Registry News

From the Oklahoma Natural Areas Registry Program

Anniversary Issue
Winter 1999

Bald eagle

Least tern

The Nature Conservancy®
Saving the Last Great Places

A decade of protection

Bald eagle

The Oklahoma Natural Areas Registry Program is proud to be celebrating its tenth anniversary in 1999.

This program is a cooperative effort between the Oklahoma Chapter of The Nature Conservancy, the Oklahoma Department of Tourism and Recreation, and the Oklahoma Natural Heritage Inventory. The Oklahoma State Register of Natural Heritage Areas was created by the Oklahoma legislature in 1984 to identify areas with unique natural features and to encourage their voluntary protection by Oklahoma's private landowners. The Oklahoma Natural Areas Registry Program is currently operated by the Oklahoma Chapter of The Nature Conservancy.

In Oklahoma we are fortunate to have a variety of registry sites that reflect our state's biodiversity. The cover of this publication reflects the diversity found along the Arkansas River. Many stretches of this river, and others like it, are used as nesting areas during the spring and summer months by the endangered Least tern. Then during the winter months the Bald eagle uses much of the same habitat. The significant feature and common bond for these birds is the *land* that is protected for their use.

Other sites across the state representing Oklahoma's diversity include the gypsum cave communities of northwestern Oklahoma, the bogs and seeps in the southeastern part of the state, along with the prairies and crosstimbers of central Oklahoma. Oklahoma's natural diversity *is* well represented. Yet we are always striving to protect more of Oklahoma's natural landscapes.

One of our first registrants in 1990 was Walter Vanderburg of Norman. He helps protect the endangered Least Tern along the Canadian River. Our most recent addition to the Registry Program is a landowner in northeastern Oklahoma with a cave system that provides important habitat for endangered Gray bats.

As a Registry participant you are part of a select group of landowners making a significant contribution by voluntarily protecting the natural area you own. You'll be happy to know that you are joined by a growing number of other landowners across Oklahoma who understand, as you do, the great importance of not losing our state's diverse natural heritage. In the coming months we look forward to revisiting our current registrants and meeting and working with new private landowners who wish to register their natural areas.

This particular volume of the registry newsletter is an anniversary issue. Our goal for this issue is to highlight a variety of registry sites across Oklahoma, the elements they protect and of course the registrants who make this program possible. The registry sites, which stretch from the panhandle to the southeastern corner of the state, are a direct reminder of Oklahoma's diverse landscapes and the life they support.

Conservation Partners

The Oklahoma Natural Heritage Inventory, a program of the Oklahoma Biological Survey, was established by the state legislature in 1987 to serve as a centralized repository for information on Oklahoma's rich and diverse natural heritage. The Heritage Inventory maintains a dynamic database of the best scientifically based information on biodiversity within the state to meet the changing needs of citizens, organizations, and government agencies in the state, and to assist in wise resource use, management, and conservation planning.

The Oklahoma Natural Heritage Inventory is an important partner to the Oklahoma Chapter of The Nature Conservancy. The Natural Heritage Inventory provides essential information and services including environmental impact assessment, resource management, and land protection. Environmental impact assessments allow land-use decisions to be made utilizing sufficient information regarding important biological resources (plants, animals, and plant communities). Decisions made by well-informed individuals and organizations helps keep these resources from being inadvertently damaged or destroyed. Utilizing the information from the Natural Heritage Inventory allows us, the Oklahoma Natural Areas Registry Program, to concentrate on vital biological features that deserve priority in conservation, protection, and management.

Oklahoma's Natural Area Sites

Purple-leaved Willow Herb: *Epilobium coloratum*

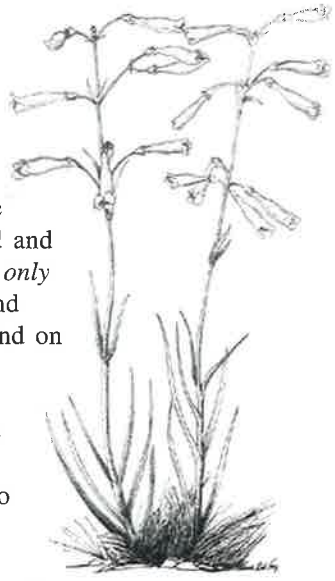
While there are historical accounts of this plant at particular sites in eastern Oklahoma, in recent years it has become very difficult to find. The purple-leaved willow herb is listed with some Oklahoma agencies as having no known sites. The Oklahoma chapter of The Nature Conservancy is fortunate to have a registry site that has this rare plant. The Folley Farm in Noble County has a small population of this plant. It is carefully monitored and attended to by the property owners, J.W. and Pat Folley.

This member of the Evening Primrose family is a perennial and is typically found in swampy meadows or wet ground along streams and ditches. It usually has numerous small flowers with four petals that are pink or whitish in color. Oklahoma is at the southern edge of this plant's natural distribution.

Gordon and Macsene Biswell on their property.

Oklahoma beardtongue:

Penstemon oklahomensis



Six registered areas protect the Oklahoma beardtongue. They include Arlington Cemetery, Byars Back Yard, Dance Creek-Kochick Homestead, Prague, Stratford and Kaufman Meadow. This striking plant occurs *only* in Oklahoma along a narrow north-south band through the central part of the state. It is found on open native prairies which have not been plowed or in open woodlands. The major threat to this plant is the conversion of native prairies to cropland.

The Oklahoma beardtongue is related to the snapdragon and foxglove. It produces attractive white flowers in late spring. These flowers appear in clusters (racemes) at the top of the stem. Each flower is about one inch long, with fused petals with the outer edges of the petals flaring out. Bees pollinate these flowers and are important for the plant's long term success. Another important means of ensuring the success of this plant is the restriction of mowing until after mid-summer when the seeds have matured and fallen into the soil.

Freeman's Yucca: *Yucca louisianensis*

Most people are familiar with the Yucca plant. It has long been a favorite ornamental plant due to its drought tolerance, heartiness, and white flowers that are produced in late spring. Throughout Oklahoma there are only three species of native Yucca. Of those the Freeman's Yucca is noteworthy because of its slightly smaller size, its less rigid leaves as compared to other Yuccas, and its branched flowering stalk. Yuccas are well adapted to drought due to a tap root that can easily reach many feet in length.

Historically the Plains Indians used the fiber of the Yucca plant's leaves and the root was used to make soap. The spiny tip of the leaf was used as a needle, often with the fibers still attached serving as the thread. Gordon and Macsene Biswell protect this plant at their Triple Creek Wildlife Refuge.

Prize Winning Presentation

The Nature Conservancy relies on its members to "spread the word" about our work. Nowhere is this better illustrated than in the following article. The following is a presentation given by Waco Webb of Haskell, Oklahoma, to his Muskogee County 4-H contest in April 1994. Waco received the first place prize for this presentation.

"First, I would like to introduce you to a special bird called a Least tern. I'm Waco Webb with the Haskell Junior 4-H Club.

This bird is special because it is an endangered animal. In Oklahoma, there are only 1,000 of these birds left.

The Least tern looks kind of like a sea gull and is actually a member of the gull family. They live on the river where they hunt, but rarely swim.

I came to know this bird through an organization called The Nature Conservancy. The purpose of this program is to protect plants and animals and their environment. About a year ago, some men came to our house from The Nature Conservancy. They wanted to observe some Least terns on the river on some of our property. Their job was to count the number of birds they saw.

A few weeks later, a lady from The Nature Conservancy came to visit our place. She and my Dad rode horses to where the Least terns were nesting. She told us that this area qualified to become a registered preserve with The Nature Conservancy. My family and I gladly agreed to help the birds in any way. This agreement says that we will try to protect the area for the Least terns. The lady also told us it was a wintering site for Bald eagles. So this was an important area. Our job was to keep people away from the area so they wouldn't disturb the nests.

We even got to name our preserve. We named it "Yahola Least Tern and Bald Eagle Preserve." Yahola came from the name of an old town that used to be there by the river.

Often, in the mail we receive magazines from The Nature Conservancy. They tell us about different animals they are trying to protect. You may have heard of the Tallgrass Prairie Preserve. This is a preserve near Pawhuska that was recently on national television. They turned loose 300 bison, hoping the herd will increase to 1800.

Waco Webb, on the right, with his mother Rose Anna and younger sister, Leanna.

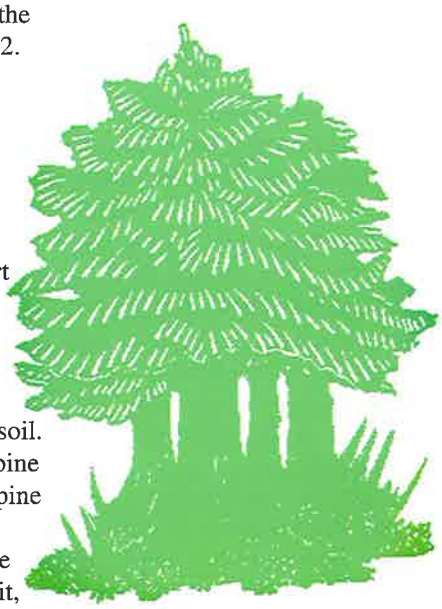
I have also learned that The Nature Conservancy works to protect other endangered animals in Oklahoma like bats and alligators.

If you think you may live in an area that could be a habitat for an endangered animal, I will be glad to help you get in touch with The Nature Conservancy. "

Waco is the son of Roy and Rose Anna Webb. He has a younger sister, Leanna.

Oak-Pine forest

Rev. R. Don Hall, of Wharton, Texas, has had five acres in the Registry Program since 1992. Located in LeFlore County, these five acres contain a prime example of the Oak-Pine forest that is found in southeastern Oklahoma.



The Oak-Pine or Oak-Hickory-Pine forests are part of the larger Oak-Hickory forest association which dominates North America's deciduous forests. Pines are especially suited for porous soil.

In the south, loblolly pine (*Pinus taeda*) and shortleaf pine (*P. echinata*) predominate. The key to maintaining these pine stands is fire. Without it, the pines are eventually replaced by hardwood tree species.

Black-tailed prairie dog:

Cynomys ludovicianus

In the 1800s, prairie dog populations covered millions of acres in Oklahoma. Today the Black-tailed prairie dog is found mainly in the Oklahoma panhandle at a variety of small sites.

Statewide, the prairie dog is fighting a tough battle to remain part of the Oklahoma landscape. Data compiled by the Oklahoma Natural Heritage Inventory between 1962 and 1996 shows a drastic reduction of acres occupied by these animals, with the exception of a slight increase in Texas County. Currently, the ninth largest prairie dog town in Oklahoma is protected through the Registry program. In Major County, the Houk Prairie Dog Town covers approximately 73 acres. It is owned by Eric Helveston of Broken Arrow, Oklahoma.

Prairie dogs earned their names due to the barking calls they make to warn each other of predators. Prairie dogs are actually ground-dwelling squirrels. These highly social animals live in extensive burrow systems called colonies or towns. Their "towns" may contain several thousand individuals. The mound entrances of the towns serve many purposes including keeping water out of the burrow, as lookout posts, and as a ventilation system.

While the burrow system provides shelter for the prairie dogs and a variety of insects, the towns as a whole is important to a variety of other animals including moles, cottontail rabbits, jack rabbits, kangaroo rats, pocket gophers, deer mice, coyotes, foxes, raccoons, badgers, skunks, bobcats, and bison. Two animals that are most dependent upon prairie dog towns are the burrowing owl (which is greatly reduced in numbers) and the Black-footed ferret (now believed to be extinct in Oklahoma).

The Black-tailed prairie dog is most often found in shortgrass prairie habitat. It is able to live on rangeland used frequently by cattle. In fact, overgrazing may initially help with the establishment of new colonies and some grazing may be necessary to maintain suitable prairie dog habitat. The prairie dog's diet consists mainly of grasses, forbs, and some roots.

Black-tailed prairie dog

Mexican free-tailed bat:

Tadarida brasiliensis mexicanus

The Mexican free-tailed bat is one that leaves a lasting impression. In northwestern Oklahoma from June through September, large populations of this bat provide an amazing show each night as they leave their roosts for feeding. The large populations that spend their summers in northwestern Oklahoma are primarily nursery colonies. One such cave in Major County is home to an estimated four million bats. On any given summer evening, a column of bats exits the cave entrance in a steady stream for well over five hours. The bats feed primarily on small moths which are caught during flight.

Just as important as the bats themselves are the cave systems these bats use as summer roosts. Many caves in northwestern Oklahoma serve as an important link in a system of roosts used by migrating free-tailed bats from northern states.

Registry sites that contain roosts for the Mexican free-tailed bat include Vickery bat cave in Major County and another site in Greer County.

Bald eagle:

Haliaeetus leucocephalus

This magnificent bird is one that is not easily forgotten once you have seen it. Its scientific name literally means "white-headed sea eagle" in Latin. The term "bald" originally meant "white-headed." Male and female eagles are identical in color. The adults have the typical white head and tail while the juveniles are either solid or a mottled brown. Both the dark eyes and beak of the juveniles turn bright yellow as they mature. Adults are 3 to 3.5 feet tall and weigh 8 to 15 pounds. Their 6.5 to 7 foot wingspan makes them one of the largest birds of prey in the world. As with many predatory birds, the adult females are larger than the males. While fish comprise a major portion of the bald eagles' diet, they will also consume waterfowl and carrion. Typical life expectancy of wild birds is 30 years but some have lived for 50 years in captivity.

The Bald eagle was once listed as an endangered species, but in recent years has been downgraded from endangered to threatened. This designation still affords the bird much protection under federal and state laws. For example, the Eagle Protection Act, which protects both bald and golden eagles, combined with the Criminal Fines Improvement Act of 1987, can cause violators to spend one year in jail or be fined $100,000 on a misdemeanor charge. A second violation is automatically considered a felony with two years imprisonment and a $250,000 fine. It is illegal to pursue, harm, harass, take or attempt to take, possess, sell, purchase or transport either eagles, eagle parts or their eggs.

Restoration of the Bald eagle in Oklahoma and other states has been aided by the work done by the George M. Sutton Avian Research Center in Bartlesville, Oklahoma.

Currently there are 14 registry sites on 2,795 acres across Oklahoma that actively protect the Bald Eagle. Most of these sites are found along the Arkansas or Canadian Rivers and numerous lakes across the state. Registrants protecting the bald eagle are listed in the table to the right. Bald eagle populations are closely monitored during the winter months by registrants and volunteers. While many individual birds migrate to Oklahoma during the winter months, some do become permanent residents.

Bald eagle

Bald Eagle Registrants

Name	*Classification*	*Location*
Noah & Betty Easton	individuals	Bixby
Edward & Carol Farris	individuals	Sand Springs
Public Service Company of Oklahoma	corporation	Tulsa
River Parks Authority	agency	Tulsa
Sand Springs Park and Recreation Dept.	agency	Sand Springs
Tulsa Audubon Society	agency	Tulsa
Tulsa County Park Department	agency	Tulsa
U.S. Army Corps of Engineers	agency	Keystone Dam
The Webb Family	individuals	Haskell
Lee & Marcia Elliott	individuals	Fort Gibson
U.S. Army Corps of Engineers	agency	Fort Gibson Dam
Ben & Teresa Holder	individuals	Perkins
Anonymous	individuals	
Anonymous	individuals	

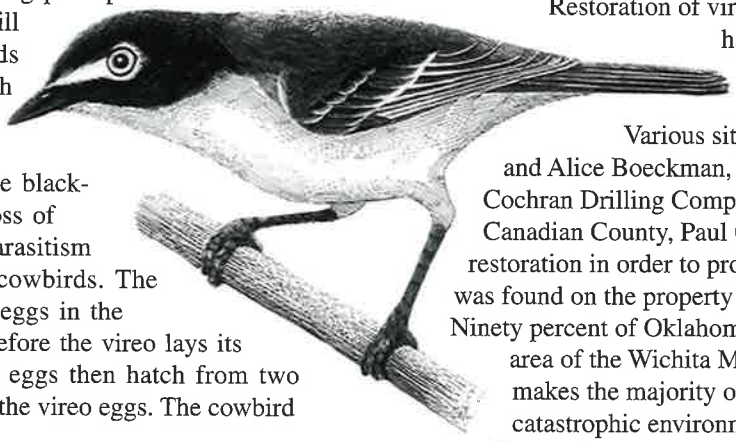
Black-capped vireo:

Vireo atricapillus

The Black-capped vireo is a rare summer resident of Oklahoma and has been a federally listed endangered species since 1987. This bird is a documented resident of Dewey, Blaine, Caddo, and Murray counties and has been sighted in many other Oklahoma counties. It visits Oklahoma from mid-April to mid-September.

This small bird (four inches) prefers scrub oak/juniper thickets on dry, rocky hillsides. Vireos construct interesting nests, weaving basket-like structures that are suspended from branches. The nests are made from a variety of materials including leaves, fibers, and spider cocoons. Vireos are very selective regarding the sites they select for nesting. Where there is at least a square mile of suitable habitat, the birds tend to nest in loose colonies, with 10 to 12 widely spaced nesting pairs per colony. Females will produce two broods per year, often with different males.

Black-capped vireo



The largest threats to the black-capped vireo are loss of habitat and nest parasitism by brown-headed cowbirds. The cowbirds lay their eggs in the vireo's nest days before the vireo lays its eggs. The cowbird eggs then hatch from two to four days before the vireo eggs. The cowbird nestlings quickly outweigh the vireos and smother them. No vireo chicks will survive where a cowbird occupies a vireo nest.

Restoration of vireo habitat in Canadian and Blaine counties has been especially important. The Blaine county population is the furthest north vireo population remaining.

Various sites in Blaine County are protected by Douglas and Alice Boeckman, Brenda Wray, Ebbie Wray, Viersen and Cochran Drilling Company, and U.S. Gypsum Corporation. In Canadian County, Paul Odom's property has undergone extensive restoration in order to provide habitat for this bird. Historically the bird was found on the property and it is expected to return in the near future. Ninety percent of Oklahoma's black-capped vireos are located in a small area of the Wichita Mountains in southwestern Oklahoma. This makes the majority of the vireo population very vulnerable to catastrophic environmental problems, disease, and other mishaps. Recovering the black-capped vireo population in Canadian and Blaine counties will greatly reduce such risks.

American burying beetle

American burying beetle: *Nicrophorus americanus*

The American burying beetle is a federally listed endangered species. It is found in a few eastern counties of Oklahoma. The registry site for this beetle is in Latimer county but in recent years the beetle seems to be more abundant in Cherokee and Muskogee counties. The reason for decline of this species is unknown but it is speculated to be related to pesticide use, declining prey base, and disease.

These beetles are bright orange with black spots and they prefer open forest and mixed prairie habitat. They are called burying beetles because they bury carrion such as mice and other small mammals. The adults and larvae are scavengers on carrion and decaying vegetation. Working together, the adults bury small carcasses or push earth out from underneath a carcass. They then mate and lay eggs on the carcass. The larvae feed on the carcass until they pupate. These beetles are highly social with complex parental care. Each individual beetle lives only one year.

In recent years there have been captive breeding studies at the University of Oklahoma. The young raised in lab settings are later released at sites where the parents were collected.

Least tern:

Sterna antillarum

The Least tern is a migratory bird related to gulls. It is easily identified by its slender size, long narrow wings, forked tail, and pointed bill. Many people enjoy watching this species because of its hovering ability while it is fishing along rivers and inlets. The Least tern is the smallest of all the North American terns, measuring about nine inches in length.

The male and female Least terns look alike. In the summer they can be identified by their black cap and nape, white forehead, black outer feathers and yellow bill with a black tip. During other seasons, Least terns have gray backs, white underparts, orange-yellow legs and feet, and short, gray tails.

There are three distinct populations of least terns in the U.S.--- the eastern, California and interior populations. In Oklahoma, the Least tern nests on salt flats at the Salt Plains National Wildlife Refuge, and on high barren sandbars and islands on the Arkansas, Canadian, Cimmaron, and Red rivers.

Least terns winter off the northern coast of South America, arriving in Oklahoma in late April to early May. They typically lay two to three eggs per clutch in May or June. Rearing of the young birds lasts through August. Then, in late August or early September, the adults and young birds migrate to Central and South America.

Threats to the Least tern populations include loss of suitable nesting habitat due to impoundment or damming of their nesting area's water source, and through straightening and dredging of the river systems. Impoundments eliminate the spring floods which maintain sandbars. Fluctuations in river water levels, natural or man-made, can cause nests to be flooded out or exposed to predators when the water level drops too low.

Least tern

Currently, there are four registered natural areas in Oklahoma that provide habitat for nesting Least terns including Canadian River Least Tern Preserve, Yahola Least Tern and Bald Eagle Preserve, Arkansas River Bald Eagle and Least Tern Preserve, and Horsethief Canyon. The Canadian River Least Tern Preserve is an approximately 20 mile section of the Canadian river south of Oklahoma City between Interstate 44 and the town of Purcell. Twenty private and public landowners are involved in this preserve which contains sandbars and islands used by these birds.

Stephen Nielsen, who monitored the preserve this past summer, reported that nine nesting colonies were observed with at least 55 pairs of terns. There were 70 fledglings produced. Every year the Least tern colonies are posted with warning signs and the area is monitored by volunteers and the U.S. Fish and Wildlife Service. Major concerns for the Preserve include the use of off-road vehicles on or near the nesting colonies.

Ozark cavefish

Ozark cavefish: *Amblyopsis rosae*

This small fish is listed as threatened by the U.S. Fish and Wildlife Service. It is usually no more than two inches long, has practically no skin pigment, no eyes and is found *only* in cave streams. It is found in only 20 caves in northeast Oklahoma, southwest Missouri, and northwest Arkansas. Its diet consists of small invertebrates that also inhabit caves. Populations of this fish have declined due to collecting, human disturbance of caves, and water pollution.

The Oklahoma Chapter is fortunate to have a number of sites that protect these delicate fish. Some of these protected areas began as Registry sites. The caves on our newly acquired Eucha Preserve are home to the Ozark cavefish along with other cave fauna.

Ozark spiderwort:

Tradescantia ozarkana

Ozark spiderwort

Property near Fort Gibson dam and the Barber Registered Areas contain the Ozark spiderwort. This beautiful Oklahoma native is related to ornamental plants such as the Dayflower and Wandering Jew. A member of the mostly tropical Spiderwort family (Commelinaceae), it is a perennial plant that reaches a height of six to nineteen inches. It has green linear leaves with crinkled edges, and its three-petaled flowers, produced from late April through May, range in color from white to pink, rose, and lavender.

The Ozark spiderwort is native to the Ozark Mountains of Missouri, Oklahoma and Arkansas and to the Ouachita Mountains of western Arkansas and southeastern Oklahoma. It can be found on steep, rocky hillsides of limestone and sandstone in rich deciduous forests. In Oklahoma, this species is considered imperiled because it has a small number of populations distributed over a limited area. Loss of habitat through conversion of natural areas is a major threat. In Missouri, millions of these plants have been lost due to the impoundments of various dams along the White River.

Seaside alder:

Alnus maritima

Three registered areas contain the Seaside alder: Canyon Creek, Cedar Creek Tishomingo, and Pennington Creek. A member of the birch family, this alder is a many branched shrub or tree with slender spreading branches, usually 15-20 feet in height. It produces cones that are dark brown, egg-shaped, and remain attached on short stalks in clusters of up to three.

The Seaside alder grows primarily near the Atlantic coast on the peninsula of Maryland and Delaware. In Oklahoma it is found only in Johnston and Pontotoc counties along the borders of cool running streams. This tree's unusual distribution gives Oklahoma's populations a special distinction. The Oklahoma populations have been documented as being present in the state since the 1800s when a botanist named Elihu Hall came across this tree during his travels.

The Seaside alder's native populations are distributed over such small areas that loss of habitat could severely endanger the species. Potential threats include pollution of the streams and disruption of stream flow. The habitat also is threatened by any development which involves clearing and the use of herbicides within 200 feet.

Registrants protecting this exceptional Oklahoma tree include John and Mary Ellen Davis of Stonewall, Arthur and Lela Biggs, and Thomas and Vera Taylor of Tishomingo.

Prairie mole cricket:

Gryllotalpa major

This cricket is easily identified by its unusual set of front legs which resemble the front legs of a mole. Like a mole, the Prairie mole cricket uses its modified front legs to dig burrows. The front portion of each burrow has an enlarged entrance area, and the male cricket calls from there amplifying the sound he produces. This amplified call, which sounds similar to a frog, is used to attract female crickets. Courtship and reproduction takes place in spring, and during this reproductive period the male crickets do not feed. The females continue feeding during this period to prepare for the nutritional demands of egg development. These insects feed on grass, other insects, and spiders.

In 1984 the Prairie mole cricket was thought to be extinct. Based on 1990 and 1991 census data from Kansas, Oklahoma, Missouri, and Arkansas, populations of the crickets were located. According to a report on the Prairie mole cricket by Peggy Hill in 1989, insufficient data was available at that time to either support or eliminate the listing of the cricket on the endangered species list.

The primary threat to the cricket is loss of suitable habitat. Its native habitat is relatively dry prairies with tall grass of medium thickness, much of which has been lost to either agricultural or economic development. While these crickets prefer undisturbed prairie habitat, there is evidence that they will remain in prairies that are mowed for hay or only lightly grazed. Populations of the Prairie mole cricket are found in central and eastern Oklahoma. Currently there is one site in Rogers County that is part of the Registry program.

Prairie mole cricket

Ozark big-eared bat and Gray bat:

Plecotus townsendii ingens, Myotis grisescens

Scattered throughout northeastern Oklahoma are several registered areas that contain caves. They are Charley Owl, Crystal Cave and Blue Moon Cave, CZ-9, DL-1. DL-15/92 and OT-4. Several of these caves are important to Gray bats as maternity colonies, while the others are important to the Ozark big-eared bats as both maternity and hibernating colonies.

The Ozark big-eared bat has been listed as a federally endangered species since 1979. It is considered endangered due to small population size, limited distribution, and vulnerability to human disturbance. There are less than a dozen caves where it has been found, five of which are in Oklahoma.

Ozark big-eared bat

The Ozark big-eared bat does not migrate and therefore winters and summers in the Ozark mountains of northeastern Oklahoma and northwestern Arkansas. The habit of concentrating its total numbers into a few caves makes it extremely vulnerable to any disturbances. The increased popularity of cave exploration is a major threat to this and other bat species. Human disturbance during the maternity season can cause bats to abandon the cave, which can result in loss of young. Disturbance during winter hibernation can bring fatal loss of energy reserves. The bat is also threatened by loss of habitat, not only of undisturbed caves, but of surrounding forest habitat which includes forested and open areas. The forested areas provide cover for the bat and the moths on which it feeds in the open areas.

Gray bat

The Gray bat has been listed as a federally endangered species since 1976. Loss of critically important maternity caves and hibernacula through human disturbance and vandalism poses the most serious threats to Gray bats.

Numerous caves and a considerable amount of riparian forests used by these bats for foraging have been lost to urban and industrial development, agricultural expansion, reservoir, highway, powerline and pipeline right-of-way construction, cave commercialization, and improper cave gating. Gray bats have lost foraging areas due to stream water quality degradation and have suffered ill effects from pesticide use.

Dennis and Diane Potter own caves which are important sites for the Ozark big-eared bat and the Gray bat.

Ozark big-eared bat

Gray bat

The Tulsa Regional Oklahoma Grotto (TROG) has been and continues to be an important conservation partner for the Oklahoma Chapter of The Nature Conservancy. This group of volunteers installs gates in many caves and regularly monitors bat populations and the caves themselves. The gates serve two purposes, keeping unwanted people out of the caves while providing the bats with easy access to the caves. In recent years many Oklahoma Gray bat populations have significantly increased once gates have been installed in the cave entrances.

Least pipewort:

Eriocaulon kornickianum

This rare plant is one of only two species in the Pipewort family in Oklahoma. The Least pipewort earned its name due to its very small size. It typically stands only two to three inches tall and produces very small white flowers. These inconspicuous plants can be found on wet, slightly disturbed sites but are rarely encountered. The registry site for this unusual yet significant plant is in Pushmataha county.

Least pipewort

Other Important Sites

Other Registry sites that are important to the program include those that encompass specific natural communities. These sites include the Harrison Bog with its freshwater marsh and an acid hillside seep; the Humphrey Prairie in Garfield County, a mixedgrass prairie; gypsum cave communities, shortgrass prairie and mesquite savannah in Greer County; the Oakhill Savannah with its combination of crosstimbers and tallgrass prairie; Pontotoc Ridge with a combination of central bottomland forest, tallgrass and mixedgrass prairie; Tenmile Hill, a tallgrass prairie site; and Walkup Marsh in Choctaw County with its freshwater marsh and rare plants.

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Quick Facts

Crickets

- The Prairie mole cricket is North America's largest cricket at approximately 2.5 inches.

Prairie dogs

- Prairie dogs maintain the area surrounding their burrows by biting off all tall plants in the area to keep their visual field open.
- The prairie dog's various alarm calls include warnings depending on whether the enemy approaches from the ground or air, a special all-clear signal or territorial call, and a call to the dominant male for help.
- Currently there is a push from some environmental organizations to place the Black-tailed prairie dog on the endangered species list.

Bats

- Guano (bat droppings), used as a source of nitrates for making explosives during the U.S. Civil War, was mined from caves inhabited by Mexican free-tailed bats.
- Some banded Mexican free-tailed bats were found to make seasonal migrations of up to 1,000 miles or more each way.
- In the United States, Mexican free-tailed bats form the largest colonies of any warm-blooded animal.
- More than half a million of these bats live under the Congress Avenue bridge in Austin, Texas, making that bat colony the largest urban bat colony in the world.
- Columns of these bats during emergence may be visible for up to two miles and may rise to altitudes in excess of 10,000 feet.
- Some Oklahoma populations have been noted as having white fur on the throat giving the appearance of whiskers. This feature occurs only rarely throughout the rest of the range of this bat.
- It is estimated that Texas populations of the Mexican free-tailed bat consume more than 18,000 tons of insects per year.

Black-capped vireo

- The Black-capped vireo used to nest in northeastern Oklahoma.
- This particular species of vireo is among the rarest birds in North America. It is only found in Texas, Oklahoma, Kansas and Mexico.

Yucca

- The root of Yucca can be poisonous, containing saponins. On the other hand, many arthritis remedies found in health food stores contain yucca root extracts.
- The root of Yucca does make a good soap.

The Yellow fringed orchid (platanthera ciliaris) is native to southeastern Oklahoma. This stunning plant is easily recognized by its bright yellow to orange cluster of flowers. Unfortunately, these beautiful flowers make this plant highly desirable to many individuals who remove it from its natural habitat. Your voluntary protection of this plant is a vital part of conserving Oklahoma's natural resources.

Questions? Comments?
Need more information about the Oklahoma Natural Areas Registry Program?
You can contact us at:

Oklahoma Natural Areas Registry Program

The Nature Conservancy, Oklahoma Chapter

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Phone: (918) 585-1117

Fax: (918) 585-2383

Free Registry boundary signs are available for all Registry participants. They can be obtained through an Oklahoma Natural Areas Registry Program representative. The signs measure approximately 11" x 11" and are made of white plastic with green lettering, like the one to the right. If you would like signs for your property, please call the number above.