

# THE TEXAS NATURE TRACKER

Spring 1999

Wildlife Diversity Program • 4200 Smith School Road • Austin, Texas 78744

## TEXAS AMPHIBIAN WATCH TAKES GIANT LEAP FORWARD



Texans joined an international "Frogforce" in 1999 with the initiation of Texas Amphibian Watch. Over 100 volunteers have joined the network designed to keep an eye on the status of frogs, toads, and salamanders in the state. The goal of Texas Amphibian Watch is to gather data on the status of these species so that trends in Texas may be compared to trends in amphibian populations being monitored by scientists and volunteers worldwide.

The international call for amphibian monitoring first came in 1989 when scientists at an international conference became alarmed at what appeared to be dramatic declines in amphibian populations all across the globe. Then, in 1995, a group of school children in Minnesota were the first to notice an alarming rate of malformed limbs in some frog populations. Because amphibians use wetland habitats during at least part of their life cycle and because they have permeable skin, ecologists believe that declines in amphibian populations and malformations may serve as early warning indicators of broader changes in ecosystems.

Texas Amphibian Watch has been designed to offer volunteers several different ways to monitor amphibians as barometers of our environmental health. As an Amphibian-spotter, volunteers can simply report the species of amphibians that they encounter in their neighborhoods or the areas they visit. The Adopt-a-Frog Pond activity lets volunteers pick their own wetland site to monitor frog and toad populations. Volunteers can visit their adopted wetland at night to listen for frog and toad calls or during the day to see if any malformed tadpoles or frogs are present. Finally, our hard-core amphibian fans can get involved in the Texas Frog and Toad Survey, a series of roadside nocturnal call counts that are part of a nationwide random sampling design.

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# HIGH HOPES FOR TWISTFLOWERS

Last year was a very hard year for the bracted twistflower, *Streptanthus bracteatus*, a rare hill country beauty. This annual, which can send spikes of lavender flowers up to 5 feet high in April with good winter and spring rains, is a treasure that was only visible in a couple of protected areas last year. **Jan Lariviere's** class from **Westlake High** only documented 37 small plants from their site near Bee Creek and **Peggy Meyer's** students from **Austin High** found even fewer at their sites along the Barton Creek Greenbelt trail in Austin. At one site in San Antonio, we found no living plants in April and only 1 stalk from the year before. Lack of rain starting in early March evidently killed most of the small rosettes that germinated and grew during the winter. And there is a good possibility that even the few remaining plants may have been eaten by deer who love this member of the mustard family.

This year, new monitors and sites will join the twistflower team to see what has

managed to survive last years' dry spell. Some roadside sites near Lake Medina will be monitored by **Mary Stiles**, a realtor in the San Antonio area. **Mary Kennedy** and her students from **Texas Military Institute** will adopt another site in Eisenhower Park on the north side of San Antonio. (By adopting 2 species, they must really like this hands-on science stuff!) **Paula Pellerin** (taking over from Jan Lariviere) and her students from **Westlake High** will continue monitoring the Bee Creek site while **Peggy Meyer's** group from **Austin High** will be joined by Austin area Master Naturalists to monitor the Barton Creek Greenbelt sites. Our hopes are that the spring rains we have had recently will give bracted twistflowers a chance to show themselves in all their glory the last week in April when monitoring is scheduled. If so, perhaps bracted twistflowers will be around for us to enjoy for years to come. We'll have to let you know how it turned out in next year's edition of *The Texas Nature Tracker*.



## TEXAS AMPHIBIAN WATCH, CONTINUED

To help volunteers get acquainted with their moist-skinned friends, TPW offers a packet of monitoring materials and a tape of frog and toad calls (the tape sells for \$5). Some volunteers in 1999 chose to learn even more about amphibians by attending one of three workshops offered in Grapevine, Bastrop, and Houston. Next year more workshops will be offered for those of you who really want to "get your feet wet."

Are amphibians in Texas doing okay? Only time and Texas Amphibian Watch volunteers can tell....





# BIG RED SAGE MONITORS WIN HONORS



Last year's issue *The Texas Nature Tracker* reported that floods had severely affected big red sage plants (*Salvia penstemonoides*) at Site 1 near Boerne, monitored by **Mary Kennedy and Sandy Moore's** students from **Texas Military Institute**. We wondered then if this spectacular perennial would be able to make a comeback. Its rarity in the wild makes it vulnerable to any kind of disturbance. In addition to the flood, we had a very dry summer in 1998 right before the August blooming period for big red sage. We had no idea what we would find when we visited the monitoring site.

On August 4th, we met Mary Kennedy, Sandy Moore, and 7 TMI students in hopes that big red sage plants were still alive and blooming. As well as meeting our monitoring goals, the students wanted to use the data from 8 years of monitoring big red sage in a science fair project. Luckily, a number of plants did survive and bloom, although not at Site 1, the site of the largest population that had been flooded the previous year.

Two TMI students, **Paulina Alvarez** and **Megan Tally** won several awards for their science fair project on the big red sage titled, "A Statistical Analysis of a Population of *Salvia penstemonoides* in the Texas Hill Country." They won third place in the team category at the Texas State Science and Engineering Fair. Their work concluded that the population of this rare, endemic plant is declining at the study site, due in large part to the 1997 flood. The team also won a 1st place from the San Antonio Men's Garden Club and a special award from the American Statistical Society. Way to go Paulina, Megan, and teachers from TMI!

## REFLECTIONS OF A MONITOR

Dear Ann and Lee Ann,

Texas Nature Tracker volunteer monitoring activities have the potential to be very useful for documenting plant and animal diversity and population abundance during a time of great environmental change in Texas. This is important work, but the projects are important for other reasons as well. Volunteer monitoring projects supplement science curriculum in schools. In my own experience as a biology professor at Huston-Tillotson College, I have students who have never been exposed to any type of lessons in ecology. Most of their biology lessons revolve around cell structures, mitosis, meiosis, and the parts of the human body. This is important, but understanding basic science methodology and knowledge of the interactions of humans, plants, and animals is also very important. Students need hands-on exposure in an interesting

outside setting where they can learn to collect data, identify organisms, and solve problems. Texas Nature Trackers projects offer this type of opportunity.

My colleague, Sally Strong and I worked on a project alongside middle and high school students who were learning to take random samples. We were impressed with their enthusiasm for the project and their ability to learn those skills. You are teaching true science methods that are used by researchers. This is definitely my ideal vision of a good use of state funds and state personnel.

Sincerely,  
Bernice Speer  
Assistant Professor, Biology Dept.  
Huston-Tillotson College



# TEXANS LOVE HORNED TOADS -

# DESPISE FIRE ANTS

*Even our monitors love to take horned lizard photos!*

Texans and their favorite reptile seem to have one thing in common — neither we nor the horny toad want anything to do with the red imported fire ant. At least that's one conclusion that our Texas Horned Lizard Watchers seem to be drawing. The devoted efforts of volunteers in this program continue to provide data about the state reptile that's unique and significant.

In 1998 a total of 64 people provided information about their efforts to sight horned lizards in 48 counties. During 1998 participants could choose to participate in Texas Horned Lizard Monitoring at three different levels. Eleven volunteers chose to participate at the most intense level, conducting transects that measured quantitative data on horned lizard and ant abundance. Other participants chose to adopt sites, such as a ranch, backyard, or local park, and provide more generic information about the presence or absence of horned lizards and ants. A total of 58 adopted sites were monitored in 1998. Finally, eight participants chose to conduct county-wide censuses -- noting the locations of horned lizard sightings wherever they occurred in the county.

Over one-half of the participants (58% of the sites and transects) saw Texas Horned Lizards in 1998. Densities at the 11 transects ranged from 0 horned lizards/acre to 4.89 horned lizards per acre and averaged 0.82/acre. Data was collected at 43 new sites or transects in 1998, while a second year of data was collected at 26 sites or transects. Although some respondents thought the 1998 drought affected horned lizard numbers, results for the sites revisited in 1998 were very similar to 1997.

Some new information did emerge in 1998. Although the general pattern of healthy horny toad populations in the western part of the state and diminished populations in the east holds true, we'd like our volunteers to

keep an eye on some areas in the future. Several counties in the panhandle and rolling plains, which previously had not reported declining horned lizard populations, now show mixed results. On the other hand, several participants have reported that Texas horned lizards are still abundant in sandy soils in the coastal counties — we need more watchers in those areas!

Again in 1998 Texas Horned Lizard Watch participants gathered insightful data about fire ants and horned lizards. Volunteers' data on presence versus absence of Texas Horned Lizards and red imported fire ants again showed a negative correlation between the two species. In addition, one participant reported that fire ants were present in Haskell county for the first time this year. Such observations may help us determine how closely the spread of fire ants might be linked with the decline of the horned lizard in Texas.

Finally, Texas Horned Lizard Watch volunteers continued to prove themselves

enthusiastic and dedicated, with many taking time to write down additional notes about their observations, sending photos, etc. As data are collected from these sites in future years, a very valuable picture of the trends in horned lizard numbers and its habitat is likely to emerge. So, to all our participants, "Thanks, and keep on counting your horny toads!"

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# LANDA PARK DOUBLES AS OUTDOOR CLASSROOM

New Braunfels High School students of **Denise Ortiz** and **Judith Simmons** realize that there is more to Landa Park than cool, clean water. Landa Park is an extension of their classroom in Environmental Science, AP Biology, and Biology I. Ortiz and Simmons use the park to give students hands-on activities in which they learn to identify many plant and animal species in the park, practice water quality testing, and participate in a special volunteer

monitoring project for Texas Nature Trackers. Ultimately, students will understand how the park's soil, water, plants, and animals are intertwined in a web of life that can't be understood until you dig beneath the surface. That is certainly what they had to do to monitor for the Horseshoe Liptooth Snail that lives only on the banks of the Comal River.



Monitoring for this land snail required the students to carefully examine the soil under the leaf litter on the wooded hillsides, using scientific sampling techniques and a sharp eye. To begin with, students learned how to differentiate between the Texas Pill Snail (a more common land snail) and the Horseshoe Liptooth Snail (a rare snail) by comparing features around the openings of the shells of the two snails. Additionally, students learned how to take random samples using a random numbers table and how to set up transects and quadrants, basic skills used by many scientists.

Students worked in small groups to set up the random samples and search for snails on two different hillsides. One group counted over

40 snails of several different types in one quadrant! That shows a real dedication to the project because counting in that one quadrant took them over half an hour and they had several more quadrants to count. Ortiz and Simmons are proud of all the New Braunfels High students who got to experience real scientific field work.

With two years' data under our belts, many questions remain concerning the Horseshoe Liptooth Snail. First, we have found very few live Horseshoe Liptooth Snails, although we have found many live Texas Pill Snails. Some shells appear to be from recently dead snails while others appear to have been long dead. Why can't we find more living Horseshoe Liptooth Snails? Are we monitoring at the wrong season or in the wrong habitat to find live snails? Or are we simply finding the remains of a species in serious decline? These questions will be answered in the future as we continue to gather data each year. Stay tuned for next year's update.



# SALAMANDER MONITORING IS JUST TOO COOL!

Picture yourself wading in a clear, hill country, spring-fed stream on a warm day. Sounds like heaven, doesn't it! That's what brings our salamander monitors back twice every year and why it is so easy to find willing volunteers for this project.

During September of 1998, **Ingram High** students and science teacher **Mary Beth Bauer**, joined our salamander monitoring team. Ingram High is monitoring Stockman's Spring, about 10 miles from their school on Texas Parks and Wildlife property. This spring (actually several springs in one small area) furnishes water for Heart-of-the-Hills Research Station. Salamanders have been found there, but many questions remain about factors that can cause an increase or decrease in their numbers. By working in pairs, Ingram High students searched for salamanders in 7 different parts of the spring/pool area. During timed search intervals, the students carefully turned over (and gently replaced) rocks to look for salamanders. Each area provided a slightly different habitat in terms of water depth, water flow, and vegetative differences. Only 1 pair of students found salamanders. From this first search, the salamanders appear to



prefer very shallow areas with constant water flow over rocks that have watercress growing between them. Several monitoring seasons will be needed to substantiate this hypothesis, but according to Mary Beth Bauer, that won't be a problem. Her students love this project.

That feeling is shared by **Susan von Rosenberg's** students of **Deer Park Middle School** who are monitoring salamanders on the Travis Audubon Sanctuary and **Linda Walker's** students of **Bracken Christian School** who work in Honey Creek State Natural Area. Both teachers divided students up into two groups to allow them to study both the macroinvertebrates found in the streams as well as the salamanders. They participate in salamander monitoring because their students love field work and because the field experiences give students a much better understanding of aquatic habitats. Spring rains should help Deer Park students this monitoring season. Last fall the stream at the Audubon Sanctuary was almost dried up, making monitoring more difficult than usual.

At least two of our salamander monitoring groups plan to sample again as we go to press. Watch for those results in next year's newsletter.





# IF ONLY WE HAD LAST YEAR'S DATA!

That was the first thought of volunteers monitoring for a tiny land snail, the Palmetto Pill Snail, when they learned that Palmetto State Park was seriously damaged during the October floods in Central Texas. The unique ecosystem in Palmetto State Park is supported by an artesian well that provides a warm, wet habitat. The Palmetto Pill Snail lives within the leaf litter near ponds and feeds on dead plants. It is not known to exist anywhere else in the world. But, would we find any Palmetto Pill Snails left after the Guadalupe River swept across its habitat? Would all of the snails be carried downstream? And even though scientists had found the snails at the park the year before, they didn't actually have data to estimate the population. How can we gauge the effects of the flood without the previous year's data?

We will never answer that question, but what is important is that our monitoring efforts did prove successful. Some Palmetto Pill Snails did hang on in spite of the flood and **Melba Sexton's** 4-H kids did a beautiful job of finding them. Two more veteran monitors, **Bernice Speer** and **Sally Strong**, investigated a



particularly difficult part of the pill snail habitat and found shells from two more. But how many would we have found if there hadn't been a flood? Will there be enough pill snails left to keep that species alive? What important role do Palmetto Pill Snails play in that unique environment? Each year, the data our volunteers provide will help us answer these questions. And we won't have to wish we had started taking data sooner.



# POCKET GOPHERS: TAKING THE NIGHT SHIFT



After two days of monitoring the Maritime Pocket Gopher (*Geomys personatus maritimus*), we were amazed at the amount of work one small (5-9 inch) pocket gopher could do in one night. Some pocket gophers created as many as 5 or 6 fresh mounds between the first and second day of monitoring. That takes a lot of digging.

Maritime Pocket Gophers are a distinct subspecies of pocket gopher that occurs only in Nueces and Kleberg counties in loose, sandy soils. Our Maritime Pocket Gopher project is located at two sites, the Corpus Christi State Fish Hatchery and the Corpus Christi Naval Air Base. On the first day of monitoring, **Diane Hartung** and **Vinay Dulip's** 10 students from Moody High School may have thought that pocket gophers did little but eat and sleep in their underground burrow systems. From background information, students knew that pocket gophers were nocturnal, but they had no idea how much work pocket gophers could accomplish

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# WACO STUDENTS STUDY WETLANDS

## TEXAS AMPHIBIAN WATCH ENHANCES OTHER OUTDOOR PROGRAMS

By Cindy Van Auken, Waco Tribune-Herald

Most students would cringe at the idea of studying science on a Saturday night, but for a group of students from Lake Waco Montessori Magnet, a recent nighttime field trip was the perfect opportunity for them to study the wetland habitat they have adopted.

The students are participating in a program sponsored by the Texas Agricultural Extension Service and the Texas A&M University System called the MarshMALLOW Project, which stands for Marsh Management Activities for Learning the Lifestyles Of Wildlife. The class received one of seven \$750 grants awarded statewide to help fund the project.

“We want them to have hands-on experience with the environment and learn the actual procedures scientists and wildlife managers go through to manage wildlife species and their habitats,” said Andy McDonald, a wildlife associate of the extension service.



Dr. Mary Neid Phillips, who teaches science at the school, said the class of 22 students started on the project in early February. The class has taken about one field trip a month to the wetland habitat that it adopted on private property on J.J. Flewellen Road near Doris Miller Elementary.

McDonald said the project, which is in its second year, is a pilot program and the sponsors will look at how effective it is in teaching students about the environment. The program teaches skills such as formulating objectives, conducting a wildlife survey, taking water-quality samples and giving oral presentations.

Assisting the students is Dr. David Schleser, a naturalist photographer and aquatic biologist who has worked with Phillips' students for two years.

“We’re learning this in the field as we go,” Phillips said. “It’s very exciting to work side by side with the children on this and especially experts, like Dr. Schleser. That’s why I write so many grants, to bring experts like him to us.”

On its field trips, the group observes and examines all types of life in and around the habitat’s ponds. The students have observed a plethora of aquatic life and insects, as well as a wealth of plants and the tracks of a few mammals.

However, the group has not found much evidence of amphibians, the focus of its search during the project. The class is also working with **Texas Amphibian Watch**, a program of the Texas Parks and Wildlife Department that has volunteers document the presence of frogs, toads and salamanders across the state.

“We are very interested in knowing more about amphibian species across the state and at the abundance of different amphibian species,” said Ann Miller, who is the Texas Nature Tracker volunteer coordinator for Texas Parks & Wildlife. “We are interested in finding out if there are amphibians with malformations. The volunteers are able to play an extremely important role.”

Miller said about a dozen schools are participating in the watch program, which is in its first year. Amphibians, which

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# TO MUSSEL MONITORS, TIMING IS EVERYTHING!

Freshwater mussels are the fastest disappearing group of animals in North America. Can their disappearance indicate other problems in our freshwater ecosystems? In Texas we want to get as much information as we can about our mussel species and volunteers are playing a major role. In 1998, around 20 volunteers were trained and armed with a specimen collection of mussel shells. Their job was to help TPW document the presence or absence of mussel species in the rivers, lakes, streams, and ponds of Texas. In all, these monitors visited over 31 sites, ten locations of which had never before been monitored by TPW. One monitor, **Mike Hernandez**, recorded 2 species that had not previously been

found in Austin County, the Texas lilliput and tapered pondhorn. Another mussel monitor and scuba diving instructor, **Tucker Davis**, is involving trained divers in the project. He hopes to create a project that will give his scuba enthusiasts important work to do when they dive for fun.

Timing is important when drought or water releases create lower water levels in lakes and rivers. Monitors can more easily find mussels that are exposed or in shallower water, and mussel monitors can make important discoveries. Bob Howells, Texas' mussel expert, has examined mussels at Steinhagen Reservoir (Dam B) during 3 drawdowns. Partial draw-downs of about 6 feet are performed every 2-3 years to control aquatic vegetation. In late January of 1996, Bob found 4,488 specimens of 21 mussel species, with many being extremely abundant. Since the drawdown was done at a slow rate, mortality of the mussels was not high. But within days of the mussel survey, record cold temperatures hit the area, killing all mussels above the water line.

Because we still didn't have trained volunteers near Steinhagen Reservoir, Bob knew it was up to him in January of 1999 to monitor this draw-down and determine the impact of the freeze in 1996. Bob found that many mussels still remained, although the populations were clearly reduced. Most species were actively reproducing and several rare species were still present. The rare, endemic Texas heelsplitter has only been known from less than 300 specimens since it was described in 1898, but was still surviving at Steinhagen. Another rare species, sandbank pocketbook, was found in the reservoir for the first time. Commercial shell species like washboards and threeridges were also doing well.

This year's mussel monitoring data demonstrates that important information can be obtained by trained monitors who work without sophisticated collecting equipment and within a limited time frame. Having volunteers who can be at the right place at the right time can make all the difference! But we can still use more volunteers. If you are interested in mussel monitoring, use the form provided on page 9 or contact Ann Miller. (See contact information on the form.)





### POCKET GOPHERS, CONTINUED

in one night. Pocket gophers didn't show themselves during the two hours students spent counting their fresh mounds, but students became very adept at recognizing fresh mounds, and had a chance to notice signs of other wildlife as well. Deer tracks in soft sand, animal trails through tall grasses, and the remains of sea gulls eaten by predators interested students as much as pocket gophers. Their monitoring data may help maintenance folks at the fish hatchery determine how different mowing regimes affect Maritime Pocket Gopher populations.

At the Corpus Christi Naval Air Station, monitor **Bernice Speer** and her husband, **Doyle Cross** helped refine our monitoring techniques. Their dedication to this 2-day project will help us learn more about how to count fresh mounds and groupings of fresh mounds as a population indicator. Bernice, an assistant professor of biology at Huston-Tillotson College, is involved in two other Texas Nature Trackers projects along with colleagues, **Sally Strong** and **Elizabeth Maxim**. Thanks to dedicated volunteers such as these, data we receive from these projects will have the validity necessary for use in management and conservation of these rare species.



### MAKING A COMEBACK: DEL RIO & THE SCURFPEA

Weather took its toll on the town of Del Rio and on Rydberg's scurfpea (*Pediomelum humile*) in 1998. Drought which lasted from early March to October dried up the scurfpea plants in the natural area behind Calderone Elementary School before they had a chance to bloom. **Monea Fortunato**

and her fourth grade students had marked and counted the perennial plants and were waiting to count blooms when the drought hit. Monea and her students were amazed at the way the plants shriveled up and seemed to disappear. **Glenda Overfelt** and her students at Del Rio High School who monitor another site of Rydberg's scurfpea, encountered the same problem. In Del Rio, restrictions on watering lawns and washing cars was a fact of life.

Then the floods hit in October! Del Rio residents suffered badly when a normally

**“The Scurfpea project is very exciting, because these plants are very rare.”**  
Alex Ibarra (top right), Calderone Elementary

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### SCURFPEA, CONTINUED

placid creek flowed over its banks and swept through the town, leaving destruction in its path and closing schools for ten days. As in other communities, months of rebuilding are beginning to mean a return to normalcy in Del Rio. But what did flooding do to the scurfpea plants after drought dealt them a blow last spring?

For Principal **Ricardo Jimenez** of **Calderone Elementary**, supporting **Monea Fortunado** and **Gloria Culpepper** in their plans for an outdoor classroom remained a high priority even during the hard times of last fall. In fact, Mr. Jimenez was the first to see signs of life in the scurfpea plants. Luckily, this years' gentle rains have been sufficient and scurpeas have reappeared miraculously. In fact another group of plants have been found about 100 yards from the previously known group. Not only have Monea's students been able to monitor the plants, but they have also taken data on flowering as well. Their data show that 75% of the plants have bloomed so far. What a comeback!

An even greater comeback is the one made by students, parents, and various community groups who have worked together to realize the dream of an outdoor classroom and 3-mile nature trail, called the Paseo do los Ninos, will be handicap-accessible for a half mile. The grand opening of the trail will be on May 28th.

**Congratulations to Ricardo Jimenez, Monea Fortunado, Gloria Culpepper, and the people of Del Rio for their success in spite of severe hardships!**



### WACO STUDENTS, CONTINUED

have been declining in numbers in recent years, serve as an early warning indicator for ecological problems because of their unique makeup, according to Miller.

"Amphibians are really good indicators of environmental quality because their skin is permeable and any toxin in the environment can permeate their skin more quickly than it might other species," Miller said.

The elementary students are also working with three ninth-grade biology classes at Waco High School that are conducting water-quality testing for Project MarshMALLOW.

"I don't think any of them had ever done anything like this before," Waco High biology teacher Teresa Kelm said. "They liked getting out there and seeing what they could find."

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Yes, I want more information about the Texas Nature Trackers Projects checked below:

- f Adopt a species in \_\_\_\_\_ or \_\_\_\_\_ county.
- f Texas Horned Lizard Watch
- f Texas Hummingbird Roundup
- f Texas Monarch Watch
- f Texas Mussel Watch
- f Texas Amphibian Watch
- f Swallow-tailed Kite Monitoring Project
- f Project Prairie Birds
- f Mid-Winter Bald eagle Survey (Annice Story, 903-566-1626)



Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

E-mail \_\_\_\_\_

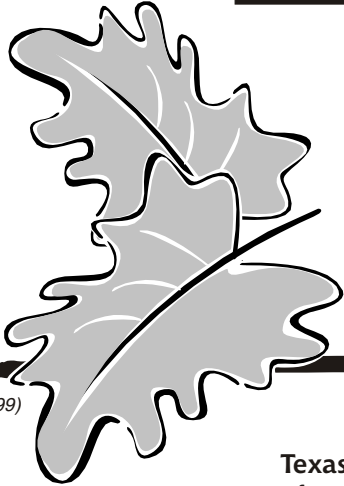
Nature Trackers is a project of:  
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# Spring 1999

TEXAS PARKS AND WILDLIFE

## THE TEXAS NATURE TRACKER




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### WHAT IS TEXAS NATURE TRACKERS?

**Texas Nature Trackers (or TNT)** is sponsored by the Wildlife Diversity Program of Texas Parks and Wildlife. TNT seeks to link citizens with populations of rare species in their area. 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.

THE TEXAS  
NATURE  
TRACKER



Texas Parks and Wildlife  
Wildlife Diversity Program  
4200 Smith School Road  
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