

TEXAS NATURE TRACKER

Spring 2001

Wildlife Diversity Program • 3000 IH-35 South, Ste. 100 • Austin, Texas 78704



HOMETOWN HORNED TOADS ESSAY CONTEST

Many Texans have fond memories of “horny toads,” but have noticed that Texas horned lizards have become increasingly rare over the last 30 years. The goal of the Hometown Horned Toads Essay Contest is for students to document Texas horned lizard abundance, characteristics and habitat in their communities and counties over time. To do this, students can record personal experiences and oral histories and research local historical reports such as newspaper articles, agricultural records and aerial photographs. The emphasis is on recording local knowledge and accessing local public records.

Students will compete in two age groups. Students in grades 6-8 will submit a typewritten paper not exceeding 500 words in length. Students in grades 9-12 will submit a typewritten paper not exceeding 1,000 words in length. Deadline for submission is March 1, 2002. Winners will be announced and prizes awarded by May 1, 2002. Later this spring, you will be able to access our Web site for resources and helpful hints about how to do the research and conduct interviews for this contest.

www.tpwd.state.tx.us/nature/education/tracker

Or contact Ann Miller at (512) 912-7025 or
ann.miller@tpwd.state.tx.us

DROUGHT

IS THERE EVER A SILVER LINING?

By Ann Miller, Texas Parks and Wildlife

The drought of 2000 was a killer in many ways. My well at home barely supplied enough water for our most pressing household needs. But the silver lining is that many Texas Mussel Watch volunteers used the lower water levels to find a diversity of freshwater mussels! Our hats are off to **John Caldeira** and **Judy Lewis** for sending us the most data last year. Their four separate monitoring trips in the Trinity River basin yielded over 40 separate entries in our database, and a good diversity of species, most of which were recently dead. Another volunteer, **Klaus Meyer**, surveyed several small lakes and ponds on or near his property in the Sabine drainage, finding five different species of mussels, but also, to his dismay, Asian clams in Greenville Club Lake where he had not seen them previously.

PEOPLE ARE OFTEN AMAZED WHEN I SHOW THEM THE MANY SPECIES OF FRESHWATER MUSSELS LIVING IN WATERS OF THE TRINITY RIVER BASIN.

John Caldeira

While most of our volunteers conduct shallow shoreline searches, we do have one scuba instructor, **Tucker Davis**, who conducted searches in Lake Dallas in depths of 1-3 meters using a 50-foot rope in a circular sweep. This type of monitoring should only be done with a qualified instructor like Tucker, but can certainly give us an idea of mussel populations in deeper water. Another father-son team, **Timothy and James Mueck**, snorkeled in Tyler State Park to find mussels. Their careful notes on a map showed exactly where they sampled. Because we are still unsure of the identification of one species they found,



continued on the next page



DROUGHT, CONT'D

we're hoping that warm weather will take them to Tyler State Park again so that we can get a positive ID this time.

Other than the previously reported golden orbs found in the San Marcos River by **Melba Sexton**, one of the most notable finds this past year was a relatively recently dead Louisiana pigtoe, found in Village Creek by **Wendy Ledbetter** (see Wendy's article below). Because East Texas has some very rare mussels, we hope our East Texas volunteers will continue to check out their streams, rivers, lakes, and ponds in the coming year.

On another note, some teachers and their students have used mussel monitoring as part of a larger science field investigation. **Sharon Wood's** class found giant floaters in a pond in Flower Mound while doing a bathymetric map of the pond. Her class created graphs of the numbers of live and dead mussels they found. The project will continue with managing aquatic plants to improve the aquatic environment. After attending our August workshop, **Donna Turner**, 6th grade science teacher at Center Point Middle School, created a unit about freshwater mussels and took her students on a monitoring field trip, accompanied by Bob Howells. Although they found Asian clams almost exclusively, students learned random sampling techniques that they can use in other field investigations. Thanks to Sharon and Donna and other Texas Nature Tracker teachers, the youth of Texas have stimulating, real-world science experiences.



Students from Sharon Wood's class, Ryan Williamson, Maritza Gomez and Keith Freeman, dive right in to their project.

MUSSEL WATCHING OPPORTUNITIES CAN PRESENT THEMSELVES AT UNEXPECTED TIMES. ON A DRIVE THROUGH NORTH-CENTRAL TEXAS, I JUST HAD TO STOP ALONG THE ROAD WHEN I SAW THAT LAKE BRIDGEPORT WATER WAS VERY LOW.

John Caldeira



PIMPLEBACKS AND PIGTOES IN THE BIG THICKET

By Wendy J. Ledbetter, Big Thicket Land Steward, The Nature Conservancy

Staff members and volunteers of The Nature Conservancy made some significant discoveries in Village Creek, which flows through the Roy E. Larsen Sandyland Sanctuary in Hardin County. In spite of low water levels that made it difficult to access some areas, our determination to monitor mussels paid off last June as we discovered that the western pimpleback and the Louisiana pigtoe are still present in Village Creek.

Bob Howells of Texas Parks and Wildlife validated our recently dead specimens and reported that only two live Louisiana pigtoe specimens and two shells of this species had been observed since

1992. Both species are considered to be of biological importance and are currently being tracked by the state and the Conservancy. This new information was included in the Conservancy's ecoregional plan, an effort to identify and develop conservation strategies for key areas of biodiversity.

The Nature Conservancy hopes to recruit additional volunteers for monitoring, and with increased rainfall this year, we may have an even better chance to document some rare mussels during the summer of 2001.



TEXAS HORNED LIZARD WATCH DATA

SURVEY RESULTS

Date of Survey	5/24/2000	6/20/2000	7/15/2000
Start Time	7:45 am	1:50 am	7:50 am
End Time	1:30 am	5:15 am	5:15 am
Temperature (°F)		86	87
Cloud Cover	cloudy, partly cloudy, partly sunny	clear	clear
Wind Speed			5 mph
# of THL smaller than 1½ inches			
# of THL larger than 1½ inches			
# of THL scat (droppings) seen			
# of harvester ant beds			
# of imported fire ant beds			

TEXAS Horned Lizard WATCH



NEW AND IMPROVED!

By Lee Ann Linam, TNT Project Biologist

Texas Horned Lizard Watch data forms sported a new look in 2000, and our volunteers responded with more information than ever about the state's favorite reptile. Not only do we have data from more counties than ever (130), data from more sites than ever (217), and data from more years than ever (10 sites with four years of data), last year's forms let us compile information about sizes of horny toads, sighting dates, temperatures, land use, habitat, and soils, as well as harvester ants and red imported fire ants. In addition, extraordinary efforts by some of our Horned Lizard Spotters helped us put new counties on the map in a significant way.

Many of our volunteers this year chose to report the sizes of the horned lizards they saw. Sizes ranged from less than one inch to over six inches. Most lizards were in the 4.0"-4.9" size range. Lizards were sighted most frequently in July, June, and May, with the first sighting reported in March and the last sighting reported in October. Young lizards (<1.5") were seen most often in July and August. Lizards were most often seen when temperatures were between 85° and 89° F, although they were also frequently seen in temperatures upwards of 95° F, and at least one volunteer sighted a lizard when temperatures were less than 70° F.

Habitat and land use information was also interesting in 2000. Most Texas horned lizards were found in residential areas (because that's where most people looked!), but data seems to indicate a preference for ranching areas. Our observers saw horned lizards most frequently in native grassland, mixed grassland and shrubs, and in improved grasslands. They were also reported in areas with sandy, clay, loam and even rocky soils.

Once again, volunteer data demonstrated that Texas horned lizards tend to be absent from areas with red imported fire ants and present when harvester ants, their preferred food, are present. Harvester ants

also tend to be absent more frequently when red imported fire ants are present. Texas Horned Lizard Watch volunteer data have proven to be very interesting to fire ant researchers.

Finally, many of our volunteers really went "above and beyond" this year for the sake of Texas Horned Lizard Watch. Several of our Horned Lizard Spotters placed ads in local papers or put out the word that they were interested in collecting sightings, while others recorded sightings wherever they had the opportunity. These efforts have really added to our database of sightings, including some counties where we previously had no data. Their efforts were supplemented by sightings submitted to the Texas Parks and Wildlife Web site and by reports collected around the state by the Horned Lizard Conservation Society.

Thanks to all these cooperators!

LIZARD LOVERS

Special thanks to these Horned Lizard "Super" Spotters

Jim and Bette Armstrong
 Skip Starkey
 Beverly Kitzman
 Barbara Farley
 Doris Steadman

Some Upcoming Events for Horned Lizard Lovers

Horned Lizard Festival – Alpine Aug. 4
 Old Rip Festival – Eastland Sept. 15



AMPHIBIAN WATCH

IT'S A TEXAS-SIZED CHALLENGE!

By Lee Ann Linam, TNT Project Biologist

We Texans like to brag that we're the biggest and best—Well, that thought was both sobering and exciting when I attended the recent coordinators' meeting for the North American Amphibian Monitoring Program. Of the 20 or so states in attendance, Texas has by far the most species of frogs and toads. At the same time, we also have the greatest number of survey routes and the greatest need for dedicated volunteers!

Full participation in the North American Amphibian Monitoring Program (NAAMP) is one of our goals in Texas, but there are many steps we need to take to reach that goal. Each one of our Texas Amphibian Watch volunteers who send in data sheets is helping us take one of those steps, no matter how large or small the individual project.

For example, one of the needs identified was to delineate the distributions of different species in the state. Our Amphibian Spotters can help us reach that goal. Last year we collected Amphibian Spotter data at seven workshops and three volunteers also sent us datasheets of their own. Our workshops and our volunteers documented cricket frogs, leopard frog species, toad species and bullfrogs in many localities, but we also had some more unique findings, such as Mexican treefrogs and Rio Grande chirping frogs in Brownsville. One spotter, **Jeanne Ansley**, took her forms with her to several localities and managed to record some green treefrogs living near her home (well, actually *on* her home!), along with other species. Another volunteer, **Larry Dove**, must keep all our monitoring forms handy, as he sent us both Amphibian Spotter data and Texas Horned Lizard Spotter data this year from the Lewisville area.

Another need we have is for better information about breeding seasons of different species. Our Adopt-a-Frog Pond

volunteers can shed some light on that question. Our NAAMP coordinator for the Houston area, **Jaime Gonzalez**, found species calling in February, March, May, and July at his frog ponds at the Houston Arboretum. His data showed that some species, like the Rio Grande chirping frog, began calling early in the year, while others, like gray treefrogs and squirrel treefrogs, were not recorded until May. In East Texas **Carol Miserlian** and Houston ISD students found a diversity of species calling in February through April (with peaks in March and April), then **Jeanne Ansley** continued to collect data on species calling in Smith county in May through July. Dr. Mary Neid Phillips is another volunteer who uses students to help collect data. You can read more about their results in this newsletter.

We did obtain data from two NAAMP roadside routes in 2000, as **Jaime Gonzalez** and I tried out sampling techniques on routes in Chambers county and in Hays county. And we searched high and low for any other data that could improve Texas Amphibian Watch. **Dan Saenz**, a U.S. Forest Service biologist in Nacogdoches, has been using electronic "frog-loggers" to record calling each night at eight different ponds. His preliminary data illustrates how great rainy periods in late May can be for hearing a variety of frog species. Contact us if you'd like more information about frog-loggers. Finally, for those of you who like to work on-line, we are also able to access data on amphibian monitoring that's submitted to FrogWatch, U.S.A. Whatever the source and however you want to get involved, we need that volunteer data to help us address the challenge of amphibian monitoring in the great state of Texas!

Texas
**Amphibian
Watch**





Houston Daisy

MONITORING THE THREATENED

By Patricia Julien, Master Naturalist, Gulf Coast Chapter

The Houston daisy, in the Sunflower family, is an annual plant that flowers from late October through November each year. Its small ray and disc flowers are golden-yellow. It's found in isolated remnant prairie patches in Harris, Chambers, Galveston and Brazoria counties. In Harris County, Houston's Addicks flood control reservoir operated by the U.S. Army Corps of Engineers (USACOE) has four localities on slightly mounded sites with alkaline soils. Sites within this reservoir were originally staked out by James Barrows, a biologist for the USACOE at Galveston.

Prior to European settlement and construction of the reservoirs, most of the land surface was covered with prairie potholes. Prairie grasses dominated. Now the main threat to the Houston daisy within Addicks reservoir is encroachment by brush and trees. Prairie grasses dominated the landscape prior to European settlement because lightning strikes started fires in the dry summers, burning out most encroaching trees and shrubs. Since the reservoirs were built, the hydrology and fire suppression has favored the growth of trees and shrubs. Controlled burns to eradicate them are extremely difficult to organize because of regulatory restrictions on burning within the city and because the reservoirs are now surrounded by residential communities.

Last fall Houston experienced wave after wave of wet weather conditions and two early cold snaps through October and November, making it difficult to get out to the monitoring sites. Tree and shrub encroachment also make access to some monitoring sites an undertaking suited only to people who can cheerfully crawl along deer paths. This year a fence line had been cleared of brush, making access to some sites a little easier. By October 14 the Houston daisy was beginning to flower and I persuaded **Mary Asscherick** from the Master Naturalists Gulf Coast chapter, and her brother, **Charles Buren**, to accompany me to begin monitoring. We covered five sites through intermittent showers. Some sites had tall grass and weeds and no Houston daisies. Most plants were only a few inches above the ground, even though this plant has been recorded as reaching 50 cm (20 inches) in height.

On November 4, TPW biologists LeeAnn Linam and Dana Price traveled from Austin to help with the monitoring. The weather remained cloudy and rainfall after noon on the 5th called a close to our monitoring. Our sites were in a clearing less encroached than other sites. We recorded many plants in flower and beginning to set seed. Dana also discovered another rare plant within these monitoring sites, the *Thurovia triflora* (threeflower broomweed), with extremely tiny white flowers.



From our experiences it is easy to see that the need for a brush control program to save the remaining prairie patches in Addicks reservoir is urgent, especially because we know some of the Addicks sites contain rare species. Most of Katy Prairie is now covered with residential housing. Very few prairie patches remain. Addicks will never be built on, so if the brush encroachment can be controlled we have the chance to protect what little is left.

In addition to Patricia's Houston daisy monitoring sites, **Janice Hartgrove**, a professor of psychology, has been monitoring a site on North Harris College campus for the past three years. Thanks to her efforts, we have consistent data about this rare plant and a mowing regime that reduces competition from other species.

Patricia Julien monitors the rare Houston daisy.



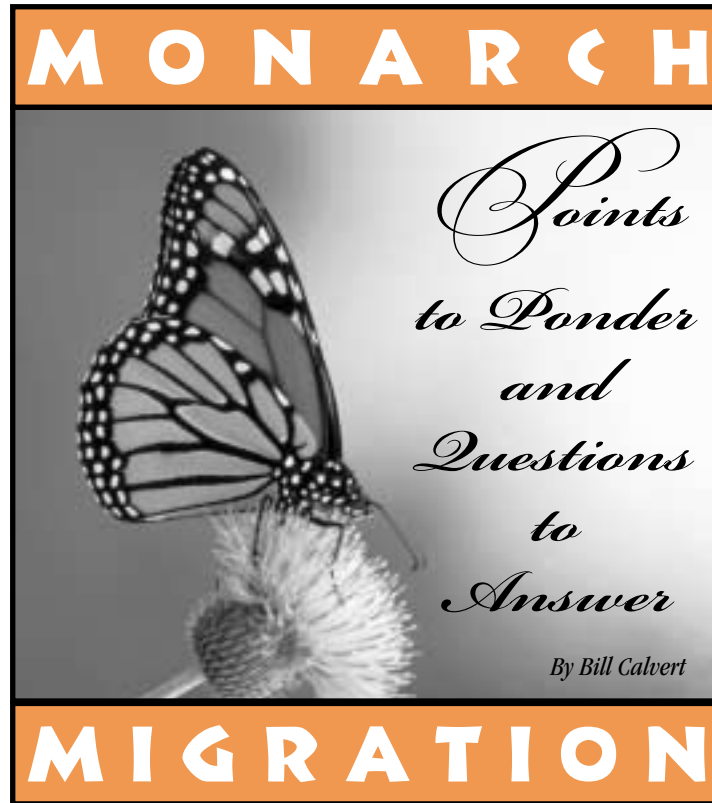
The Spring Migration 2000

The monarch migration seemed to have started early in the spring of 2000. By March 1st they had been sighted as far east as Lake Pontchartrain, Louisiana and as far north as Austin, Texas. By March 7th, they had reached Tyler and two days later they were seen in Longview. During the second week in March, coastal areas in Texas as far east as League City (south of Houston) were reporting them, as were inland locations such as San Antonio, Austin and Temple. By March 16th, eggs were being counted in Buda on antelope horn milkweed. By March 24th, Journey North, an internet website that monitors the migration throughout the country, reported adult monarchs east into Georgia and as far north as Oklahoma and Arkansas.

Normally the greatest peak of egg laying and the beginning of the next generation occurs just after the adult monarchs are seen. In past years egg-laying has always peaked sometime during the first week of April. Were the spring 2000 monarchs truly early or were the sightings normal fluctuations in a general pattern?

A bout of very warm weather occurred at the Mexican overwintering sites during the first week of March 2000. Local residents in Angangueo reported monarchs flooding their town for the first time that season. (Angangueo is below the biggest overwintering site at Rosario and on the migration route northward). It is possible that unseasonably warm weather triggered the migration early. However there is another possibility that needs to be explored.

Each year that we study the migration, we recruit more volunteers to help in the monitoring. Many volunteers have become local experts who know more about monarchs and their food plants in their areas than anyone else. It goes without saying that as monitors become more practiced, they notice more. We cannot rule out that the reason that monarchs are seen earlier each year is that people trained in observing them are seeing them earlier in the season. This is why we need to monitor monarchs over long periods to be able to pick up migration patterns and changes in those patterns over time.



The Fall Migration 2000

The fall 2000 migration was also earlier than ever recorded. Normally monarchs reach the northern part of our state sometime during the closing days of September and reach Central Texas sometime between the 5th and 10th of October.

On August 19th extreme North Texas reported the first sightings for the state. Monarchs were also seen in small numbers in Austin and San Antonio. Reports from the North

indicated that the summer population was especially high in the Dakotas and Minnesota. After these initial reports, no more came in until the 8th of September when mass movements were reported from Minnesota to Iowa. Still small numbers were reported from scattered Texas locations from Huntsville to San Antonio.

One puzzling aspect of the fall migration has been the status of the “early migrants.” Are these true migrants whose reproductive machinery is turned off for the winter, or are these opportunists who can take advantage of a fall or late summer milkweed crop in the south? We hope to answer these questions by having more monitors noting the occurrence of eggs and larvae in late summer and early fall. Contact Texas Monarch Watch if you would like to help with this special monarch research.

By the third week of September, the mass of migrating monarchs reached Central Oklahoma. On September 21st masses were reported in Abilene – at least ten days earlier than usual. At the time, Texas was in a severe drought and the nectar supply was almost nonexistent.

By the fourth week of September, Abilene was reporting thousands of monarchs and Midland reported tens of thousands. The rains came and the nectar plants started to recover. Monarchs accumulated wherever nectar was available. In river bottoms where it had rained and flowers were in bloom, monarchs were abundant. Especially popular were the Medina and South Llano River areas. They had reached Highway 90 at San Antonio, Uvalde and Bracketville. Never before had monarchs penetrated so deep into Texas so early.

By the first week of October, Central and South Texas were full of monarchs. During the month of October, monarchs were everywhere in Texas from Huntsville in the east to Rocksprings and then to Dolan Falls on the



Devils River in the west. The migration lingered well into November, perhaps slowed by the abundant rainfall and a lack of strong northern winds. It was the longest migration – mid-September to the end of November – experienced since the beginning of Texas Monarch Watch in 1993.

What is hard to determine is the size of the population based on the reported occurrences in the state during the migration. However, the population size can be reliably estimated by measuring the areas occupied by the monarchs in Mexico during January when they are most densely packed. As of this writing, it appears that the population of 2000-2001 is down somewhat from past years. We have not accumulated enough data to determine whether or not this is a decline or a normal fluctuation in an otherwise healthy population. Only several years of data will answer that question.

Another interesting question has emerged. Do some monarchs overwinter in Texas? Christmas bird-counters have been turning up “mini winter sanctuaries” of monarchs along the Texas Coast. In December, a birder reported seeing five clusters of monarchs (possibly a hundred in the largest cluster) northeast of the town of Matagorda. Another birder reported two clusters in an area near Seadrift. In past years a large monarch aggregation was reported on the Bolivar Peninsula. **Harlen Aschen**, a teacher from Victoria, has been monitoring these reports and is watching a “mini colony” near Point Comfort. Please contact Texas Monarch Watch with any information you have of monarch overwintering colonies along the Texas coast. 1-800-468-9719

*The following teachers and their students are very active monarch monitors. We salute their consistent efforts to send us data and provide students with innovative, inquiry-based learning experiences. **Dorothy Bishop** of League City, **Harlen Aschen** of Victoria, **Mary Kennedy** of San Antonio and **Carol Boettcher** of Huntsville.*



Melissa Miller and Pat Morton tag monarchs in Austin.



By Marsha May Reimer

SAFETY FIRST



In our day-to-day urban lives, we are surrounded by a cacophony of noises. The tranquil sounds of the wilderness are often never really heard. Next time you visit your project site listen for the soothing sound of the wind blowing through the trees. Do you hear melodious bird songs ringing through the air? Isn't it amazing what you hear when you take the time to be quiet and listen? Wilderness experiences can change the way you see the world. But, it's important to take an active role to insure that these outdoor experiences are both enjoyable and respectful of wildlife and their habitats. You must be prepared for whatever comes your way.

- Be very aware of your surroundings and of where you put your hands and feet.
- Take along a basic first aid kit for any minor emergencies such as scrapes and cuts.
- Include sunscreen and insect repellent for comfort and protection.
- Learn to identify and avoid plants such as poison ivy that can cause grief. Contact your doctor or pharmacist for the latest methods for prevention or treatment of a poison ivy reaction.
- Protect your feet from sharp objects by wearing boots or water shoes.
- Always work with at least one partner.
- Make sure you have written permission if you are working on private property.
- If your project site is far from the beaten path, a cell phone may be a good piece of equipment to have on hand in case of an emergency.

Pay close attention to the consequences of your actions. Many project sites are located in ecologically sensitive wildlife habitats. Trails are often developed to protect these habitats and the animals and plants that live there. So, if there is a trail, please use it. If your project requires that you leave that trail, get permission from those responsible for the property and walk carefully. As members of a throw-away society, we seem to find all types of trash everywhere we go. Trash can adversely affect the visual aspect of a wilderness experience and can be harmful to wildlife. If you packed it in – pack it out. Take that extra step and pack out any trash you find at your project site to insure that your future visits will always be pleasurable and wild.

AN EXCITING YEAR FOR HUMMINGBIRD MONITORS

By Mark Klym, Hummingbird Roundup Coordinator



Texas Hummingbird Roundup has generated some excitement this year with several confirmed reports of unusual birds from across the state. The year began (the first report dated January 1) with reports from all across central and coastal Texas of hummingbirds feeding at active feeders. Susan Orwig, from the Houston area had a Broad-tailed Hummingbird that showed up on Christmas Day 1999, and stayed over the holidays. Later in the month we had reports of Archilochus Hummingbirds (either Black-chinned or Ruby-throated) in south Austin, Calliope Hummingbirds in south Austin, Rufous Hummingbirds in San Patricio County, Harris County and even Lubbock County! Winter hummingbirds certainly are not limited to the coast! Interestingly enough, during the coldest portion of the winter of 2000, we received reports of hummingbirds, primarily Rufous Hummingbirds, being observed as far north as coastal New Jersey.

Some very unusual sightings were noted this year, including a Lucifer Hummingbird in Gillespie County followed shortly by a White-eared Hummingbird at the same feeder. Green Violet-eared Hummingbirds (2 of them) were seen in Nueces County. A rather late season occurrence of a Broad-billed Hummingbird in Howard County also has the ornithologists at TPW quite interested.

The Hummingbird Roundup is a great opportunity to share your enjoyment of hummingbirds in a way that will benefit these birds. Because few biologists have time to monitor hummingbirds, you can make a significant contribution by monitoring the hummingbirds in your backyard, helping us gather valuable information should these birds ever require active management. With a new coordinator on board and new workshop opportunities, we are actively seeking more monitors. If you are interested, call Mark Klym at 512-389-4644.

PROJECT PRAIRIE BIRD WORKSHOPS

By Cliff Shackelford

In 2000, two Project Prairie Birds (PPB) workshops were held in Texas with a combined total of over 100 attendees. The workshops were held at the Armand Bayou Nature Center in Clear Lake, and at the Hornsby Bend Bird Observatory in Austin. In February, we presented a PPB workshop at the regional Southeast Partners in Flight Annual Meeting in Mobile, Alabama, with over 200 attendees from over 15 states. We're excited that the PPB methodology is being adopted in other states.

Three workshops are planned for the fall of 2001: Armand Bayou Nature Center in Clear Lake, Heard Natural Science Museum and Wildlife Sanctuary in McKinney, and in Austin at either the Lady Bird Johnson Wildflower Center or Hornsby Bend Bird Observatory. If you're interested in attending a workshop before volunteering your time to collect meaningful information on declining grassland birds, please contact Cliff Shackelford (clifford.shackelford@tpwd.state.tx.us) this summer for more details.



SWALLOW-TAILED KITE: TWO-YEAR REPORT

By Cliff Shackelford

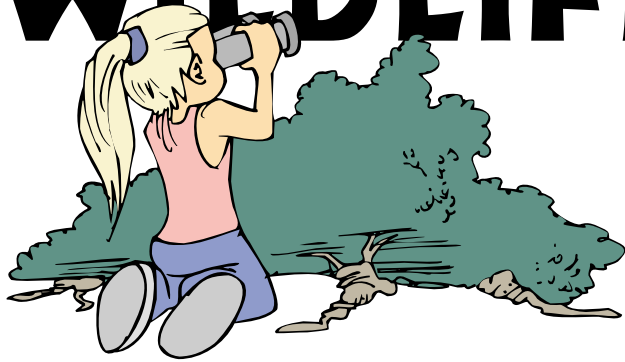
A two-year report is available on the Swallow-tailed Kite Survey and Monitoring Project in Texas. This 16-page report includes a lot of neat information collected by citizens and biologists in Texas from 1998-1999. This project was sponsored by Texas Parks and Wildlife, Texas Partners in Flight, Temple-Inland Forest, and the U.S. Forest Service.

So what's in this report? First, you can find out how many nests have been found and where the best spots are to search for swallow-tailed kites this spring and summer. The report also details the earliest and latest dates for this species in Texas and when it peaks during the two hawk watches in Texas.

If you'd like a free copy, please send a self-addressed stamped envelope (SASE) to the address below. This full-sized booklet only fits in a 10"x13" envelope with \$0.99 postage on it, so make sure that's what you send with your name and mailing address already on it. Please write "Kite Report" somewhere on your order since we have several different SASE orders trickling in. Send to: Cliff Shackelford, Nongame Ornithologist, Texas Parks and Wildlife, 3000 IH-35 South Suite 100, Austin, TX 78704.



WILDLIFE WATCHING



IT'S ELEMENTARY, MY DEAR WATSON!

By Monea Meck-Fortunato, Dr. Fermin Calderon Elementary, Del Rio

As reported last spring, the drought had a stranglehold on Del Rio. However, June, abruptly and literally, drowned all chances that the drought would continue a second year. The steady, slow, soaking rains occurring once or twice a month, are replenishing the depleted watershed and reestablishing the native flora of this portion of the Chihuahuan desert. Now, we are anticipating a record spring for wildflowers and wildlife.

Several indicators support our optimism about monitoring projects in the spring of 2001. This winter, students have noted stronger, healthier native winter grasses and fewer examples of tree bark damage or damage to cactus, indicating that local wildlife are finding more food. Vernal pools are also maintaining good water levels, providing badly needed water for wildlife and excellent conditions for increased spring amphibian activity. Calderon students expect to see a tremendous rise in the local tadpole/toad populations being monitored for Texas Amphibian Watch.

Compared to a near zero population in spring of 2000, this spring should keep the kids "hopping" to count them all. Naturally occurring pools, in conjunction with the newly constructed "toad tank," will also become on-site labs for testing water quality of the local watershed.

**WE ARE ANTICIPATING
A RECORD SPRING
FOR WILDFLOWERS
AND WILDLIFE.**

An increase in both harvester ant beds and Texas horned lizard sightings on the nature trail this fall indicates that next year's data for Texas Horned Lizard Watch will be interesting. We released a number of Texas horned lizards around the nature trail because of students capturing lizards at home and bringing them to school. We continue to educate all students on the dangers and implications of capturing wild species, especially threatened ones such as Texas horned lizards and Texas tortoises. Groups of students actively involved with the Animal Caretakers program give lessons to classrooms on these and other issues.

Our population of the rare, Rydberg's scurfpea, (*pediomeelum humile*), should sprout many blooms this spring. Students will be busy making regular visits to the scurfpea site and preparing new tags for this year's flowers. With continued rains, it could become the most productive year we have monitored.

Participating in Texas Monarch Watch is popular on our campus, too. The fall 2000 monarch migration through the nature trail site was exceptional. It coincided with dense blooming of sagebrush and fall wildflowers, providing abundant nectar sources for migrating butterflies. Students made several attempts to count the butterflies, with a high count of over 107 butterflies within 30 minutes on one particular day. Students have located several patches of milkweed that are especially favored by monarch butterflies for laying eggs. They collected the seeds for spring planting to increase the number of egg-laying sites available to the butterflies.

Third grade gifted and talented students have taken on the challenge of designing and writing a Web site for the Paseo de Los Niños Nature Trail. The website will report the status and findings of all monitoring and science projects conducted on the trail. Students from kindergarten through fifth grade will be involved in submitting information for the website. Ongoing activities such as bird watching, establishing habitat, and trail updates will be featured. We're just getting started, but check on us when you receive your newsletter. You can find us on www.myschoolonline.com in Del Rio, Texas, at Calderon Elementary.



Nick Lowe and Savannah Lowe release a captured horned lizard.



A WATERY WORLD – ON OUR OWN CAMPUS

By Dr. Mary Neid Phillips

Intermediate students in Grades 4-6 at the Lake Waco Montessori Magnet School for Environmental Studies in Waco ISD are getting ready to begin their third year of Texas Amphibian Watch at a private vernal wetland in East Waco after their early March spring break. They will continue their weekly visits to gather data on the presence of Blanchard's cricket frogs on property near the Brazos River, bringing back buckets of water samples to share with their classmates in the campus lab.

This spring, however, all Lake Waco Montessori students can learn how to prepare for future field work as Texas Nature Trackers. Gurgling away as the centerpiece of our recently dedicated Jerry Burks Enabling Garden is the Cooper Foundation Water Garden, a 600-gallon raised pond with a musical sounding waterfall that attracts students and adults alike to this special ecosystem.

A campus pond, no matter what size, enables students to observe the cycles of nature and the way that plants and animals interact in a habitat. Almost immediately after the rock-lined pond was completed in late August, 2000, and filled with fresh water and aquatic plants, dragonflies and damselflies came to dip their bodies in for a drink. A mud dauber spotted some of the wet soil around the irises and decided to build its new home under the eaves of the nearby classroom wing. Even a squirrel was seen scampering up the keystone blocks that surround the pond and waterfall to enjoy a drink. One sunny fall day elementary students in grades one through three counted over 25 Monarch butterflies winging their way over the courtyard to their winter resting places and e-mailed their observation data to the national Monarch Watch hotline.

**“WE LEARNED
THAT THE FISH
HIDE BEHIND
THE ROCKS AT
THE BOTTOM
OF THE POND
WHEN IT’S
COLD.”**

**DEBORAH,
AGE 5**

When Waco woke up to a December ice storm, the trees, perennials, and permanent structures in the green classroom wore a rare coat of glistening white as icicles hung from the birdbath, birdfeeders and scarecrow. Although the waterfall was unaffected by the drop in temperature, there were thin layers of ice along the perimeter of the pond and on the edges of the keystone blocks. What a great way to teach the three states of matter using water as the perfect example!

And, on a cold January morning at 9 a.m., three-year-olds observed a strange large bird sitting alone high up in the single large mulberry tree in the garden, intently watching and waiting for something. What the children had spotted was a hawk hoping to find a meal of the finches or sparrows that have been enjoying regular meals at the two bird feeders hanging from the tree. It was a perfect opportunity to introduce young children to the concept of a food chain in action!

An outdoor classroom with a pond ecosystem, even in the heart of a city neighborhood like ours, becomes a community of plants and animals, acting as a magnet for temporary and permanent wildlife residents that reflect the seasonal changes in Central Texas. It therefore provides an opportunity for students of all ages to learn the basics of field observation and the scientific method as they become young naturalists and future Texas Nature Trackers.

Visit the Jerry Burks Enabling Garden with its Cooper Foundation Water Garden at Lake Waco Montessori Magnet School. Contact Dr. Mary Neid Phillips, Environmental Educator, at 254-752-5951 or e-mail mphillips@wacoisd.org

ATTENTION TEACHERS! TNT TOOL KITS STILL AVAILABLE



*Kayla Pierce, teacher at
McLeod High School,
receives her TNT Tool Kit.*

This past fall, the TNT staff put together ten TNT Tool Kits composed of the equipment and support materials needed for teachers to involve students in five different monitoring projects. The tool kits are available to qualified teachers on a yearly loan basis. Teachers simply agree to use the kits to do at least two of the TNT projects, send us data, and complete an evaluation form. Although our application stated that it must be completed and turned in to our office by Nov. 15th, we have extended the deadline and will take applications through the end of April.

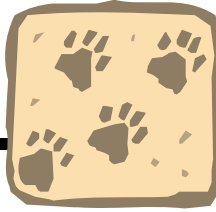
**To receive an application for one of the tool kits,
contact Ann Miller at (512) 912-7025 or
ann.miller@tpwd.state.tx.us**



*Denver McMurry at
Georgetown High School
receives his TNT Tool Kit.*



MAKING TRACKS



Keeping track of Texas Nature Trackers projects.

www.tpwd.state.tx.us/nature/education/tracker/

SPRING/SUMMER WORKSHOP SCHEDULE



TEXAS AMPHIBIAN WATCH

Monday, March 19 — This Texas Amphibian Watch workshop will be held at the Houston Arboretum. It will last from 6:30 to 9:00 p.m. and will include a short hike to listen for amphibians calling. To register, call Jaime Gonzales at 713-681-8433.

Saturday, March 24 — Held in conjunction with the Texas Association of Environmental Education Conference at the Houston ISD Outdoor Education Center, Trinity, TX. This 4-hour workshop will include classroom time to learn basic information about amphibian species as well as a field trip to practice monitoring skills. For information or to register, contact Tom Cospser or Dorothy Chavez at 936-594-7074 or www.oecoly@lcc.net or Ann Miller at 512-912-7025 or ann.miller@tpwd.state.tx.us

Friday, April 27 — Brazos Bend State Park, 1:00 pm - 5:00 pm, with an optional evening call count. To register or for more information, contact Ann Miller at 512-912-7025 or ann.miller@tpwd.state.tx.us

Wednesday, May 16 — Austin, Wild Basin Wilderness, 6:00 pm - 10:00 pm. Call Carol Knepp to register at 512-327-7622 or Ann Miller at 512-912-7025 or ann.miller@tpwd.state.tx.us



Mimicking frog and toad calls at a workshop in Tyler

TEXAS MUSSEL WATCH

Friday, March 30 — Workshop held in conjunction with Texas Watch and the “Meeting of the Monitors” conference. In addition to basic information about freshwater mussels in Texas, the workshop will include a field trip to practice monitoring skills.

To register or for more information, contact Allison Moore at 512-245-7470 or am13@swt.edu or Ann Miller at 512-912-7025 or ann.miller@tpwd.state.tx.us

Saturday, April 28 — Brazos Bend State Park, 10:00 am - 4:00 pm (includes mussel monitoring field trip)

To register or for more information, contact Ann Miller at 512-912-7025 or ann.miller@tpwd.state.tx.us

Tuesday, August 7 — Lewisville Outdoor Learning Area (near Denton), 8:30 am - 2:30 pm. For more information, contact Steve Spurger at 940-565-3710 or Ann Miller at 512-912-7025 or ann.miller@tpwd.state.tx.us

SPECIAL PROGRAM FOR TEACHERS OF GIFTED AND TALENTED

Friday, June 8 — at McKinney Roughs Environmental Center

This 6-hour workshop prepares teachers to involve students in real-world science investigations based on TNT projects.

To register and for more information, call Gwen Copeland at 1-800-776-5272 Ext. 8002 or 512-303-5073 (Austin) or Ann Miller at 512-912-7025 or ann.miller@tpwd.state.tx.us

THE TEXAS NATURE TRACKER



Texas Parks and Wildlife
Wildlife Diversity Program
3000 IH-35 South, Suite 100
Austin, Texas 78704

Spring 2001

TEXAS PARKS AND WILDLIFE

TEXAS NATURE TRACKER



Spring 2001

Wildlife Diversity Program • 3000 IH-35 South, Ste. 100 • Austin, Texas 78704

WHAT IS TEXAS NATURE TRACKERS?

Texas Nature Trackers (or TNT) is sponsored by the Wildlife Diversity Program of Texas Parks and Wildlife. TPW biologists provide training and/or materials, while TNT volunteers agree to collect data for TPW on an ongoing basis. The goal of TNT is to foster local stewardship and conservation to ensure that species do not become threatened. Participation is strictly voluntary and surveys are conducted only on public property or on the property of willing landowners. TNT is partially supported by a grant from the U.S. Fish and Wildlife Service.

For more information about Texas Nature Trackers contact the Wildlife Diversity Program at 1-800-792-1112 ext. 7011.