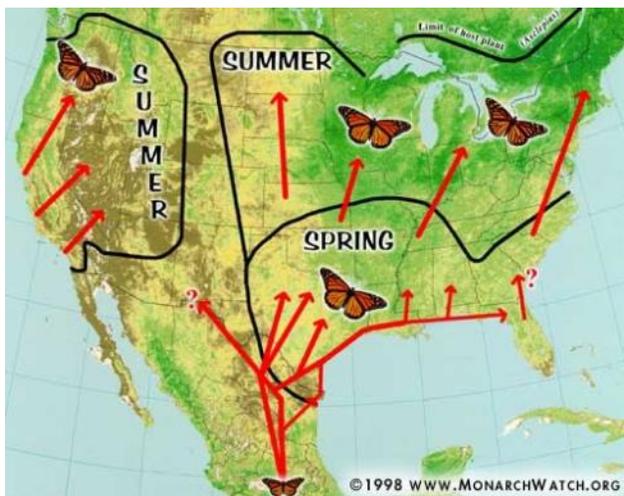
There are four different types of butterflies nectaring on this plant - a Monarch, several Juniper Hairstreaks, and I believe an Admiral and a Queen.

Magical Monarch Migration in North America

Sammye Childers

Monarchs are the only known migrating insect. The embodiment of fragility, these insects travel between 1200 to 2800 miles---a feat without parallel. By instinct alone, they travel to the same mountains, and when possible the same trees, that their ancestors left the previous spring. West of the Rockies they migrate to the Pacific coast of California; east of the Rockies they migrate to the Transvolcanic Range in Mexico. The migration takes three to four generations of butterflies to reach the northern most breeding grounds and Monarchs are born knowing everything they need to survive. The inherent knowledge appears to be based upon a combination of circadian rhythm and the position of the sun in the sky. These fragile creatures must withstand illnesses and infections, bad weather, lack of sufficient food and shelter, predation and winter storms to complete their cycle.

Winter habitat is found on only 12 mountaintops



Spring Migration

(up to two miles high) on the planet. Moisture is critical in the overwintering cycle and high altitude mountains capture moisture. To survive the winters, Monarchs live off stored fat for up to 5 months and amass in clusters on trees. The tree trunks function like a hot water bottle and the forests function like an umbrella and a blanket.

Spring migration begins in March. Mating for the overwinter population occurs in spring just prior to the migration northward. The migration advances about 50 miles a day. The first generation returns only as far north as they need to find the first milk-

weeds. The first two or three generations live only a few weeks and race to produce the next generation. By June Monarchs have reached the northern most region of their breeding range in Canada.

Monarchs lay eggs only on milkweed (genus *Asclepius*), usually on the underside, and they will hatch in 3 to 12 days depending upon the weather. The Monarch will develop from egg to adult in about one month. The milkweed plant is the only plant that the first instar will feed upon. This larval stage will feed upon the milkweed for about two weeks. Milkweed is a perennial herb and contains a potent heart poison which helps protect them from browsing animals and leaf eating insects. Monarchs in every stage of development store this poison within their bodies which in turn protects them. Their bright coloring also serves as a warning. When an insect is brightly colored rather than camouflaged to match their background, it usually means that they have a secret weapon. However, there are spiders, reptiles and certain birds that are able to eat Monarchs without ill effects.

Lifespan depends on the season the butterfly emerged and whether or not it belongs to the migratory group. A butterfly emerging in early summer has the shortest lifespan of 2 to 5 weeks. The Monarchs born in late summer have the longest lives and live about 7 to 8 months. Migratory Monarchs enter a non-reproductive stage known as diapause and begin their journey southward in late August.

Milkweed and nectar sources are steadily declining in the U S due to development and widespread use of herbicides. Ninety percent of all Monarch habitat occurs within the agricultural landscape. Farm and ranch practices strongly influence monarch populations. Roadside management with use of herbicides and frequent mowing has greatly reduced habitat. Development in the U S is consuming 6,000 acres a day---2.2 million acres per year. That is an area the size of Delaware and Rhode Island combined. The remaining milkweed habitat in fields and pastures, edges of forests, grasslands, native prairies and urban areas are not sufficient to sustain the Monarch population.

To offset the loss of milkweed and nectar sources we must create, conserve and protect habitats. Individuals can help by creating "Monarch Way-

Monarch Migration (cont'd)

stations" in home gardens, on school campuses, in parks, nature centers, along roadways and on other unused plots of land. Without a major effort to restore milkweeds to the landscape, the Monarch population is certain to remain at record low levels.

The "Waystation" should, of course, include abundant milkweed. Butterfly weed and Antelope Horn are two species that do well in this area. It should also include cosmos, Joe Pye Weed, Mistflower, Purple Coneflower, Tithonia Torch (Mexican Sunflower) and Verbena. If you wish to include a feeding station, provide a clean sponge soaked in a solution of 1 part honey to 4 parts water. Also beneficial is a butterfly muddle (a mixture of clean sand, dirt or fine gravel and clean water).

Sources: learner.org/north; gpnc.org; newworldencyclopedia.org; MonarchWatch.org; Worldwildlife.org; Sondra's lecture.

Wood Ducks

The wood duck is one of the most colorful ducks in North America. As with all wildlife, these ducks can be found wherever food, shelter and water are plentiful. Since acorns must provide over half their diet to ensure proper eggshell formation, they will bypass areas without abundant oak trees.

Wood ducks are found primarily in the eastern half of the United States. They are generally shy and stay along the banks where overhanging plants help to hide them from predators and hunters. They are cavity nesters and many people put up nest boxes to provide more nesting areas for these beautiful ducks. Ten to fifteen eggs are deposited in a tree cavity or nest box; it takes over a month for the eggs

to hatch and two more months for the chicks to mature. Wood duck chicks can fall from cavities high in a tree and land safely below.

Wood duck nest box plans are available on-line and experts advise that anyone putting up a nest box should know the proper dimensions, height and distance from water. Nest boxes should also have a predator guard.

Blanco State Park—Day in the Park

Friday, May 7th

VOLUNTEERS NEEDED!

Just a reminder that anyone able to help out with our Day in the Park for Blanco Elementary 3rd graders would be well appreciated!

We have developed stations for Mammals, Fish, Birds, Habitat Survival, Watershed and Bats. We are still looking for someone to do an insect station. Anyone trained in Balcones for their "Going Buggy program?"

Guides and assistants are needed for most other events.

Please contact the following if you are able to help out:

Connie Barron: goddessfit@aol.com 512-750-6362

Mary Alice Partain: MaryalicePartain@tpwd.state.tx.us

Sherry Bixler



Photo by Greg Gillson, Pacific NW Backyard Birder

Wood Duck Nest Boxes

Sammye Childers

Due to overharvesting, to the loss of habitat and to the sad fact that only 20% of natural cavity nests are successful, wood ducks were once driven to the brink of extinction. The advent of artificial nesting structures has greatly assisted in their dramatic recovery. The first nesting boxes were recorded in 1937.

If you are considering installing a wood duck box, the first step is to make sure you have a monitoring and maintenance plan in place. Boxes will have to be checked, cleaned and repaired or replaced before each nesting season and monitored at least monthly during the nesting season. Also, be aware that invasive species such as European starlings will have to be removed on a regular basis. Starlings have been known to wipe out wood duck production in some areas.

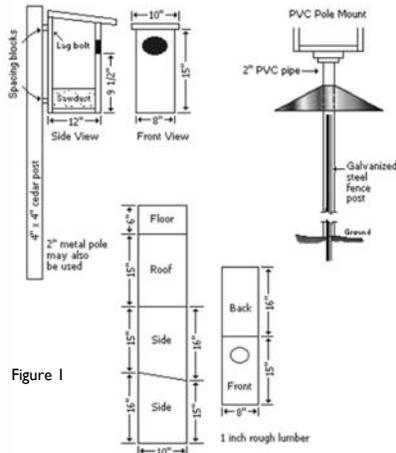


Figure 1

The wood can be painted, stained, or treated, but only on the outside surface. However, it is generally preferred that the wood be left natural. The entrance hole should be a 4-inch diameter circle or be an oval that is 3 inches high and 4 inches wide. Numerous nest box designs have been used with success; (Figure 1) provides one example. A 3-inch wide strip of 1/4-inch mesh hardware cloth should be securely fastened to the inside of the box under the entrance to function as a ladder for the hen and newly hatched ducklings. The cut edges of this cloth should be folded back before insertion to avoid injury to the ducklings. Another method of assisting the ducklings in their climb from the nest to the entrance hole is to roughen up the wood surface under the hole with a chisel. A 4-inch layer of coarse sawdust or wood shavings should be placed at the bottom of the box to serve as nesting

material and to help prevent the eggs from rolling around. The lid or one side of the box should be removable to facilitate monitoring and cleaning.

Wood ducks are highly secretive in selecting nest sites to minimize impacts of nest predators and competition from other wood ducks. Therefore, it is important to locate individual nest boxes in relatively secluded areas within timber stands where natural cavities would occur naturally. Nest boxes can be placed either on land or over the water. If located over the water, they should be placed at least 4 feet above the high water level and the entrance hole should face the open water rather than the shoreline.

Because of ease of access by predators, installation of nest boxes directly on trees should be avoided. Nest boxes placed on land should be located from 30 to 150 feet away from the shoreline. An entrance placed six feet above the ground is most effective. Boxes placed directly on the

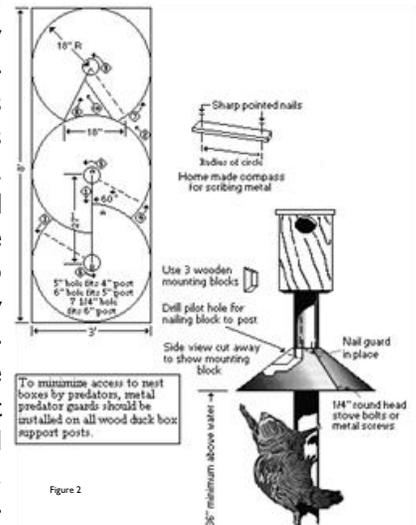


Figure 2

shoreline appear to be more likely frequented by nest predators. Since the hen must lead her ducklings to water soon after they hatch, the area between the nest box and the water's edge should be free of any major obstacles such as roads or fencing. Nest boxes placed on poles over water are generally more easily monitored than those placed in trees. Regardless of whether the box is placed over the water or land, the entrance should be clear of obstructions to provide easy access for the ducks. In order to maximize nest box use while minimizing nest dumping, it is generally recommended that nest boxes should be placed at least 600 feet apart and should not be visible to one another. When placing nest boxes in isolated locations, consider ease of access for monitoring purposes.

All boxes should be fitted with a galvanized

Nest Boxes (cont'd)

sheet metal predator guard that is placed six to twelve inches below the bottom of the box. Below (Figure 2) is a layout for cutting three predator guards from a 3 ft x 8 ft sheet of 26-gauge galvanized metal. When installing the guard, overlap the cut edge to the dotted line. To facilitate cutting, follow the sequence of numbers. Make circular cuts in counterclockwise direction. To make initial cut on line A-B, make a slot at A with a wood chisel, use tin snips, and wear leather gloves.

Boxes should remain out during the winter to provide winter cover sites for screech owls and other resident birds. Wood ducks typically begin nesting in February so all maintenance should be done by mid January. A good maintenance checklist should include:

- Check condition of box; replace or repair as needed.
- Check to make sure the duckling "ladder" is functioning properly.
- Check the support post to make sure it is sound and secure.
- Check to make sure the predator guard is functioning properly.
- Remove old nesting material and replace with fresh material.
- Cut back vegetation that would allow predators access around the guard.

Sources:

The Wood Duck Society
 The National Wildlife Federation
 Ducks Unlimited
 U S Dept. of Interior/ U S Geological Survey
 M P R A Wood Duck Project

Bees in more trouble than ever after bad winter

Submitted by Mike Harris

MERCED, Calif. – The mysterious 4-year-old crisis of disappearing honeybees is deepening. A quick federal survey indicates a heavy bee die-off this winter, while a new study shows honeybees' pollen and hives laden with pesticides.

Two federal agencies along with regulators in California and Canada are scrambling to figure out what is behind this relatively recent threat, ordering new research on pesticides used in fields and or-

chards. Federal courts are even weighing in this month, ruling that the U.S. Environmental Protection Agency overlooked a requirement when allowing a pesticide on the market.

And on Thursday, chemists at a scientific conference in San Francisco will tackle the issue of chemicals and dwindling bees in response to the new study.

Scientists are concerned because of the vital role bees play in our food supply. About one-third of the human diet is from plants that require pollination from honeybees, which means everything from apples to zucchini.



Zac Browning shows a queen bee at a bee farm east of Merced, CA
 (Marcio Jose Sanchez/Associated Press)

Bees have been declining over decades from various causes. But in 2006 a new concern, "colony collapse disorder," was blamed for large, inexplicable die-offs. The disorder, which causes adult bees to abandon their hives and fly off to die, is likely a combination of many causes, including parasites, viruses, bacteria, poor nutrition and pesticides, experts say.

"It's just gotten so much worse in the past four years," said Jeff Pettis, research leader of the Department of Agriculture's Bee Research Laboratory in Beltsville, Md. "We're just not keeping bees alive that long."

This year bees seem to be in bigger trouble than normal after a bad winter, according to an informal survey of commercial bee brokers cited in an internal USDA document. One-third of those surveyed had trouble finding enough hives to pollinate California's blossoming nut trees, which grow the bulk of the world's almonds. A more formal survey will be done in April.

"There were a lot of beekeepers scrambling to fill their orders and that implies that mortality was high," said Penn State University bee researcher

Bees (cont'd)

Dennis vanEngelsdorp, who worked on the USDA snapshot survey.

Beekeeper Zac Browning shipped his hives from Idaho to California to pollinate the blossoming almond groves. He got a shock when he checked on them, finding hundreds of the hives empty, abandoned by the worker bees.

The losses were extreme, three times higher than the previous year.

"It wasn't one load or two loads, but every load we were pulling out that was dead. It got extremely depressing to see a third of my livestock gone," Browning said, standing next to stacks of dead bee colonies in a clearing near Merced, at the center of California's fertile San Joaquin Valley.

Among all the stresses to bee health, it's the pesticides that are attracting scrutiny now. A study published Friday in the scientific journal PLOS (Public Library of Science) One found about three out of five pollen and wax samples from 23 states had at least one systemic pesticide — a chemical designed to spread throughout all parts of a plant.

EPA officials said they are aware of problems involving pesticides and bees and the agency is "very seriously concerned."

The pesticides are not a risk to honey sold to consumers, federal officials say. And the pollen that people eat is probably safe because it is usually from remote areas where pesticides are not used, Pettis said. But the PLOS study found 121 different types of pesticides within 887 wax, pollen, bee and hive samples.

"The pollen is not in good shape," said Chris Mullin of Penn State University, lead author.

None of the chemicals themselves were at high enough levels to kill bees, he said, but it was the combination and variety of them that is worrisome.

University of Illinois entomologist May Berenbaum called the results "kind of alarming."

Despite EPA assurances, environmental groups don't think the EPA is doing enough on pesticides.

Bayer Crop Science started petitioning the agency to approve a new pesticide for sale in 2006. After reviewing the company's studies of its effects on bees, the EPA gave Bayer conditional approval to sell the product two years later, but said it had to carry a label warning that it was "potentially toxic to

honey bee larvae through residues in pollen and nectar."

The Natural Resources Defense Council sued, saying the agency failed to give the public timely notice for the new pesticide application. In December, a federal judge in New York agreed, banning the pesticide's sale and earlier this month, two more judges upheld the ruling.

"This court decision is obviously very painful for us right now, and for growers who don't have access to that product," said Jack Boyne, an entomologist and spokesman for Bayer Crop Science. "This product quite frankly is not harmful to honeybees."

Boyne said the pesticide was sold for only about a year and most sales were in California, Arizona and Florida. The product is intended to disrupt the mating patterns of insects that threaten citrus, lettuce and grapes, he said.

Berenbaum's research shows pesticides are not the only problem. She said multiple viruses also are attacking the bees, making it tough to propose a single solution.

"Things are still heading downhill," she said.

For Browning, one of the country's largest commercial beekeepers, the latest woes have led to a \$1 million loss this year.

"It's just hard to get past this," he said, watching as workers cleaned honey from empty wooden hives Monday. "I'm going to rebuild, but I have plenty of friends who aren't going to make it."

Garance Burke And Seth Borenstein, Associated Press

Name the Newsletter!

Our newsletter needs a proper name. Please send suggestions to chili865@gmail.com for consideration by the board and HLMN. It is hoped that a selection can be made for the May newsletter, so put your thinking caps on!

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

Event Calendar

Mike Childers and Mike Harris

APRIL		MAY	
Going Buggy	15th	Stumpy Hollow Hike	1st
Doeskin Ranch	8:45-1:30	Inks Lake Park	9:30-10:30
Bird Walks with Judy Bell	15th	HLMN Meeting	5th
Balcones Canyonlands	8:00-11:00	Kingsland Library	1:00-3:30
Fishing with a Ranger	16th	Canoeing Skills/Tours	6th
Inks Lake Park	6am-7am	Inks Lake Park	9:00-12:00
Texas Outdoor Family Prog	17th	Bridges to Birding	7th
Inks Lake Park	9:00	Doeskin Ranch	9:15-1:30
Stumpy Hollow Hike	17th	Fishing with a Ranger	7th
Inks Lake Park	9:30-10:30	Inks Lake Park	6pm-7pm
Stumpy Hollow Kayak	17th	Day in the Park	7th
Inks Lake Park	1:30-3:30	Blanco State Park	9:00-1:30
Bird Walks with Judy Bell	17th	Hike the Hill Country	8th
Balcones Canyonlands	8:00-11:00	Inks Lake Park	1:00-4:00
Texas Outdoor Family Prog	18th	Stumpy Hollow Kyack	8th
Inks Lake Park	12:00	Inks Lake Park	1:30-3:30
Old Tunnel Bat Cave Trip	20th	Young Naturalists	8th
Silver Creek Restaurant, Fredericksburg	4:30-?	Inks Lake Park	10:00-11:30
Great Outdoors Program	20th	Canoeing Skills/Tours	13th
Inks Lake Park	8:30-12:00	Inks Lake Park	9:00-12:00
Great Outdoors Program	21st	Fishing with a Ranger	14th
Inks Lake Park	8:30-12:00	Inks Lake Park	6pm-7pm
Great Outdoors Program	22nd	Stumpy Hollow Hike	15th
Inks Lake Park	8:30-12:00	Inks Lake Park	9:30-10:30
Bird Walks with Judy Bell	17th	Canoeing Skills/Tours	15th
Balcones Canyonlands	8:00-11:00	Inks Lake Park	0900-1200
Fishing with a Ranger	23rd	Electric Boat Excursions	15th
Inks Lake Park	6pm-7pm	Inks Lake Park	7:30-9:30
Song Bird Festival Start	23rd	LCRA Conservation Easement WkShp	15th
Fall Creek Estate Winery	5:30	Johnson City HQ Auditorium	1:00-4:15
Canoeing Skills/Tours	24th	Canoeing Skills/Tours	20th
Inks Lake Park	11:00-1:00	Inks Lake Park	9:00-12:00
Hike the Hill Country	24th	Fishing with a Ranger	21st
Inks Lake Park	1:00-4:00	Inks Lake Park	6pm-7pm
Song Bird Festival - Balcones	24th	Canoeing Skills/Tours	22nd
Various events/times	7:30-12:00	Inks Lake Park	9:00-12:00
Advanced Grass Identification Wkshop	24th	Electric Boat Excursions	22nd
Austin Conserv Property near Buda	8:30-4:30	Inks Lake Park	7:30-9:30
Song Bird Festival - Balcones	25th	Bridges to Birding	27th
Various events/times	7:30-12:00	Doeskin Ranch	10:00-13:30
Song Bird Festival - Balcones	26th	Full Moon Hike	27th
Various events/times	8:00-12:30	Inks Lake Park	8pm
Bridges to Birding	27th	Fishing with a Ranger	28th
Doeskin Ranch	10:00-14:00	Inks Lake Park	6pm-7pm
Full Moon Hike	28th	Twilight Paddle	28th
Inks Lake Park	8pm	Inks Lake Park	7:30pm-9:30
State Land Conservation Conference	28th-30th	Stumpy Hollow Hike	29th
Hilton Austin Airport	2 days	Inks Lake Park	9:30-10:30
Bird Walks with Judy Bell	29th	Canoeing Skills/Tours	29th
Balcones Canyonlands	8:00-11:00	Inks Lake Park	9:00-12:00
Fishing with a Ranger	30th	Electric Boat Excursions	29th
Inks Lake Park	6pm-7pm	Inks Lake Park	7:30-9:30
Outdoor Woman	30th - 2nd		
Columbus, TX	3 days		