The Wild Side!

May 2016

More than 700 species of plants and animals, including this great horned owl, were reported during Oklahoma's spring virtual BioBlitz! Learn more about the project and which species were reported at iNaturalist.org.

Upcoming Events

Oklahoma Native Plant Society "Weeding"
May 27, 2016
Martin Park Nature Center, Oklahoma City

The ONPS partnered with Martin Park Nature Center and planted a big patch of native plants for pollinators a few weeks back. But as with all new gardens, the weeds are trying to muscle in. Join them for the weeding from 6:30-8 p.m.

Selman Bat Watch Registration
May 31, 2016

The registration form will be available at wildlifedepartment.com beginning May 31. Successful applicants will be notified by email by 9 p.m. June 14. Forms must be postmarked by U.S. Mail by June 10.

Hit the Trail: Gloss Mountains State Park

The Great Plains Trail of Oklahoma has been directing nature enthusiasts to beautiful landscapes, scenic drives and wildlife-watching destinations in western Oklahoma since 2006.

Though a challenging climb, the views on top of the mesa are well worth it - and several benches are stationed along the trail so you can take a breather! Once on top, the walking is easy and you can explore the mesa and overlook the valley floor and Lone Peak Mountain. Bring along a pair of binoculars to watch for raptors and a camera to snap a shot of the sunflowers breaking out of the rocky ground or in case you happen upon a collared lizard basking near the benches.

Gloss Mountain State Park is just one of the many destinations located on the Great Plains Trail of Oklahoma's Gloss Mountains Loop. Make the most of your time in this historic and scenic area by planning your trip at greatplainstrail.com.

We'll showcase other destinations along the Great Plains Trail this summer on Facebook at Jena Donnell, Wildlife Diversity Specialist.

Species Profile: Cardinal Shiner

For stream's biologists, the flash of a male cardinal shiners' red fins and belly during springtime sampling is a great sign; indicating a clean, healthy stream. In fact, this four-inch fish is considered one of the most intolerant fish species of poor water quality in our state.

The vibrant red stripes of the male cardinal shiner are only seen during the fish's breeding season (typically May), but are nonetheless responsible for the scientific name, Luxilus cardinalis. ("Cardinalis" is Latin for "red.") In addition to their intense coloration, breeding males also develop "tubercles," or bumps of skin, from the tip of the nose to the forehead - as seen in the above photo. These bumps help males maintain contact with females during spawning and may even aid in nest defense. Outside of the breeding season, males more closely resemble females when they fade to olive-brown. Both males and females have silver sides with a broad black stripe in the middle.

Cardinal shiners are related to the similar appearing duskystripe shiner. The two species were thought to be the same fish until 1988. Both species eat aquatic plants, algae and aquatic and terrestrial insects.

The colorful cardinal shiner is native to the four-state area of southwestern Missouri, northwestern Arkansas, eastern Kansas and northeastern Oklahoma. The Sooner State encompasses more than 25 percent of this species' total range. Here, schools of cardinal shiners can be found in small streams and moderately large rivers. They are restricted to clear, gravel-bottomed streams in the Ozark Highland and Boston Mountain ecoregions and seem to prefer permanently flowing waters. These fish are best appreciated when spotted snorkeling, especially during the breeding season.

Some Streams with Historic Cardinal Shiner Records:

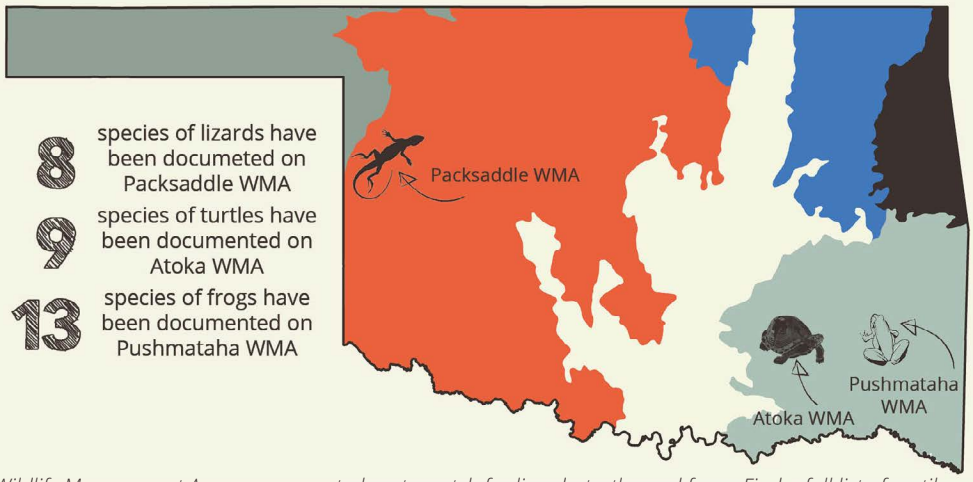
Baron Fork
Brush Creek
Buffalo Creek
Five Mile Creek
Flint Creek
Fourteen Mile Creek
Honey Creek
Illinois River
Park Hill Creek
Peacheater Creek
Peavine Creek
Sager Creek
Saline Creek
Sallisaw
Shell Branch
Snake Creek
Spring Creek
Sycamore Creek
Tyner Creek

The Wildlife Department's Stream Team plans to conduct repeated, long-term fish community monitoring surveys. In the process of surveying all the fish in the system they will also learn about fish species of greatest conservation need, including the cardinal shiner. Learn more about these efforts on the ODWC - Stream Team Facebook page.

Article by Tony Rodger, Streams Program Biologist

Looking for Lizards Turtles and Frogs on Wildlife Management Areas

From the sandy prairies of Packsaddle WMA to the Ouachita Mountain foothills of Pushmataha WMA, Oklahoma offers a wide range of wildlife experiences, including watching reptiles and amphibians. Whether they are darting under nearby leaf litter, sliding into ponds with a splash or leaping to safety with a squeal, lizards, turtles and frogs can be found with relative ease at many Wildlife Management Areas.



Wildlife Management Areas are a great place to watch for lizards, turtles and frogs. Find a full list of reptiles and amphibians documented on Packsaddle, Atoka and Pushmataha WMAs at wildlifedepartment.com.

Looking for Lizards at Packsaddle WMA

Located in the mixed-grass prairie, Packsaddle WMA's sandy grasslands and shrublands are prime habitat for lizards. In addition to providing rocky gypsum outcrops for these scaled creatures to bask, Packsaddle WMA also offers bare ground between grass clumps that allows the lizards to freely move while foraging or escaping predators

Lizards can be found across the WMA, but are frequently spotted running along the sandy roadways in mid- to late morning. They can also be found by carefully watching leaf piles under shinnery oak mottes and brush piles for movement.

Eight species of lizards have been documented at Packsaddle WMA. Visit wildlifedepartment.com to learn more about these lizards, including the Texas horned lizard, and the many other amphibians and reptiles documented on this sandy WMA.

Traipsing After Turtles at Atoka WMA

A mix of rocky hillsides, hardwood forests, uplands and ponds, southeastern Oklahoma's Atoka WMA provides habitat for a diversity of amphibians and reptiles, including turtles.

Aquatic turtles can be observed basking on rocks and logs near the edge of the WMA's many creeks and ponds as well as around Bluestem Lake. When approached, they often slide to the safety of the water. To get a good look, use binoculars from a distance taking note of the size and color of the turtle as well as the profile of the shell.

More terrestrial turtles can be found by watching and listening for movement in wooded areas. Along with aquatic turtles, these terrestrial turtles can also be seen along roadsides in spring as they search for places to lay eggs. Watch for these roving turtles on spring mornings or after summer rainstorms.

Nine species of turtles have been documented at Atoka WMA. Visit wildlifedepartment.com to learn more about these reptiles, including the three-toed box turtle and the many other herps documented on this WMA. April, May, June and September are recommended times to watch for amphibians and reptiles on Atoka WMA.

Continued on Page 4

Following Frogs at Pushmataha WMA

Though mountainous, Pushmataha WMA offers enough water sources to attract 15 species of amphibians. The Kiamichi River slices into the north boundary, two smaller creeks - Peterson and Caney Creek - bisect the area and more than 50 ponds pepper this forested WMA. This wide range in habitat provides ample places for frogs to catch insects, attract mates and lay eggs.

While some species of frogs are secretive, many can be spotted at night along the edge of a stream or pond bank. Find their general location by honing in on the loudest chorus, then shining a flashlight around the water's edge until you find an individual frog. Careful observation of size, coloration and patterning can help you identify individual species, but many frogs can be easily identified by call alone.

Twelve species of frogs have been documented at Pushmataha WMA. Visit wildlifedepartment.com to learn more about these amphibians, including the pickerel frog and the many other herps documented on this WMA.

Turn to wildlifedepartment.com to learn about the reptiles and amphibians documented on Wildlife Department lands by Dr. Laurie Vitt, or purchase a copy of "A Field Guide to Oklahoma's Amphibians and Reptiles" by Greg and Lynnette Sievert to learn about 157 species of amphibians and reptiles found in the state.

The Plants of Pontotoc Ridge Preserve

Managed by The Nature Conservancy, this Preserve is an Arbuckle Plains property located on top of the Arbuckle-Simpson Aquifer, providing critical recharge for the aquifer.

Located 25 minutes south of Ada, The Nature Conservancy's Pontotoc Ridge Preserve showcases rolling hills, limestone outcrops, springs and streams. And while the grasslands, shrublands and woodlands typical of the Cross Timbers ecoregion are present, the Preserve doesn't have the post oak/blackjack oak habitats botanists and managers expected. "The Preserve is still in the Cross Timbers ecoregion, it just doesn't have any 'cross timbers'," said Amy Buthod, botanist with the Oklahoma Biological Survey.

Contracted to The Nature Conservancy to search the 2,900-acre Preserve for every species of grass, cactus, flower, vine, shrub and tree, Buthod and fellow Oklahoma Biological Survey botanist Bruce Hoagland made monthly trips to the area for two growing seasons. After 16 trips between March 2013 and October 2015, the team had documented 565 individual species of plants, as well as 49 varieties or subspecies. Fourteen of those plants are considered rare and are "tracked" by the Oklahoma Natural Heritage Inventory, a branch of the Biological Survey. The last plant survey, conducted by Forrest Johnson and Pat Folley three years after the Preserve was purchased in 1994, revealed only 399 species, two of which were tracked by the ONHI. While The Nature Conservancy has indeed made improvements to the area; conducting prescribed burns, removing livestock grazing pressure and combating invasive plants like sericea lespedeza; the 53.9 percent increase in plant species can also be attributed to a 1,000-acre addition to the Preserve, as well as an increase in survey intensity and available resources.

Buthod and Hoagland used the plant list generated in the 1997 Pontotoc Ridge Preserve survey to guide their efforts; the team checked-off species previously documented and collected vouchers of those that hadn't yet been recorded. The vouchers - plant stems, leaves and flowers that are stored in the Robert Bebb Herbarium - are evidence of the survey and give botanists the ability to confirm the presence or absence of the plant in future survey efforts.

Continued on Page 5

The Plants of Pontotoc Ridge Preserve, Continued:

Buthod and Hoagland used the plant list generated in the 1997 Pontotoc Ridge Preserve survey to guide their efforts; the team checked-off species previously documented and collected vouchers of those that hadn't yet been recorded. The vouchers - plant stems, leaves and flowers that are stored in the Robert Bebb Herbarium - are evidence of the survey and give botanists the ability to confirm the presence or absence of the plant in future survey efforts.

The Oklahoma Biological Survey is mandated by the State of Oklahoma to survey plant and animal communities. "It's great that The Nature Conservancy and its donors have sponsored this study," said Buthod. "Our surveys have documented several sensitive plants, as well as a distinctive shrubland." Though common in the Edwards Plateau region of Texas, this particular shrub community hadn't before been described in Oklahoma.

In addition to the new shrubland and 14 rare plant species, including prairie crabapple, Oklahoma penstemon and spring coralroot, Buthod and Hoagland also found more common plants like Indian blanket, blue-eyed grass and antelopehorn milkweed.

Results of the survey were presented during a recent seminar and hike hosted by The Nature Conservancy. Forty-seven plant enthusiasts attended the lecture and explored the Preserve late last month. Find other opportunities to visit this limited access Preserve at nature.org.

Now that the plants of Pontotoc Ridge Preserve have been surveyed, the team of botanists will begin studying plants on The Nature Conservancy's newly-acquired Oka' Yanahli Preserve.

The Wild Side e-newsletter is a project of the Oklahoma Department of Wildlife Conservation Wildlife Diversity Program. The Wildlife Diversity Program monitors, manages and promotes rare, declining and endangered wildlife as well as common wildlife not fished or hunted. It is primarily funded by the sales of Department of Wildlife license plates, publication sales and private donors. Visit wildlifedepartment.com for more wildlife diversity information and events. For questions or comments, please email jena.donnell@odwc.ok.gov