

Panoramas

hen I've been confronted by a crisis in life, it helps me focus on things that really matter. The events of COVID-19 have tested all of us. For many, our faith, family, and friends are at the forefront like they should be when the seas are calm. I do have faith that we Oklahomans will get through this. I also plan to spend more time with family and friends in the woods and on the water.

Does anyone think about going hunting and fishing 365

days a year? Good! I'm not alone! Being an avid outdoorsman and the Assistant Director of your Wildlife Department, I do wonder if we think about the future of hunting and fishing and all outdoor participation often enough.

If our kids, grandkids, nephews, nieces, and friends are to care about wildlife, nature, the outdoors and conservation, then we need a purpose-driven outdoor life. That doesn't just mean catch more fish and shoot bigger deer. We need to share and teach basic skills

we take for granted. Having introduced hundreds of kids to the outdoors, I can tell you that mentoring someone on their first deer, turkey, quail, squirrel or fish is the ultimate reward for any outdoorsman. My motto is "Replace Yourself Plus One." I take that seriously.

As hunting, fishing and outdoor education continue to decline across the country, it is up to each of us to introduce folks to our pursuits. Opportunities are plentiful. You only need to look at the Department's website to get started.

Free Fishing Days will be June 6-7. Every kid deserves a chance to catch sunfish on a bobber and worm. Mostly though, they need to be mentored. Youths need to be taught basic skills like how to tie on a hook, where to fish along the bank, and how to clean a fish. Try a Close to Home fishing lake and be that person who got you hooked when you were a kid!

Hunting is in ways harder, as there are fewer public places to learn skills and more skills to learn. It starts with basic firearms handling and ultimately leads to a skilled shooter. Once mastered, the shooting skills fit seamlessly into hunting.

For nearly a decade now, Americans have engaged more in the shooting sports, and the Department has started a shooting range construction and renovation initiative to provide places to shoot, whether just for fun, to teach basic shooting skills, or both. Learning and practicing a fun, safe activity together is always a great way to build relationships while doing something

> that builds confidence and increases the chances of having a successful hunt later.

Target practice and recreational shooting are important because they provide critical funding for wildlife conservation activities. When shooters buy guns and ammo, a federal excise tax is collected. That money comes back to the states for programs including wildlife restoration, state wildlife grants, hunter education and landowner incentive programs, and public lands. Simply put, shooters help fund the conservation machine.

Recognizing the importance of sport shooting to Oklahomans, the Department is renovating existing public-access shooting ranges and building new ones across the state on wildlife management areas. We're also building ranges with universities and improving access to private ranges. We've finished renovating four ranges and will turn dirt this summer to renovate two. And new ranges are set for Kaw, Copan, Sandy Sanders and Packsaddle WMAs.

As these new ranges come on line, (and as we all, hopefully, are able to return to normal) I urge you to go shoot, "Replace Yourself Plus One," and mentor the next generation of outdoor enthusiasts that will fund the conservation machine. Our future depends on it.

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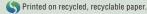
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Off the Beaten Path

Notes on Wildlife • Outdoor Tips • Readers' Letters • Environmental News Compiled by Don P. Brown

ENID STUDENT WINS ODWC SPECIAL AWARD FOR ART



"Through Their Eyes," an artwork by Parker Schovanec of Enid, won the Oklahoma Department of Wildlife Conservation Special Award in this year's Sutton Award student art contest.

A student of Lacye Russell at Oklahoma Bible Academy, Parker received a special cash prize for the best depiction of an Oklahoma-related conservation subject. His entry also received an Honorable Mention in the 2-D art category.

The first-place winners this year are:

- Darcy Ball, Metro Christian Academy, 2-D Artwork, "Achromatic Bengal."
- Destiny TeLinde, Alva High School 3-D Artwork, "The Great Horned Owl."
- Liam Puls, Oklahoma School of Innovation and Experiential Learning, Photography, "The Land of Many Mothers."

Established in 2003, the Sutton Student Art Award recognizes high school students who demonstrate the ability to communicate current conservation topics in compelling ways. The show is free to enter and open to all Oklahoma high school students grades 9-12. The award is funded up to \$20,000, which is distributed to winning student submissions and their instructors as determined by the selection committee.

"From honeybees to Texas horned lizards, through sculptures to pastels, these students have intriguing stories to tell," said Audra Fogle, development director for the Sutton Avian Research Center in Bartlesville. "It is exciting to be able to connect our conservation mission with schools to provide significant scholarships for students and the teachers who work so hard to run their programs on shoestring budgets."

Parker's artwork depicts a close-up view of a deer's eye showing reflections of a cityscape.

In his essay, Parker wrote, "Imagine what the animals of this world see compared to what we see every day. The animals have watched us throughout the years slowly tearing nature and this world apart.

"All people should experience nature firsthand in order to appreciate what human society must look like through the eyes of the wildlife. Hopefully then we would all be more respectful in conserving the earth."

Fogle said more than 2,600 students have been encouraged to express themselves through this art

"Today, as schools struggle to afford enrichment programs such as the arts, it is exciting to be able to connect our conservation mission with schools to provide significant scholarships for students and the teachers who work so hard to run their programs on shoestring budgets," said Audra Fogle, development director for the Sutton Center in Bartlesville.

The next Sutton Award competition will start seeking entries in September with artworks due in January. For more information, go to www.suttoncenter.org/education.





2 Off the Beaten Path

Outdoor Galendar

For New updates to the Outdoor Calendar, please visit the Department's

WEBSITE: WWW.WILDLIFEDEPARTMENT.COM/CALENDAR.HTM

NOTICE: Events listed were still scheduled at press time; events are subject to cancellation due to the coronavirus pandemic.

MAY 2020

- 2 Oklahoma City free fishing day, no city permit required.
 Forest Ecology Workshop, 9 a.m.-3 p.m., OSU Stillwater, www.okmasternaturalist.wixsite.com/website.
- **3** "Outdoor Oklahoma" TV, TBD, 8 a.m., OETA.
- 4 Oklahoma Wildlife Conservation Commission meeting, 9 a.m., Goodwell, Okla.
- **9** Hooked on Fishing, ages 5-15, 8-10:15 a.m., Edwards Park Lake, Oklahoma City. Register: www.okc.gov.
- 10 Mother's Day.
 - "Outdoor Oklahoma" TV, Tenkara Fishing, 8 a.m., OETA.
- 16 Hooked on Fishing, ages 5-15, 8-10:15 a.m., Metro Tech Springlake Campus, Oklahoma City. Register: www.okc.gov.
- "Outdoor Oklahoma" TV, TBD, 8 a.m., OETA.
- 19 Okla. Striped Bass Assn. meeting, 7 p.m., Zebco, Tulsa, (918) 639-8114.
- 23 Hooked on Fishing, ages 5-15, 8-10:15 a.m., South Lakes Park East Pond, Oklahoma City. Register: www.okc.gov.
- "Outdoor Oklahoma" TV, TBD, 8 a.m., OETA.
- 25 Memorial Day; state offices closed.
- "Outdoor Oklahoma" TV, TBD, 8 a.m., OETA.
- Friends of NRA events set in El Reno, May 16; Ponca City, May 30. Info: www.FriendsOfNRA.org.
- National Wild Turkey Federation events set in Woodward, May 21; Idabel, May 29; Durant, May 30. Info: www.nwtf.org/events.

JUNE 2020

- 1 Oklahoma Wildlife Conservation Commission meeting, 9 a.m., 1801 N. Lincoln Blvd., Oklahoma City.
- Oklahoma City free fishing day, no city permit required.
 Hooked on Fishing, ages 5-15, 8-10:15 a.m., Edwards Park Lake,
 Oklahoma City. Register: www.okc.gov.
- **6-7** Oklahoma Free Fishing Days, no state license required.
- 7 "Outdoor Oklahoma" TV, TBD, 8 a.m., OETA.
- 13 Hooked on Fishing, ages 5-15, 8-10:15 a.m., Metro Tech Springlake Campus, Oklahoma City. Register: www.okc.gov.
- 14 "Outdoor Oklahoma" TV, TBD, 8 a.m., OETA.
- 16 Okla. Striped Bass Assn. meeting, 7 p.m., Zebco, Tulsa, (918) 639-8114.
- 20 Hooked on Fishing, ages 5-15, Dolese Youth Park Lake, Oklahoma City. Register: www.okc.gov.
- 21 Father's Day.
 - "Outdoor Oklahoma" TV, TBD, 8 a.m., OETA.
- 27 Intro to Tenkara Fishing, ages 14+, 10 a.m.-noon, Arcadia Conservation Education Area, Edmond, (405) 521-3855.
- "Outdoor Oklahoma" TV, TBD, 8 a.m., OETA.
- Ducks Unlimited event set in Oklahoma City, June 12. Info: www.ducks.org/Oklahoma/events.
- Friends of NRA events set in McAlester, June 6; Norman, June 13. Info: www.FriendsOfNRA.org.
- National Wild Turkey Federation events set in Guthrie, June 4; Edmond, June 6; Sapulpa, June 20; Claremore, June 27. Info: www.nwtf.org/events.
 - ** FOR HUNTING SEASON DATES, GO TO www.wildlifedepartment.com/hunting/seasons **

APPLY FOR CONTROLLED HUNTS

UNTIL MAY 20

The Oklahoma Department of Wildlife Conservation's popular controlled hunts program is open for online applications through May 20.

This program offers once-in-a-lifetime elk and antelope hunts, highly sought-after buck hunts, and a range of other quality deer and turkey hunting opportunities through randomized drawings that only cost sportsmen \$5 to enter. Hunts are held on Wildlife Department or other government-owned or managed lands where unrestricted hunting would pose safety concerns or where overharvest might occur otherwise.

New hunts added this year are for elk (walk-in only) and for physically-disabled hunters.

The only method to apply for a controlled hunt is through the hunter's personal Go Outdoors Oklahoma account. Simply follow these steps:

- Log in to your account at license.GoOutdoorsOklahoma.com.
- Click on the "Controlled Hunts" tile at the top right of the page.
- Check preference points and apply for the hunts of your choosing. You may apply as an individual or create or join a party application.
- Pay your one-time \$5 entry fee online through the secure Go Outdoors Oklahoma system.

In case of difficulties, please call the Help Desk at (833) 721-1035 or email

HelpDesk@GoOutdoorsOklahoma.com.

Go to www.wildlifedepartment.com/ControlledHunts for complete application instructions, including tips on enhancing chances of being selected as well as full listings of available hunts for elk, deer, antelope and turkey.

2019-20 CONTROLLED HUNTS

More than 4,200 people had the opportunity to participate in a controlled hunt last year! Many of them experienced the hunt of a lifetime! Here are some numbers:

- Elk Hunts: 232 hunters harvested 179 elk.
- Pronghorn Antelope Hunts: 71 hunters harvested 43 pronghorns.
- Deer Hunts: 3,219 hunters harvested 694 deer.
- Youth Deer Hunts: 650 youth hunters harvested 340 deer.
- Turkey Hunts: 119 hunters harvested 30 turkeys.

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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 Director J.D. Strong,

My wife and I live in Yukon. For many years I've conversed back and forth with Wildlife Biologist Mark Howery, either by phone or text, about different wildlife questions. Mark has been an excellent representative of the ODWC. Over the years, he has answered many questions we have had regarding wildlife or issues. He is always eager to help by answering questions we have had regarding wildlife, and he is incredibly knowledgeable.



Mark Howery

I think that it would be great if you could give him an "attaboy" for the great job he has been doing. And yes, I've told him many times that I think he's a great resource person.

Ron Mars

Dear Director J.D. Strong,

On behalf of Oklahoma State Chapter President Kamara Gatz, the State Board of Directors, and our professional staff, we certainly appreciate participation of Wildlife Department staff in recent Oklahoma National Wild Turkey Federation In-Service Training and Volunteer Appreciation & Awards Dinner in Shawnee.



Colin Berg and Corey Jager

provided excellent presentations on R3 and legislative activities, respectively; and, Chief of Wildlife Bill Dinkines was with us for the evening dinner and to help with recognition of McCurtain County Game Warden Kenny Lawson as our Oklahoma NWTF Wildlife Officer of the Year (and later selected as NWTF National Wildlife Officer of the Year). Also in attendance as members and volunteers were Oklahoma Game Wardens Carlos Gomez and Travis Garrett.

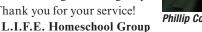
This means a lot to our State Board of Directors, to us as staff, and to the rank-and-file membership to see ODWC's involvement. People are realizing how big and multi-faceted our partnership is, a good thing. Speaking of which, as of tonight, we have 96 RSVPs for our upcoming Wildlife Conservation Field Day in partnership with the Department at Cherokee Wildlife Management Area on Feb. 1.

We just wanted to say thanks.

Gene T. Miller, CWB® NWTF District Biologist, West Texas and Oklahoma

Dear Game Warden Phillip Cottrill,

We would like to say thank you again for coming to educate our group. Gun safety is such an important issue and the more exposure we have to safe, professional and proper information, the better! We value your time and appreciate your willingness to advance the knowledge of our group. Thank you for your service!





Phillip Cottrill

Dear Wildlife Department,

With these troubling times we are going through, the Oklahoma Wildlife Department has thousands of acres of land for the public to enjoy.

I went looking for mushrooms and did not find any, but what a great time I had.

Thank you to the Department of Wildlife for having all this land for us to enjoy. Hope you enjoy the photos.

Don Bruce, via Facebook





Errata

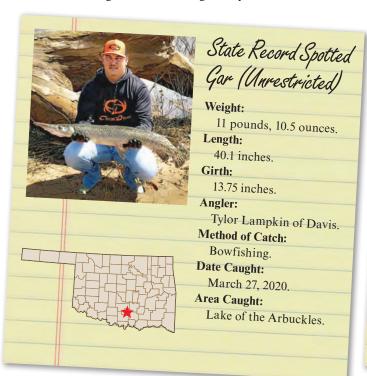
In the Anglers' Guide appearing in the March/April Outdoor Oklahoma magazine, incorrect information appears for Lake Lawtonka. Here is the correct information:

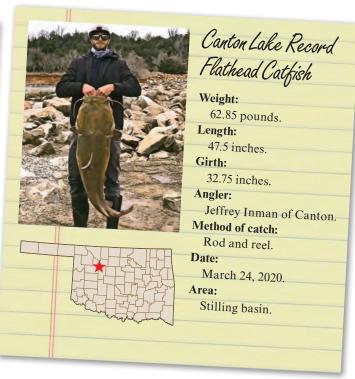
- What to catch: Largemouth bass, smallmouth bass
- Where to gear up: School House Slough
- Where to find a guide: Curt's Guide Service
- · Where to stay: Granite Pointe RV Park, Plantation Inn, Stardust Inn Bed and Breakfast, Meers Store and Restaurant

4 Off the Beaten Path

BOW ANGLER TAKES OKLAHOMA-RECORD SPOTTED GAR

New state- or lake-record fish have been added to the Wildlife Department's official database in recent weeks. Here is a snapshot of the big ones that didn't get away!





What's the biggest fish you've ever caught? A 7-pound largemouth, a 2-pound crappie or a 45-pound blue catfish? While your fish might not be a new state record, it possibly could be the biggest fish ever caught from your favorite lake. Thanks to a network of record-keepers at lakes across the state, your next trophy could qualify as a lake record.

The Lake Record Fish Program was established as a way to serve anglers and recognize big fish and the lakes they come from. To find out more, go to www.wildlifedepartment.com/fishing/state-and-lake-records.





WIN A GUIDED DOVE HUNT IN ARGENTINA!

The Oklahoma Wildlife Conservation Foundation is giving away a dove hunt in Argentina for four people, all expenses paid.*

Proceeds raised will enable the Foundation to support the conservation mission of the Wildlife Department. Get raffle tickets through May 20, 2020, online at www.GoOutdoorsOklahoma.com.

*Up to \$4,500 cash in addition to six hunts, gun rental, airfare, local transportation, and 5-star lodge near Cordoba.

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GAME WARDENS KEY IN TURTLE SMUGGLING CASE

A New Jersey man was sentenced in federal court in Tulsa after pleading guilty for conspiring with others to purchase, transport and sell more than 1,000 box turtles unlawfully collected in Oklahoma, U.S. Attorney Trent Shores said.

Two Oklahoma Game Wardens, Carlos Gomez and Karlin Bailey, were key players in the months-long investigation involving the Oklahoma Department of Conservation and the U.S. Fish and Wildlife Service.

The U.S. Attorney's Office for the Northern District of Oklahoma was able to secure the federal conviction 16 months later.

Chief U.S. District Judge John E. Dowdell ordered William T. Gangemi, 27, of Freehold, N.J., to pay \$250,000 in restitution to the Oklahoma Wildlife Department and a \$100,000 fine to the U.S. Fish and Wildlife Service, and also put him on two years of probation.

Nathan Erdman, Chief of Law Enforcement for the Wildlife Department, said this case required assistance from officers across the nation. "First, Game Wardens Bailey and Gomez did an outstanding job with this investigation. This is a prime example of how a simple phone call from a concerned citizen can lead to large cases and convictions.

"I would like to thank the USFWS for their assistance with this case, and also I would like to thank the U.S. Attorney's Office, Northern District of Oklahoma, for the prosecution."

U.S. Fish and Wildlife Service Regional Director Amy Leuders said, "It's been an honor for us to work with the Oklahoma Department of Wildlife Conservation and the U.S. Attorney's Office in bringing this case to justice, and for sending a message that crimes against wildlife will not be tolerated. Unfortunately, every day, crimes are committed against wildlife. But whenever a wildlife poacher or trafficker is held accountable for their



Carlos Gomez



Karlin Bailey

crimes, it gives us a precedent case that allows us to better protect these resources for generations to come. In addition, the court-ordered restitution funds will go toward vital conservation programs that will mitigate damage caused by poaching and wildlife smuggling."

The investigation began with a phone call from a concerned citizen.

A Mannford, Okla., hotel housekeeper entered a room after being told for a week not to clean it and discovered a large number of turtles. Her phone call to authorities eventually led to taking down one of the biggest wildlife smuggling operations in the United States.

From May 1, 2017, to May 31, 2018, Gangemi knowingly facilitated the purchase and transport of unlawfully collected three-toed and plains (ornate) box turtles from Oklahoma to New Jersey in order to sell them for profit. In Oklahoma, the collection of both types of box turtles for commercial purposes is against the law.

By smuggling the turtles, Gangemi violated the Lacey Act, a federal law that makes it a felony to engage in the sale or purchase of protected wildlife. Box turtles reach sexual maturity at about 10 years old and have a high nest and

juvenile mortality rate. Due to these factors, turtle harvest can have highly detrimental effects on populations.

Shores said Gangemi was part of a syndicate of wildlife smugglers that exchanged turtles between the United States and China. "I can't say that I ever expected we'd be announcing a turtle smuggling prosecution, but I've learned just how prevalent this criminal enterprise is globally and the detrimental impact it has on our wildlife population in Oklahoma, not just today but for future generations. I'm proud of this case and the result it achieved to better protect Oklahoma wildlife."

Off the Beaten Path



Newly hired Game Wardens attended the first ODWC Game Warden Training Academy in February and March. Six weeks of specialized training included wildlife law, waterfowl enforcement techniques, wildlife forensics, blood and man tracking, precision vehicle driving, precision boat driving, defensive tactics, firearms training, trauma first aid, interview and interrogations, and other classes along with daily workouts. The COVID-19 situation required changes during the Academy to comply with health guidelines. The Game Wardens took a final physical training test and a final comprehensive exam March 27. After passing the required tests, they were sworn in and sent to their new districts for 10 weeks of ride-along training with a Field Training Officer.

Outdoor professionals teamed up in late February to catch an injured bald eagle in water near Miami, Okla. Game Warden Jason Adair and Oklahoma State Park Officer Zach Early tried catching the eagle, but the water hampered the effort.



ODWC Fisheries Technician Kendall Robbins was nearby and jumped into action. He waded into the cold water for the rescue. The mature eagle was taken to Tulsa Zoo, and veterinarians found the bird's injuries were from a gunshot. They said the eagle likely won't fly again.

Anyone with information about this eagle is asked to contact Oklahoma Game Warden Jason Adair (918) 533-2679 or call the Operation Game Thief Hot Line at (800) 522-8039. You can remain anonymous and could earn a cash reward.

Two bull elk were killed with a rifle and left in a field along Bigbow Road about a half-mile north of Lee Boulevard in Comanche County. This occurred around 6 p.m. Feb. 18. Please call Game Warden Lt. Mike Carroll at (580) 695-7535 or Operation Game Thief at (800) 522-8039 with any information.



(Reports from the Oklahoma 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.

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2019 CREATIVE WRITING COMPETITION

"MY HISTORY WITH HUNTING"

EDITOR'S NOTE: Each year, the Oklahoma Department of Wildlife Conservation and Oklahoma Station Chapter Safari Club International join to sponsor a creative writing competition for Oklahoma middle and high school students. A boy and a girl from two age divisions are selected winners. Students were required to 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 at the Circle P Pogue Ranch (or similar) and a scholarship to the Outdoor Texas Camp. In this issue, Outdoor Oklahoma honors senior category female winner Maggie Moore, 17, from Depew Public Schools.



OKLAHOMASTATIONSCI.ORG

HUNTING: SHARING THE HERITAGE

By Maggie Moore

On a crisp fall morning, as the sun rises over Oklahoma skies, people can be found sitting in a treestand with

a rifle in their hands as they pursue the elusive whitetail deer. Maybe it was with a muzzleloader or bow instead, but to many, this is way of life; It is ingrained into their fiber. Whatever method it was, these people got to hunt and experience what their ancestors experienced many years ago. Having that opportunity to hunt could change someone's life forever; I know it changed mine.

Most of my family on my father's side hunt deer, turkey, coyote, hogs, elk and so much more. Hunting, for them, started because of my grandfather and my great uncle. For me, it started when I was born. My father named me Maggie after his .22 Mag, so the fact I have loved shooting guns ever since is inherent. On my seventh birthday, my uncle bought me a BB gun. Soon after that, I began shooting my dad's .22 rifle and told him that I wanted to go hunting. Finally, when I was 10, he took me hunting and I was able to harvest my first deer. That hunt got me "hooked" so to speak.

My father and I still hunt old-school, mostly because of me. To me, I do not want the advantage of putting up cameras or hunting over bait, but to each their own. I hunt as much as I can and whatever I can. I have successfully hunted with rifles, shotguns, and muzzleloaders. This year, I am challenging myself to shoot a deer with my bow. Archery takes a lot more skill than shooting a rifle. The skill of getting closer, shot placement, and the one-shot-kill mentality.

Growing up, I heard quite a few hunting stories from my dad and uncles, some of those stories being absurd and some of them being hilarious. One thing was certain: Listening to them has made me love hunting even more. The relationship hunting creates and the bonds with my family and friends, that's the heritage I have instilled into me.

Marc Anthony once said, "Do what you love and you'll never work a day in your life." Well that is exactly what I plan on doing by making a career out of my passion for hunting. I plan to become a Game Warden and share my love for wildlife and hunting with other outdoor enthusiasts. Maybe some would love it just as much as I do. My family heritage is based on hunting. Hunting is my passion. It is in my blood. It will be my legacy.

NWTF SELECTS OKLAHOMANS FOR NATIONA

The National Wild Turkey Federation recently honored Oklahomans in four categories at the 44th annual NWTF Convention and Sport Show in Nashville, Tenn.

2020 Wildlife Officer of the Year

Kenny Lawson, Game Warden for the Oklahoma Department of Wildlife Conservation based in McCurtain County, received the 2020 Wildlife Officer of the Year Award. The award goes to those who have excelled in teamwork and innovation, excellence and innovation, attitude and leadership, and achievements and accomplishments

"To be recognized by the NWTF, who I believe is the greatest conservation organization in the country, is a huge highlight in my career," Lawson said.



ODWC Game Warden Kenny Lawson accepts the national NWTF Wildlife Officer of the Year Award.

He's served as a Game Warden for 30 years and has tirelessly protected Oklahoma's vast natural resources. Through a seven-week span of studying 50,000 photos from covert cameras, Lawson single-handedly implicated 25 suspects of poaching bucks, does and a bear. The criminals faced thousands of dollars in fines and had hunting privileges revoked for life. Lawson has been at the forefront of apprehending poachers in Oklahoma, seizing anything from illegally harvested mountain lion to retrieving over a mile of illegal gill nets from the waters he patrols.

This award is not new to Oklahoma. We are honored to have Oklahoma wardens win this award in two previous years when Game Wardens Shane Fields and Spencer Grace received the well-deserved award.

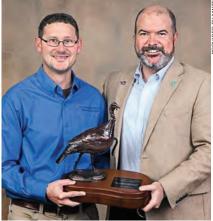
Land Stewardship Award

ODWC Director J.D. Strong and Wildlife Biologist Eric Suttles accepted the Land Stewardship Award. "I'm honored to receive this esteemed award on behalf of the Department and our hard-working biologists and technicians who pour out their sweat and toil every day for nothing more than the reward of a prosperous flock and a better hunt for our sportsmen and women," Strong said. "This award embodies the strong and productive partnership we have forged over the years with NWTF, which has enabled us to do so much more to improve habitat and grow hunting than we could ever do on our own. Thank you to the thousands of NWTF donors, volunteers and staff that give so selflessly to help us do what we do in Oklahoma."

The Oklahoma Department of Wildlife Conservation embodies the NWTF mission. Designated private lands biol-

ogists provide technical assistance to private landowners on a full-time basis. And the Oklahoma Land Access Program seeks to allow access to quality private lands for public use.

"Opening private lands for public access, improving wildlife habitat and creating strong partnerships these are intrinsic



ODWC Wildlife Biologist Eric Suttles and Director J.D. Strong accept the national NWTF Land Stewardship Award.

components to the NWTF mission, and it is great seeing a state agency pushing a similar mission," NWTF CEO Becky Humphries said.

Best Inaugural Hunting Heritage Program Award

The award was given to the Tri-City Sportsmen Chapter. Bobby Armstrong and Rick Nolan accepted the award on behalf of the Newcastle, Blanchard and Tuttle, OK NWTF Chapter. The Tri-City Sportsmen hosted a deer hunting workshop designed to assist new or novice hunters who do not have the benefit of a friend, family member or colleague to mentor them.



Bobby Armstrong and Rick Nolan of Tri-City Sportsmen Chapter accept the national NWTF award for Best Inaugural Hunting Heritage Program.

Fund-Raising Award

Tulsa NWTF Chapter leaders Garrett McClendon and Jeff Springman accepted an award that recognized the chapter for annual fund-raising that exceeded \$75,000 during 2019. ***

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TRY THESE TIPS FOR TEACHING KIDS TO CAST

The excitement of young girls and boys when they catch their first fish is so fun to see. Then they want to catch another, and another. Soon they're asking, "Can I hold the rod? Cast the bait out? Put the worm on the hook? Reel the line in?"

The first 'Fishing 101' question I usually hear from mentors is when to start taking kids fishing. The answer: As soon as you want, but probably between the ages of 2 to 4, when they have good control of their bodies and movements, and can communicate fairly well. That's probably closer to age 4, and it's when they have a little more attention, stamina, interest, and patience. Ask yourself if the child is capable of holding the rod if he/she catches a moderate-size fish.

That leads to the question about when you can start teaching a child to cast. Maybe age 4, probably 5, certainly 6. Most 5-year-olds can throw a ball, swing a baseball bat, and do other things requiring motor skills. But abilities and attitudes differ among youths of the same age. Some are bigger, stronger, more coordinated, or simply more determined. Whatever their age, if they want to do it, get into your extreme-patience mode and show them.



Here's advice for anyone who wants to teach a child to cast a fishing rod:

- Start with an appropriate size rod. It should be small and light. Small means 36 to 48 inches, or maybe 5 feet if the youngster is older. Use a kid's fishing rod rather than an adult's fishing rod, or at least use something that would be light and small for adults.
- Start only with spinning or spincasting gear, the latter being a hands-down favorite for kids because it's simple to use.
- Consider starting with an underspin reel on a spinning rod. Several companies make underspin reels, which are spincasting reels that feature a line-release trigger rather than a pushbutton line release, and are mounted under a spinning rod handle rather than on top of a spincasting rod handle. I've started many kids with such an outfit. It's easy to master.
- Here's the most practical way of teaching a kid to cast
 with a fishing rod: practice first on land in an open field,
 not while also trying to catch fish on the water. Teaching
 a child to cast onshore gives him/her time to develop timing and coordination, and you can build up to increasing
 accuracy by giving them distances to achieve (start short)
 and broad target areas to shoot for.
- Set the gear up for left- or right-handed use, whichever is appropriate. Let them do what comes naturally to them.
- Use practice casting plugs, which are aerodynamic weight-forward rubber or plastic objects without hooks, to start and to gain proficiency.
- After they develop some ability, have them practice casting
 with something akin to what they'll be angling with, but
 without a hook (like a float rig).
- Make sure that the gear a child uses is in good condition, especially the line, rod guides, and reel functions. It's exasperating and discouraging if the tackle is junk and/or hampers their efforts.
- Stress safety with constant reminders to look behind them when they're about to cast. Eventually it will become second nature.
- Once they're casting on the water, work with them to control their casting around people on shore or in a boat, near objects, and in closer quarters. You can't always just rear back and fire away, so have them always thinking about the circumstances.

Finally, most younger anglers don't need a fishing license. In Oklahoma, resident youths 16 and younger do not require a fishing license. If you're an adult accompanying a youth, you'll generally need a license unless exempt.

(Ken Schultz, TakeMeFishing.org)

10 Off the Beaten Path



Hiking

- Be aware of your surroundings.
- Try not to hike alone.
- Keep kids within sight and close by.
- Make noise periodically so bears in the area can avoid you.
- Keep dogs leashed at all times, or leave them at home.
- Double bag your food and pack out all food and trash.

Leaving scraps, wrappers or even "harmless" items like apple cores teaches bears to associate trails and campsites with food.

Camping

- Keep a clean camp.
- Don't burn food scraps or trash in your fire ring or grill.
- Do not store food, trash, clothes worn when cooking, or toiletries in your tent. Store in approved bearresistant containers OR out of sight in a locked vehicle OR suspended at least 10 feet above the ground and 10 feet from any part of the tree.
- In the backcountry, set up camp away from dense cover and natural food sources.
- Cook at least 100 yards from your tent, downwind if possible.

Hunting & Fishing

Hunters and anglers are more likely to encounter bears because they move quietly and travel during early morning and late evening hours when bears are most active.

- Follow tips for hiking and camping
- Know that carcasses, gut piles, and bait may attract bears.
- If a bear beats you to your catch or kill, don't try to reclaim it; leave the area when it is safe to do so.

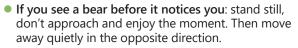


Carry Bear Spray & Know How To Use It

Keep bear spray accessible; it's proven to be the easiest and most effective way to deter a bear that threatens you. It doesn't work like bug repellant, so never spray your tent, campsite or belongings.

If You Encounter a Bear

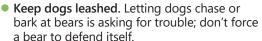
Black bears are seldom aggressive and attacks are rare.



• If you encounter a bear that's aware of you: don't run; running may trigger a chase response. Back away slowly in the opposite direction and wait for the bear to leave.

Visit **BearWise.org/bear-safety-tips/** to learn what to do if a black bear approaches, charges or follows you.

Precautions for Dog Walkers, **Cyclists and Joggers**



• Leave earbuds at home. Cyclists and joggers traveling quickly and quietly can easily surprise bears. Be aware of your surroundings and make noise periodically.

BearWise.ord

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Helping People Live Responsibly with Black Bears

BearWise® — Created and Supported by State Wildlife Agencies and Bear Biologists • © 2019



TENKARA

Simply Fishing

By Don P. Brown

Information & Education Specialist

Ahhh, the simple life. There is much to be said for simplifying things. In a time when the American lifestyle drastically changed for so many people because of a global pandemic known as coronavirus, many of us have gained a newfound resolve to slow down the hectic page of modern life and embrace a more minimalistic approach.

That's really the beauty of a type of fishing called tenkara. And Norman angler Michael Vidrine, 40, was ahead of the curve when he embraced the Far Eastern technique several years ago.

"It ultimately is the original style of fly fishing. I see it as a simpler way for people to get into fly fishing," he said. "But it's a different technique for sure, and it works."

Tenkara originated in Japan and has been practiced there for at least several centuries. It was known by only a few people in America until a company called Tenkara USA opened in the United States in 2009. Since then, the ranks of those enjoying tenkara have grown.

Where traditional fly fishing can involve lots of gear, tenkara ultralight fly fishing uses just the basics. There is no reel, just a long lightweight rod with a length of













fishing line tied to the end. There aren't large cases of tackle or jars of bait to carry, just a couple of artificial flies. It doesn't require wading. A small pair of pliers, an optional fish net, and perhaps a pair of polarized sunglasses, and you are set.

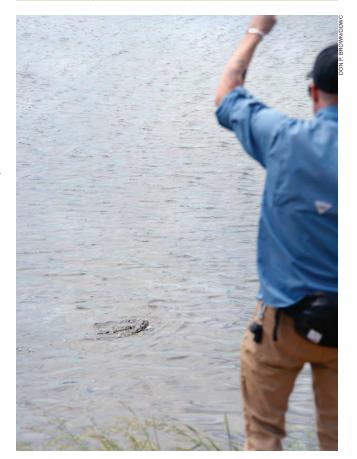
Vidrine said his interest in tenkara came about because he found himself cooped-up in his workplace. Spending eight hours inside with no windows to see outdoors was not his favorite thing. So, he decided to get outdoors during his lunch break. And a nearby Close-to-Home Fishing site offered him the opportunity to enjoy some fishing on his midday breaks.

And that's where the simplified technique of tenkara entered his life. It was just the right combination of quick and easy. "It was the minimal type of fishing that I was looking for."

In only a minute or two, Vidrine can park his car near a fishing hole and have his fly in the water. After a relaxing half-hour, he says he typically catches some fish. He gets a chance to unwind in the middle of the day, and usually returns to his office feeling more energized.

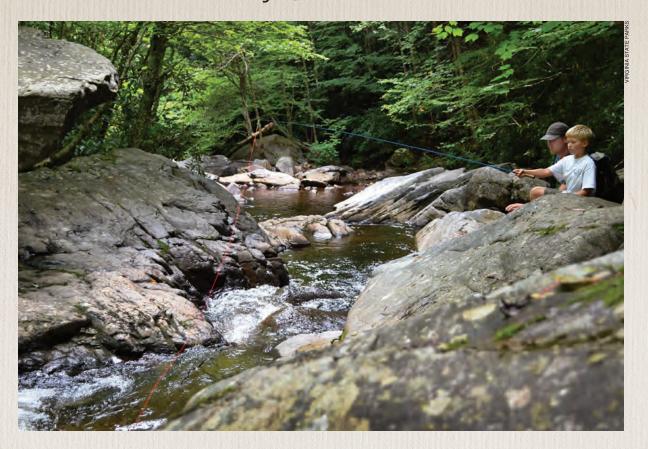
It is believed that tenkara originated in the mountainous areas of Japan. Anglers would create bamboo rods up to 15 feet long that could be taken apart and carried in a tube. The anglers would follow the small running streams up the mountains to fish for trout,





FISH WITHOUT LICENSE

Weekend of June 6-7, 2020



Oklahoma's Free Fishing Days will be June 6-7 this year! That means anyone, resident or nonresident, can fish that weekend without needing a state fishing license.

Oklahoma was among the states that first introduced Free Fishing Days about 40 years ago. Now, it's more important than ever to share

America's angling traditions with future generations. Free Fishing Days is the perfect opportunity to invite someone to go fishing and introduce them to the pleasures it brings.

The Sooner State has some excellent fishing in lakes, ponds, rivers and streams, but also in urban waters designated by the Oklahoma Department of Wildlife Conservation as "Close-to-Home Fishing" locations. These waters are stocked with fish regularly and are designed to provide a successful outing. For a list of CTH waters, go to www.wildlifedepartment.com/fishing/close-to-home.

Oklahoma's Free Fishing Days are scheduled

National Fishing and Boating Week

National Fishing and Boating Week is a national celebration, an event that highlights the importance of recreational boating and fishing. Celebrate June 6-14, 2020.



each year during National Fishing and Boating Week. And the best way to celebrate is to get out on the water!

Many people don't realize that participating in fishing and boating actually helps fund efforts to conserve our natural resources and improve boating and fishing access. A portion of all fishing tackle and license sales, as well as boat supply and registration sales, provide funds to the Sport Fish Restoration Program. This means that every time you purchase a fishing license or register a boat, you are helping improve the natural places you love.

and they needed gear that was simple and portable.

The long rod allows the angler to present an artificial fly in a very precise manner. There is no reel or spool of line to worry with; only a length of line ending with a lighter tippet to tie on a tiny fly. The length of line is normally about the length of the rod, or maybe a bit longer.

As for tenkara technique, "most people pick it up quickly," Vidrine said. "The kids call it 'whip fishing.' Anybody can learn to do it."

Similar to traditional fly fishing, a tenkara angler will snap the rod back and forth to position his fly before letting it fall into the water. Vidrine says tenkara is best used in smaller water bodies and streams or creeks. But because it is ultralight fishing, the wind can easily hamper the angler's casting efforts.

Several companies now offer tenkara fishing gear in America. Vidrine said the expense is comparable to what you might pay for a high-quality rod-and-reel combo. Modern tenkara rods are usually made of fiberglass or carbon fiber and are very light. They are often telescoping rods that extend from about 20 inches to 12 feet. Rods come in a carrying tube that can easily hold everything an angler needs.

"These are amazing for hiking. It weighs next to nothing."

The flies that are used in authentic tenkara are called kebari. They differ from a standard Western artificial fly in that it is a wet fly with a special reverse hackle — instead of feathers or hair tied facing backward to cover the hook, they are tied facing forward to create more disturbance in the water.

Vidrine said during the past several years, he's noticed more traditional fly fisherman trying their luck at local urban fishing areas. Many are curious to learn about the method Vidrine is using.

"I've met so many great people all the time I've been fishing. But it's a different technique for sure."

But he's never once run across another tenkara angler while fishing. Perhaps as society has learned to slow down some, more people will take to tenkara.

"There's lots of opportunity. It's an easy way to get out with the kids, to go out for an hour or two.

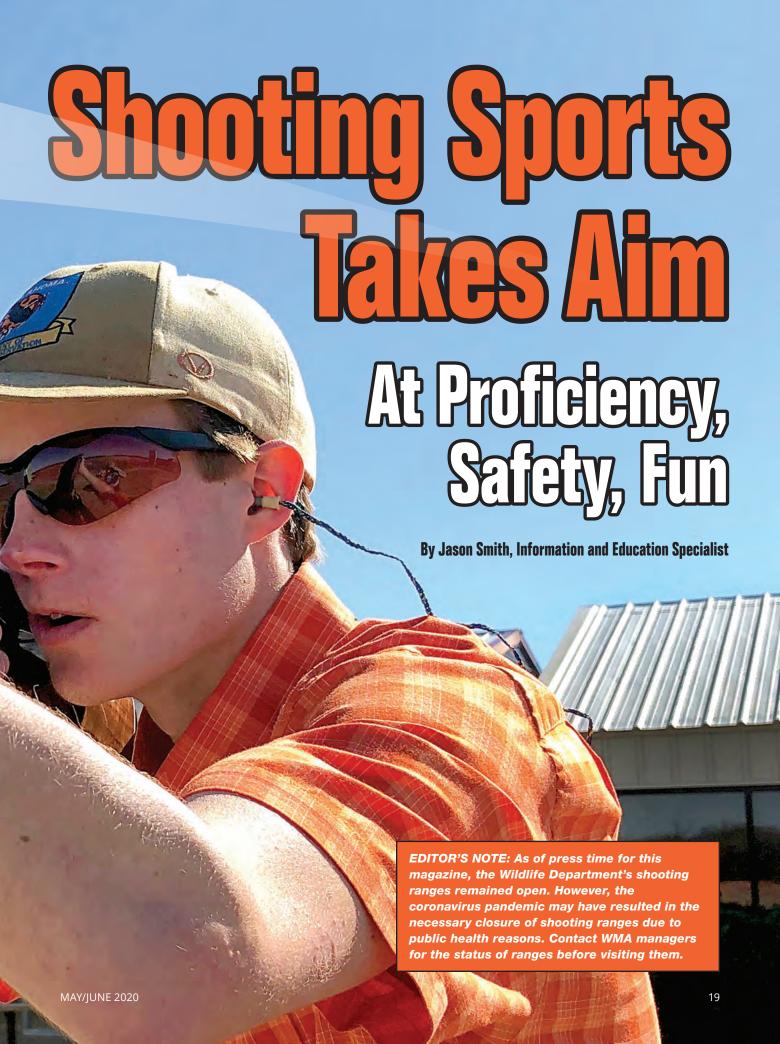
"It is so much fun."

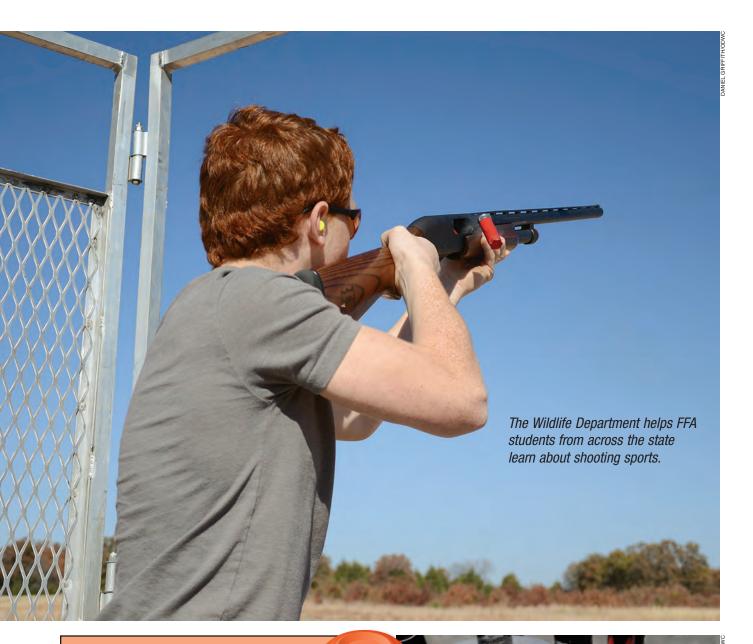




youtube.com/OutdoorOklahoma.







SPORTING CLAYS

The game of sporting clays is the closest to actual hunting in the field. It is designed to simulate the hunting of game birds, waterfowl and even rabbits. The course has 10 to 15 shooting stations and winds throughout the native landscape. Therefore, each sporting clays field is different because there are no limits regarding target angle, distance or speed. Sometimes clay targets of various sizes are used to add another challenge to the game. When the shooter is on the station and ready, he will call "pull," and targets will be thrown in singles or pairs, and can fly in any direction.



Orange clay targets are stacked in a target throwing machine.

Hunting, fishing, and hiking are just a few of the many outdoor activities that are popular throughout Oklahoma and the United States.

But we should add another to the list, so to speak, of very popular and rewarding outdoor activities: shooting sports.

The wealth of disciplines included in shooting sports includes trap, skeet, sporting clays and five-stand, all done with a shotgun, as well as target shooting and silhouette shooting with rifles. And let's not forget target shooting with pistols, and the more demanding discipline of action shooting, where competitors use different firearms in a timed setting to score as many points as possible.

Those who engage in the various shooting sports have long surpassed the childhood activity of "plinking" (which for me was shooting soda cans in the pasture with my grandfather). Some shoot for the fun of it, while others take the competition quite seriously, even hoping for a chance to go to the Olympic Games.

The popularity of shooting sports is such that Oklahoma has more than 180 public schools involved in the Oklahoma Scholastic Shooting Sports Program (OKSSSP), a trap-based program started in 2013 by the Oklahoma Department of Wildlife Conservation (ODWC). Students at

10 COMMANDMENTS OF FIREARMS SAFETY

- 1. Always keep the muzzle pointed in a safe direction.
- 2. Firearms should be unloaded when not actually in use.
- 3. Don't rely on your gun's safety.
- 4. Be sure of your target and what's beyond it..
- 5. Use correct ammunition.
- **6.** If your gun fails to fire when the trigger is pulled, handle with care!
- 7. Always wear eye and ear protection when shooting.
- **8.** Be sure the barrel is clear of obstructions before shooting.
- Don't alter or modify your gun, and have guns serviced regularly.
- **10.** Learn the mechanical and handling characteristics of your firearm.



Teaching a youngster about firearms use and safety will often help throughout his or her entire life.



these schools, from 7th grade through 12th grade, compete in regional events with the hope of advancing to the annual state shoot, which has been held each spring at the Oklahoma Trap and Skeet Association in El Reno, Okla. Of the 180-plus schools that begin regional competition each spring, the top 16 senior teams and top eight junior teams advance to the state shoot.

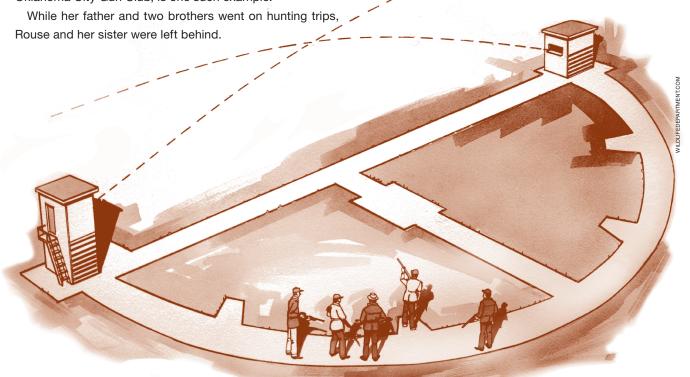
"This program is amazing," said Damon Springer, Senior Information and Education Specialist with ODWC, and coordinator of OKSSP. "These kids really enjoy this program, and it promotes firearms safety as well as healthy competition. Many of them have even gone on to earn scholarships to be on a shooting team at the college level."

Schools wanting more information about OKSSSP may call Springer at (405) 317-6316.

For some, shooting sports have been a part of their lives forever. For others, the introduction comes later in life but has had a profound impact. Suzi Rouse, president of Oklahoma City Gun Club, is one such example.



A scorekeeper is sometimes on hand to keep track of hits and misses on the skeet or trap field.



SKEET SHOOTING

The game of skeet has each shooter on numbered stations in a semicircle between structures called the high house and the low house. The target throwing machines are in these houses, and clay targets are thrown through windows from each of the houses. Much as their names suggest, one target is high, and one target is low, and they always travel the same paths and always travel toward each other. The shooters move around the field, producing different shooting angles for each of the targets. At some of the stations, shooters must shoot at a "double," when targets fly from the high and low houses at the same time and cross over the middle of the skeet field.



These shooters have a comfortable place to sight in their rifles at Lexington WMA.

ODWC Shooting Ranges

Progress continues on a multi-year program to renovate or create shooting ranges on wildlife management areas statewide.

Renovations include concrete pads and benches, overhead canopies, target stands and new shooting berms. Two ranges are being renovated each year. Anyone with a hunting or combination license may use the ranges. Rifles, handguns and shotguns are permitted.

Renovations have been completed at Beaver River, Cherokee, Lexington and Pushmataha WMAs. Renovations are upcoming at Canton, Fort Supply, Hickory Creek, James Collins, Optima, and Texoma Washita Arm. For more information, go to https://www.wildlifedepartment.com/wildlife-management-areas/shooting-ranges.

At least six new ranges are in the planning stages at WMAs including Copan, Kaw, Packsaddle and Sandy Sanders. The Wildlife Department has also assisted in building a new public shooting sports complex at Oklahoma Panhandle State University in Goodwell.



A view from a shooting station on one of the renovated shooting ranges at Lexington.

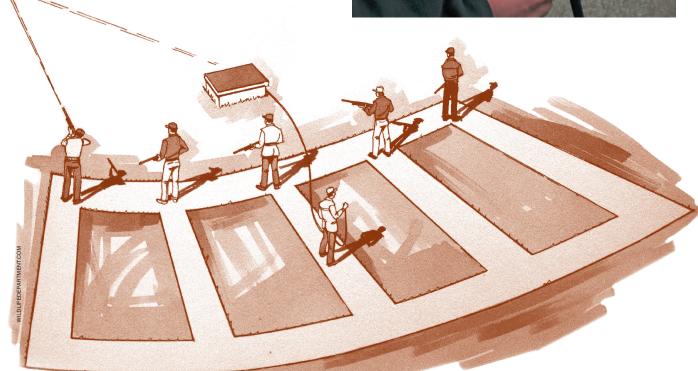
"It was not even an option of introducing us, because we were girls," Rouse said.

After meeting the man who would become her husband — a U.S. Marine Corps veteran — she joined him in becoming a member of Oklahoma City Gun Club (OKCGC). Rouse's activity and involvement grew so much, she was approached in 1999 about starting a women's program, and the gun club began hosting an annual Women on Target event each September. This year will mark the 21st event.

The event draws as many as 600 women from across the country, many of whom plan their vacation time around the event and are repeat visitors. During the daylong event, they have the opportunity to target shoot with rifles and pistols, as well as shoot moving clay targets with shotguns.

"It empowers them. They feel like they can accomplish something," said Rouse, who has been president of OKCGC for 12 years.





TRAP SHOOTING

The game of trap involves five shooters, standing 16 yards in an arc behind a trap house. The house, which is typically only partially above ground level, holds what's called a trap machine, or target thrower. This machine, completely obscured from the view of the shooters' view, will oscillate from side to side. When each shooter calls for a target — signified by shouting the word "pull" — the target will fly out of the house in a random direction. It could be to the shooter's left, to the shooter's right, or anywhere in between. Not knowing the target's direction is a key challenge of the game.

Other added challenges include standing farther away from the trap house (up to 27 yards), or by using a wobble machine. This machine will throw targets within the same parameters but will sporadically alter the height of each target.

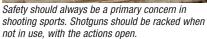
FIVE-STAND

The game of five-stand can be highly modified, but it typically involves six machines and five shooters standing in a line abreast. Depending on where the game is in rotation, each shooter may face a single target from a predetermined machine, or may face a pair of targets from predetermined machines. Targets may be traveling straight away from the shooter, or crossing from left to right or from right to left.

The FFA Sporting Clays competitions each fall, conducted by the Oklahoma Department of Wildlife Conservation, involve four shooters per round and six machines laid out in a specific pattern.









A similar background belongs to Paula Tate, an active skeet shooter at OKCGC and a former chairman of the club's Shotgun Division. Tate grew up watching her father and brother venture off to hunt, and it wasn't until 2007 that she attended her first Women on Target event.

Tate and her husband, Brent, remain very active with the club. Both of them shoot competitively, and both serve as instructors at a variety of events.

For Adam Dreyer, also an OKCGC member, becoming involved in shotgunning activities was delayed only by his age.

Dreyer, a native of Illinois, moved to Edmond with his parents on his 8th birthday. It would be two more years before he picked up a shotgun, but it wasn't for a lack of desire.

"I started doing the 4-H archery and air rifles, and I had to wait until I was 10 to do shotguns," he said. "And ever since then, I've been doing shotgun sports."

Dreyer has been actively involved in all shotgun disciplines, with his main focus being skeet. He is also an avid duck hunter.

Dreyer has had to dial back on his level of skeet shooting while pursuing his education at Oklahoma State University. Majoring in wildlife ecology and management, he hopes to one day serve as a game warden with ODWC.

For those new to shooting sports, Dreyer offers this advice: It takes time, practice, and patience.

"If they try it and they are not successful at first, don't be discouraged," he said. "It takes a lot of muscle memory and practice to get to where you really start to enjoy it."

Dreyer said shooting sports are about skill, not athleticism, and "anyone can partake and not feel discriminated against."

That sentiment also echoes with Springer when it comes to the OKSSSP.

"Some kids don't have the desire to play other sports like football, basketball, baseball. But this program allows them to still be a competitor for their school," he said.

Aside from the OKSSSP, ODWC also conducts the FFA Sporting Clays program (a modified five-stand setup) each fall. The Department also has a Shotgun Training Education Program (STEP), which offers small hands-on clinics across the state, throughout the year, to introduce people to shotgunning and firearms safety.

At the Department's annual Wildlife Expo at Lazy E Arena in Guthrie, as many as 5,000 people of all ages get the chance to shoot a shotgun.

"It's always about safety first and then learning the finer points of becoming a proficient shotgunner," Springer said.

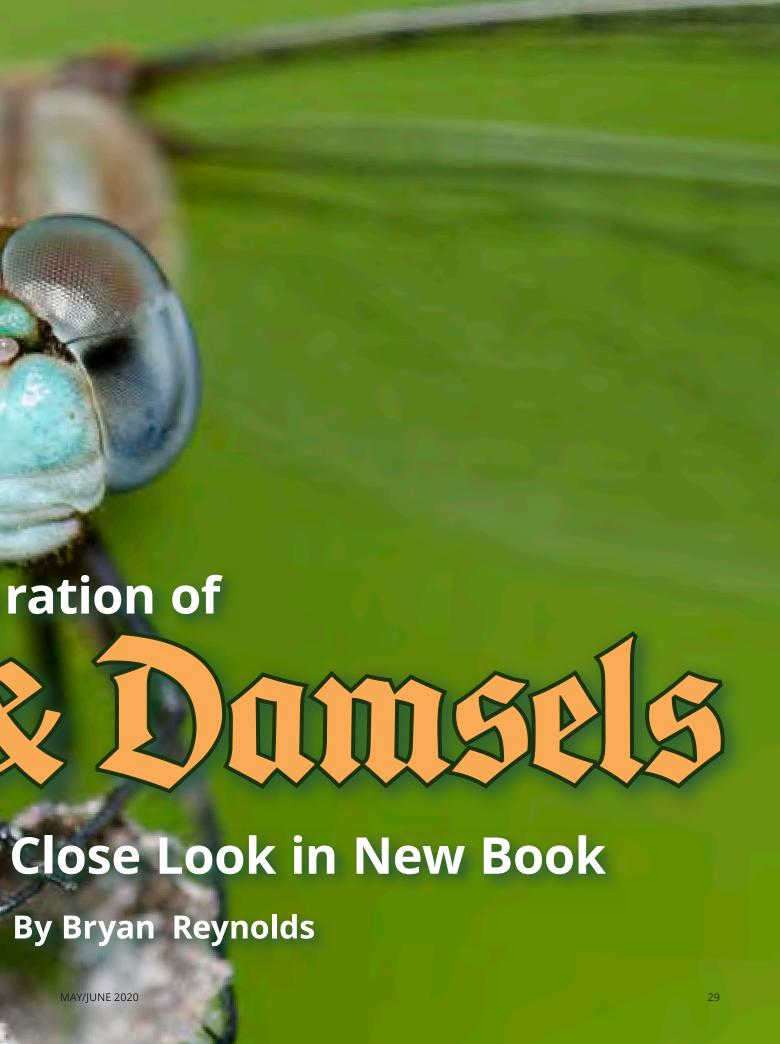
WhereToShoot.org

Managed by the National Shooting Sports
Foundation, the trade association for the firearms
industry, this website is the most comprehensive
online directory of shooting ranges. Log on to find a
place to shoot near you.



A young trap shooter awaits his turn during a tournament within the Oklahoma Scholastic Shooting Sports Program.







ome Oklahoma insects are impossible not to notice, either due to their appearance or because of their behavior.

Dragonflies and damselflies (collectively

called 'odes') stand out for both reasons. Who hasn't noticed a large colorful dragonfly conspicuously perched on a twig on a hot summer's day? Or noticed dozens of them at dusk swooping around high in the sky as they hunt for mosquitoes? These remarkable insects, with common names such as jewelwings, spiketails, meadowhawks, and darners, are extremely interesting and highly beneficial insects.

In the United States, 478 species of odes have been documented, with 176 of those species found in Oklahoma. With 12 ecoregions and centrally located on the continent, Oklahoma has one of the highest species counts of any state in the country.









Odes belong to the order Odonata, derived from the Greek word *odonto*, meaning tooth. The largest species in Oklahoma, with a wingspan of 4 inches, is the dragonhunter, *Hagenius brevistylus*, whereas the smallest damselflies are less than an inch across.

Like all insects, odes have three body segments: a head, thorax, and abdomen. Attached to the thorax are three pairs of legs and two pairs of wings. The wings are net-veined and translucent, sometimes with colored patches. Each wing acts independently, making them very nimble in flight.

They have compound eyes with up to 30,000 facets, called ommatidia, allowing them to see nearly 360 degrees. With this excellent eyesight, they hunt flying insects such as mosquitoes, and a single dragonfly can eat hundreds per day.

Males spend a lot of time looking for females. Once spotted, the male approaches and, with special claspers on the tip of his abdomen, grasps the female on the back of the neck. The male straightens out its body and the pair flies around in this position known as tandem linkage. Then, the female curls her abdomen forward to connect with the male (the mating wheel). After mating, the female is











ready to lay eggs in or near a source of water.

Eggs hatch in one to eight weeks. Odes go through incomplete metamorphosis, so instead of a caterpillar stage, they hatch out as an underwater larval stage (called a nymph). They prey upon other aquatic insects and as they grow, and they will molt periodically. For their final molt into adulthood, they climb out of the water onto a cattail, boat dock or something similar. The top of the thorax splits, and the new adult pulls itself out. Fluid pumps into the wings, which expand and harden. The young adult (called a teneral) is still not mature. It still takes a couple weeks for it to obtain its full adult coloring, and then the cycle starts over again.

Observing dragonflies and damselflies has become a popular hobby. The best place to look for them is along any body of water. It doesn't require special equipment, but close-focusing binoculars and a field guide are good tools to have.

A new book about these insects in Oklahoma, "Dragonflies at a Biogeographical Crossroads: The Odonata of Oklahoma and Complexities Beyond Its Borders," is planned for release in June. (https://www.crcpress.com/9780367440350). This lavishly illustrated book written by Brenda D. Smith and Michael A. Patten, two Oklahoma Biological Survey







dragonfly specialists, will be a must-have for any Oklahoma naturalist's field pack. Mentioned in the book is an interesting sub-species recently described by the authors and named the Howery's Clubtail (Gomphurus ozarkensis howeryi). The name honors Mark Howery, a longtime Wildlife Biologist with the Oklahoma Department of Wildlife Conservation.

Dragonflies have been around for millions of years. They are beautiful, interesting and highly beneficial creatures that anyone in Oklahoma can observe and enjoy.



Sleuthing Out State's Stream Smallmouths

Radios Reveal Wandering Habits Of Neosho Strain in Oklahoma

By Craig Springer, External Affair, Southwest Region, U.S. Fish and Wildlife Service



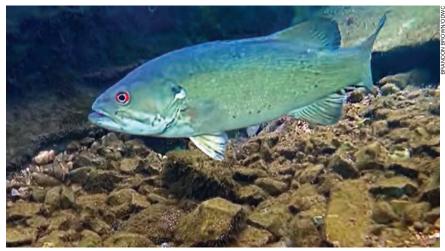
Research student Andrew Miller kayaks a northeastern Oklahoma stream and listens for the sound of a radio-tagged Neosho smallmouth bass.

36 **OUTDOOR OKLAHOMA** A bout the time that redbuds flash their pretty pinkish blooms on eastern Oklahoma's hillsides and gray streamside sycamores unfurl their fresh leaves the color akin to a wet lime, there's something curious going on.

And it goes mostly sight unseen.

Smallmouth bass are on the move with the singular purpose of procreation. As our planet wobbles back to the vernal position, the amount of daylight lengthens, shadows shorten and the creek waters warm. These cues signal to one of America's top freshwater sport fish that it's time to spawn.

The fish that ardent anglers call "bronzeback" hold a renowned reputation as energized packets of fish flesh. Twitch a floating stickbait on slick water over a dark pool at dusk, or drag a crayfish-colored club-tailed jig over a gravelly run, and then hang on. The fight of this fish is always outsized. And expect to see a few leaps out of the water before you



The Neosho smallmouth bass, seen in this image taken from video, was the subject of a fouryear study aimed at finding out this unique species movements and nesting habits in streams of northeastern Oklahoma.

unhook your catch and decide to release it. A plucky flip of the tail fin, a splash, and off it goes.

Smallmouth bass are a favorite of many anglers — and have been for years since well before former U.S. Fish and Wildlife Service scientist and medical doctor, James Henshall, branded the species as the "gamest fish that swims" in his 1881 tome, "Book of the Black Bass." It's still in print, by the way.

The fight of this fish is always outsized.



Deeper pools are where Neosho smallmouth bass were commonly found in the warmer months.



Student researcher Andrew Miller sutures a sedated Neosho smallmouth bass after implanting a radio transmitter. The trailing white antenna can be seen extending from the fish's belly.

If you've caught one, you're not hearing anything new. You know the "arrowy rush" that Henshall spoke of. And if you're a licensed angler, take heart in knowing that you are helping pay for leading-edge research into the whereabouts of smallmouth bass in select Oklahoma streams, that in the end can improve a strain of bronzeback unique to the area — and make fishing all the better.

Dr. Shannon Brewer, an associate professor at Oklahoma State University, led research into how the bass behaves through the year. Brewer and graduate student Andrew Miller monitored a strain of bronzebacks found only in the spring-fed streams in the Ozark highlands near where Oklahoma, Missouri and Arkansas converge. The fish is known as Neosho smallmouth bass, and it has an affinity for flowing water.

This habitat and behavior research on smallmouth bass that swim in Oklahoma's Elk River and tributar-



After their recovery from sedation and surgery, these Neosho smallmouth bass were released back into the streams where they were captured.

38 OUTDOOR OKLAHOMA

ies was funded through the federal Wildlife and Sport Fish Restoration Program, collected through taxes paid by fishing tackle manufacturers on fishing gear, passed on to anglers. When an angler hears the ding of a cash register and coin drop in the till, they are paying for conservation. Brewer and Miller conducted the work expressly for the Oklahoma Department of Wildlife Conservation, which, in the end expects to use research findings to inform its fishery management decisions.

How they conducted research is nearly as interesting as what they are learning. Brewer and Miller surgically implanted 100 Neosho smallmouth bass with radios, as early as 2015. The fish were caught by electrofishing, anesthetized, and the radios placed inside the body cav-

ity and then stitched up. The bass were returned to the same streams in which they were caught after they recovered from surgery. A few radioed bass have been lost to otters and anglers, but through the course of the study, at least 30 bass remained tagged in each of three streams.

The radios emit a signal whereby the researchers relocated the fish many times, some for nearly three years before the batteries exhausted. In the warm months of March to October, the fish were relocated at least once weekly; in the colder months, only once per month. The professor and student have been able to gather a fair amount of information, revealing when and where these bass go through the year. Where the males take up housekeeping in the spring is of particular interest.

The professor and student have been able to gather a fair amount of information, revealing when and where these bass go through the year.



This stream in northeastern Oklahoma is typical Neosho smallmouth bass habitat.

Brewer and Miller relocated the bass by walking streamside or kayaking, intent on hearing the distinct radio signals on a receiver they carried. Tracking through the winter months revealed very little movement, Brewer said.

"Their favorite habitats in winter seemed to be deep pools. They would hold between rocks in slow water and sometimes in quite shallow rocky areas — stationary. I'm an angler and naturally curious,

and snorkeled in January for a closer look. Smallmouth bass shoved themselves between rocks, in cavities, and in piles of woody debris. Fish of all sizes. Some were wedged sideways in cavities, protected from swifter water," she said.

As winter turned to spring, the two researchers found much variation among the many individual fish that carried radios. "Females were first to move," Brewer said. "Come April, they were headed upstream to



Neosho smallmouth bass nest over a gravelly stream bottom and aggressively guard against egg predators.

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spawning sites. Some moved nearly five miles to find spawning habitat."

Male smallmouth bass typically build nests over gravel in shallow water and court females to spawn. Males aggressively guard the nests during construction, through hatching and for a short spell as fry hover above the nest and the guarding male before disbursing to nursery habitat. The researchers noted that bass in their study seemed to concentrate in select areas, which might indicate limited spawning habitat.

As to what the females were doing post-spawn, Brewer said they didn't travel far, typically staying near the closest deep pools until about September. Then there seemed to be a downstream movement, particularly by the older and larger bass.

The three streams that harbored the radioed smallmouth bass all empty into Grand Lake O' the Cherokees. Curiously, none of the bass were located in the reservoir; they all stayed in the streams. Moreover, the bass stayed in the streams in which they were tagged, except for one female that moved seasonally between two streams.

Kurt Kuklinski, Fisheries Research Supervisor at the Wildlife Department's Fisheries Research Lab in Norman, said study findings point to the uniqueness of this fish. "Neosho smallmouth bass are a stream fish. They have a liking for cool, spring-fed flowing waters. They're native to the eastern one-third of Oklahoma, and their reliance on Ozark streams makes them different than lake-dwelling smallmouth bass."

Kuklinski said study results will help biologists make the best decisions about properly managing Neosho smallmouth bass. Some of the early findings include:

There is a need to protect the genetic integrity of Neosho small-

mouth bass by not stocking reservoir strain smallmouths into reservoirs in northeastern Oklahoma. The Neosho bass are a unique and valuable resource to Oklahoma anglers and are worthy of conservation efforts.

Responsible land management surrounding northeastern Oklahoma streams is an important component of conserving this species. ODWC Fisheries Regional Supervisor Jim Burroughs said this species merits protection from threats including land use changes, increasing water demand and the introduction of non-native species.

"Conserving Oklahoma's unique native species should remain a paramount responsibility and priority of ODWC," Burroughs said.

Also, some streams hold the potential for high angler harvest. Biologists should consider angler creel limits aimed at conserving the species.

"Dr. Brewer and her students expended an enormous amount of effort to provide this information to ODWC in an effort to manage Neosho smallmouth bass populations to the best of our abilities. This project is a great example of the research partnership we have built with the OSU Cooperative Wildlife Research Unit." Kuklinski said.

This study gives the ODWC Streams Program added information to manage and protect the state's stream resources.

(Information and Education Specialist Don P. Brown contributed to this article.)

Smallmouth bass shoved themselves between rocks, in cavities, and in piles of woody debris.

Curiously, none of the bass were located in the reservoir; they all stayed in the streams.

Learn More Online

Check out the Outdoor Oklahoma YouTube Channel for more about northeastern Oklahoma streams and smallmouth bass. Here are some related videos:

- Underwater Smallmouth Bass Research: https://youtu.be/d6lW4yNwaws
- Ozark Streams and Smallmouth Bass: https://youtu.be/iRLlhQOuPEM
- Underwater Oklahoma: https://youtu.be/rOAA65SZit4

Pages From the Past

Outdoor Oklahoma magazine is turning 75 years old this year. Many memorable items have graced the pages of the nearly 650 issues that have been printed since 1945. In each issue of 2020, we will look back at some of those items, just to reminisce. Here we feature a few pages from the June 1947 issue.

lune, 1947

Oklahoma Game and Fish News

PENNSYLVANIAN PRESENTS HUNTING TROPHY TO OKLAHOMA

Beautiful Deer Specimen Killed by Father Following 1889 Land Run into this State

THROUGH NEGOTIATIONS with Seth Gordon, Secretary of the Pennsylvania State Game Commission and Jeff F. Kendall, Oklahoma's state game warden, the State Wildlife Museum in Oklahoma City has added a beautiful and historic trophy to its collection.

The trophy, a fine 14-point whitetail deer head, was presented by Mahlon G. Robb, RFD 1, Huntingdon, Pa., whose father made the 1889 land run into what is now Oklahoma, and killed the animal on one of his numerous hunting expeditions in the northern part of the state in the fall of that year. Robb writes an interesting story in his presentation of the deer head to the State of Oklahoma, as follows:

In April, 1889, three men—George W. Robb of Mc-Connelstown, Pa., a man by the name of Davis and another named Kirby of Texas, set out from Greensburg, Kans., in a buckboard drawn by two horses, headed for the first, Oklahoma land run. They camped at Buffalo Springs for eight days before the United States Cavalry allowed them to move up to the starting line.

At high noon, the Cavalry was supposed to fire a cannon to start the rush. My father said the Cavalry bugler was on somewhat higher ground than the home seekers. He saw the bugler place the horn to his lips but never heard a note of the bugle nor the cannon shot. In the ensuing din, commotion and din, the earth itself trembled. For the first five minutes everyone feared for their lives. Wagon wheels locked, horses fell and the general bedlam was awe-inspiring and terrible. Soon, however, the riders, wagons and other conveyances fanned out and completed their run in comparative ease. But the cowboys, mounted on fast horses, headed for the town sites, outdistanced all others. Robb, Davis and Kirby made their run in the buckboard.

The day following the rush, my father set out to visit his friends on their claims when he came upon a tremendous cougar out in the open country. Although he was not armed, the animal walked slowly away and acted bewildered. The rush of the previous day had routed it from its regular habitat. This mountain lion or cougar was the only one he ever saw, even in his later hunting expeditions.

One summer day my father walked a mile to the Chisholm Trail, hoping he would see someone who might be going to town to mail a letter. While waiting there a light wagon drove up carrying a hunting party of two men from Chicago and an Englishman. He asked them if they would post his letter, which they agreed to do. They then asked father if he wanted a bird dog. The dog was so stiff and used up from hunting that they had to lift it out of the



Jeff Kendall, State Game Warden of Oklahoma, accepts the historic trophy in the wildlife museum at the State Capital.

wagon. He was white with large liver colored spots, a full-blooded English setter. After some dickering in which they first wanted to sell, the hunters finally said, "You take the dog, he'll no doubt die anyway." They said his name was Sancho. With that they drove off, Sancho looking longingly after the departing wagon.

Father took off one of his shoe laces and using it for a leash, started back for his claim. He soon discovered that the dog's feet were worn down from hard hunting, so he carried the dog half way home. The dog was half dead from thirst and a neighbor whose house he passed gave the dog a pan of milk. Within two or three days the dog started to perk up and at the end of the week he was spry as a kitten. He tried him out on birds and found he was trained. This dog accompanied these three men on their hunting trips. When they found him on point in the tall grass they never knew just what was going out. It might be quail, prairie chickens, turkeys or even deer, of which they shot several in that manner. Sancho was a natural retriever and on badly wounded deer he would run in and hold the deer until the hunters came up for the finishing shot. My father brought this dog back to Pennsylvania with him and the animal lived until 1899. The last hunt in Oklahoma Territory with Sancho, my father and his two friends shor prairie chickens in 1890 on the town site of Hennessey.

In early fall, 1889, father, Davis and Kirby set out on a hunting expedition. They were armed as follows: one double barrel rifle and shotgun combined and one 10-gauge breech loading Parker. They used brass cases on this, and it was their best gun, good on turkeys, prairie chickens, and deer. It used buckshot up to sixty or eighty yards. They later acquired a breech loading single barrel shotgun, 12-gauge, of unknown make, also a 40-60 Winchester repeating rifle. My father traded a doe and three dollars cash for a 45-70 single-shot Sharps and a set of reloading tools consisting of a bullet mold and a separate tool for decapping, recapping and bullet seating on one tool. This gun was acquired from an unkown buffalo hunter who told father he had used it to hunt buffalo for the market. The ejecting lever was broken, only about two inches being left, and since the reloading tool did not have a resizing tool, after much use the shell cases would sometimes stick in the gun and have to be removed with a ramrod.

Concerning the game sold in the Territory: Wild turkeys brought \$1 each, prairie chickens and quail were sold by the dozen at from \$4 to \$6 for the prairie chicken and \$2 to \$3 a dozen for quail. Deer marketed for \$5 to \$10 depending on size. Antelope, of which father's party shot two or three, they consumed in camp.

One evening at dusk they came upon this large deer (the head of which is being presented to the Oklahoma wildlife museum). Whether it was downed with buckshot or not, I can't say, but at any rate it was almost dark and they did not have Sancho along. This was in the high grass country and the deer only gave a few bounds before it was out of sight. They spent a few minutes looking, but darkness was setting in and the other men, after chiding father on missing his shot, started for camp. It rained that night and next day, preventing his return to complete the search. It turned warm the following night. Next day my father returned with the dog, Sancho, and after only a short search found the dead deed only about one hundred yards from where he was shot. Warm weather had spoiled the animal for food, but father cut off the head and horns and saved the hide and part of the carcass as food for Sancho. This is the story of this trophy.

Therefore, I, Mahlon G. Robb, present in the memory of my father, the late George W. Robb and the men and women who participated in the first Oklahoma land run, April 22, 1889, this trophy to be placed in a public Stateowned museum at the State Capitol Building, to the citizens and the Sovereign State of Oklahoma.

LUTHER SPORTSMAN CLAIMS OLDEST LICENSE

M. C. Engel, LUTHER, comes forth with a claim to Oklahoma's oldest hunting license, since Oklahoma Game and Fish News (March issue) carried a story of one issued November 15, 1909, to J. L. Allen of Mooreland. Engel recently sent in a hunting license issued August 28, 1909, which now gives him first claim to the oldest. This 63-year old hunter has a complete collection of licenses for each year since the State law required them, 1909 through 1947.

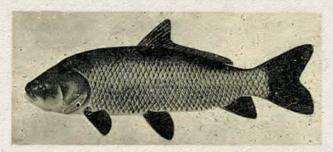
KNOW YOUR OKLAHOMA FISA

(Editor's Note: This is the twenty-fifth in a series of thumbnail sketches of individuals of the 125 species and sub-species of fish known to exist in Oklahoma waters. It is hoped that these authoritative descriptions will be the means of Oklahomans becoming better able to identify the fishes of their state.)

By A. D. (Bob) ALDRICH

THERE ARE THREE species of buffalo fish listed for Oklahoma waters. They are found principally in the larger rivers, overflow sloughs and large reservoirs. The general appearance is somewhat similar to the common carp. However, they are easily distinguished by the more robust, stocky body and absence of barbels on the snout.

Buffalo fish feed on organic matter, vegetation, algae and insect larvae which they strain from the mud or sand of the river bottoms. In many parts of the country they are an important commercial species, considered superior to the carp and usually bring a slightly higher price on the market.



Red-mouth Buffalo (Ictiobus cyprinella)

Large numbers of buffalo fish have been propagated for distribution to waters of the Mississippi basin. They are not propagated in Oklahoma hatcheries. It is a very prolific species and well able to maintain its numbers under favorable conditions. It is likely that the buffalo fish will become abundant in some of the large lakes of Oklahoma, and commercial utilization should be encouraged.

When taken from clear waters these fish are very palatable. They grow to large size, often reaching fifty pounds in weight. A common method of preservation is to dress and smoke the meat of the buffalo fish. Many individuals can them and reports indicate this to be quite a widespread practice.

There is no doubt but what a great deal of improvement will be made toward better and more general utilization of many of the food fish of Oklahoma in years to come.

WE NEED MORE FISHIN'! Instead of a nickel cigar this country needs more time to get caught up with itself.— (Broken Arrow Ledger).

FORTY-THREE YEARS AGO



DESPITE THE EFFORTS of modern conservationists to keep Oklahoma's supply of wild game on at least a steady level to meet today's hunting demands, it cannot be denied that mastering the nimrodic sports around the turn of the century was a simpler recreation than it is now. Game was far more plentiful, there still were wilderness areas where only the strong and hardy penetrated, and none but the wantonly wasteful took more than he needed for there were no means of refrigerating wild game in the backwoods.

So it is with wishful longing that many oldtime gunners look back to the early days, as does venerable A. M. Seran, Wewoka, who recently brought this 43-year-old picture to the editor of Oklahoma Game and Fish News, with a request

1947 DUCK STAMPS SOON AVAILABLE

DUCK STAMPS for 1947 will go on sale at U. S. Post Offices July 1. This issue, featuring two snowgeese, was designed by Jack Murray, outdoor magazine artist, and costs \$1. It is required, along with an Oklahoma hunting license, for waterfowl hunting next season.

Today's Sapling is tomorrow's sawlog—and your descendants' dwelling place the day after.

WHILE THERE ARE 500 species of humming birds, not a single member is found in any part of the Old World. All are residents of the Western Hemisphere.

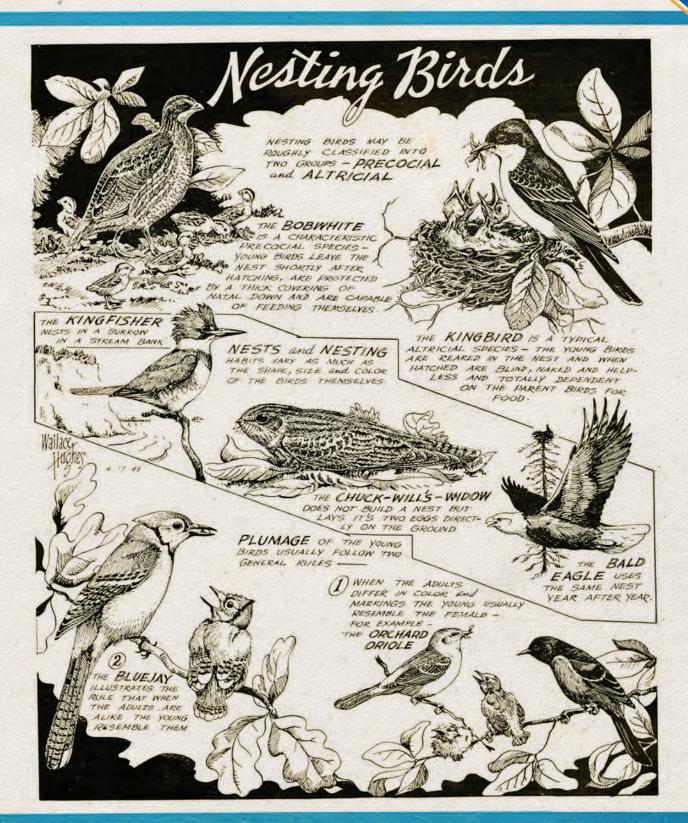
that it be published in these pages. None of the men in the picture are now living. They are, left to right: A. L. Frederick, former business man of Wewoka; A. J. Brown, a brother of Territorial Governor John F. Brown; and Mr. Phillips (first name unkown), who was the camp cook.

On this particular hunting party, photographed in 1904 in the Kiamichi Mountains, the men traveled by train from Wewoka to Tuskahoma, where they chartered a team and wagon and drove far in to the backwoods of Pushmataha county on a deer and wild turkey hunting expedition. That they didn't miss is evidenced by the four turkeys and three deer carcasses hanging in the background.

NORMAN MAN RECOGNIZED AS GUN EXPERT

Winston Q. Smith, 578 South University Boulevard, Norman, was recently given national recognition in the pages of a new book, "The Gun Collector's Handbook of Values," by Charles Edward Chapel, a national authority on firearms. In the new book the author lists Smith as one of the leading authorities on the collecting, appraising and historical treatment of firearms in American history.—(Norman Transcript).

ONE TREE makes a million matches, one match destroys a million trees,





Get Your Durable Collector's Card

Upgrade your license to this durable card on custom art by a local artist and support the next generation of conservationists.

Buy Online at License.GoOutdoorsOklahoma.com



Oklahoma Habitat Donor Window Decals

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



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

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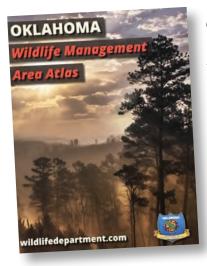
Wildlife License Plates

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 \$38 (original or replacement) or \$36.50 (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.



Habitat Donor Caps

Top-quality, American-made caps display the Habitat Donor Patch of your choice, which designates you as a contributor to the Department's Land Acquisition Fund. Wearing this hat means you care about future generations and the great hunting and fishing tradition. Specify hat style on order form. — \$18



Oklahoma Wildlife Management Area Atlas

This updated edition has topographical maps of Wildlife Management Areas and now includes Department-owned fishing lakes across Oklahoma. At almost 100 pages, the atlas presents maps showing where to access areas, adds lands that have been acquired since 2010, and shows special features at each area such as parking sites,

camping areas and food plots. Your atlas purchase comes with a one-year subscription to the award-winning "Outdoor Oklahoma" magazine. — \$25







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May/June 2020 47

OKLAHOMA'S tchable Wildl

Potentially Deadly Spiders

BY JUSTIN VEACH, EDUCATION INTERN

Two species of spiders in

Oklahoma are potentially

life-threatening for people

Two species of spiders in Oklahoma are potentially life-threatening for people: the brown recluse, also called fiddleback, and the black widow. The brown recluse is a small brown spider that gets its nickname from the violin-shape marking located directly behind its eyes. The black widow is a slightly larger, black spider that is often distinguished by a red hourglass shape on the female's abdomen.

Brown recluse spiders usually live up to two years. Each female creates several egg sacs during the summer, each containing about 50 eggs. The brown recluse is able to survive up to six months without food or water.

It likes to hide in quiet areas during the day, such as cabinets, shoes, clothing on the floor, or under furniture. At night, it comes out to search for food.

Brown recluse spiders

are not aggressive and won't bite unless provoked or cornered. Most bites occur when someone puts on clothing in which the spider is hiding, or when a sleeping person rolls over onto a spider. The bite often isn't even felt until later, and the amount of venom injected through a bite can vary. Most brown recluse bites are minor, but some do cause health problems. The venom is more potent than that of most venomous snakes, but the spider doesn't normally inject enough venom to threaten a person's life. But some bites have been fatal, mostly in younger children and people with weak immune systems.

Black widows get their name from their cannibalistic

mating process. After mating, the female will sometimes bite the male and consume him if she's hungry. The male is much smaller than the female and is usually a dark brown color, not black. The male will try to mate with a female that has eaten recently to avoid being eaten itself.

The female black widow can bite and inject venom into a person, while the males and adolescents are fairly harmless. The venom is a neurotoxin that affects a person's nervous system. The venom is thought to be 15 times stronger than a rattlesnake's, but they don't inject very much and most people recover. It is extremely rare for a black widow bite to prove fatal to a person, but it

Black widows are usually found around manmade structures such sheds or barns. Their webs are a jumbled mess of cobwebs. When the

has occurred.

male approaches to mate, he will perform a sort of dance to tell her that he is a potential mate and not food to be eaten. Black widows usually mate in springtime, and females can create several egg sacs during summer, each containing hundreds of eggs. The female will fiercely protect her egg sacs until the young emerge. The spiderlings are cannibalistic and will eat each other, so many don't survive. After a few days, the spiderlings will climb off the ground and release silk into the air to allow the wind to carry them aloft. This "ballooning" process takes them away from their competition and to their own new territory.

48 **WATCHABLE WILDLIFE**







Oklahoma's Free Fishing Days are June 6-7, 2020. It's the perfect time to introduce someone to the sport because anyone can fish without a state license those days! You'll do something good for the future of conservation while showing someone else the joys to be had in Outdoor Oklahoma! For more, see page 16.



A PUBLICATION OF THE DEPARTMENT OF WILDLIFE CONSERVATION

