

Outdoor Oklahoma

MAY / JUNE 2024

**LET'S CELEBRATE
WILDLIFE DIVERSITY**

**Your Chance To See,
Share, And Science!**

SPECIAL PULLOUT SECTION

**Public Shooting
Range Guide**

**Review Foundation's
Many Investments in
State Conservation**

A PUBLICATION OF THE OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION



PANORAMAS



While managing Oklahoma's diverse fish and wildlife resources, and the habitats they need, we've come to realize that many hands don't just make "light work," they make conservation work. The helping hands of like-minded conservation partners stretch the Wildlife Department's resources to have an even bigger impact on Oklahoma's natural resources and the people who enjoy the outdoors. Here's a look at the diverse efforts of three of our valuable nongovernmental conservation partners.

The **Oklahoma Chapter of The Nature Conservancy** works to conserve the lands and waters on which our native plants and wildlife depend. The Joseph H. Williams Tallgrass Prairie Preserve is one of 12 places The Conservancy protects in Oklahoma. Although best known for its bison herd, other prairie wildlife such as grasshopper sparrows and regal fritillaries can be observed and photographed there.

This nonprofit charitable organization works to protect magnificent landscapes and unique biodiversity on more than 100,000 acres. From Ozark forest songbirds at their J.T. Nickel Family Preserve to ancient oaks in the Keystone Ancient Forest Preserve, and impressive views of the high plains at the Black Mesa Preserve, visitors can explore, learn, and volunteer to be a part of these important places.

The Conservancy also helps landowners conserve their properties through easements and has been a strong advocate of native landscaping, prescribed fire, and protecting aquifers and watersheds. It has partnered with ODWC to conserve the unique fauna of caves and springs, and to restore oak woodlands and prairies.

Since opening in 1902, the **Oklahoma City Zoo** has connected people with the world's vanishing wildlife and wild places. Its award-winning Oklahoma Trails exhibit allows visitors the chance to encounter nearly 100 species native to Oklahoma! These include mountain lions,

American alligators, greater roadrunners, alligator snapping turtles, whooping cranes, and river otters.

The zoo is a leader in monarch conservation efforts and helps schools create pollinator gardens. The zoo assists with habitat projects, partners with ODWC to conduct bird and bat surveys, collaborates with ODWC on conservation involving rare reptiles, amphibians, and birds, and helps track the Texas horned lizard population at Tinker Air Force Base.

The **George Miksch Sutton Avian Research Center** works to find conservation solutions for birds and the natural world through science and education. The center has long been dedicated to the conservation of bald eagles in Oklahoma. Through its captive-rearing program, 97 bald eagles were released into Oklahoma in the late 1980s. During the past 40 years, Oklahoma's nesting bald eagle population has grown from less than five pairs to more than 300!

The Center has started captive breeding programs to boost other wild bird populations including the endangered Attwater's prairie-chicken, a coastal Texas subspecies of the greater prairie-chicken, and the endangered masked bobwhite, an Arizona and Mexico subspecies of the northern bobwhite. The Center is the Oklahoma coordinator for the national Breeding Bird Survey, and it has partnered with ODWC on the Oklahoma Breeding Bird Atlas, the Winter Bird Atlas, and research into Henslow's sparrows, prairie-chickens, and other prairie birds.

ODWC is honored and thankful to work with these, and many other, important partners in conservation. ♡

Mark Howery

Mark Howery,
Senior Biologist Wildlife Diversity, ODWC

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ON THE COVER:

The eastern collared lizard, often called the mountain boomer, is Oklahoma's state reptile. It's easily distinguished by its relatively large size,

large head, bright coloration, a tail twice the body's length, and a distinct black collar on the neck. This lizard is but one example of Oklahoma's ample wildlife diversity, which we celebrate in this issue of Outdoor Oklahoma. (Photo by Stephen Ofsthun.)

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OKLAHOMA



OFF THE BEATEN PATH

NOTES ON WILDLIFE • OUTDOOR TIPS • READERS' LETTERS • ENVIRONMENTAL NEWS
COMPILED BY DON P. BROWN

WIN BIG WITH OUTDOOR OKLAHOMA ADVENTURES RAFFLES

The newest Outdoor Oklahoma Adventures raffles have been announced, and raffle tickets are available now!

The four raffle adventures being offered this year are:

- A premier three-day private-land elk hunt in southwestern Oklahoma by Deer Time Ranch. (You're eligible to win even if you've been drawn for an elk hunt through ODWC's Controlled Hunts Program).
- A two-day turkey hunt with Rio Rojo Outfitters in southwestern Oklahoma.
- A fishing trip with the legendary Jimmy Houston at his south-central Oklahoma ranch.

- A lifetime combination hunting and fishing license.

Outdoor Oklahoma Adventures raffle tickets are \$10 each, or \$30 for a bundle of five tickets. Anyone can enter, whether or not you have a hunting or fishing license, and there is no limit to the number of tickets you can buy.

All proceeds go directly to the Wildlife Department to fund conservation and public hunting and fishing opportunities for everyone.

The last day to buy tickets is May 20. But why wait? Click on the code to get your tickets to put your name into these fantastic raffle drawings. ♡



Full details are online at wildlifedepartment.com/outdoorok/adventures.



Guided elk hunt on more than 1,200 acres of private land in the Wichita Mountains in southwestern Oklahoma.



A lifetime hunting and fishing license for Oklahoma hunters and anglers.



Spend a day fishing with worldwide fishing icon Jimmy Houston.



Two-day, two-night hunt, for one person for one bird; meals and lodging included.

WELCOME TO THE DOCK!

Are the fish biting? You bet! Step onto **The Dock** and take a gander at some great catches made recently by Oklahoma anglers. Here's a few we thought you would enjoy! To see more or submit a photo of your catch, go to www.wildlifedepartment.com/fishing/the_dock or scan the code:



Brody Needham, black bass, March 13, 2024, Blue River PFHA.



Lance Booth, blue catfish, March 12, 2024, Lake Texoma.



Michael McCarthy, hybrid striped bass, March 16, 2024, Waurika Lake.



Glenn Peters, striped bass, March 6, 2024, Keystone Lake.



Adam C., white crappie, March 15, 2024, Pine Creek Lake.



Pepé G., white crappie, March 14, 2024, Arcadia Lake.

HUNTING AND FISHING LICENSE MODERNIZATION CHANGES TO BEGIN JULY 1

The **Oklahoma Wildlife License Modernization Act** was signed into law March 26 by Gov. Kevin Stitt. The measure streamlines and simplifies hunting and fishing licenses, and will provide funding for the Wildlife Department primarily by adjusting license costs to regional averages.

The act becomes effective July 1, 2024.

More than 20 years have passed since any notable changes were made to the state's fishing and hunting licenses and fee structure. This modernization plan reduces the array of licenses previously required for many activities and adjusts license fees to maintain a stable funding source for future conservation of fish and wildlife in Oklahoma.

"As an avid outdoorsman and a lifetime hunting and fishing license holder, I'm proud to sign the Wildlife License Modernization Act," Stitt said. "We're going to be top 10 in everything and give Oklahoma hunters a streamlined licensing system. This bill gets government out of the way by combining multiple licenses, cutting red tape, and modernizing the process.

The legislation was sponsored by state Sen. David Bullard of Durant, and state Rep. Ty Burns of Watchorn. Some highlights in the act:

- Consolidation of more than 50 current hunting and fishing licenses into 15.
- Defining all "youth" as anyone younger than 18, whether resident or nonresident.
- Creation of a single "youth super license" that will take the place of about 15 different types of youth hunting licenses.
- Providing resident deer hunters one license for all deer they are allowed to harvest in a season, an option previously only offered to nonresidents.
- Increasing license costs for nonresidents hunting deer and waterfowl in Oklahoma.
- Adding the black bear hunting license to the privileges granted with the lifetime hunting and lifetime combination licenses.

"Restructuring Oklahoma's cumbersome and outdated licensing structure has been the No. 1 priority the past several years for the Oklahoma Wildlife Conservation Commission," said Wade Free, Interim Director of the Wildlife Department. "We are grateful for the sponsorship of Senate Bill 941 by Sen. Bullard and Rep. Burns during this legislative session. And we want to express

our deepest thanks to the more than 15 conservation-minded partner groups who threw their support behind ODWC and this measure because they understand how crucial it is to the future of Oklahoma's natural resources."

The act adjusts license costs to more realistically reflect the cost of wildlife conservation activities at present. ODWC has struggled to maintain operations during this time with no appreciable increase in license fees and stagnant revenues.

This act also brings Oklahoma's fees more in line to those of other surrounding states. In some cases, the license cost will increase, and in others the cost will decrease.

By restructuring into fewer licenses and assigning more realistic prices, the act is expected to generate as much as \$10 million in additional revenue to fund fish and wildlife conservation in Oklahoma. The funding will enhance fish and wildlife habitat improvements, address infrastructure and deferred maintenance needs, and can be used to access federal Office of Conservation Investment funds at a rate of \$3 for every state license dollar. The Wildlife Department is a user-funded agency that is solely supported by hunting and fishing license sales and receives no state tax appropriations.

LICENSE MODERNIZATION FAQ

What licenses are changing, and what licenses are remaining?

For a comprehensive list of restructured licenses and adjusted prices, go online to wildlifedepartment.com/licensing.

Will my current licenses still be valid?

Yes, any license bought prior to July 1 will be valid for what it was intended (one single resident gun antlered deer license = one gun antlered deer). That one license does not, however, cover hunters for all the deer they can hunt; after July 1, they will need to buy a resident deer gun license if they are going to hunt beyond just the license they bought previously.

What about Controlled Hunts fee structure? Will it change for this year?

Controlled Hunts will all be the same as far as the regular application/current license types, and costs because the drawings will be conducted (and licenses paid and issued) prior to July 1.

How do I apply for a lifetime license?

No changes are happening to the lifetime license application process. All of that information, including a link to the online application, is online at wildlifedepartment.com/licensing/lifetime-license.

When is the final date for lifetime license hard-copy applications?

Mail-in applications with a postmark date before June 30 will be processed at the current rate.

When is the final date for lifetime license online applications?

The last day to ensure approval is June 28, 2024.

If a nonresident buys a deer license in June 2024, will he or she still have to buy an annual nonresident hunting license to hunt deer this fall?

Yes, every nonresident hunter in the fall of 2024 will need an annual hunting license and a deer license (even if they bought their deer license in June 2024).

Will the price and scope of the Conservation Passport change?

This legislation provides that the Wildlife Conservation Commission may increase the price of the Conservation Passport by \$10 and require it for all lands managed (not just owned) by the Wildlife Department. The Wildlife Conservation Commission may consider this in the future, but there is no immediate change expected until ODWC can consult with cooperators such as the U.S. Army Corps of Engineers and other agencies.

If I bought my hunting or combination lifetime license before July 1, 2024, does it include a bear license?

Yes, moving forward bear licenses are included in all hunting and combination lifetime licenses, no matter when they were purchased.

If I have a lifetime fishing license now, can I add a lifetime hunting license to it after July 1?

No. After July 1, the lifetime hunting privilege will only be sold with the new lifetime combination fishing and hunting licenses. If you want to add a lifetime hunting license along with a current lifetime fishing license, we recommend you do so prior to July 1.

Can I start a payment plan for my child before the price increase?

Yes. If a payment plan is started for a minor (under 18) prior to July 1, your total cost will be at the current price. However, you must pay the balance within 1 calendar year of starting the payment plan.

Is there a discount on lifetime licenses for tribal citizens?

No. Discounted prices for lifetime license are only available to resident seniors (65 and older) and resident disabled veterans.

So is every hunting and fishing license going to cost me more now?

No, a number of our licenses did not change at all.

Are licenses more expensive for nonresident hunters and anglers?

Yes, nonresident prices have increased and provide the bulk of the revenue increase projected from the bill.

I have my lifetime licenses for hunting and fishing, so how does all this affect me?

Mostly, it doesn't. You are, however, now exempt from having to buy a separate bear license to hunt bear.


Why are license fees increasing?

The new license structure and license fees, determined by the Oklahoma Legislature, streamlines and modernizes licensing for Oklahomans, making it easier and more accessible for them to enjoy Oklahoma's outdoors. This restructuring brings Oklahoma hunting and fishing licensing from 2003 to the present, and it makes Oklahoma competitive with regional averages. This license streamlining will result in better customer service, and customers will have more confidence in knowing they are buying the correct license. Additionally, this modernization plan was based on extensive surveys of constituent license preferences by industry leader Southwick Associates. Importantly, this license modernization will bring needed revenue to the Wildlife Department to fulfill its mission in conserving wildlife for all Oklahomans.

Will people younger than 18 be required to have or buy the HIP permit?

No. If the hunter is not required to have a basic hunting license, that hunter is not required to have a Harvest Information Program permit. Hunters 65 and older are also exempt from the HIP permit.

Will I still need to buy an Oklahoma Waterfowl Stamp (license)?

Resident waterfowl hunters age 18 to 64 will be required to buy the state duck stamp (license), now priced at \$20. Lifetime or combination license holders, along with all youths 17 and younger, are exempt from the state duck stamp. Nonresident waterfowl hunters 18 or older must have the state duck stamp, now priced at \$30. 

GAME WARDEN'S JOURNAL

ACCOUNTS FROM THE FIELD BY THE PUBLIC SERVANTS WHO ENFORCE THE FISH AND WILDLIFE LAWS OF OKLAHOMA.



On March 19, Game Warden **Andrew Potter** (based in Choctaw County) responded to a report that sacks of geese had been dumped on the Indian Nation Turnpike north of Antlers. He found 52 snow geese piled on the shoulder of the southbound lanes at mile marker 23. Exams proved all the geese had been shot, and none of the meat had been harvested. Game Wardens will continue to investigate this wanton waste and improper disposal of this wildlife resource. Please report any information to Potter at

(580) 317-5000; Game Warden **Eric Barnes** (580) 513-5014; Game Warden **Thomas Gillham**, (580) 271-0808; or **Operation Game Thief**, (800) 522-8039. Caller can remain anonymous.

On March 16, Game Wardens **Spencer Grace** (based in Kay County), and Game Warden **Larry Green** (based in Osage County), responded to a 911 call about two fishermen stranded on rocks with water rising below Kaw Dam. Other first responders had been dispatched to the area including Oklahoma Highway Patrol, Kay County Sheriff's Department, and Ponca City Fire EMS. The Game Wardens launched their boat, and the two young fishermen ages 17 and 18 were rescued. Both were wet from falling into the water. Thankfully this event had a happy ending. When fishing tailwaters below any dam, move to the safety of higher

ground when warning sirens are sounded.

Game Wardens Lt. **James Edwards** (based in Beckham County), **Clint Carpenter** (based in Custer County), and



Brandon Lehrman (based in Greer County) participated in Sayre Public Schools College and Career Fair on March 13 for students in grades 6-12. Students could pick five career paths to evaluate, and 120 students chose the Game Warden career path! The Game Wardens taught about their careers and other career paths available within ODWC.

Oklahoma Game Wardens helped with the Bassmaster Classic on Grand Lake o' the Cherokees. Anglers from across North America pursued the championship on the 46,500-acre fishery in late March. The greatest celebration of the sport of fishing was on full display from Grove to Tulsa, and Game Wardens were glad to be there. Thank you Grove Police and Fire, Grand River Dam Authority, and Tulsa Police Department for the team effort that made the event a huge success!



(Reports from the Oklahoma Department of Wildlife Conservation-Game Wardens Facebook page.)

EDITOR'S NOTE: Please help make a difference! When violators break the law, they steal fish and wildlife from you! Report violations anonymously by calling Operation Game Thief at (800) 522-8039. You could earn a cash reward.

APPLY FOR CONTROLLED HUNTS


The Wildlife Department's Controlled Hunts Program could be your path to individual, group, and youth hunting opportunities, including once-in-a-lifetime elk and pronghorn hunts!

The Controlled Hunts application period is open through May 20. Hunters can enter drawings for hundreds of quality, ODWC-sanctioned hunts for species including deer, elk, pronghorn, and wild turkey! New this year, hunters can buy one additional preference point for the once-in-a-lifetime elk hunts, which carries forward for those hunters who aren't selected for an elk hunt this year.

Two important changes to the Controlled Hunts Program are being implemented this year, including the option to buy additional hunt choice selections within each category, and better odds for longtime elk and antelope hunt applicants.

Learn more on the Wildlife Department's Controlled Hunts webpage at wildlifedepartment.com/hunting/controlledhunts.

Also, check out our blog post on the Outdoor Oklahoma Journal for more information about group, elk, and youth hunts. Just scan the code:

All applications are submitted through your Go Outdoors Oklahoma profile. Once logged in, select the "Controlled Hunts" link. 




WAYS TO SUPPORT WILDLIFE DIVERSITY

Donating \$5, \$15, or even \$25 to the **Wildlife Diversity Fund** is just one of the many ways you can get involved in conservation efforts of our state's fish and wildlife. The Wildlife Department can use these donations to learn more about where our nongame fish and wildlife live and identify potential strongholds for rare or declining species.

And, we're able to nearly triple every donation when we leverage them with available federal funds. This means we can fund more time in the field to research our state's species of greatest conservation need.

Adding a Wildlife Conservation **specialty license plate** to your vehicle is another way to help the Wildlife Diversity Program fund surveys of rare or declining nongame fish and wildlife. Twenty dollars of the \$39 fee (\$36.50 for renewals) goes to the Wildlife Department. Specialty license plate fees are in addition to annual registration fees.

Lastly, you can donate all or a portion of your **state tax refund** to the Wildlife Department's Wildlife Diversity Program. So next tax season, look for the Wildlife Diversity Program on Schedule 511-H, the donations list of your income tax form. 

Scan the code to donate to the Wildlife Diversity Fund.



OUTDOOR CALENDAR

FOR THE LATEST UPDATES, GO ONLINE TO LICENSE.
GOOUTDOORSOKLAHOMA.COM/Event/Events.aspx

NOTICE: Events were scheduled at press time; they are subject to change.

MAY 2024

- 4** Oklahoma City Free Fishing Day, no city permit required.
Camp OKC Latina Fishing Clinic, 10 a.m., Route 66 Park, Yukon.
Register: license.gooutdoorsoklahoma.com/Event/ViewEvent.aspx?id=108477.
Women of the West art show opens, Woolaroc Museum, Bartlesville.
- 5** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- 6** Oklahoma Wildlife Conservation Commission meeting, 9 a.m., Oklahoma City. Livestream: YouTube.com/OutdoorOklahoma.
- 12** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- 18** Hike the Dike, 8 a.m., Hackberry Flat WMA Crawford Building.
Register: license.gooutdoorsoklahoma.com/Event/ViewEvent.aspx.
- 19** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- 20** ODWC Controlled Hunts application deadline; wildlifedepartment.com/hunting/controlledhunts.
ODWC Outdoor Oklahoma Adventures raffle ticket sales deadline; wildlifedepartment.com/outdoorok/adventures.
- 26** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- 27** Memorial Day; state offices closed.
- 31** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- **Ducks Unlimited** events (date) set in Norman (2); Miami (4); Eufaula (9); Bixby (18). Info: www.ducks.org/events.
- **National Wild Turkey Federation** events (date) set in Erick (10); Skiatook (18). Info: <https://your.nwtf.org/members/events>.

JUNE 2024

- 1-2** Oklahoma Free Fishing Days, no state license required.
- 3** Oklahoma Wildlife Conservation Commission meeting, 9 a.m., Oklahoma City. Livestream: YouTube.com/OutdoorOklahoma.
- 4** Cross Timbers Forest and Range Management Field Day, 9 a.m., Camp Redlands at Lake Carl Blackwell. Register: <https://license.gooutdoorsoklahoma.com/Event/ViewEvent.aspx?id=108628>.
- 9** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- 16** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- 23** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- 30** "Outdoor Oklahoma" TV, 8 a.m., OETA.
- **Ducks Unlimited** event (date) set in Weatherford (14). Info: ducks.org/events.
- **Friends of NRA** event (date) set in McAlester (14). Info: friendsofnra.org/events.

** FOR HUNTING SEASON DATES, GO TO
www.wildlifedepartment.com/hunting/seasons **

2023 CREATIVE WRITING COMPETITION

"THERE IS NO BETTER FEELING OF ACCOMPLISHMENT"

EDITOR'S NOTE: The Oklahoma Department of Wildlife Conservation and Oklahoma Station Chapter Safari Club International sponsor a creative writing competition for middle and high school students. A boy and a girl from two age divisions are selected winners. Students write essays using the theme "Hunting: Sharing the Heritage" or "Archery: What I Like About Archery in the Schools and Bowhunting." Winners in the age 15-17 category receive a guided antelope hunt in the Texas Panhandle, and winners in the 11-14 age category receive a hunting trip with Rack Attack Outfitters of Fairview (or similar) and a scholarship to the Outdoor Texas Camp. In this issue, Outdoor Oklahoma honors junior category female winner Allie Hayes, 12, from Woodall School.



By Allie Hayes

It was a cool, calm November day when my dad and I took off on our early morning weekend hunt. We walked through the dark, quiet woods and listened to the leaves crunching beneath our feet. We climbed the old, sturdy red oak tree, hooked our safety harnesses, and made ourselves comfortable in our tree stand. We knew the wait ahead of us could be long, but we were prepared to wait for the perfect deer.

We sat in the tree for what seemed like forever, listening to the peaceful sounds of birds chirping, the whistling winds, and watched the colorful autumn leaves fall from the trees around us. Finally, we spotted the first deer of the morning.

A healthy doe made her way through the trees, stopping briefly to look behind her. We had an idea about what might be coming next; would it be the perfect buck? A few moments later, there he was, walking steadily across the woods. Nervously, I grabbed my bow hoping for a successful hunting trip, but as the doe made her way quickly through the woods, the buck followed right behind her. Both the doe and buck continued on, first out of shooting range and then out of sight. The disappointment immediately set in, but I quickly reminded myself that the challenge is what makes bowhunting fun and exciting.

Harvesting mature deer that are to their full potential is the responsibility of a good hunter; therefore, he or she must show patience, discipline and self-control. A hunter must accurately identify the target to avoid injury or violating wildlife laws. Harvesting a deer with a bow is a very rewarding experience because of the patience, practice, and time that goes into the sport.

Archery is equally as challenging as bowhunting. Even though you are not in the woods hunting for that perfect buck, you still feel the same amount of pressure at an archery competition. Archers are lined up back-to-back, sometimes shooting at the same target, and it can become overwhelming, which is when you need to show self-control, focus, and confidence. When you are finished shooting for the day and you've beat your previous high score, there is no better feeling of accomplishment than that!

National Archery in the Schools (NASP) is a great program for so many. It allows students who may not be interested in other sports the chance to be a part of a team and involved in a school club. I am proud to be one of a few female archers representing Woodall School, and I will take the valuable lessons that I have learned through archery and hunting, and apply them to my life going forward. ♥



WELCOME TO THE TAILGATE!

Is the hunting good? You bet! Step up to **The Tailgate** and check out some great harvests made recently by hunters in Oklahoma. Here's a few we thought you would enjoy! To submit your photo of a successful hunting trip, or to see what others have harvested, go to wildlifedepartment.com/hunting/tailgate or scan the code:



Stacy R., deer, Logan County.



Lexi Chaney, first deer, Oklahoma County.



Ryland Huff, wood duck, Dec. 19, 2023, Fort Cobb WMA.



Joel Jones, elk, Sept. 27, 2023, Cookson WMA.



James Foster, first deer, Custer County.



John Mitchell, northern bobwhite, Ellis County.

WILD ABOUT COOKING

WILD TURKEY SOBAHEG STEW

Sobaheg means “stew” to the Wampanoag (wamp-u-nuck), a Native American tribe that inhabited present-day southern Massachusetts and eastern Rhode Island. This Wild Turkey Sobaheg Stew simmers for 3 to 4 hours and makes 6 to 8 servings.

—Jenny Nguyen-Wheatley



INGREDIENTS

3 lbs. wild turkey legs/breast
Vegetable oil
Kosher or sea salt, to taste
1 onion, peeled and halved
8 to 10 cups water
14 whole raw chestnuts
1 lb. butternut squash, cut into large cubes
1 (15.5 oz.) can of great northern beans, drained and rinsed
1.5 to 2 cups hominy, drained
10 juniper berries, toasted and ground
Fresh mint, chopped
Freshly cracked pepper

DIRECTIONS

- Coat bottom of large heavy-bottomed pot with cooking oil and heat over medium. Pat dry meat with paper towels and cut into cubes. Season meat generously with salt and pepper. In batches, brown meat in pot to a nice sear on all sides.
- Return all meat to pot and cover with water. Add halved onion. Bring to a boil and scrape bottom of pot with wooden spoon. Cover and simmer 3 to 4 hours, or until meat becomes tender.
- While meat cooks, cut across each chestnut shell and cover with water in small saucepan. Boil chestnuts for 20 minutes.
- Remove saucepan from heat. Remove 2 or 3 nuts at a time and peel off outer hard shell and inner paperlike membrane. NOTE: The membrane becomes difficult to peel when it cools even slightly.
- Transfer all chestnuts to food processor and grind as finely as possible. Set aside.
- In the main pot, remove meat from bones, if any, and discard bones. Discard onion.
- Stir in butternut squash, hominy, beans, and ground chestnuts. Simmer 10 to 15 minutes, or until squash becomes tender but not mushy. Simmer longer for a thicker stew, or use more ground nuts. For thinner stew, add water or chicken stock.
- Season as desired and serve.



Jenny Nguyen-Wheatley

ABOUT THE AUTHOR

Jenny Nguyen-Wheatley, who immigrated to the US from Vietnam, was first introduced to hunting in college and started a cooking website called Food for Hunters. Since, she has written for numerous hunting and outdoor magazines, and co-authored — with her husband, Rick Wheatley — the book “Hunting for Food: Guide to Harvesting, Field Dressing and Cooking Wild Game.”

(This publication was funded by the Multistate Conservation Grant Program, a program supported with funds from the Wildlife and Sport Fish Restoration Program and jointly managed by the Association of Fish and Wildlife Agencies and the U.S. Fish and Wildlife Service.)

GAME BAG

A COLLECTION OF LETTERS TO THE WILDLIFE DEPARTMENT

We'd like to hear from you! Send your letters to **Outdoor Oklahoma Letters**, P.O. Box 53465, Oklahoma City, OK 73152, or send e-mail to donald.brown@odwc.ok.gov.

Dear Wade Free, ODWC Interim Director,

On behalf of myself and B.A.S.S., I want to thank you and your staff for all the help you provided at the recent Bassmaster Classic in Tulsa. Fish hauling from Tulsa to Keystone and Grand Lake is no easy chore, and we sincerely appreciate the time and effort your agency put into the task. Returning the bass weighed on the Classic stage back to the lakes where they were caught is something that the public expects, and it can only happen with the assistance of our state agency partners like ODWC.

We also appreciate the loan of the projectors for our Conservation Summit. That may seem like a small thing, but given the crazy rates for renting AV equipment, it really did help out and allowed us to provide amenities to the guests that would otherwise not be affordable.

Please forward my thanks to all of the management and hatchery staff that were involved in both the fish hauling and Conservation Summit. And don't hesitate to let me know how B.A.S.S. can help you in the future.

Gene Gilliland, B.A.S.S. conservation director

Dear Wildlife Department,

This shout-out goes to ODWC Wildlife Division employees **Scott Parry, Ron Smith, Scotty Webb, Brian Powell, Alex Cooper, Weston Storer, Jesse Groggin, Joe Nabonne, Thad Potts, and Chase Kokajan**. During the Smokehouse Creek Fire that came into Ellis and Roger Mills counties from Texas, these men showed up to

protect infrastructure in our wildlife management area with WMA Technician **Adam Dreyer**. Myself and **Lewis Jennings** fought the wildfire and managed resources for our designated counties with our fire departments.

This 1 million-acre-plus wildfire gave us a lot to worry about, but knowing we could leave our areas in the hands of this crew to focus on the task at hand is something each of us, our families, and our communities are extremely thankful for.

Marcus Thibodeau, ODWC Wildlife Biologist

Dear Wildlife Department,

I just wanted to write in and say that I've really enjoyed utilizing the outdoor WMA gun ranges. I've been to a few across the state on many occasions and have never had a negative experience. I'm sure you all don't hear it enough, but thanks for all that you do!

Ethan

Dear Don P. Brown, Associate Editor,

All I can say is wow and thanks! I was just inquiring (about when my magazine subscription would start), and I know these things take time to "get into the system." However, you have gone well above expectations, and I thank you.

Just another reason to love our Oklahoma Department of Wildlife Conservation.

Paul Waits, via email


EDITOR'S NOTE: Mr. Waits placed his new subscription order just a few days after the cut-off date for receiving the next magazine. We confirmed his order status and gladly sent along a copy of the magazine he'd just missed. Subscribers who want to check their order status or change their address or send a message are welcome to go online to wildlifedepartment.com/outdoorok/magazine and use our Customer Service Portal. We extend our thanks to Mr. Waits, and all of our subscribers, for supporting Outdoor Oklahoma and wildlife conservation in Oklahoma.

ODWC SEEKS BUMBLE BEE SIGHTINGS

ODWC is asking Oklahomans to share sightings of the American bumble bee online at iNaturalist.org. The free online crowdsourcing platform allows wildlife enthusiasts to connect with biologists as well as a larger community of naturalists.

As a pollinator, the American bumble bee plays an important role. These bees, along with other native pollinators, help many plants, which in turn ensure important food sources for many wildlife species.


Oklahoma has at least 10 species of bumble bees. But American bumble bees have three black and two yellow bands. The first yellow band is just behind the eyes; the second band is in the middle of the abdomen.

Create a free [iNaturalist](http://iNaturalist.org) account to share your American bumble bee sightings with ODWC. 



American bumble bee.

IT'S THE LAW:

Noodling, the catching of fish with the hands only, is permitted for all nongame fish including flathead catfish. Oklahoma's other two species of catfish, blue and channel catfish, are classified as game fish, but regulations allow only these two game fish species to be taken when noodling. Noodling is prohibited at all Wildlife Department fishing areas, but is permitted in most public fishing areas. Consult the Special Area Regulations for the water body where you intend to noodle. 

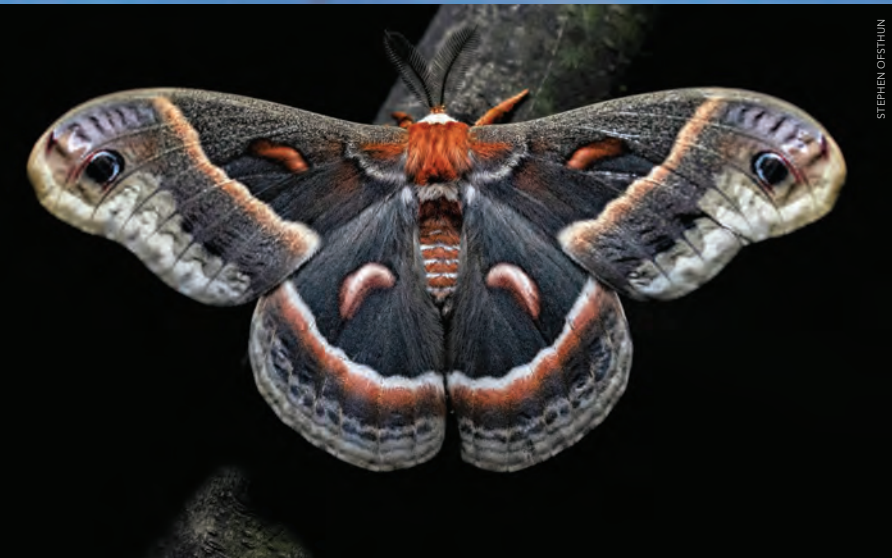
JEREMIAH ZURENDA



STEPHEN OESTHUN



STEPHEN OESTHUN



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JENA DONNELLODWC



STEPHEN OESTHUN





STEPHEN OISTHUN



BILL HORN



KELLIE CARTER/READERS PHOTO SHOWCASE 2023



JOE STEVART/READERS PHOTO SHOWCASE 2019



JENA DONNELL/DWC



JENA DONNELL/DWC

CELEBRATING WILDLIFE DIVERSITY

OKLAHOMA'S DIVERSE NATURAL WORLD IS IN THE SPOTLIGHT HERE. HUNDREDS OF SPECIES OF PLANTS, FISH, BIRDS AND ANIMALS, ALONG WITH A RICH ARRAY OF WILD HABITATS, RIGHTLY DESERVE THE ATTENTION AND ADMIRATION OF ALL OKLAHOMANS. IN THESE PAGES, READ ABOUT VARIOUS WILDLIFE DEPARTMENT CONSERVATION TOPICS THAT CAN EASILY GO UNNOTICED.

ALL ARTICLES BY JENA DONNELL, COMMUNICATION AND INFORMATION SPECIALIST

WILDLIFE DIVERSITY PROGRAM

Established in 1981, the Wildlife Department's Wildlife Diversity Program focuses on rare, declining, and threatened species of wildlife as well as those common species not hunted or fished. More than 800 species have been documented in Oklahoma, of which nearly 90% are considered nongame species.

To help conserve our wildlife and maintain Oklahoma's rich biological heritage for present and future generations, the Wildlife Diversity Program has developed the "Oklahoma Comprehensive Wildlife Conservation Strategy." This guiding document helps prioritize conservation issues and actions, and determine research and surveys on species considered to be of greatest conservation need.



SPECIAL FOCUS:
SEE NATURE. SHARE SIGHTINGS.
SUPPORT SCIENCE.

Sharing nature sightings is one of the easiest and most effective ways you can get involved in conservation. It's something you can do whether you're new to nature or have years of experience, and every sighting helps biologists learn a little more about our state's natural resources. Go to Page 29 for more.



CONNECT TO NATURE WITH THESE WILD WORDLES

WE'VE COMPILED FIVE-LETTER WORDS THAT CAN KEEP YOU CONNECTED TO PLANTS AND ANIMALS BETWEEN NATURE FIXES.

Even when you're far away from the natural world — sitting behind a desk, scrolling for distraction, or playing a certain word game to make it through the rest of your day — you can still immerse yourself in the plants and animals that help make Oklahoma incredible.

We've combed through our lexicon of wild conservation terms to find five-letter words that can keep you connected between your nature fixes ... and might just fit in your next Wordle puzzle.

STEPHEN ORSHUN



Ruby-throated hummingbird.

F A U N A

(and FLORA too!)

noun [FAW] + [NUH]: animal life, especially the animals characteristic of a region, period, or special environment. Merriam-Webster.com Dictionary.

The Wildlife Department has long been charged with managing and protecting fish and wildlife, along with their habitats. This mission embraces thousands of species of both fauna and flora, including 450-plus birds, 100-plus mammals, 150-plus fish, 125-plus reptiles and amphibians, and 2,500-plus plants.

In addition to Oklahoma's familiar game animals, the Wildlife Department is also focused on the 300-plus species identified as being in greatest need of additional conservation attention, including the Texas horned lizard, crawfish frog, and Ozark big-eared bat. The agency's Wildlife Diversity Program has partnered with research groups to learn more about these species and the habitats on which they rely.

Stay in touch with the Wildlife Department and learn about its conservation work by following us on our social media channels, @okwildlifedep.

JEREMIAH ZURENDA



Indian blanket.

F O R B S

noun [PH] + [ORBS]: an herb other than grass. Merriam-Webster.com Dictionary.

Whether you call them forbs, flowers, or weeds, many wildlife simply call this suite of seed-producing plants "food." Forbs (and their seeds, leaves, and pollen) are a critical source of food for pollinators and songbirds alike. When growing thick or tall enough, they can also provide escape and thermal cover for even more amazing animal life.

Adding forbs and other native plants to your backyard or pasture is a great way to attract wildlife to your property. We share tips for establishing a successful wildscape in our online Landscaping for Wildlife guide.



Broad-headed skink.

SKINK

noun [SKINK]: any of a family (Scincidae) of typically small insectivorous lizards with long tapering bodies.

Merriam-Webster.com Dictionary.

Oklahoma's wildlife often comes with wild stories! When faced down by a potential predator, a group of lizards known as skinks may rely on a drastic survival tactic — voluntary tail amputation. To create a distraction and open an escape route, the lizard can separate its tail from the body at distinct planes within the vertebrae and muscles. The tail can eventually be regrown, but the stunt comes with costs. The lizard loses important fat reserves and may be more vulnerable to another predation attempt.

Learn more about Oklahoma's incredible lizards in "A Field Guide to Oklahoma's Amphibians and Reptiles," available in our Go Outdoors Oklahoma shop.



A female red fox.

VIXEN

noun [VIK] + [SUHN]: a female fox. Merriam-Webster.com Dictionary.

Oklahoma's wildlife may be known by multiple names. A group of red fox, formally known as *Vulpes vulpes*, may be called an earth, leash, or skulk, while the pups are often called kits, adult males are called dogs, and females are known as vixens.

Whatever you chose to call them, foxes and other wildlife spotted in Outdoor Oklahoma can make for great memories, and great television! Check out a clip of red fox fisti-cuffs, then follow the Wildlife Department's Outdoor Oklahoma YouTube channel for more wild videos.



Great blue heron.

HERON

noun [HERR] + [UHN]: any of various long-necked and long-legged wading birds (family Ardeidae) with a long tapering bill, large wings, and soft plumage. Merriam-Webster.com Dictionary.

Hérons can be a great introduction to the world of bird watching. As a group, Oklahoma's four herons are large enough to readily be seen and have a distinctive body shape with a long neck and legs. And the great blue heron, the largest of the wading birds, can be found across Oklahoma year-round.

Bird watching can be a great reason to explore Oklahoma and its natural places. In addition to helping you disconnect from your daily stresses — or reconnect with your wild family and friends — your bird watching excursions can also help biologists! When you share your sightings of birds or other animals or plants, you're filling in gaps of knowledge and contributing to conservation!



Chimney swift.

SWIFT

adjective [SWIFT]: moving or capable of moving with great speed.

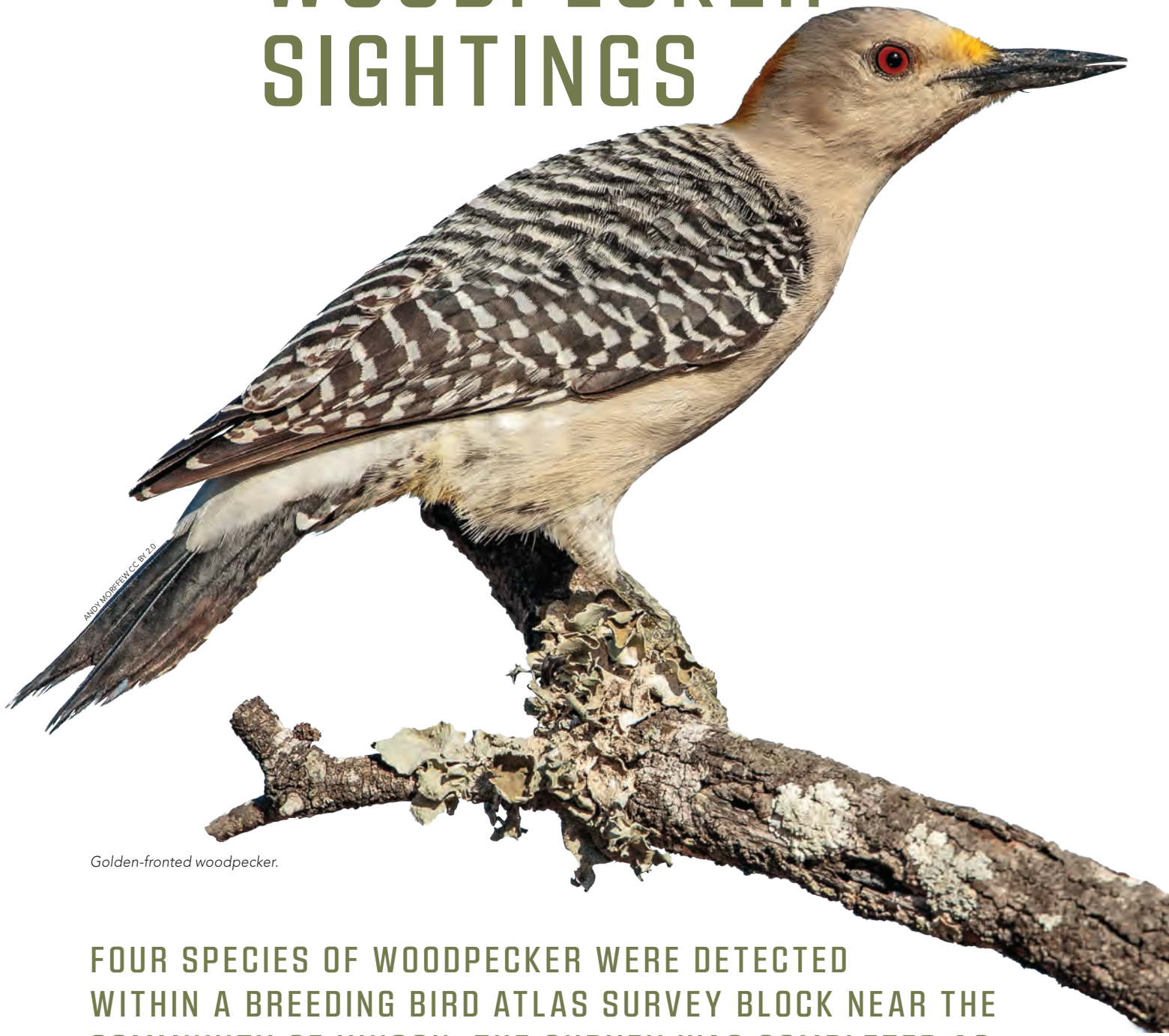
noun: 1 any of several lizards (especially of the genus *Sceloporus*) that run swiftly, 3: any of numerous small plainly colored birds (family Apodidae) that are related to the hummingbirds but superficially much resemble swallows. Merriam-Webster.com Dictionary.

From chimney swifts to swift foxes, Oklahoma has no shortage of speedy animals. But speed isn't the only adaptation of our state's fish and wildlife. Camouflage, migration, special foraging behaviors, and mimicry are just a few ways animals have found their niche!

Meet Oklahoma's incredible wildlife species each month in the free Wild Side e-newsletter! In addition to species spotlights, each issue shares updates on research and survey projects and ways to get involved in conservation. 🌱



BIOLOGIST HAULS IN REMARKABLE WOODPECKER SIGHTINGS



Golden-fronted woodpecker.

FOUR SPECIES OF WOODPECKER WERE DETECTED
WITHIN A BREEDING BIRD ATLAS SURVEY BLOCK NEAR THE
COMMUNITY OF VINSON. THE SURVEY WAS COMPLETED AS
PART OF OKLAHOMA'S SECOND ATLAS EFFORT.



★ Vinson

Red-headed woodpecker.

For many Oklahoma birders, woodpeckers are a somewhat expected staple. As a group, the insect eating, drumming machines can be spotted across the state at any time of the year, in almost every habitat. But some of the state's 14 documented species are more challenging to find than others.

During a "Breeding Bird Atlas" survey near the community of Vinson, Mark Howery, a senior biologist with the Wildlife Department, hauled in a remarkable collection of woodpeckers, including two species with limited ranges in the state. Vinson, located eight miles east of the Texas state line in Harmon County, resembles much of southwestern Oklahoma's mesquite grasslands.

"It really surprised me," Howery said. "I saw golden-fronted woodpeckers, red-headed woodpeckers, northern flickers, and ladder-backed woodpeckers. And I was able to get confirmation of nesting for each species."

JEN GOELLNITZ CC BY-NC-ND 2.0



FOUR REMARKABLE WOODPECKER SIGHTINGS

In early July, Howery returned to the Vinson Breeding Bird Atlas survey block to monitor the area's breeding birds for the third and final time of the season. That day, he saw 38 species and had confirmation of breeding activity for 12 species, including four species of woodpecker.

SIGHTING ONE

"I saw a pair of golden-fronted woodpeckers carrying food in their bills as they flew through a wooded draw," Howery said. The bird closely resembles the more common red-bellied woodpecker, but is rarely spotted in the state outside of the southwestern region. Howery only observed the birds on his third trip to the atlas block.

SIGHTING TWO

"Then I saw a pair of red-headed woodpeckers doing the same thing. They were right by the road, and I could see them carrying food to a hole in a dead cottonwood." Of the four woodpecker species documented in this atlas block, the red-headed woodpecker was the most consistent. "I saw four to five birds on each of the three trips.

SIGHTING THREE

"Then I saw a family group of northern flickers — there was an adult pair and three fledglings with dark mustaches. One of the weird things about flickers is that juveniles have male plumage as their first plumage. I don't know of another bird that does this — most juveniles look like the females in their first year." The flickers, the most common and widespread of the four woodpeckers spotted during the survey, were seen on Howery's first and third surveys, in the same area of the atlas block.

SIGHTING FOUR

"About two-and-a-half hours later, I was circling back through a small grove of mesquite trees at the end of the route and saw a family group of ladder-backed woodpeckers. There were two adults and two fledglings on both sides of the road." Ladder-backed woodpeckers are small in size and prefer arid habitats.

All told, Howery spotted 47 bird species in the Vinson survey block during the 2023 breeding season and confirmed the nesting status of 22 species.

"One of the weird things about flickers is that juveniles have male plumage as their first plumage. I don't know of another bird that does this — most juveniles look like the females in their first year."



Ladder-backed woodpecker.



Northern flicker.

During the first Oklahoma Breeding Bird Atlas, conducted from 1997 to 2001, project personnel and volunteer birders visited 573 of the 583 designated blocks, spending an average of 13 hours surveying within each block, and documented 212 species.

Confirming nesting or breeding birds was the goal of Howery's survey as part of the second Oklahoma Breeding Bird Atlas effort. The project, coordinated by the Sutton Avian Research Center, with funding support from the Wildlife Department's State Wildlife Grants Program, is documenting evidence of nesting birds — either of adult birds carrying nesting material or food to a nest, or of fledgling or juvenile birds — in 583 3-mile-square blocks across the state.

During the first Oklahoma Breeding Bird Atlas, conducted from 1997 to 2001, project personnel and volunteer birders visited 573 of the 583 designated blocks, spending an average of 13 hours surveying within each block, and documented 212 species. At least 160 species were confirmed to breed within the state, and an additional 38 species were marked as possible or probable breeders because of observations of singing males.

The ongoing atlas project will serve as a 20-year follow-up to the first survey effort and can be used to compare bird distributions in the state and document any changes during the intervening years. For the Vinson block, Howery documented an additional 14 species when compared to the first Breeding Bird Atlas project and confirmed nesting behavior of 10 more species than the previous effort.

Surveys for the second atlas began in 2020 and are planned to conclude in 2024. 🌱

The second Oklahoma Breeding Bird Atlas is supported by State Wildlife Grant F21AF03463. Howery's survey was funded by State Wildlife Grant F22AF02644.

Wildlife Diversity continues on Page 29.

TAKE YOUR BEST SHOT!

FREE!

AMANDA THOMAS/ODWC

A Guide to Oklahoma's Public Shooting Ranges



A FREE PUBLICATION OF THE OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION



Elevated archery stands at any ODWC shooting range require shooters to use a harness for safety.



A young shooter enjoys practicing at the Kaw WMA pistol range.

WHY BUILD SHOOTING RANGES?

Recreational shooters have become major contributors to wildlife conservation. When shooters buy sporting arms and ammunition, manufacturers pay an excise tax to the federal government that is required to be apportioned back to the states for wildlife conservation efforts.

The North American Model of Wildlife Conservation is a user-pay, public-benefit system, and recreational shooters along with hunters and anglers are the top payers ensuring conservation happens and that wildlife abounds for those who love the outdoors.

With recreational shooting on the rise during the past decade, the Oklahoma Department of Wildlife Conservation is working to help meet the greater demand for places to shoot. ODWC has more than 20 shooting ranges in various stages of construction, environmental, engineering, and/or planning phases.

ODWC is committed to a multiyear program to renovate or construct shooting ranges on Wildlife Management Areas statewide as well as partner with outside parties to encourage enhancement, expansion, and/or new development of public target ranges in the state.

ODWC is addressing the need for increased public shooting access in Oklahoma for new hunters, and recreational and competitive shooters,

while also encouraging existing hunters and shooters to enhance their skills by becoming more proficient with firearms, promoting safe and responsible hunting and shooting practices, and providing safe and environmentally responsible shooting areas.

This guide shows where public land shooting ranges can be found, and also details plans that ODWC has for future development of ranges.

Anyone who uses a Wildlife Department shooting range must possess a state of Oklahoma hunting or combination hunting/fishing license.

Detailed rules are posted at each range. For more information, contact the wildlife biologist for that area. 🏹

SHOOTING RANGE RULES

On all Wildlife Department-owned or -managed lands, the discharge of firearms for purposes other than when hunting is restricted to the target/shooting ranges provided for public use.

1. Shooting ranges are open year-round, unless otherwise specified in the Oklahoma Fishing and Hunting Regulations (public hunting lands special area regulations, controlled hunt closures) or signs at the range.
2. Shooting hours are official sunrise to 30 minutes after official sunset, daily.
3. Any person younger than 16 using the shooting range must be immediately supervised by an adult 18 or older.
4. All firearms shooting single projectiles or any pellets larger than conventional BB (0.18 of an inch in diameter) must be shot at approved berms and target areas only. Airborne clay targets may be shot using pellets no larger than conventional BB.
5. All rifle, pistol, shotgun, and muzzleloader targets will consist of paper or clay targets only.
6. All paper targets must be removed before leaving the shooting area.
7. Centerfire rifles and pistols .50-caliber and larger are prohibited.
8. Fully automatic firearms are prohibited.
9. Fireworks, explosive devices, exploding targets, tracer and incendiary rounds are prohibited.
10. Eye and ear protection shall be worn while shooting.
11. Shooters, and accompanying adult, must possess a valid State of Oklahoma hunting license or State of Oklahoma combination hunting/fishing license, unless exempt.
12. Shooting while another person is down range is prohibited.
13. No person shall possess, consume, or use any intoxicating beverage or beer, as defined in Title 37, at any shooting range or shooting range parking areas.

ARCHERY RANGE RULES

For Department shooting ranges that include an archery area, the following shall apply:

1. Archery range is open year-round, unless specified otherwise in the Oklahoma Fishing and Hunting Regulations (public hunting lands special area regulations, controlled hunt closures) or signs at the range.
2. Shooting hours are official sunrise to 30 minutes after official sunset, daily.
3. Any person younger than 16 using the shooting range must be immediately supervised by an adult 18 or older.
4. Archers using the elevated platform must wear a safety harness meeting the standards of the Treestand Manufacturers Association and be attached to the platform at all times.
5. Archers may only shoot at stationary targets.
6. Archers must draw and release arrows or bolts from the tower or directly below the tower ONLY.
7. All nocked arrows or bolts must point down range at all times.
8. The archery tower is limited to four shooters at a time; no spectators are allowed on the archery tower.
9. Shooting while another person is down range is prohibited.
10. Broadheads may only be used in designated lanes.
11. Shooters, and accompanying adult, must possess a valid State of Oklahoma hunting license or State of Oklahoma combination hunting/fishing license, unless exempt.
12. Archery targets designed specifically for archery are allowed on the archery range. Archery targets must be removed after use.
13. Only legal archery equipment is allowed on the archery range.
14. No person shall possess, consume, or use any intoxicating beverage or beer, as defined in Title 37, at any shooting range or shooting range parking areas.

NOTICE: Public use of any shooting or archery range during its renovation or construction is prohibited.

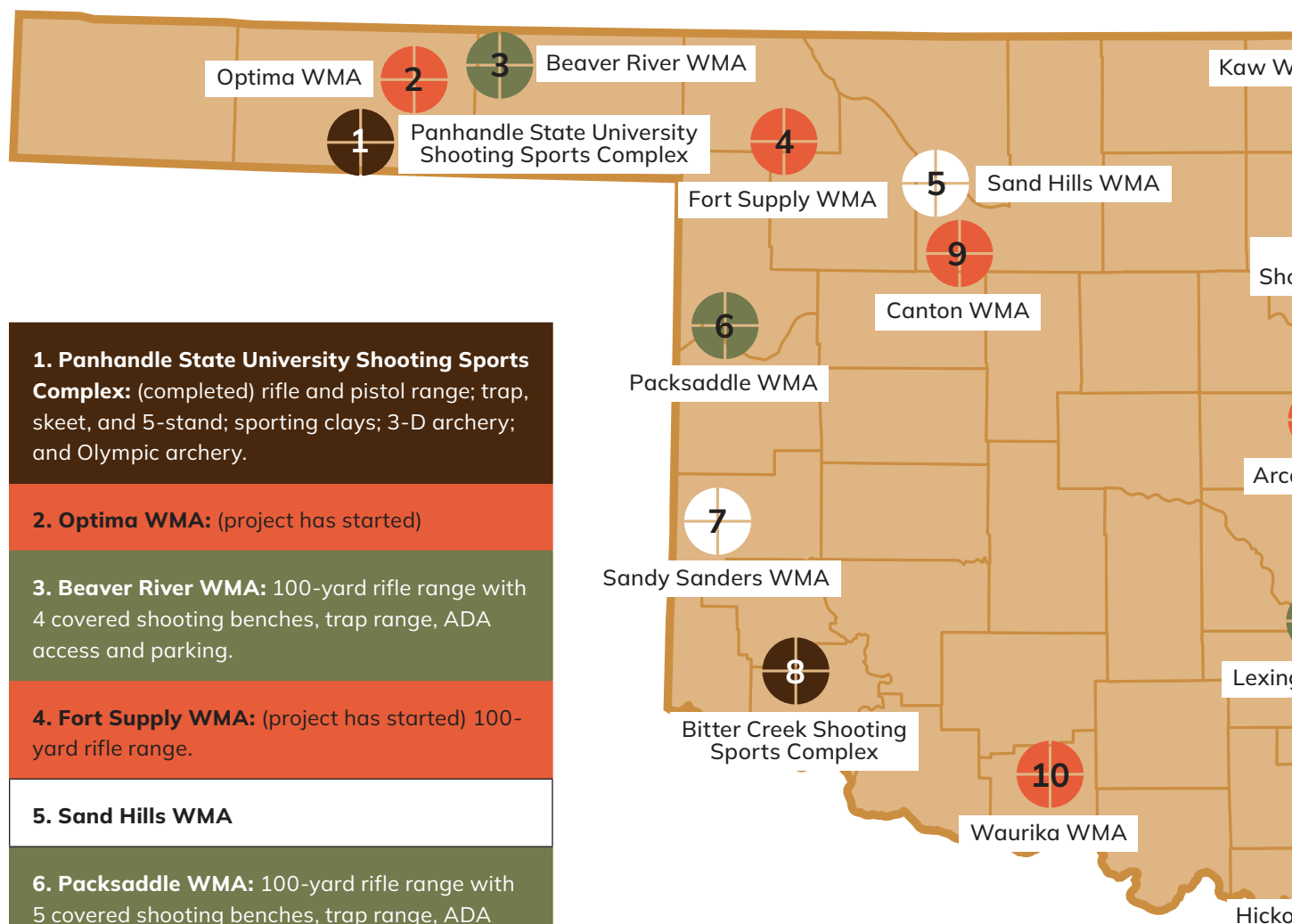


The newly opened rifle range at Packsaddle WMA is ready to welcome sport shooters.

AMANDA THOMAS/ODWC

ODWC SHOOTING RANGE LOCATIONS AND STATUS

Completed
 In Progress
 In Planning
 Collaborative



1. Panhandle State University Shooting Sports Complex: (completed) rifle and pistol range; trap, skeet, and 5-stand; sporting clays; 3-D archery; and Olympic archery.

2. Optima WMA: (project has started)

3. Beaver River WMA: 100-yard rifle range with 4 covered shooting benches, trap range, ADA access and parking.

4. Fort Supply WMA: (project has started) 100-yard rifle range.

5. Sand Hills WMA

6. Packsaddle WMA: 100-yard rifle range with 5 covered shooting benches, trap range, ADA access and parking.

7. Sandy Sanders WMA

8. Bitter Creek Shooting Sports Complex: (planned) new world-class facility (pass-through grant with City of Altus).

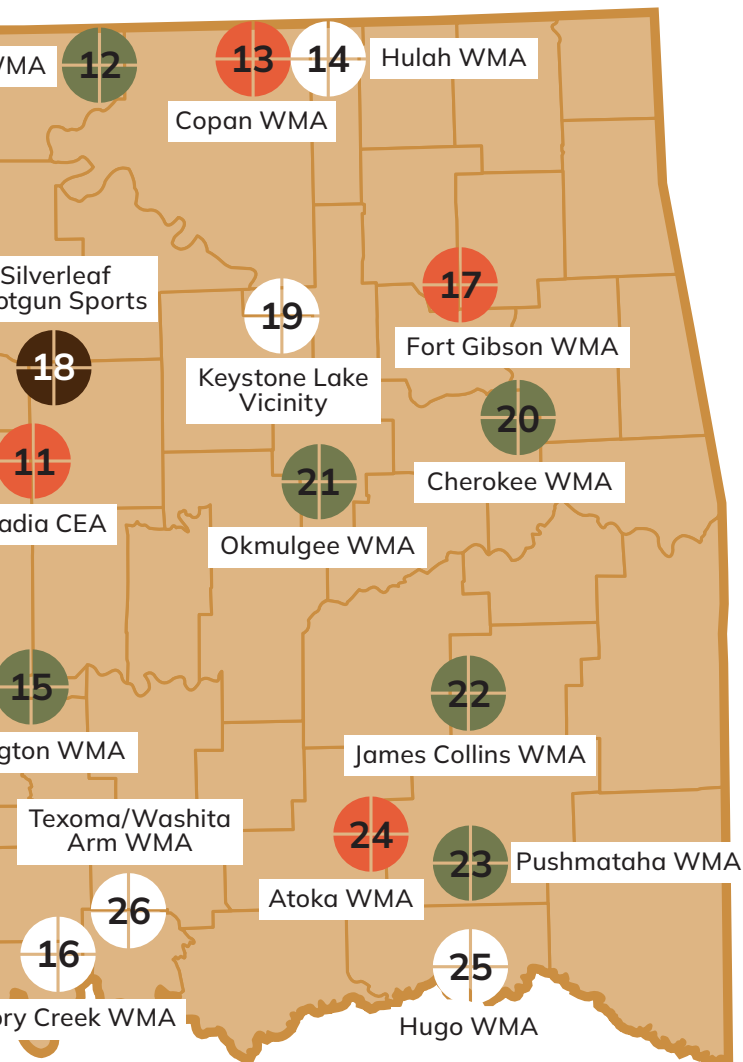
9. Canton WMA: (project has started) 100-yard and 200-yard rifle range with 2 covered shooting benches.

10. Waurika WMA: (project has started)

11. Arcadia CEA: (project has started) Archery range only.

12. Kaw WMA: two 100-yard rifle ranges with 12 covered shooting benches, 30-yard pistol range with 6 covered shooting benches, archery range with tower and 4 shooting lanes, ADA access and parking.

ND PROJECT STATUS



13. Copan WMA: (project has started)

14. Hulah WMA

15. Lexington WMA: 50-yard and 100-yard rifle ranges with 5 covered shooting benches, 25-yard pistol range with 4 covered shooting benches, ADA access and parking.

16. Hickory Creek WMA: 80-yard rifle range with 2 shooting benches.

17. Fort Gibson WMA: (project has started) 100-yard rifle range with 2 shooting benches.

18. Silverleaf Shotgun Sports: (completed) equipment update (pass-through grant).

19. Keystone Lake vicinity

20. Cherokee WMA: 100-yard and 200-yard rifle range with 4 covered shooting benches, 25-yard pistol range with 4 covered shooting benches, trap range, ADA access and parking.

21. Okmulgee WMA: 100-yard rifle range with 5 covered shooting benches, 30-yard pistol range with 4 covered shooting benches, trap range, ADA access and parking.

22. James Collins WMA: 100-yard rifle range with 5 covered shooting benches, 30-yard pistol range with 4 covered shooting benches, ADA access and parking.

23. Pushmataha WMA: 200-yard rifle range with 2 covered shooting benches, 25-yard pistol range, trap range, ADA access and parking.

24. Atoka WMA: (under construction) 100-yard rifle range with 4 covered shooting benches, 30-yard pistol range with 4 covered shooting benches, shotgun/trap range, archery range with archery tower including 4 shooting lanes, ADA access and parking.

25. Hugo WMA

26. Texoma/Washita Arm WMA: 100-yard shooting range with 1 shooting bench.

Scan this code for coordinates and driving directions to WMA shooting ranges.




PARTNERSHIPS GROWING AT RANGES ACROSS THE STATE

From one corner of the state to the next, partnerships have been and will be a critical piece of shooting range construction and renovations. While each project is different in scope and details, the one thing that they share is that the collaborative relationships lead to win-win-wins, for the Wildlife Department, for its partners, and most importantly for hunters and recreational shooters.

For example, Oklahoma Panhandle State University is home to a first-class shooting facility, and one is also in the works with the City of Altus. In both cases, the partnering organizations provided match funds. The future archery range at Arcadia Conservation Education Area has received major support from

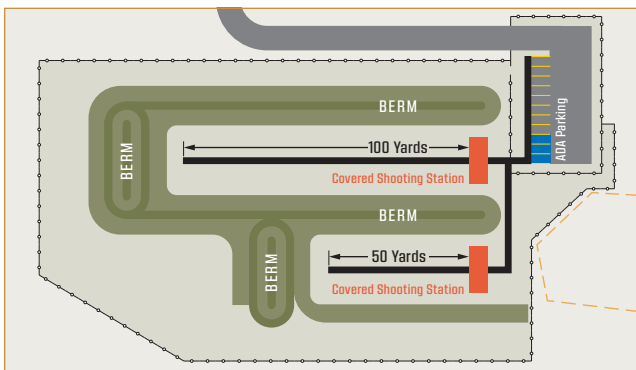
the Oklahoma Wildlife Conservation Foundation (OWCF). Silverleaf Shotgun Sports has been to improve their facilities in partnership with the Wildlife Department.

The National Rifle Association provided key funding for the renovated range at the Lexington Wildlife Management Area. Since 2017, ODWC has applied for a half-dozen NRA public range grants totaling \$68,000 in donations towards new ranges or renovations, the latest being \$25,000 for Optima Shooting Range renovation.

OWCF is a great place to donate for upcoming projects that will soon begin construction. For more information, log on to <https://okwildlifefoundation.org>. 



The Optima WMA shooting range, seen here, will undergo renovations and improvement thanks in part of to a generous donation from the NRA.



Optima WMA shooting range site plan.



"We have made significant progress with planning, renovating, and constructing shooting ranges on our wildlife management areas, and we are excited to continue to increase public shooting access across the state."

— Amanda Thomas, Shooting Range Coordinator,
Oklahoma Department of Wildlife Conservation




From left, Nels Rodefeld, Chief of Communication and Education for ODWC; Amanda Thomas, ODWC Shooting Range Coordinator; Peter Churchbourne, Director of NRA's Hunters' Leadership Forum; and Wade Free, ODWC Interim Director.

The Public Range Fund of the National Rifle Association donated \$25,000 for matching federal grant funding.

Peter Churchbourne, director of the NRA's Hunters' Leadership Forum, presented the donation to ODWC in February 2024. It will be used to help pay for additions and renovation at the public shooting range at Optima Wildlife Management Area.

By leveraging this donation with matching federal funds, a potential \$100,000 will be available.

Liz Bush, managing director of NRA Community Engagement, said, "NRA Range Services is grateful that we can be a part of this essential expansion and improvement to the ranges at the Optima Wildlife Management Area to benefit the people of Oklahoma."

"Public ranges allow hundreds of thousands of hunters, competitive shooters, and target shooters to work on their marksmanship under safe and responsible conditions," Bush said. 

SHOOTING SPORTS EDUCATION DRIVES PARTICIPATION

More than 725,000 Oklahoma residents participated in shooting sports in 2022, and that participation is continually rising. Numerous team and individual sport-shooting champions arise from Oklahoma nearly every year.

Oklahoma's recreational sport shooters contribute more than \$1.65 billion annually to the economy. And that's one huge reason the Oklahoma Department of Wildlife Conservation has long supported shooting sports through education programs that involve school students across the state.

Nearly 6,000 Oklahoma students participate annually in the **Oklahoma Scholastic Shooting Sports Program** (OKSSSP), which is ODWC's trap-shooting curriculum for students in grades 7-12.

The **Oklahoma National Archery in the Schools** (OKNASP) Program and **Varsity Archery** program engage thousands of students in grades 4-12 to provide target archery training. ODWC also offers school programs for **Explore Bowhunting** and **Explore Bowfishing**.

Since 1995, ODWC has offered the **Shotgun Training Education Program** (STEP). These programs provide wing-shooting opportunities to about 9,000 participants annually of all skill levels. STEP helps conduct the National

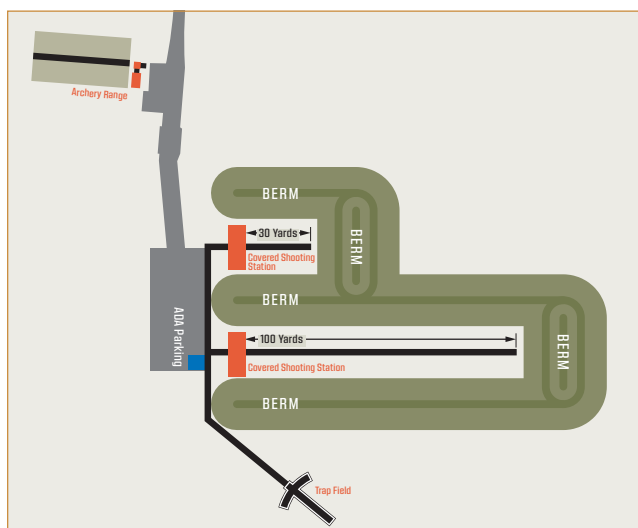


WILDLIFEDEPARTMENT.COM

FFA Organization's state shooting competitions each year.

ODWC has also reached out to other entities in promoting shooting sports. Pass-through grant funding allowed ODWC to provide partial funding to create a shooting complex at Oklahoma Panhandle State University in Goodwell, and to upgrade trapshooting equipment at the Silverleaf Shooting Sports facility near Guthrie.

In the works currently is pass-through grant funding to help the City of Altus build the Bitter Creek Shooting Sports Complex. 🏆



Atoka WMA shooting range site plan.

NEW ATOKA SHOOTING RANGE TO OPEN IN FALL 2024

A new shooting range is under construction at Atoka Wildlife Management Area. The project broke ground in March 2024.

It will feature a 100-yard rifle range, 30-yard pistol range, shotgun range, an archery range including an elevated platform, and Americans with Disabilities Act access and parking. 🏆



DARIN HILL/ODWC

Kaw WMA gun range.

A MESSAGE FROM THE DIRECTOR

“Shooting ranges have been one of my passions for many years, and recreational shooters are contributing about seven out of every 10 dollars into the conservation machine. Being a hometown Newkirk boy, I am excited to see a shooting range on Kaw WMA. The shooting range isn’t even 300 yards from where I harvested my first deer as a kid, which led to me being hooked on hunting, shooting, conservation, and ultimately having a career with ODWC. I’m certain the range will hook many more kids into hunting, shooting, and conservation. With the hiring of a full-time shooting range coordinator, ODWC is headed down the tracks with steam!” 🦌

— Wade Free, Interim Director,
Oklahoma Department of Wildlife
Conservation



WADE FREE/ODWC

Ready Free, nephew of ODWC Interim Director Wade Free, helps break in the new rifle range at Kaw Wildlife Management Area on opening day.



Funding is provided through federal assistance for state wildlife conservation agencies via the Wildlife Restoration and subaccount Public Target Range programs. The source of these funds are federal excise taxes on sporting arms and ammunitions (firearms, ammunitions, pistols, handguns, revolvers, bows, archery, and arrow components). These funds are governed by the Wildlife Restoration Act (1937), as amended by the Target Practice and Marksmanship Training Support Act (2019) and are administered by the U.S. Fish and Wildlife Service, Office of Conservation Investment. Annually, the funds are apportioned to qualifying state wildlife agencies based on the number of hunting license holders and each state’s size in relation to the other states.



THE INFORMATION IN THIS PUBLICATION WAS CURRENT AS OF MAY 2024.

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WILDLIFE SIGHTINGS: WHAT TO SHARE AND HOW TO SHARE IT

CONTRIBUTE TO CONSERVATION BY SHARING SIGHTING DETAILS OF FISH, WILDLIFE, AND PLANTS.

Contributing to conservation can be as simple as sharing the details of observations made in your backyard, during your commute, or on your recent hunting or fishing trip. Specific what, when, and where details of your nature sightings can help biologists track the status of fish, wildlife, and plants across the state.

WHAT TO SHARE:

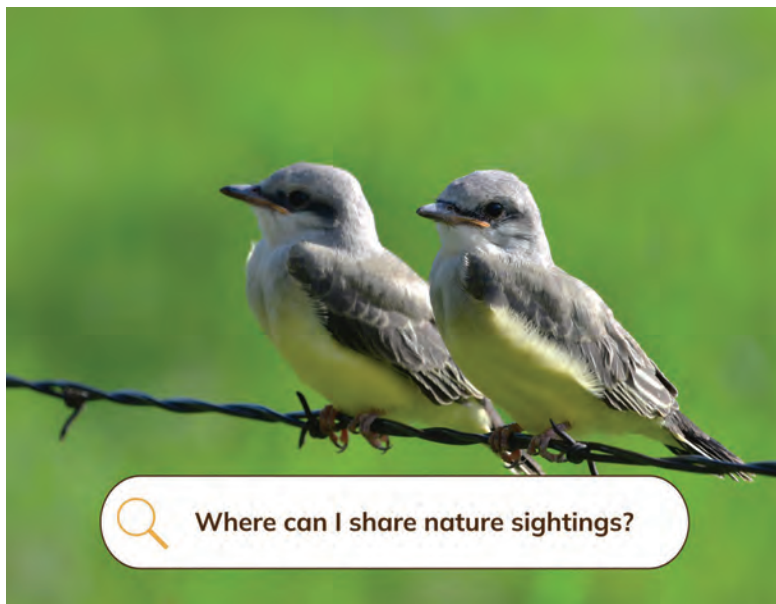
Sighting details can be shared for any organism, whether it's common or rare, native, or introduced. Regardless of the species, knowing when and where it was spotted and how many were seen can help biologists plan for future conservation efforts. Photos and information about any markings or identification bands can strengthen the observation.

While documenting common plants and animals is as important as documenting rare species, naturalists can be on the lookout for sensitive species that are the focus of ongoing Wildlife Department projects. **Sightings of bumble bees, Texas horned lizards, eastern whip-poor-wills, and loggerhead shrikes are of special interest.**

HOW TO SHARE:

Once you've made your observation, photos and details about the sighting can be shared at wildlifedepartment.com, or on free nature apps like iNaturalist or eBird. (iNaturalist collects observation details for all organisms while eBird focuses on bird sightings.)

Joining iNaturalist or eBird not only gives you a place to log and share your nature observations but also connects you with other naturalists in your area and helps you find new places



to explore. Both apps allow you to search the respective databases for species and places of interest while also allowing observers to obscure the location of their sightings. iNaturalist can also offer identification suggestions when photos or sounds are uploaded and allows the larger iNaturalist community to suggest an identification after the sighting is posted.

WHEN TO SHARE:

Nature sightings can be shared as soon as you make the observation, or whenever you chose to upload the details. Nature apps make it exceptionally easy to share information and photos within minutes of an observation, but some naturalists wait to share details of sensitive species so the individuals won't be unintentionally harassed. If you won't be sharing details the day of the sighting, consider jotting the specific date and location along with any notes that will help jog your memory.

FIELD GUIDES, ONLINE RESOURCES, AND SWEAT EQUITY

Identifying plants and animals can be a daunting but worthwhile endeavor. Building this skill can take years, calls for a lot of patience and attention to detail, and often leads to memorable — if not sometimes frustrating — time spent in nature. Thankfully, countless resources and identification tools are available that suit a variety of learning styles.



FIELD GUIDES

Printed field guides are a treasured part of many naturalists' skill-building experience. They come in all shapes and sizes; may be hard cover, spiral bound, or foldable; feature illustrations or photographs; and include species found across continents, regions, or individual states. As for the "best" guide, it's the one you will actually use. We recommend visiting a local library or bookstore to window-shop the best fit for you. If you plan on taking your guide afield, be sure to consider the weight and size ... smaller, soft-bound copies often make for friendlier trail companions. (P.S. Used guides may come with a cheaper price tag and may include helpful notes from the previous owner!)

ONLINE RESOURCES

If you have a smartphone with a data plan, you're already carrying an untold number of free

guides and identification tools into the field. Online resources like oksnakes.org, the Cornell Lab of Ornithology's All About Birds, and the U.S. Forest Service's bumble bee guides often have more information than can be printed on the pages of a physical guide, and may include multimedia content like sound files and videos that simply can't be printed.

NATURE APPS

Many free nature sharing apps like iNaturalist and eBird include information about the species you've spotted, and some apps (we're looking at you iNat) can actually provide identification recommendations when a photo is uploaded.

Beyond these sighting-oriented apps, a glut of nature apps and identification tools are waiting to be downloaded to your device. Some, like Merlin Bird ID by the Cornell Lab of Ornithology, are free, while others come with a nominal price tag. Apps like the Sibley Birds 2nd Edition combine features of printed field guides with the ability to search recordings and keep a personal log of your bird sightings.

NATURE SIGHTINGS HELP FILL GAPS IN KNOWLEDGE

As passionate and dedicated as Oklahoma's biologists are, they can't document every incredible animal and plant found in every corner of the state every hour of the day. Instead, they conduct targeted surveys during key times, often on public lands, and rely on nature enthusiasts to help fill in the knowledge gaps throughout the year.

Sharing sightings not only makes you more aware of the natural world around you, but can also be key to statewide conservation efforts. Scan the code to watch a video of James Hung as he shares why nature sightings are so valuable.



LOCAL NATURE ORGANIZATIONS

If your preferred learning experiences come with a side of human connection, consider joining or attending a meeting of a local nature organization like the Audubon Society, Oklahoma Ornithological Society, Oklahoma Herpetological Society, or the Oklahoma Native Plant Society. These organizations often have member field trips that would give you a chance to explore Oklahoma and flex your identification skills.

Beyond nature-based organizations, many local and state parks have nature centers or host nature walks. One ready source of events like eagle watches or plant walks is [travelok.com](https://www.travelok.com).

SWEAT EQUITY

Whether you prefer printed field guides, online resources, or the human connection, you'll need sweat equity to build your identification skills. That could come from setting a weekly routine of browsing a guide for 15 minutes, taking Merlin along for your morning coffee to test your bird song identification from your back porch, or making a daily or monthly trek to a local park or your favorite natural area. The more you test your identification skills, the more comfortable you'll become with recognizing Oklahoma's amazing plants and animals.

HOW SIGHTINGS HELP

Sharing the details of your nature sightings can be a lot like skipping the perfect rock across the water. Documenting the specific what, when, and where details can help you remember your wild encounters, help fellow naturalists plan their next adventure, and help biologists design their next survey or study.

Here are just a few examples of how Oklahoma sightings have been used for conservation:

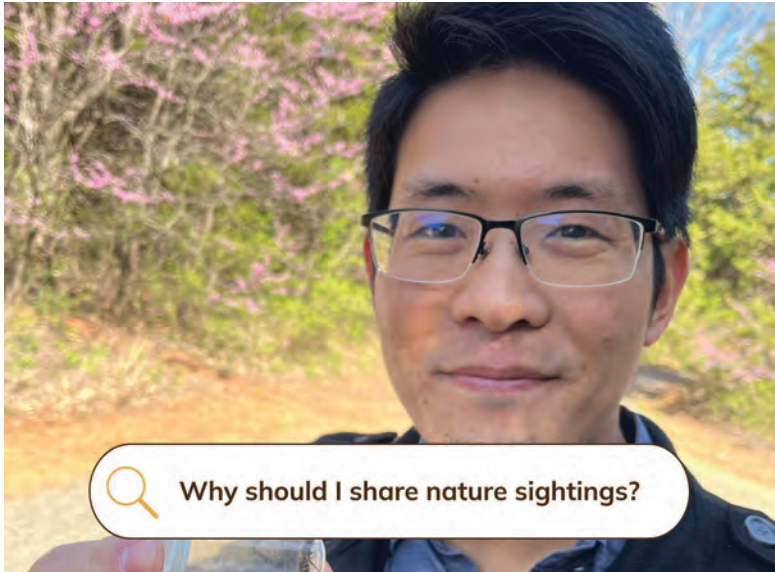
- When the Wildlife Department updated "A Field Guide to Oklahoma's Amphibians and Reptiles," it used sighting details shared on platforms like iNaturalist and HerpMapper to expand the known ranges



How can nature sightings be used?

of multiple species. These more-accurate range maps can be especially helpful when planning new survey and research projects.

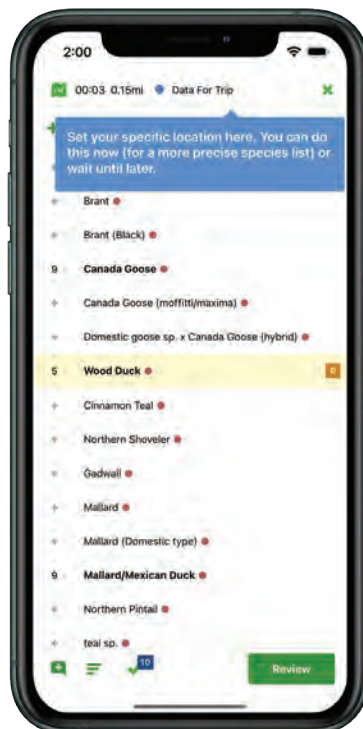
- When naturalist Stephen Ofsthun reported a tagged American white pelican he photographed at Lake Thunderbird to the U.S. Geological Survey's Bird Banding Laboratory, he helped biologists with the Idaho Department of Fish and Game learn more about the travel patterns of pelicans hatched in their state.
- Before Amy Buthod, botanist for the Oklahoma Biological Survey, heads into the field to inventory the state's plant communities, she searches several databases to identify plants that may be growing in her survey area and those with incomplete records. iNaturalist has been especially helpful, with 139 observations of 51 taxa tracked by the Oklahoma Natural Heritage Inventory made in 2020 alone! Buthod doesn't just use iNaturalist to connect to nature, it has also helped her connect with people! A fellow iNaturalist recently reached out about a federally threatened plant that was previously unknown to occur in Oklahoma. Buthod confirmed the sighting within a week, and the duo published the finding.



- When the Wildlife Department receives reports of aquatic nuisance species like big-head carp, biologists can collect important data about the invasive species and track their infiltration in the state's waters. The bighead carp invasion into Oklahoma has proven bizarre so far ... reports seem limited to adult animals, and biologists have not yet seen signs of recruitment. Additionally, the existing population hasn't seemed to boom as it has in other states and waterways. The more bighead carp the Wildlife



iNaturalist app.



eBird app.

Department can get from anglers, the more biologists can learn.

WHERE TO SHARE:

Just as it takes time to find the perfect rock for skipping, it takes time to find the right nature sharing app or site for your needs. We've highlighted four of our favorite sites below but encourage you to study the features of the individual sites and their privacy statements before giving them a test run.

iNaturalist

If you're interested in sharing sighting details for a variety of organisms (a bird observation one day, a plant observation the next, and a turtle observation a week later...), iNaturalist is a great "where to share" candidate. After creating a free account, you can add observation details from their website or mobile app, share notes beyond the standard "what, when, and where" fields, and search for sightings made by other iNaturalists in your area. As an added bonus, iNaturalist automatically recommends species identifications when you upload a photograph with your observation. Members of the iNat community may also recommend identifications once the observation is posted. Learn more about iNat's features in the online "Getting Started" guide.

Not quite ready to upload and share details of your nature sightings? Consider using "Seek by iNaturalist." (App Store/Google Play) Your observations and photos won't be posted on iNaturalist, but you'll still get automated recommendations for species identifications. Seek is a great iNaturalist alternative for younger children and classrooms.

eBird

Similar to iNaturalist, eBird documents the important "what, when, and where" details of your sightings. But where iNaturalist documents all organisms, eBird focuses only on bird sightings. This hub for birders has two primary features: 1) submitting your list of bird

sightings, and 2) exploring the sightings made of individual species or at birding “hot spots.” This exploration feature is accessible without logging in, but you will need to create a free account to upload your bird lists and photos, and to access other features. While eBird is especially helpful for experienced birders, it can also help new birders by generating an area’s expected species list and show when to expect certain birds in certain areas.

Want to take your birding adventures to the next level? The Cornell Lab of Ornithology shares a list of once-a-year and extended bird counts you can join; ways you can help study nesting success and nature in cities and towns; and plugs a photo and audio archive that helps document the planet’s bird life.

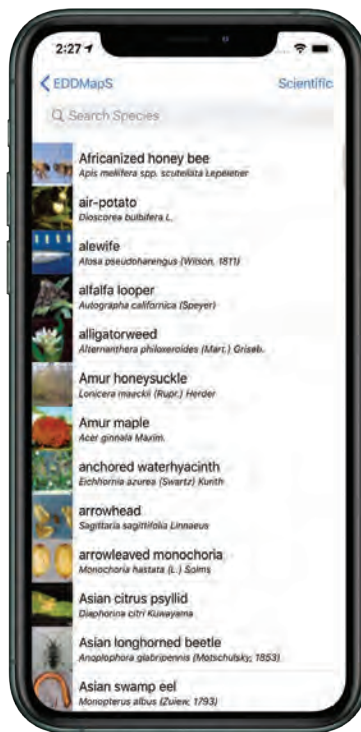
EDDMapS

The Early Detection and Distribution Mapping System, EDDMapS, is all about finding, mapping, and tracking invasive species. After creating a free account, you’ll be able to share sighting details of invasive plants, insects, fungi and diseases, and wildlife, which can help biologists track their spread. EDDMapS also searches through other databases, including iNaturalist, to provide a broader look at the invasion. Documenting and mapping observations is just one side of EDDMapS — land managers and naturalists can also learn more about the invasive plants and animals they may be concerned about and the ecological threats they present.

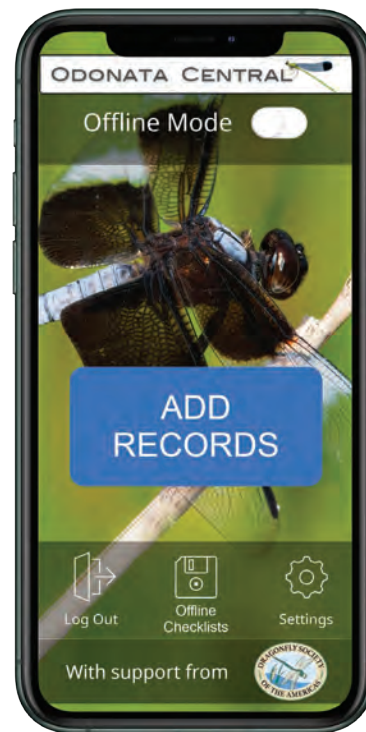
EDDMapS is a great one-stop-share for invasive species, but the Wildlife Department also accepts reports of Aquatic Nuisance Species including mussels, snails, fish, plants, and crayfish at wildlifedepartment.com.

Odonata Central

Just as eBird focuses solely on birds and EDDMapS focuses solely on invasive species, Odonata Central focuses solely on members of the “Odonata” insect order that includes dragonflies and damselflies. Like many other



EDDMapS app.



Odonata Central app.

nature sharing sites, Odonata Central allows you to upload your observations, search and filter their extensive database for other sightings, and view their records on a map for free. Bar charts have also been generated to show the flight seasons of various species.

Some of Oklahoma’s first dragonfly and damselfly records were collected by a Bluffton, Indiana banker in 1907 ... which means nature enthusiasts have been helping shape the story of Oklahoma’s fish and wildlife for more than a century without being biologists by trade. Read more about how E.B. Williamson’s legacy lives on in our Outdoor Oklahoma Journal, and discover

more about Oklahoma’s dragonfly history in “Dragonflies at a Biogeographical Crossroads.”

While you’re searching for the best nature sharing site for you, don’t forget that the Wildlife Department welcomes sightings, especially of rare species, at wildlifedepartment.com. 🦋

SUBSCRIBE TO THE WILD SIDE

If you’re looking for even more ways to get involved in conservation, sign up for our monthly e-newsletter, the Wild Side. Each issue features Oklahoma’s nongame fish and wildlife and the people that work to conserve them.





SMALL BUTTERFLY GETS BIG STATUS UPDATE

A TEAM FROM THE OKLAHOMA BIOLOGICAL SURVEY TRACKED DOWN THE HANDFUL OF FROSTED ELFIN BUTTERFLY RECORDS FOR THE STATE AND MADE IT THEIR MISSION TO INCREASE THE NUMBER OF KNOWN LOCATIONS FOR THE SPECIES.

As a conservation biologist assigned to track rare and declining species, the Oklahoma Natural Heritage Inventory's Brenda Smith has spent the past six years digging through scant and scattered records, wading through hundreds of roadside patches, and rallying an extended survey team with one goal in mind: assessing the status of Oklahoma's frosted elfin butterfly populations.

"It was very daunting at first — wondering if we would be able to find the species or do years of surveys without success. But once we got out in the field, we realized 'this is doable. We can tackle this.'"

The target may have been small — frosted elfins have a wingspan of just over an inch and early caterpillars can be as little as a single millimeter — but Smith's efforts paid off in a big way.

"Prior to our surveys, there were just a handful of frosted elfin records in the state," Smith said. "Now, there are 188 records of the spe-

cies in Oklahoma. We were able to bridge a gap and brought the number of known locations in Oklahoma to 52 sites in nine counties.

"With these records, we were able to re-evaluate the frosted elfin's status in Oklahoma using the NatureServe calculator and adjust the state ranking from an S1 — a species thought to be super rare — to an S3. It's still a species of concern but is further down the list."

This surge of new data comes at an important time for Oklahoma biologists as the U.S. Fish and Wildlife Service is reviewing the frosted elfin's status across its 25-state range to determine if the species may warrant protection under the Endangered Species Act. Smith was initially contacted about Oklahoma's frosted elfin populations in 2017 as part of the USFWS's Species Status Assessment and the discretionary review is expected in the federal fiscal year 2025.

FROM MODEST BEGINNINGS...

When Smith's search for the frosted elfin began in 2018, all that was known about the butterfly's status in Oklahoma could be boiled down to a handful of records — nine in total — that were confined to three counties and dated back about three decades.

This shortage of records initially pointed to a limited population but was also likely a result of the butterfly's understated appearance and behavior.

"I often think these butterflies are akin to the birding world's 'little brown jobber,'" Smith said. "They're not showy. They're not flashy. And they're skittish. They flit around so much within their host plant patch that it's hard to get a good look."

Adult elfins also have a short flight season that ends before most butterfly enthusiasts start venturing afield.

"When we first started surveying, the flight season was thought to just be three to four weeks in March and April. In that time frame in Oklahoma, there can be rain, it can be really cold, and there can even be ice storms. Most butterflies just don't come out that early. But we recently learned frosted elfins can be active in 45-degree temperatures — before the host plant has emerged — which is incredible and surprising."

While the butterfly itself is a challenge to find, Smith knew of a trade secret: If a species is secretive or otherwise hard to find, look first for its habitat.

For the frosted elfin, that meant looking for the known host plant in Oklahoma, yellow wild indigo. In bloom, the indigo's vivid yellow flowers are hard to miss but its bright green leaves and tendency to grow in clumps make the plant easy to spot from the road even outside of its flowering stage.

To find sites where wild indigo has been known to grow in Oklahoma, Smith relied on the Oklahoma Biodiversity Information System as well as museum and public databases and then reached out to the state's naturalist community to broaden the known indigo sites — and the elfin search radius — to 30 southeastern Oklahoma counties.

... TO MORE THAN 150 RECORDS

Once host plant locations were identified and the logistics of surveying across a wide swath of the state in unpredictable weather conditions were untangled, Smith joined her team of other scientists, conservation groups, and butterfly enthusiasts in the field.

During the adult butterfly's flight season, surveyors would walk in a zigzag pattern through indigo patches, documenting any adult elfins that were kicked up. Later, they would return to the patches, examining a minimum number of plants per patch and documenting any frosted elfin larvae found.

"Our main goal was to broadcast out and find as many sites as possible to better understand the frosted elfin's distribution in the state," Smith said.

In addition to increasing the number of Oklahoma frosted elfin records from nine to 188, the survey results also revealed patterns within the state. From the map on page 37, one would think more elfins are found in eastern Oklahoma where more small host plant patches are found. But actually, elfins and wild indigo have their highest densities within sites in south-



Yellow wild indigo flower.

JENA DONNELL/ODWC



Frosted elfin butterfly.

ALEX HARMON/CC BY-NC 4.0 DEED

OKLAHOMA'S BRIEF FROSTED ELFIN HISTORY: 1991–2018

The frosted elfin has only been known in Oklahoma since the early 1990s when entomologist Chuck Harp documented the species in Garvin and Murray counties. The next batch of records followed nearly 20 years later when former USFWS employee Berlin Heck observed the butterfly on his McCurtain County property, more than 140 miles away.

Curious if frosted elfins remained at these sites, Bryan Reynolds, another butterfly enthusiast and early member of Smith's elfin team, conducted follow-up surveys at Harp's southcentral sites in 2011 and at Heck's southeastern site in 2018. Though unable to find adult frosted elfins or their larvae at either location, Reynolds searched the surrounding areas and encountered the butterfly at nearby sites. The elfins at the "new" Murray County site have since been dubbed the "Sulphur Colony," while the elfins at the "new" McCurtain County site are now identified as the "Haworth Colony."



ALEX HARMON/CC BY-NC 4.0 DEED



JAMES HUNCE/CC BY-NC 4.0 DEED

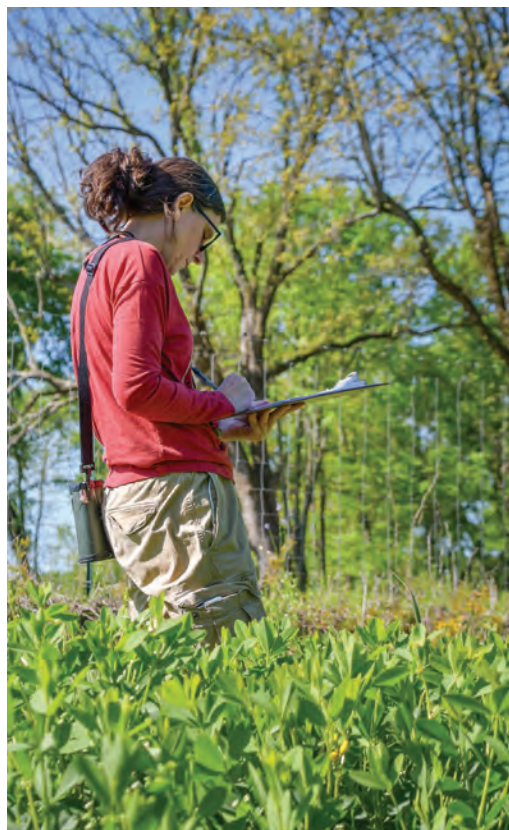
A yellow frosted elfin caterpillar feeds on a wild indigo plant near Durant, Oklahoma.

Adult elfins aren't picky about their nectar source and will feed from a variety of blooms. But the butterflies are a little more particular about where they lay their eggs. In Oklahoma, female frosted elfins primarily seek out yellow wild indigo, *Baptisia sphaerocarpa*, but Smith's team also documented elfins using the related Nuttall's wild indigo, *Baptisia nuttalliana*, as host plants for their caterpillars. Interestingly, frosted elfin caterpillars found in Oklahoma and the region are bright yellow instead of the green found in other parts of the range.

While feeding on the wild indigo, frosted elfin caterpillars produce a sugary substance that may foster a connection with ants known as myrmecophily. In some instances, the ants may be persuaded to care for the caterpillar by providing protection, but ants may also attack the elfin's larvae. Smith's team documented both sides of this behavior in Oklahoma.



JENA DONNELL/ODWC



JENA DONNELL/ODWC

Smith's team targeted clumps of the frosted elfin's host plant, yellow wild indigo, during the spring butterfly surveys.

central Oklahoma with counts at one indigo patch exceeding 100 individual adult elfins in 2022. Medium numbers of the butterfly and its host plant were found in the northeastern portion of the study area, and the lowest numbers were found at the most southeastern sites.

The health of individual indigo patches and their proximity to other patches were leading factors in calculating the state's number of elfin populations. Prior to 2018, there were two distinct populations. Now, there are thought to be 10 to 32 separate populations in the state.

"Every single population is either in the Choctaw Nation or the Chickasaw Nation," Smith said. "Both Nations will be important partners in conserving this species."

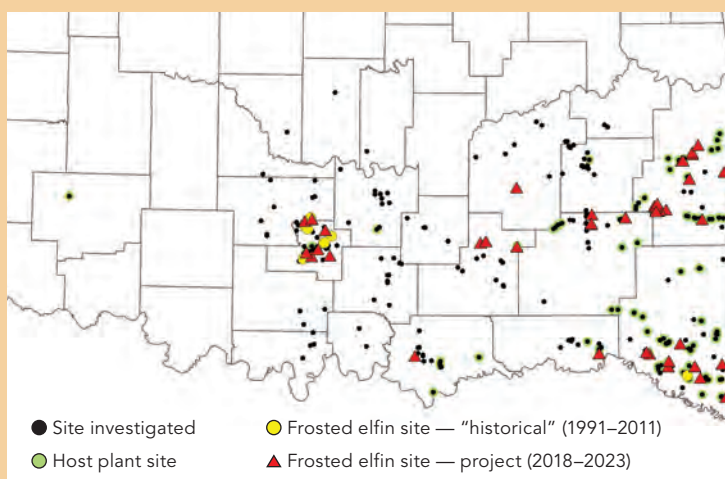
Though frosted elfin surveys have ended for the time being, Smith is delighted with the results.

Not only did the surveys expand the known frosted elfin range in Oklahoma, but Smith was able to build a regional network of landowners, agencies, and volunteers. As a result of this exchange, the Oklahoma Department of Transportation has incorporated conservation mowing practices at known wild indigo sites to reduce the impact to developing frosted elfins; the Oklahoma Turnpike Authority has protected an indigo and elfin site along the Indian Nation Turnpike; and the number of frosted elfin and yellow wild indigo records on the public nature sharing site iNaturalist has increased throughout the region.

"This is the kind of project you want to be involved in. It gives you hope to know your hard work is paying off and that people are getting the conservation message and want to help." 🍷

EDITOR'S NOTE: Smith was a steadfast force at the Oklahoma Natural Heritage Inventory, not only in this project but in building knowledge about species like the black rail, tiger beetles, and the state's dragonfly and damselfly community. She recently published "Dragonflies at a Biogeographical Crossroads." After more than 20 years in Oklahoma, Smith has joined the Nevada Division of Natural Heritage as an entomologist.

The Oklahoma Frosted Elfin Project was initially funded by the Oklahoma Natural Heritage Inventory and later by ODWC and U.S. Fish and Wildlife Service through the Cooperative Endangered Species Fund with matching resources provided by the Oklahoma Natural Heritage Inventory in 2021, 2022, and 2023.



Smith's team investigated a number of locations in southeastern Oklahoma and documented frosted elfins at 52 sites in nine counties.

The Oklahoma Frosted Elfin Project has been embraced by a wide range of partners since it began in 2018. Project leader Brenda Smith and managers Marie Stone and Bryan Reynolds conducted the bulk of the surveys along with Dr. Leah Dudley and Jose Montalva of East Central University. Colleagues from the Oklahoma Department of Transportation, Oklahoma Gas & Electric, Oklahoma State University's Kiamichi Forestry Research Station, Okies for Monarchs, The Nature Conservancy, Bebb Herbarium, U.S. Fish and Wildlife Service, U.S. Forest Service, Chickasaw Nation, Choctaw Nation, Weyerhaeuser, and the Kerr Center for Sustainable Agriculture alerted the team to roadside indigo patches, facilitated searches, and granted access. Oklahoma's community of naturalists also shared their wild indigo and elfin sightings, and private landowners welcomed the team on their properties and shared their enthusiasm for pollinators.

In addition to conducting surveys, the East Central University survey team also collected frosted elfin DNA samples as a side project and worked with Hendrix College in Arkansas, multiple learning institutions in Florida, and the University of Massachusetts in an attempt to determine if the subspecies of frosted elfin found in Oklahoma is a separate species.



Texas horned lizard.



WE'VE GOT ANSWERS

BIOLOGISTS REPLY TO LIZARD FAQs

Texas horned lizards, or the more familiar "horned toads," hold a special interest for many outdoor enthusiasts. They often feature fondly in childhood memories, spark a curiosity about the natural world, and can bring excited smiles when encountered. But these tank-like animals aren't stumbled upon as frequently as they have been in the past. We checked in with biologists Mark Howery and Cheyenne Gonzales to answer a few of the Wildlife Department's most frequently asked lizard questions and learn how to best help these well-loved reptiles.

WHERE DID THEY GO?

Historically, Texas horned lizards were found across about 80% of Oklahoma's counties, foraging in native grasslands for ants and other insects during their active season and burrowing underground to avoid extreme temperatures. But the lizards have become increasingly scarce as more and more of their habitat has been converted to crop fields and non-native pastures.

"Texas horned lizards are undoubtedly experiencing declines," said Mark Howery, senior biologist with the Wildlife Department's Wildlife

Diversity Program. "But they continue to be locally common and widespread in the western one-third of the state.

"And while we've seen the most substantial declines in the central and eastern parts of their range, one of the fascinating things

about the reports we receive from the public is that the lizards continue to persist in pockets, especially in central Oklahoma."

This persistence is likely due to corresponding pockets of quality lizard habitat.

"Texas horned lizards need somewhat loose soils, with relatively open vegetation and exposed ground to thrive," said Cheyenne Gonzales, another biologist with the Wildlife Diversity Program. "They're sit-and-wait predators, relying on their camouflage to avoid being spotted by predators and waiting for ants next to their open trails."

ARE THEY PROTECTED OR ENDANGERED?

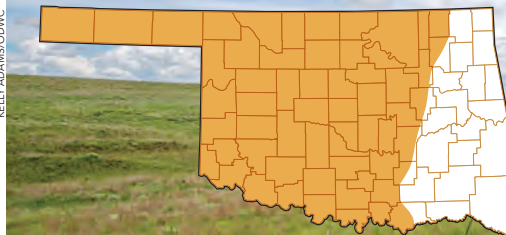
Contrary to popular belief, the Texas horned lizard isn't a "listed" species but is afforded some protections by state law.

"These lizards are neither threatened or endangered at the state or federal level," Gonzales said. "Instead, they're considered a species of greatest conservation need and have a closed season in Oklahoma."

The closed season has protected Texas horned lizards from direct take — capture, possession, or harvest — since 1992, and while the protection doesn't extend to the lizard's habitat, it does make it illegal to keep one as a pet.

"A majority of the lizard's diet is ants and other insects," Gonzales said. "Even if it were legal to have a Texas horned lizard, it would be difficult to supplement its diet and keep it alive."

KELLY ADAMS/ODWC



HOW CAN I HELP LIZARDS?

Lizard enthusiasts have many options for helping lizards and other wildlife, from maintaining quality places for them to live, to reducing the risk of predation or mortality, to simply sharing the word.

"The first and foremost way to help Texas horned lizards is to conserve their habitat," Howery said. "It all starts with native vegetation."

Native vegetation — with plenty of bunch grasses and flowering plants — doesn't just help the lizards more easily move around their environment, it helps the lizard's main food source, ants.



JACK CHLEBANOWSKI/SUBMITTED

"Harvester ants are feeding on the seeds of these grasses and forbs, and while people may avoid spraying ant mounds with insecticide, they may not realize that spraying 'weeds' with herbicide can be just as detrimental to the lizards and their food supply."

Keeping bermudagrass and other invasive, sod-forming grass at bay is another way to accommodate lizards.



"Horned lizards will spend time in mowed bermudagrass yards to bask in the sun and warm up, but they can't live there full time," warns Howery. "Bermudagrass doesn't produce enough seeds to support harvester ants, and tall bermudagrass is difficult for horned lizards to move through. Keeping bermudagrass out of lizard habitat is key to maintaining the ideal combination of native vegetation and bare ground."

Private landowners can get more tips for maintaining habitat for lizards, or any other native wildlife, by scheduling a visit with the Wildlife Department's Private Lands Program.

While habitat is the major factor in maintaining horned lizard populations, there are multiple other ways to help the lizards.

"If you're trying to control fire ants, you can use 3 gallons of boiling water per mound instead of insecticides that may affect native invertebrates," Gonzales said. "And keeping house cats indoors can also protect lizards and other wildlife from predation."

"Don't forget that roads can be a dangerous place for basking lizards and other small animals. You can help reduce road mortality by being mindful when traveling, especially on dirt and pasture roads."

Howery and Gonzales also encourage people to share their Texas horned lizard sightings at wildlifedepartment.com.

"In the last two years, we've received reports of more than 500 individual lizards, more than half of which have been juveniles, from 39 counties," Gonzales said. "It's always great to get these reports and keep tabs on the population."

LIZARD OR TOAD?

Despite the popular common name of "horned toad," these animals are technically lizards. Both lizards and toads feed primarily on insects, but only the reptilian lizards have scales on their bodies, claws on their feet, and most have external ear openings. Toads and other amphibians have moist skin, which is usually smooth, lack claws, and do not have external ear openings.

"Texas horned lizards are more adapted to drier environments than most reptiles and amphibians, but they likely have higher water requirements than we think," Howery said. "In fact, these lizards can funnel rain and dew down channels of scales on their back toward their mouths to drink or 'harvest' that moisture."

WHAT IS THE WILDLIFE DEPARTMENT DOING FOR TEXAS HORNED LIZARDS?

In addition to collecting Texas horned lizard sightings from the public and monitor-



LIZARD

WADE FREE/ODWC



TOAD

JENA DONNELL/ODWC

Part of the Texas horned lizard's scientific name, "*Phrynosoma*," translates to "toad body."

ing their status, the Wildlife Department has funded multiple studies focused on the popular lizard and manages hundreds of thousands of acres of public lands that benefit lizards and other wildlife.

"We've worked with several partners at the University of Oklahoma, the Sam Noble Museum of Natural History, the Oklahoma City Zoo, and Oklahoma State University to learn more about these lizards, where they occur, and the potential viability of a relocation program," Howery said. "And one of our current projects is assessing the most effective ways to survey lizards on public and private lands. Early indicators point to road-based surveys as the most effective survey method."

Beyond this study, funded in part by the State Wildlife Grants program with support from partners like the University of Oklahoma, the Wildlife Department also manages habitat that can support Texas horned lizards on 36 Wildlife Management Areas, encompassing more than 325,000 acres of public lands. And the agency encourages and financially supports similar habitat management practices, including prescribed fire and native grass plantings, on privately owned lands.

"Conserving this species in Oklahoma is going to take long-term commitment and efforts from multiple partners at multiple lev-

els," Howery said. "The Wildlife Department has made strides by having protective regulations and managing habitat on public lands. But it will take a landscape scale effort — with private landowners as our chief partner — to make an impact." 🍷

I HAVE NATIVE GRASS AND ANTS... WHERE CAN I GET LIZARDS?

Landowners that have both native habitat and ample ant mounds often reach out to the Wildlife Department to find out how they can relocate horned lizards to their property. Unfortunately, studies show translocated lizards and other reptiles experience high mortality — fewer than 25% of relocated Texas horned lizard adults and less than 30% of juveniles survive a full year — making a relocation program unrealistic at this time.

"Relocated animals have a hard time orienting in and learning their new environment," Howery said. "Studies show these individuals move four to five times more often in their new habitat than the resident horned lizards. That makes them incredibly susceptible to predation."

Even without the issue of increased mortality of translocated animals, the issue of scale remains.

"They may be relatively small in size, but these lizards require a large amount of quality habitat. For some species, we can implement practices in our backyard and make an impact. But for Texas horned lizards, a relocation area would need to support several hundred lizards to make an impact, and that can require more than 100 acres of high-quality habitat.

"The good news is that if you have quality habitat in a large tract, there's a good chance that you already have lizards on your property."

Conservation

Fun Outdoors!

A wildflower suncatcher is fun and easy to make! Go outside and collect wildflowers, leaves, foliage, and grass. Go inside and cut the center circle out of a paper plate. Place the plate's ring on top of a sheet of plastic wrap. Turn the ring over and arrange your flowers, etc., on the plastic wrap. Then put another sheet of plastic wrap over the ring. Trim the plastic wrap, punch a hole into the plate ring, and hang in a window.



Wildflower Suncatcher.

Hunting Tip

Spring turkey season is open until May 16. If you didn't get a turkey during youth season, your unfilled youth license is still valid for regular turkey season.

Fishing Tip

Have you found yourself at your favorite fishing spot in need of bait? Try digging up your own worms. Or catching grasshoppers, crickets, etc. If you brought a sandwich, you might use a bit of bologna, bread, or cheese on the hook.

for Kids!

Word Search: Insects in Oklahoma

D	D	D	G	P	I	L	L	B	U	G	N	R	N	I	Z
V	E	L	T	E	E	B	U	Z	V	O	H	Y	S	W	V
Z	Z	L	E	G	Y	K	M	E	P	W	O	T	E	G	O
G	Q	C	I	C	A	D	A	K	I	L	L	E	R	K	T
S	G	L	G	R	A	S	S	H	O	P	P	E	R	I	G
H	P	F	D	N	E	U	S	I	R	E	D	A	N	T	W
C	B	W	B	K	E	A	D	A	C	I	C	A	P	F	M
A	I	B	U	O	B	Y	Y	Z	S	J	R	O	A	K	N
O	F	J	T	X	E	N	K	J	C	S	U	Q	D	E	B
R	Y	X	T	L	L	Z	Y	U	B	K	I	K	D	J	O
K	U	F	E	I	B	H	W	S	K	A	T	N	A	L	G
C	C	X	R	J	M	W	R	Z	Q	W	I	O	B	U	R
O	O	A	F	X	U	S	T	I	N	K	B	U	G	U	E
C	G	B	L	B	B	Q	K	M	B	G	M	H	F	O	G
P	S	V	Y	Y	L	F	L	E	S	M	A	D	A	N	F
L	L	W	E	G	Q	V	K	Y	D	E	W	H	E	J	P

Find and circle the names of these insects commonly seen in Oklahoma.

Cicada

Red Ant

Damselfly

Bumble Bee

Grasshopper

Beetle

Cockroach

Stink Bug

Butterfly

Pill Bug

Assassin Bug

Cicada Killer

COOL FACTS About the Cicada:

- These insects are 1 to 2 inches long with prominent eyes on each side of the head.
- The male creates a loud buzzing courtship call in spring and summer.
- Many species emerge from the soil annually after living underground 2 to 5 years.
- Some species emerge in 13- or 17-year intervals, perhaps a survival strategy.
- In spring 2024, emergence of both 13- and 17-year species is expected in the United States.
- The adult insect is called an imago, and adults only survive about two weeks.
- They feed on xylem sap from various tree species.



ROSARIO/NATURALIST CC-BY-NC

- At least 3,000 cicada species are found worldwide.
- Their song is loud enough at close range to cause permanent hearing loss in people.
- Females cut slits into tree bark or limbs and deposits eggs.
- Nymphs hatch from eggs and fall to the ground, where they burrow.
- After emerging from the soil, nymphs climb trees to shed exoskeletons and become adults.

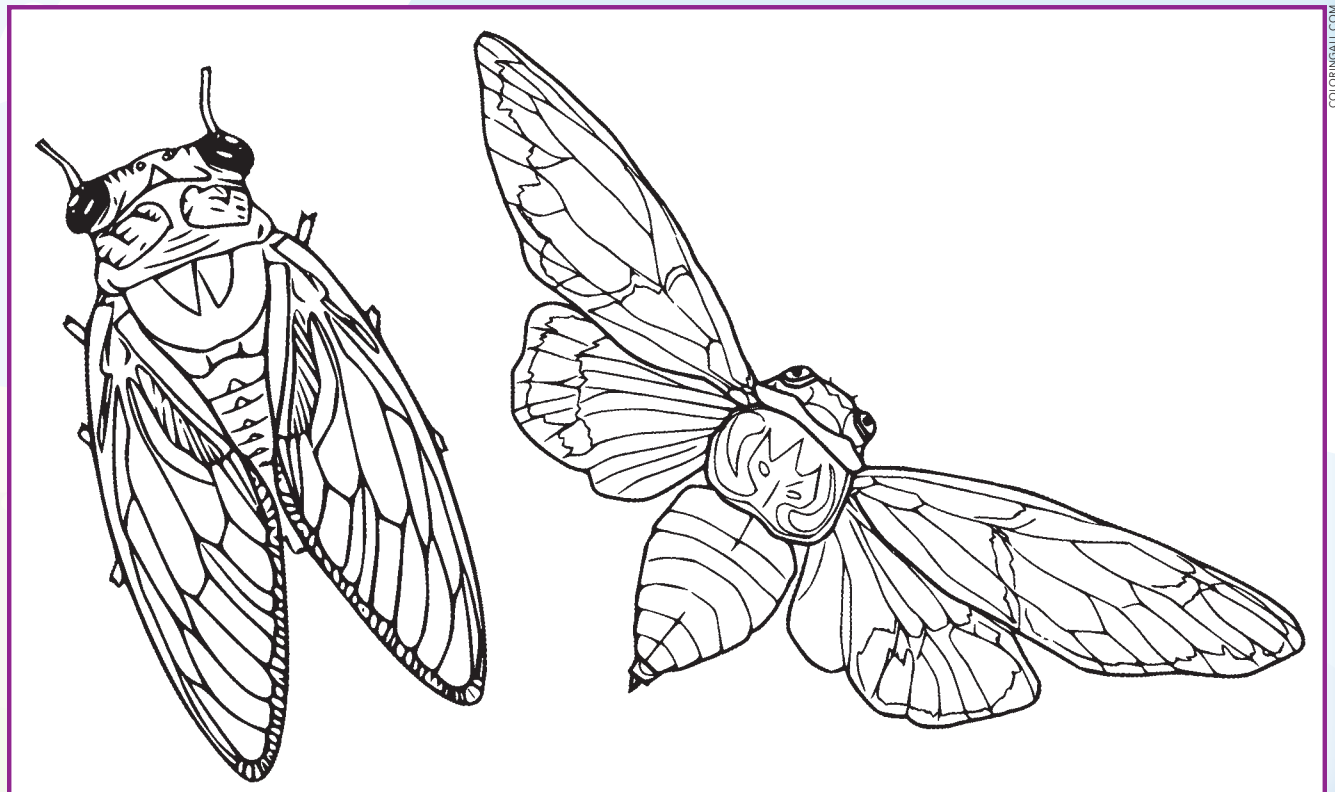


ASMITHA/NATURALIST CC-BY-NC



TED MACRAE/NATURALIST CC-BY-NC

Color a Critter: Cicada



COLORINGALL.COM

OWCF Invests Time, Money to Boost Conservation

The Oklahoma Wildlife Conservation Foundation supports the Oklahoma Department of Wildlife Conservation by supporting numerous conservation, fishing, hunting, and law enforcement projects across the state.

The Foundation was formed in 2018 to encourage private support for ODWC. The Foundation's vision is to enable all outdoor enthusiasts to actively enjoy our state's wildlife and wild spaces.

OWCF is a nonprofit organization working exclusively alongside and supporting the Wildlife Department. It provides citizens an outlet to show their passion for the outdoors by investing their time and money in projects that will make a difference for generations to come.

OWCF Executive Director Rick Grundman said the Foundation is always looking for opportunities allowing it to partner with ODWC to leverage resources because more can be done together than could ever be done alone.

Here are some of the major contributions from OWCF to date:

- \$952,770 endowment started with Midway USA Foundation to support youth shooting sports programs in Oklahoma. Up to 5 percent may be spent each year.
- \$75,000 match for a \$300,000 planning and engineering study to bring water back to Hackberry Flat Wildlife Management Area.
- \$200,000 planning and engineering study match for the planned Arcadia Lake Family Archery Range.
- \$1 million-plus Arcadia Lake Archery Range construction funding match committed; \$50,000 matching grant secured

from OG+E to provide 18-1 matches to fully fund range construction set for this year.

- \$8,750 for buying duty ammunition for all ODWC Game Wardens at a time when state contracts were backlogged.
- \$27,500 for 115 Mustang Auto-Inflate Personal Flotation Devices bought for all Game Wardens.
- Enforcement Model Patriot airboat bought from private donations for Game Wardens.
- \$5,000 that was matched by private donors, for a total of \$40,000, to fund Tiger Bass stocking in Grand Lake.
- Bought prizes to promote awareness and compliance for new Fisheries Division program to gather data through bass tournament registrations.
- Provided Lifetime License grand prize for Rack Madness event, along with door prizes.



Renaming of education building at Hackberry Flat WMA.

MICAH HOLMES/ODWC



Patriot airboat donation to ODWC Law Enforcement Division.

DON P. BROWN/ODWC


OKLAHOMA WILDLIFE CONSERVATION FOUNDATION SPOTLIGHT

- Worked with OG+E to expand Close to Home Fishing and Family Fishing events, and provided fishing tackle to youth attendees.
- Support of Nuisance Bear Response Team with purchase of six Pneu-Dart pneumatic dart guns and provided chemical immobilization training on best practices from Global Wildlife Resources.
- Fostering Outdoor Oklahoma Families (FOOF) fishing equipment and licenses purchased to support this foster children's program sponsored by ODWC and Oklahoma Department of Human Services.
- Provided grant-writing assistance to ODWC resulting in applications for \$7 million in grants.
- \$10,000 building renaming of the Hackberry Flat Education Center as requested by the Oklahoma Wildlife Conservation Commission.
- Funding to support ODWC's award-winning social outreach activities.
- Co-funded Close to Home Fishing dock in Oklahoma City with the Paul George Foundation.
- Bought hunting blinds, chairs, rests, and equipment for use on youth depredation doe hunts.

Also, the Foundation's Board of Directors recently voted to fund the following projects from ODWC's projects list:

- \$10,000 for bear conflict management (completes the amount needed for improved gear and training in Wildlife and Law Enforcement Divisions).
- \$15,000 for the Stars and Stripes Project providing licenses for disabled veterans and Gold Star families.
- Up to \$30,000 for the Foundation to purchase guided hunts for ODWC's Spring 2024 Outdoor Oklahoma Raffles (2 bull elk, 1 mule deer, and 1 spring turkey).
- \$25,000 to leverage \$75,000 in federal funds for leasing more than 13,000 acres of public hunting land through ODWC's the Oklahoma Land Access Program.
- \$25,000 to leverage \$75,000 in federal funding to provide eight new schools with the complete suite of ODWC's outdoor education programs
- \$12,500 to leverage \$37,500 in federal funding to add 50 schools to ODWC's Fishing in the Schools program
- \$3,125 to leverage \$9,375 in federal funding to add one more school to our full suite of ODWC's outdoor education programs.

OWCF plans to continue funding:

- Future Rack Madness lifetime license giveaways.
- \$4,000 for art commissions for ODWC's durable collectible license cards. (OWCF will be able to auction or raffle the artwork after it is used for the cards.)
- Continue support for ODWC's social media platforms. 



OWCF and OG+E family fishing event at Horseshoe Lake.

OWCF
www.okwildlifeconservation.org



THE OKLAHOMA WILDLIFE CONSERVATION FOUNDATION (OWCF) is engaged in a five-year program to raise \$5.2 million to further the strategic mission of the Oklahoma Department of Wildlife Conservation.

Since the Wildlife Department has operated on a limited budget for more than 100 years and doesn't receive appropriated state tax dollars, funds raised by the Foundation are among the best methods to more rapidly advance the Department's strategic plan. Because many ODWC projects qualify for a 3-to-1 or 9-to-1 federal dollar match, donations to OWCF can be multiplied and bring more and better projects to Oklahoma more quickly.

Funds raised by OWCF support wildlife research and management, multi-year conservation projects, community outreach programs, and outdoor recreation projects. OWCF's mission cannot be achieved without the support of community partners, philanthropic foundations, and donations from individuals who want to make a difference for future generations.

All donations are tax-deductible. To learn more about OWCF and how to help, go to www.OKwildlifeconservation.org, www.facebook.com/OKWildlifeFoundation, or email Rick Grundman at rgrundman@okwildlifeconservation.org, or call (918) 323-5566.



OUTDOOR STORE

license.GoOutdoorsOklahoma.com

Sign in or shop online as a guest. Some items also available in person at ODWC headquarters, 1801 N. Lincoln Blvd. in Oklahoma City.

****Prices listed on these pages do not include \$3 online ordering convenience fee.**



NEW ODWC LOGO DRINKWARE

Double-wall high-grade stainless steel 16-oz coffee mugs and 20-oz tumblers made by Yukon with DuraGrip powder coat finish featuring the new ODWC arrowhead logo. Tumblers come in navy, white, and bottomland camo; mugs come in olive drab and navy. They are vacuum-insulated and BPA-free. (Online sales only.) — \$20

Outdoor Gear



YUKON FLOATING GUN CASE

Welded waterproof construction, thick foam padding for protection, 500d tarpaulin exterior shell, carry strap and handle, universal fit for shotgun or scoped rifle. (Online sales only.) — \$70

YUKON ODWC BACKPACK COOLER

Double Duty — Works as Cooler or Padded Gear Bag, Keeps Ice For Days, Air Tight Zipper, Rugged Welded Construction, 20 can with Ice capacity. (Ships separate from other Outdoor Store items) — \$140.00



NEW OUTDOOR OKLAHOMA CAPS

These sleek fabric caps sport the latest Outdoor Oklahoma logo design! They are the Richardson 112 model, mid-pro shape, pro-curved visor, adjustable snap-back, 60% cotton/40% polyester. Various colors and styles will be available (subject to availability). (Online sales only.) — \$20

DURABLE COLLECTOR'S CARDS

Every hunting and fishing license holder can upgrade to a customized hard plastic card that won't be damaged by water, sun, dirt, or regular wear and tear like paper documents. Cards hold customer and license information on one side; the other side features artwork from Oklahoma artists that changes periodically. Several designs available. (Account sign-in required.) — \$6



OKLAHOMA HABITAT DONOR WINDOW DECALS

Show your support of the Wildlife Department's conservation efforts with these striking window decals. All proceeds are earmarked to help provide hunting and fishing access to the public. — \$10 each





WILDLIFE LICENSE PLATES

Dress up your vehicle while showing your support of our great state's wildlife resources by getting a wildlife license plate. Nine Wildlife Conservation Plates are available to serve as your regular, rear-bumper license plate. The plates cost just \$40 (original or replacement) or \$36.55 (renewals) above your regular annual registration fee with proceeds going to Oklahoma's Wildlife Diversity Program. The forms are available at local tag agencies, or online at tinyurl.com/WildTags.

OKLAHOMA WATERFOWL HUNTING STAMP

Oklahoma "duck stamps" are always popular with collectors and hunters. While each year's stamp features a different handsome design sure to add appeal to any stamp collection, funds from stamp sales are used for many kinds of waterfowl management projects. Specify year when ordering. — \$10

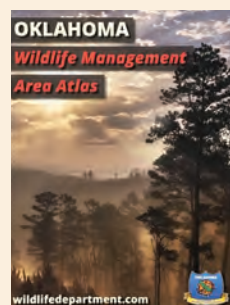


DURABLE FIELD TAGS

A three-pack of plastic field tags with name and customer ID printed on one side, and places to write your harvest date/time and the E-Check confirmation number on the other. Reusable. (Account sign-in required.) — \$6

HABITAT DONOR CAP

Top-quality, American-made cap displays the Bass Habitat Donor Patch, which designates you as a supporter of the Wildlife Department's conservation efforts. Wearing this hat means you care about future generations and the great hunting and fishing tradition. — \$20



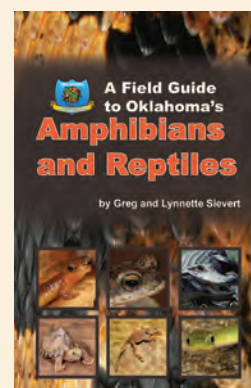
OKLAHOMA WILDLIFE MANAGEMENT AREA ATLAS

The Wildlife Management Area Atlas presents maps of Oklahoma's WMAs and ODWC-owned fishing lakes. At 109 pages, the atlas features lands purchased before 2018. Each map shows special features such as parking sites, camping areas, and food plots. Your atlas purchase comes with a bonus one-year subscription to the award-winning *Outdoor Oklahoma* magazine. — \$25

LATEST

A FIELD GUIDE TO OKLAHOMA'S AMPHIBIANS AND REPTILES

Get an introduction to Oklahoma's 140 species of salamanders, frogs, turtles, lizards, snakes and alligator in the 4th edition of our guide to the state's amphibians and reptiles. Six species accounts have been added and range maps have been updated throughout the guide. — \$20



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RAZOR-BACKED MUSK TURTLE

BY KAYLEEN SUGIANTO, OKLAHOMA STATE UNIVERSITY STUDENT

The razor-backed musk turtle (*Sternotherus carinatus*) is among many aquatic species of turtles native to about 10 counties in southeastern Oklahoma.

Their shells range in color from light brown to orange, with dark gray streaking that has the potential to fade as time passes.

Their skin color varies with brown, pink, and gray, along with numerous small black dots sprinkled across its body.

The carapace, or top shell, is high-domed with sharp, swooping scales that resemble razored humps along the midline of the back. These humps are what give this turtle its name.

When bothered, this turtle can excrete a pungent musk.

These turtles generally have 10 scales on the plastron, or bottom shell, where other turtles often have 11 scales. A single pair of barbels is noticeable on the chin rather than on the neck.

Adult turtles rarely exceed 5 inches long in Oklahoma. Hatchlings are about an inch long and weigh 3 to 4 grams. Male turtles may be slightly larger than females and have longer tails. Like most turtle species, the sex of the razor-backed musk turtle's offspring is determined by temperature; more females are produced in cooler or warmer conditions, and more males are produced at intermediate temperatures.

Individuals reach maturity about 4 to 7 years of age, and they are about 3 to 4

inches long. Females reach maturity faster on average than males.

These turtles make their homes in aquatic habitats, such as medium to large flowing streams with sandy or gravelly bottoms. They prefer deeper and clearer water bodies. They walk along the floor of the streams and use submerged rocks or wood as hiding places. Some turtles even have a growth of healthy algae on their shells.

While these turtles are mainly aquatic, they often take advantage of emerging deadwood upon which to bask. Basking occurs on logs or high above the water on steeply angled branches that have fallen from trees. These areas allow the razor-backed musk turtle the ability to avoid areas where other turtles thrive.

Razor-backed musk turtles are primarily carnivorous, preying on aquatic insects, snails, crustaceans, and other sources of food that come their way. Larger individuals of the species tend to favor mollusks in their diet. They also eat amphibians, carrion and aquatic plants. They are active mostly from late afternoon into evening, and pre-dawn through morning.

Predators of these small turtles include alligator snapping turtles, water snakes, diving beetles, and many other aquatic predatory species.

Spotting razor-backed musk turtles can be difficult because they are greatly aware of their surroundings. Because of this, they are easily startled and will plunge straight back into the water at the slightest disturbance perceived as a threat. The use of binoculars would be the best way to detect and observe these turtles as they bask in the sun throughout most of the year. ♡

While these turtles are mainly aquatic, they often take advantage of emerging deadwood upon which to bask.





DARRIN HILL/ODWC

The new shooting range at Packsaddle Wildlife Management Area is among the latest of more than 20 range-building or renovation projects under way across the state. A special pullout section about ODWC's sport shooting efforts is included in this issue of Outdoor Oklahoma.

Outdoor Oklahoma

