It’s hot and dry! With most of the state in exceptional drought, 2011 is proving to be a challenge for all living things in Texas. The weather is especially difficult for Texas’ frogs and toads. I hope your local populations are hanging in there. The eight months from October 2010 through May 2011 were the driest eight-month period on record for Texas since 1895. By mid-July, Austin already experienced 28 days of 100°F and higher. What can we expect for the rest of the summer? Hope you all are doing your best to stay cool!

**Biological Assessment Teams**

The concept for TPWD Biological Assessment Teams (BAT) is finally coming together. The plan is to establish volunteer BATs eventually in every region of the state. A BAT is an assemblage of enthusiastic, skilled volunteers (from groups such as master naturalists; native plant, herp and bird societies; and other nature organizations) that will assist TPWD by conducting surveys of plants and animals on private property, helping landowners qualify for their wildlife tax valuation, and contributing data to the TPWD Texas Natural Diversity Database.

We held the first pilot Biological Assessment Team survey in May 2011 in East Texas. This initial survey targeted herps (reptiles and amphibians) and plants on two private ranches. There were two teams, one for herps and one for plants. TPWD herpetologist Andy Gluesenkamp and TPWD biologist Lee Ann Linam led the herp team. The herp team members consisted of three local Dallas/Fort Worth Herp Society members and one Master Naturalist. TPWD botanist Jason Singhurst led the plant team.

**Dedication and Innovation Fuel Texas Amphibian Watch Findings**

Lee Ann Johnson Linam, TPWD

Dedication and innovation proved to be the essential ingredients for Texas Amphibian Watch in 2010. Dedication, as partner groups and devoted individuals continued to step up and monitor on a regular basis. Innovation, as volunteers increasingly documented their efforts through digital photos, digital audio recordings, and email submission of data. In addition, development of a TPWD database for TAW data is opening the doors to some interesting insights about our froggie friends. Some highlights from 2010 include:

- Data forms were submitted to TAW by 23 volunteer teams, bringing the total number of formal participants to 87.
- Data were submitted from 21 counties. Monitors were active in Brewster County for the first time in 2010 and documented the occurrence of the introduced American bullfrog and green treefrog.
- Data were collected at 21 TAW Adopt-a-Frog Pond sites. Data were collected at an additional 10 sites using automated frogloggers.
- Data were collected on four roadside transects, each representing 10 sampling points.
- Two volunteers also submitted Amphibian Spotter data, while 19 anecdotal reports were received via email. An email report with attached photos even documented the endangered Houston toad at a site in Bastrop County!
- Data were submitted on 26 frog and toad species and on 11 bird species.

**Texas Amphibian Watch 2010**

Gulf Coast toads, green treefrogs, cricket frogs, American bullfrogs, and southern leopard frogs continued to be the most widely-reported species; however, the Rio Grande chirping frog was also extremely common in several coastal Texas counties. Texas Amphibian Watch data has been very important in documenting the establishment of that species there.
Catching up ...

Biological Assessment Teams (Continued)

The plant team members consisted of five Native Plant Society members and one Master Naturalist. Two additional team members have asked to be included in future surveys. The goal of this initial pilot project was to record species of herps and plants on these two properties for the landowner and the TX Natural Diversity Database. It was a very successful survey and the landowners were very pleased with the results. TPWD District 5 biologists found these two properties where landowners were excited to have these teams survey. Texas Nature Tracker biologists in Austin and in District 5 will work together in the future with additional local landowners and current BAT members for future herp and plant inventories. Other animal group inventories will be developed in the future with additional BATs.

Central Texas will be the next target. We hope to establish BATs for surveying more animal groups such as birds, karst invertebrates and general invertebrates (such as dragonflies, butterflies, etc), as well as plants and herps. If you are a landowner interested in having your property surveyed or if you would like to contribute your expertise by participating on a BAT, please contact us at (800) 792-1112 ext. 8062 or marsha.may@tpwd.state.tx.us.

Facebook

Join us on Facebook! All you have to do is go to: https://www.facebook.com/texasnaturetrackers

Texas Nature Tracker Volunteers

A special THANK YOU to all Texas Nature Tracker volunteers for taking the time out of your busy lives to help TPWD collect important data on Texas’ amazing critters.

Texas Nature Tracker Partnership

The Texas Nature Tracker Partnership began in 2004. This partnership involves an effective relationship between groups such as Texas Master Naturalist chapters, nature centers and zoos with Texas Nature Tracker biologists where we all work together to promote and provide local monitoring events for Texas Mussel Watch (TMW) and Texas Amphibian Watch (TAW). This partnership has now expanded to also include Texas Horned Lizard Watch and Texas Black-tailed Prairie Dog Watch. If your group would like to take part in this exciting program or get more information, please contact us at: (800) 792-1112, ext. 8062 or marsha.may@tpwd.state.tx.us

Texas Nature Tracker Partners are really making a difference!

We are proud to introduce our new Texas Nature Tracker Partners:

TEXAS MUSSEL WATCH PARTNERS
Blackland Prairie Master Naturalist Ch.
Spring Creek Greenway Nature Center
Red River Master Naturalist Ch.

TEXAS AMPHIBIAN WATCH PARTNERS
Galveston Bay Area Master Naturalist Ch.
Tierra Grande Master Naturalist Ch.
Highland Lakes Master Naturalist Ch.
Trinity River Audubon Center
Blackland Prairie Master Naturalist Ch.
Spring Creek Greenway Nature Center

If your group would like to take part in this exciting program or just get more information, please contact us at (800) 792-1112 ext. 8062, or marsha.may@tpwd.state.tx.us.
Central Texas and the upper Texas coast were the strongholds of participation this year, but contributions also came from East and North Texas and the first monitoring sites were established in West Texas. Participation was especially high in Travis County, where the Capital Area Texas Master Naturalist Chapter provided leadership in monitoring three sites, along with an additional site in Williamson County. Dr. Dan Saenz’s work with automated frog-loggers produced the highest species counts (12 species in Houston County); however, volunteers in Brazoria, Harris and Travis counties also managed to document 10 or more species, while Travis County volunteers also reported 10 bird species.

On the innovation side, monitoring data is now being entered into a database developed with the assistance of Jon Purvis at TPWD. The database allows data from adopted sites to be quickly summarized into some interesting comparisons. For example, volunteer data in 2010 showed a peak in number of species calling in June (17 species).

**Total Species Reported Calling in Texas by Month, 2011**

- Gulf Coast Toad: 11 counties, 131 occurrences (sites x nights)
- Green Treefrog: 11 counties, 72 occurrences (sites x nights)
- Cricket Frog: 10 counties, 111 occurrences (sites x nights)
- American Bullfrog: 9 counties, 31 occurrences (sites x nights)
- Southern Leopard Frog: 8 counties, 67 occurrences (sites x nights)
- Rio Grande Chirping Frog: 3 counties, 67 occurrences (sites x nights)

**Amphibian Watch Adopt-a-Frog Pond and Transect Results**

<table>
<thead>
<tr>
<th>County</th>
<th>Number of Sites</th>
<th>Number of Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandera</td>
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<td>2</td>
</tr>
<tr>
<td>Bastrop</td>
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<td>1</td>
</tr>
<tr>
<td>Brazoria</td>
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<td>Cass</td>
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<tr>
<td>Chambers</td>
<td>10*</td>
<td>4</td>
</tr>
<tr>
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<td>5</td>
</tr>
<tr>
<td>Guadalupe</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Harris</td>
<td>13*</td>
<td>10</td>
</tr>
<tr>
<td>Hays</td>
<td>11*</td>
<td>6</td>
</tr>
<tr>
<td>Houston</td>
<td>4**</td>
<td>12</td>
</tr>
<tr>
<td>Milam</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Nacogdoches</td>
<td>4**</td>
<td>9</td>
</tr>
<tr>
<td>Travis</td>
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<tr>
<td>Trinity</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Williamson</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

*includes data from 10 stops one on NAAMP roadside route
**includes data from 4 frog-loggers recording nightly
Database entries from Adopt-a-Frog Pond also allow us to analyze climatic and habitat variables, such as average temperatures when species are calling. The true frogs and chorus frogs were active at cooler temperatures, while the tropical frogs and some of the toad species required warmer temps.

One additional innovation is the addition of fillable, emailable forms for Texas Amphibian Watch on our webpage. Visit [www.tpwd.state.tx.us/amphibians](http://www.tpwd.state.tx.us/amphibians) if you would like to use this option.

On the dedication side, Texas Amphibian Watch staff taught workshops in Bastrop County, Hays County, Wichita County, Galveston County, Smith County, and Fort Davis County in 2010, recruiting Galveston Bay Texas Master Naturalists and East Texas Master Naturalists as partners for Texas Amphibian Watch. These partners continue to be critical to the success of amphibian monitoring in the state, with several of our established partners conducting their own local trainings. Several workshops were also held for teachers and Texas Parks and Wildlife Department staff, providing training for these important partners, as well.

A few volunteers continue to go “above and beyond” in their service to Texas Amphibian Watch. Barbara Turner of the North Texas Master Naturalists contributed data for the fifth year in 2010. Their chapter uses monthly monitoring sessions to train others about Texas Amphibian Watch and reported 1275 volunteer monitoring hours in 2010! Julie Young set the dedication mark in 2010, collecting 60 different monitoring samples.

Georgia Monnerat was close behind, collecting 56 Adopt-a-Frog Pond monitoring samples, and running a North American Amphibian Monitoring Program route. Kathy McCormack, Jerry Mayfield, and Betty Bouley also spent a fair number of nights in the field, with over 30 samples each. We are excited about recently placing an order for annual Texas Amphibian Watch pins that we can offer to volunteers who monitor on a regular basis, starting in 2011. Just a small way of saying thank you to our dedicated volunteers in the future!
The Capital Area Master Naturalists (CAMN) had four teams performing TPWD’s Texas Amphibian Watch (TAW) Adopt-A-Frog-Pond monitoring in 2010. Nocturnal frog and toad calls were monitored on a monthly basis at Bauerle Ranch Park (formerly Slaughter Creek Greenbelt) and Mary Moore Searight Park in south Austin, Riata Pond in north Austin, and Berry Springs Preserve in north Georgetown. Bauerle Ranch Park is 306 acres of mostly unimproved ranchland with a small pond formed by a ranch road spillway and fed by a tributary creek to Slaughter Creek. Mary Moore Searight Park is a city park that includes a portion of Slaughter Creek, Riata Pond is a semi-urban storm water retention pond, and Berry Springs Preserve is a passive county park with a spring-fed pond and nearby creek. Winter and early springs rains increased water levels at all locations in the first quarter of 2010, but moderate drought conditions had returned by the last quarter of the year.

In 2010, 11 CAMNers logged a total of 11 monitoring hours and observed five amphibian species at Bauerle Ranch Park: Bullfrog, Northern Cricket Frog, Gulf Coast Toad, Great Plains Narrow-Mouthed Toad, and Green Treefrog. Three nocturnal bird species were also observed: Great Horned Owl, Common Nighthawk, and Chuck-Will’s-Widow. Beginning in February 2010, this was the first year of monitoring at this location. Jerry Mayfield and Sandie Mayfield shared the task of site coordinator.

In 2010, eight CAMNers logged a total of 12 monitoring hours and observed six amphibian species at Mary Moore Searight Park: Rio Grande Leopard Frog, Bullfrog, Gulf Coast Toad, Green Treefrog, Northern Cricket Frogs and Gray Treefrog. Three nocturnal bird species were also observed: Great Horned Owl, Common Nighthawk and Chuck-Will’s-Widow. This was the first year of monitoring at this location, and Julia Osgood is the site coordinator. The attendees at this location tend to live very nearby (one person walks over) so we do not record round-trip miles or hours.

In 2010, 22 CAMNers logged over 715 round-trip miles and almost 33 round-trip hours for a total of 12 monitoring hours and observed three amphibian species at Riata Pond: Bullfrog, Gulf Coast Toad and Cliff Chirping Frog. One nocturnal bird species was also observed during two of the 12 months: Common Nighthawk. This was our third year of monitoring at this location, and Sue Anderson was the site coordinator.

In 2010, 10 CAMNers logged over 2,203 round-trip miles and over 57 round-trip hours for a total of 14 monitoring hours and observed five amphibian species at Berry Springs Preserve: Rio Grande Leopard Frog, Gulf Coast Toad, Bullfrog, Green Treefrog and Northern Cricket Frog. Five nocturnal bird species were also observed during eight of the 12 months: Great Horned Owl, Barred Owl, Eastern Screech-Owl, Common Nighthawk and Chuck-Will’s-Widow. This was our second year of monitoring at this location, and Kathy McCormack is the site coordinator.

Team support for this effort has been outstanding – in addition to the site coordinators, participants included Liz Wells, Gloria Blagg, Patty Collier, Bill Dodd, Cheryl Goveia, Christine McCulloch, Erin McDonald, Andy Swain, Bob Kamper, Alice Stofa, Greg Cumpton, Becky Patterson, Sarah McDonald, Cindy Durand, Chris Durand, Mary Kay Sexton, Chuck Sexton, Alicia Nelson, Maggie Moody, Peg Gavins, Ron Armbruster and Jackie Davis. Since we monitor for the hour or so after sunset, a group provides safety in numbers in these public places. In addition, a team assures that there will be monitoring coverage of the site every month (i.e., not everyone has to make it every month). Plus, more eyes and ears mean that we observe more things – not just the amphibians and birds, but lots of other critters and plants, as well!

In 2011, we plan to continue monitoring at Bauerle Ranch Park, Mary Moore Searight Park, and Berry Springs Preserve, but we will be moving our north Austin monitoring location from Riata Pond to Lake Creek Dam (a dammed-up natural creek drainage area). Contact one of the site coordinators if you'd like to join the crepuscular crowd this year!
Texas Horned Lizard Watchers used a variety of means to document horned lizards in 2010, but one notable change last year was that a majority of sightings last year came in through email, with a majority of those volunteers documenting their sightings with photos. At the same time, several volunteers dedicated themselves to expanded research efforts, gathering more detailed data on horned lizard size and habitats. Texas Horned Lizard Watch also received data on round-tailed horned lizards this year.

Data were submitted from 47 counties in 2010. Bastrop County led the way with the most horned lizards reported (33), followed by Armstrong County (18), Dickins (13), and Bailey (10). Coke, Kimble and Val Verde counties produced the greatest amount of effort, with three different volunteer groups sending in reports from each of those counties. Horned lizards were reported from three counties for the first time—Knox, Lynn and Glasscock—bringing the total number of counties participating to 176. While volunteers continued to focus their efforts on Texas horned lizards, round-tailed horned lizards were reported from one site in Presidio County. County-by-county results for Texas horned lizards in 2010 are presented in the figure to the left.

In 2010, a total of 21 volunteers or volunteer teams submitted THLW data sheets, bringing the total number of formal participants to 225. Nine transects were conducted, 13 sites were surveyed, and four spotter reports were submitted. An additional 31 incidental reports came in via phone or email, including 21 reports that documented horned lizards with photos. Horned lizard scat was detected at seven sites.
Other efforts in the Post Oak Savannah included continuation of DNA sampling of horned lizards in Milam County by the El Camino Real Chapter of Texas Master Naturalists and a continuation of the rural cemetery surveys in Fayette and Bastrop counties. A total of eight cemeteries were visited. No horned lizards, horned lizard scat or harvester ants were encountered. Red imported fire ants were common, occurring in five of the eight sites, even in sandy soils.

Special thanks go out to Karen Crisman, who contributed data from Hall County for the tenth year, and to Philip Manfredi, who has been diligent in conducting surveys in Kendall County for five years. Also, congratulations to the Big Country Texas Master Naturalist Chapter who became partners in Texas Amphibian Watch last year under the guidance of member Phil Watkins.

With increasing access of volunteers to the Internet, Texas Horned Lizard Watch continues to work to make online reporting available. An emailable form is now available on the webpage (www.tpwd.state.tx.us/hornedlizards/). Hopefully, the convenience of those forms will allow greater participation, and the ability to attach a photo can increase the verifiability of sightings. In addition to recruiting additional reporting, Texas Horned Lizard Watch is now offering partnership training to local groups with a hope of encouraging more in-depth studies of horned lizards. These studies may be especially valuable in isolated or peripheral populations of horned lizards and may offer greater insights for landowners hoping to maintain or restore habitat for this popular species.
During the 2009-2010 Texas Mussel Watch monitoring season volunteers collected data within nine Texas drainage basins in 19 counties (see map) were examined for freshwater mussel species by 58 Texas Nature Tracker (TNT) Texas Mussel Watch (TMW) volunteers, including students from Mike McKay’s Texas State Technical College Environmental Biology class, a total of 26 volunteers with Barrett Christie from the Dallas Zoo, four volunteers with The Nature Conservancy biologist, Bob Boensch, participants from one TMW workshop by Texas Parks and Wildlife Department (TPWD) biologist, Marsha May, and four TNT Partners: Texas Master Naturalist (TMN) El Camino Real Chapter, TMN Heart of Texas Chapter, TMN Lost Pines Chapter, TMN Rolling Plains Chapter and The Nature Conservancy/Big Thicket National Preserve. A total of 27 unionid species were observed within the nine drainage basins.

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Since Texas Mussel Watch began in 1998, 298 volunteers have participated in monitoring mussels in Texas, contributing 1,573 volunteer hours. A special “Thank You” goes out to Mike McKay at Texas State Technical College (TSTC), who has involved Texas students in monitoring mussels in Hubbard Creek Lake since 2001. (See article by TSTC students Corey Townson and Chance Bramlet).

A special “Thank You” also goes out to individual volunteers who submitted data this year and have participated in TMW for four or more years: Dian Hoehne, Annette Jones, Penny Miller, Heather Perry and Janet Wallace.

Five species listed as Priority Species in the Texas Wildlife Action Plan (TPWD 2005) were recorded by TMW monitors and three of these species are state listed as threatened.

**Texas Pigtoe** (*Fusconaia askewi*)
TWAP listing – High Priority Species – State Listed as Threatened
One relatively-recently dead shell, was recorded in Hardin County in the Neches River drainage and identified by TMW volunteers, Leta Parker and Stephanie Burgess.

**White Heelsplitter** (*Lasmigona complanata*)
TWAP listing – Medium Priority Species
Two relative-recently to long dead shells were recorded in Lamar County in the Red River drainage during a Texas Department of Transportation Mussel Workshop.

**Fawnsfoot** (*Truncilla donaciformis*)
TWAP listing – Medium Priority Species
One recently dead shell was recorded in Lamar County in the Red River drainage during a Texas Department of Transportation Mussel Workshop.

**Smooth Pimpleback** (*Quadrula houstonensis*)
TWAP listing – High Priority Species – State Listed as Threatened
One long dead valve was recorded in Milam County in the Brazos River drainage and identified by TMW volunteer, Katherine Bedrich.

**Golden Orb** (*Quadrula aurea*)
TWAP listing – High Priority Species – State Listed as Threatened
Five very-recently to relatively-recently dead shells were recorded in Goliad County in the San Antonio River drainage and identified by TPWD River Studies biologists, Clint Robertson and Steve Boles; One live specimen was recorded in Caldwell County in the San Marcos River drainage and identified by TMW volunteer, Melba Sexton.
August 11, 2010, the TSTC Environmental Biology class participated in a student driven lab where a PowerPoint presentation and some field work at Hubbard Creek Reservoir was performed learning about “Texas Mussel Watch.” During the in class presentation, a wide variety of topics were explained from mussel biology to why we are concerned about the increase of species being added to the endangered list. Several valves and shells were examined by the students which were collected from many different sites.

At the field site, a brief explanation of proper handling was discussed including methods of surveying such as random shoreline search, shallow water search, area, quadrat and transect. Every student found at least one live mussel while some found shells and valves with several different species evident in the area. We found that in the spring water levels were higher and most mussels lived in about three feet of water, now some are in the one foot area. Mussel populations in the area seem to be steady with no sudden die-offs reported. Many pictures of the specimens found were taken and each student had the opportunity to complete a field log and survey data sheet. By the end of the lab, I think everyone could see that habitat loss due to many different reasons is the number one factor influencing the populations of freshwater mussels and their importance as an indicator species. Most of the students agreed that the field work was probably the most enjoyable part of the lab along with the education.

The TON went live May 5, 2009. After two years of effort by TPWD coastal biologists and technical experts from the Resource Information System at TPWD Austin headquarters, a unique, online volunteer-based fishery observation application was launched. Overlaid onto a Google Earth background, today anyone that catches, jumps, finds one dead or otherwise observes a tarpon, can enter the observation into the web-based database and see how it compares to other observations along the Texas coast. Even those who have not ever seen a tarpon, but want to find out when and where they are observed can query the application. And if that is not enough for you, if one has photos of the observation they can be uploaded as well.

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Mystery Surrounding the Tarpon

For the amount of press and attention that the tarpon enjoys, very little is known about this popular gamefish, particularly in Texas. At one time, tarpon roamed the Texas coast in such great numbers and was the mainstay of a popular fishery, that Port Aransas was once named “Tarpon.” Today, while they are still occasionally encountered, pretty much everyone agrees, their population numbers pale in comparison to the levels back in the 1940s and ’50s. Why they disappeared is a mystery, although coastal development and overfishing are the leading culprits, they remain an enigma. The TON hopes to change that by augmenting the current knowledge base of tarpon through the use of volunteers.

Since the application went live, 33 individual observations representing an estimated 342 tarpon have been reported. Some, like Chaney’s, are eye-opening. Some are just plain fun. On September 9, 2010, Mike Dixon of Corpus Christi and two of his friends were flats fishing in the upper Laguna Madre when they happened across a school of approximately 50 three- to six-foot tarpon. One of the anglers soon hooked up on a 5-foot tarpon, which in spectacular fashion, jumped over the boat breaking free on the opposite side — leaving the three anglers a bit thankful that the “green” tarpon had not landed in the boat with them.

Some are a bit sad too. This past January, Bob Jasek, a south Texas winter resident, reported finding five juvenile dead tarpon in a roadside ditch after a brief cold spell in Aransas Pass, reinforcing the fact that tarpon are pretty much cold intolerant.

Combined with previously collected TPWD data, more than 600 tarpon are represented in the database, collectively. Any and all information on when, where and at which life stages tarpon use Texas waters, can greatly aid in the management of the species. It is hoped that the TON, together with the volunteers who submit observations, will reveal new information that may aid in bringing this magnificent species back to a level that resembles their glory years.

Submit a Tarpon Observation and Receive a Free TON Poster

New this past year is an incentive program for those who log in new observations. While supplies last, a new artistic tarpon poster will be given out to all observers who enter new tarpon observation data. The frame-quality poster was designed by the developers of the application in hopes to provide participants with a memento of their participation and encourage participation.

Go to www.tpwd.state.tx.us/tarpon or email tarpon@tpwd.state.tx.us for more information.

Resource Information System

The Resource Information System (RIS) Team develops online mapping applications to improve data collection on species of interest and engage citizen scientists in monitoring efforts. This team is part of the Information Technology Geographic Information Systems (IT GIS) Lab at Texas Parks and Wildlife Department.

For more information on RIS applications, please contact us at gis.lab@tpwd.state.tx.us or visit www.tpwd.state.tx.us/landwater/land/maps/gis/ris/index.phtml
Texas hosts two species of box turtles, the eastern (or three-toed) box turtle (Terrapene carolinensis) and the ornate box turtle (Terrapene ornata), which is also called the desert box turtle, in the western part of the state. In recent years many scientists and citizens have expressed concern that these species are no longer as common as they once were.

Since 2005, volunteers and Texas Parks and Wildlife Department staff have been providing sightings of box turtles to the Texas Box Turtle Survey. Response has been excellent, allowing us to prepare a five-year summary of results with a glimpse into where these species are still found in the state.

**Results**

A total of 552 individuals provided data between 2005 and 2009. A total of 1,311 box turtles were sighted, consisting of 606 eastern box turtles, 676 ornate box turtles, and 29 turtles where species was not reported. While participants could submit data on dead box turtles, most turtles reported were alive. Most turtles sighted (58% of easterns and 63% of ornates) were female, consistent with other field studies of box turtles. Just under half of the sightings (597) were submitted by TPWD employees, with the remainder coming from citizen volunteers.

Most ornate box turtles were in the 4- to 5-inch size class, while easterns averaged somewhat larger, with a significant number in the 5- to 6-inch size class. Very few hatchling-sized box turtles were found—only 21 easterns and 9 ornates.

Box turtles were found in a diversity of habitats, with ornate box turtles being encountered most often on roads (perhaps easy locations to spot a turtle!).

Eastern box turtles sightings tend to peak in May, while sightings of ornates tend to peak in June in most regions, except the High Plains, which peak in August.

The majority of box turtles were sighted when temperatures were between the mid-70s and low 80s F. In the High Plains and Trans-Pecos, ornate box turtles tended to be seen after rain.
The greatest number of eastern box turtles were reported from the Pineywoods ecoregion, followed by the Blackland Prairies, and the Post Oak Savannah. Harris County produced the most sightings. Other top counties were Grayson, Hardin, Montgomery, Anderson and Brazos. Only eight locations had more than five eastern box turtles reported over the five-year period. Contributions by TPWD Inland Fisheries staff led the way, with more than 50 sightings near Lake Texoma.

The greatest number of ornate box turtles was reported from the Rolling Plains ecoregion, followed by the Cross Timbers, and the Gulf Coast Prairies. The top county was Cottle County where extensive research on box turtles is taking place on the Matador Wildlife Management Area, followed by Calhoun, Grayson and Harris counties. Only five locations had more than five ornate box turtles reported over the five-year period.

Conclusions

Participation in the Texas Box Turtle Survey has been excellent, with much valuable data gathered concerning the distribution of box turtles in the state. Overall, it appears that both eastern box turtles and ornate box turtles still occur throughout their historic range in the state.

One area of concern elicited by the results to date is the very low number of hatchling box turtles sighted. Only 21 young (<2”) eastern box turtles and nine young ornate box turtles were sighted. While small box turtles are more difficult to spot and the age structure of turtle populations always includes a high percentage of adults, the low level of reproduction detected warrants continued attention.

Because of the useful data collected and concerns regarding recruitment, the Texas Box Turtle Survey will continue. In particular, efforts will be made to encourage sightings from currently unsampled areas and to more purposefully survey locations with multiple sightings in order to see whether reproduction can be detected.

If you would like a copy of a more detailed report on the first five years of data, please send an email to boxturtles@tpwd.state.tx.us.
Turtles in Texas experience intense pressures from increasing human activities ranging from direct collection to habitat alteration. Accurate assessments of the impacts of these pressures on turtles require monitoring data for comparison. Modeled after the highly successful Texas Nature Tracker programs, the Fort Worth Zoo developed a Texas Turtle Watch program in 2010 to collect data on three species particularly impacted by commercial harvesting. By partnering with personnel from the Texas Parks and Wildlife Department, Master Naturalists, Texas State University, Turtle Survival Alliance and the University of Texas at Arlington, Fort Worth Zoo staff have developed a Texas Turtle Watch methodology and training curriculum that can be used with Fort Worth Zoo program participants and with citizens statewide. The development of the program and all materials was funded by a grant from the Texas Parks and Wildlife Department.

Using Texas Turtle Watch curriculum activities, Texans learn to identify the program’s focus species: red-eared sliders, river cooters and soft-shell turtles, since they are threatened by commercial trade and are easy to identify. By collecting data on these species over time, the Watch program will contribute directly to species population knowledge (species abundance, abundance by sex and age class, population trends over time). In addition, the zoo-based pilot program will recruit volunteers of all ages and interest levels to gather scientific data and experience the outdoors on both private and public lands.

To date, Fort Worth Zoo staff members have trained more than 500 certified Texas Turtle Watchers. These Watchers have reported data on more than 350 turtles in counties across the state including Tarrant, Dallas, Comal, Brazoria, Limestone, Ellis, Walker, Polk, Tyler and Harris. Organizations such as the Houston Zoo and Trinity River Audubon Center are hosting their own Texas Turtle Watch trainings to help expand the program even further. Summary data from these sightings will be submitted directly to Texas Parks and Wildlife biologists to help focus conservation efforts statewide.

The Texas Turtle Watch Coordinators are dedicated to providing an outdoor experience for citizens of all ages while gathering scientific data that will contribute to knowledge about turtle populations in Texas.

If you would like to learn more about the program or to receive a Turtle Watch training program for your group, please contact Texas Turtle Watch, c/o Fort Worth Zoo, 1989 Colonial Parkway, Fort Worth, TX 76110, lwise@fortworthzoo.org or ahackney@fortworthzoo.org
Half way through the year, 2011 is looking like an interesting year for hummingbird watching in the Lone Star State. As of this writing, we have reports of 12 species from various locations across the state, and the peak season for some species has yet to come.

Since its introduction in 1994, Texans have volunteered more than 430,000 hours providing data on hummingbirds and their habitats in 189 counties across the state. Of course, this means that we still have 65 counties from which we have not received data, and these counties are generally in the Panhandle and northeast Texas.

The roundup is providing data that is helping our understanding of these birds grow. Over the 16 years for which data has been analyzed, we have had Rufous Hummingbirds somewhere in Texas at least once each month. While these birds remain primarily a fall and winter migrant, we cannot rule out a Rufous Hummingbird just because the season is wrong. We have found that White-eared Hummingbirds are now nesting in west Texas, and that Broad-billed Hummingbirds are nesting again after several decades with no recorded nests. We are learning about what makes good hummingbird habitat too. If you have not seen it, take a look at Dr. Brent Ortego’s article at www.tpwd.state.tx.us/newsletters/eye-on-nature/2010fall/page2.phtml#f for an interesting perspective on what hummingbirds are using during the winter months. This article has made me re-think what “hummingbird habitat” looks like.

If you are not already involved in the Hummingbird Roundup, it is never too late to start. Forms can be found at www.tpwd.state.tx.us/publications/pwdforms/media/pwd_0029_w7000_tx_hb_rndup_bkyd_survey_09_11.pdf