



**Oklahoma Department
of Wildlife Conservation**

Fishing in the Schools Manual

Panoramas

Richard Hatcher

Director – Oklahoma Department of Wildlife Conservation

I can't express how much fun you can have fishing in Oklahoma. This manual shows you how you can get the most from fishing and enjoy it as a hobby for the rest of your life.



Learning how to fish is not hard. In fact, it's easy, and it's fun! Becoming more knowledgeable about the fish and aquatic resources our state offers, you'll become a better angler and be able to enjoy it even more as a lifetime hobby.

If you've never been fishing and simply head to a local lake or pond to try it, you will probably enjoy the scenery, and you will probably even catch a fish. But just think how much more fun and rewarding it would be if you knew how to properly choose a bait, tie on a hook and cast a line. Wouldn't it be great to know how to catch and identify a variety of fish, so that you can catch them over and over again?

This manual and the Fishing in the Schools Program will equip you with the knowledge you need to catch fish in Oklahoma, showing you along the way just how easy it is to be a good angler in Oklahoma.

The Oklahoma Department of Wildlife Conservation is excited to bring you this program. We've done a lot over the years to make sure our waters are healthy and teeming with fish habitat and fish for you to catch. In fact, every year we stock millions of fish in Oklahoma lakes, rivers and ponds, so they will be there for anglers to catch. There are more than a million surface acres of water and more than 1,100 miles of shoreline here in our state. Some lakes have produced state-record fish multiple consecutive years.

Suffice it to say that Oklahoma is well-known as a fishing state. And we want to make sure you get to take part in it and have fun doing it.

The Oklahoma Department of Wildlife Conservation is a constitutional agency. It was created based on the user-pay/user-benefit principle where fishing and hunting license fees fund the operation of the Department. The Department's mission is to manage Oklahoma's wildlife resources and habitat to provide scientific, educational, aesthetic, economic and recreational benefits for present and future generations of hunters, anglers and others who appreciate wildlife.

Most of the time, all you need for successful fishing is

a fishing rod and reel and a few key items, or "tackle," to get you on your way. The pages that follow will teach you all about that. Once you go through this manual and master a few simple skills, there's nothing left to do except go fishing!

With so much water available in the state for fishing, and with so many species of fish available to catch, this class will prepare you to head out into new waters across Oklahoma. All you have to do is decide you want to go.

Robert Fleenor

Law Enforcement Chief



Here at the Wildlife Department, we have had the privilege of working with thousands of new anglers. A common trait of anglers is the desire to learn more about fishing and becoming better at catching fish. Two of the most important lessons to learn and remember are the importance of water safety, and following the state's fishing laws.

We can teach you how to identify fish, how to tie a knot and how to cast a line. And we can teach you about the importance of following the laws. But it's up to you to take on the responsibility of making sure you are a safe, legal and ethical angler.

You'll make choices every time you go fishing. You'll choose your spot, your bait and where you will cast. You'll also choose whether you will handle hooks safely, if you'll be careful around water and if you'll know and follow the regulations for the area you are fishing.

Oklahoma anglers will have the best fishing experiences if they are safe, legal and ethical. I believe you can make the right choice, and I encourage you to do so. And in doing so, I believe you'll enjoy fishing for the rest of your life.

Barry Bolton

Fisheries Division Chief



The Wildlife Department has a rich history of conserving and creating fish habitat in Oklahoma. Oklahoma fish hatcheries were being built and developed as early as 1915 and throughout the '20s. The

first fishing licenses were established in 1925. And before there were specialized facilities for fisheries biologists to use, they conducted research in the basement of the state capitol.

We've come a long way since then. We've improved fishing opportunities all over the state by conducting research, creating and enhancing habitat, raising and stocking fish, developing access points to good fishing, and enforcing laws designed to conserve fish. In fact, millions of fish are stocked every year in Oklahoma lakes, rivers and ponds for anglers to catch.

The Wildlife Department still faces challenges and opportunities, such as maintaining populations of popular fish such as black bass, catfish, walleye and sunfish in waters across the state; addressing the issue of Oklahoma's aging lakes; improving access to good fishing locations and more.

Other challenges, however, stem from the habits of people and the trends of society. There are so many recreational opportunities and choices today, such as organized sports or even video games. The Department has risen to meet these challenges by improving its Aquatic

Resource Education Program (AREP). This includes offering this manual and the Fishing in the Schools Program in Oklahoma schools.

But even so, the real key to conserving fish habitat and preserving the sport of fishing is you. Your participation in fishing is one of the best ways to benefit fish. By purchasing equipment and licenses where applicable, you are helping to fund the important conservation efforts that go on across Oklahoma.

While it's a privilege to be able to live and fish in a state like Oklahoma, it's also an important responsibility for all of us to share the sport of fishing with others, such as a

friend or family member. With your participation in fishing and your willingness to pass on the joys of fishing to someone else, we can help make sure Oklahoma remains a top fishing state.



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Introduction to Oklahoma Fishing in the Schools

Welcome to the Oklahoma Fishing in the Schools Program. The purpose of this manual is to introduce you to the sport of fishing. It will cover the basics of equipment, fish identification and the techniques you should know before going fishing.

In 2011, the Oklahoma Fishing in the Schools Program was introduced to almost 50 schools across the state. The number of schools continues to grow and in the fall of 2013, more than 150 schools were participating in the program. The program is an extension of the Aquatic Resource Education Program developed by the Oklahoma Department of Wildlife Conservation in 1988.

What is sport fishing? It's fishing for enjoyment. More than 700,000 people across the state of Oklahoma participate in fishing annually either for recreational purposes or to catch fish as a source of food. The Oklahoma Department of Wildlife Conservation is the agency in Oklahoma responsible for the management of the state's fisheries.

"Angler" is a term used to identify someone who is fishing. The angler is a key component to the management of a fishery. Well-informed and educated anglers have a better understanding of the resource and the role they play in its management. Oklahoma Fishing in the Schools was designed to introduce new anglers to the sport, and to create responsible anglers that understand the important role they play in the conservation and management of Oklahoma's fisheries.



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History of the Oklahoma Department of Wildlife Conservation

- 1895 – Rainbow trout first stocked in Oklahoma by U.S. Fish and Wildlife Service.
- 1909 – Wildlife Department created. First game warden appointed.
- 1925 – First fishing licenses established.
- 1929 – Byron fish hatchery opens.
- 1934 – Holdenville fish hatchery opens.
- 1945 – "Oklahoma Game and Fish News" ("Outdoor Oklahoma") began publication.
- 1947 – Cooperative Fisheries Experimental Station established at University of Oklahoma. (Now exists as Oklahoma Fishery Research Lab.)
- 1948 – First private pond stocking policy adopted.
- 1950 – First walleye stocking in Canton Reservoir and Tenkiller Reservoir.
- 1959 – Lake Carl Etling wintertime trout stocking program begins.



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The Medicine Park fish hatchery opened in 1915. Today, it is known as the J.A. Manning Fish Hatchery, and it is still operating.

Introduction to Oklahoma Fishing in the Schools

- 1967 – Blue River Public Fishing and Hunting Area land purchased.
- 1969 – The first lifetime combination license was sold for \$150.
- 1970 – First successful natural reproduction by striped bass in Lake Keystone.
- 1974 – First natural reproduction by striped bass in Lake Texoma.
- 1977 – Striped bass hybrids first stocked in Oklahoma (Sooner Lake).
- 1976 – “*Outdoor Oklahoma*” television show began.
- 1979 – Operation Game Thief established.
- 1980 – Lower Mountain Fork River year-round trout stocking program begins.
- 1983 – Fish habitat development program initiated.
- 1985 – Saugeye first stocked in state (Lake Thunderbird).
- 1986 – Lake Watonga wintertime trout stocking program begins.
- 1988 – Aquatic Resources Education Program established.
- 1991 – Brown trout introduced to the tailwaters below Broken Bow Reservoir.
- 1993 – Durant Hatchery was renovated, increasing annual production by 1.7 million fish. Department fish hatcheries stocked almost 30 million fish over the course of two years.
- 1994 – Robbers Cave State Park wintertime trout stocking begins.
- 1998 – Stream management program begins.
- 2003 – Hunting and fishing licenses available online.
- 2005 – First Wildlife EXPO.
- 2007 – Paddlefish Research & Processing Center established.
- 2008 – Lake Record Fish Program established to recognize Oklahoma anglers and fish.
- 2011 – Oklahoma Fishing in the Schools Program established.
- 2014 – Oklahoma Fishing in the Schools Program reaches 200 schools across the state. ■



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The Oklahoma Department of Wildlife Conservation is the agency responsible for managing Oklahoma's fisheries.

Fishing Tackle & Supplies

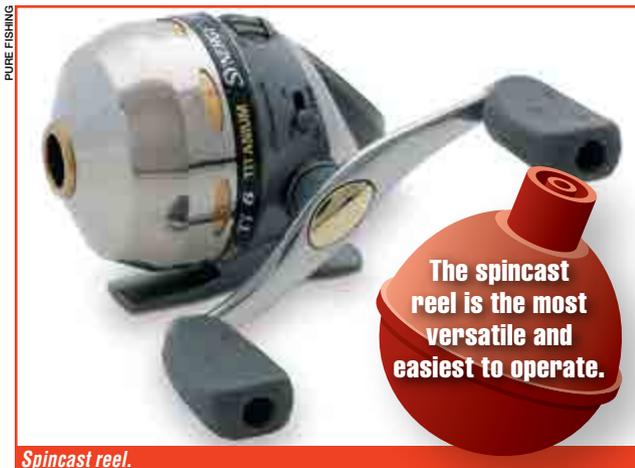
2 CHAPTER

Fishing tackle, supplies and equipment are essential to the success of any angler. This doesn't mean you need to buy the most expensive product on the shelf. But knowing what equipment is needed will help you succeed in your fishing trip.

The basic equipment any angler uses is nothing more than a rod and reel with a line, hook and weight. The type of rod and reel, and the sizes of the line, hook and weight will all depend on the species of fish you intend to catch.

The Reel

All fishing reels typically consist of some sort of spool that holds line, with a crank to reel in the line. There are different types of reels that vary in form and function, and have varying degrees of difficulty on their use.



Spincast reel.

Spincast reels are the most basic and easiest to use. A spincast reel is the recommended choice of any beginning angler since it is easy to operate and difficult to tangle. It is also very versatile in that it can be used in just about any form of fishing.

Spinning reels are another type of reel and one of the more common reels used by experienced anglers. This reel is dif-



Spinning reel.

ferent from the spincast reel in that the spool is open, and the reel hangs underneath the rod instead of sitting on top. The reel is a bit more difficult to use, and inexperienced users will easily tangle the line. But with practice, a spinning reel provides a much better option than a spincast reel.



Baitcast reel.

Baitcast reels are sort of a hybrid between the spincast and spinning reel. The line is exposed on the spool similar to the spinning reel, but the reel is back on top of the rod, and the line is released by pushing a button with the thumb on the back similar to the spincast reel. This is again a more advanced reel used by experienced anglers, and without experience the line can easily become tangled.

The last reel is a very specific reel associated with a type of cast. The **fly reel** is used specifically for "fly fishing." Like the spinning reel, the fly reel hangs underneath the rod, but is designed so that instead of your bait or tackle being the weight, the line is the weight that is cast. A fly reel is not as complex compared to other reels since the spool itself is merely a storage device to hold line and retrieve line.



Fly reel.

Fishing Tackle & Supplies

The Rod

The type of rod you use will depend on the type of tackle you plan to use and which reel you have. Casting reels (bait-cast and spincast) sit on top of the rod. So those rods will differ from a rod for a spinning reel which hangs below the rod.

The length of a rod can vary from 5 to 6.5 feet for spinning and casting rods for freshwater fishing. The length depends on user preference. But for beginners, 5.5 feet is a good starting point.

Rods also have a term called “action” associated with them. The action is how much flexibility the rod has. The lighter the action, the more flexible the rod will be. A rod with heavier action is much stiffer. Your preferred action depends on the size of lure and fish you plan to catch. For beginners, a medium action is a good starting point.

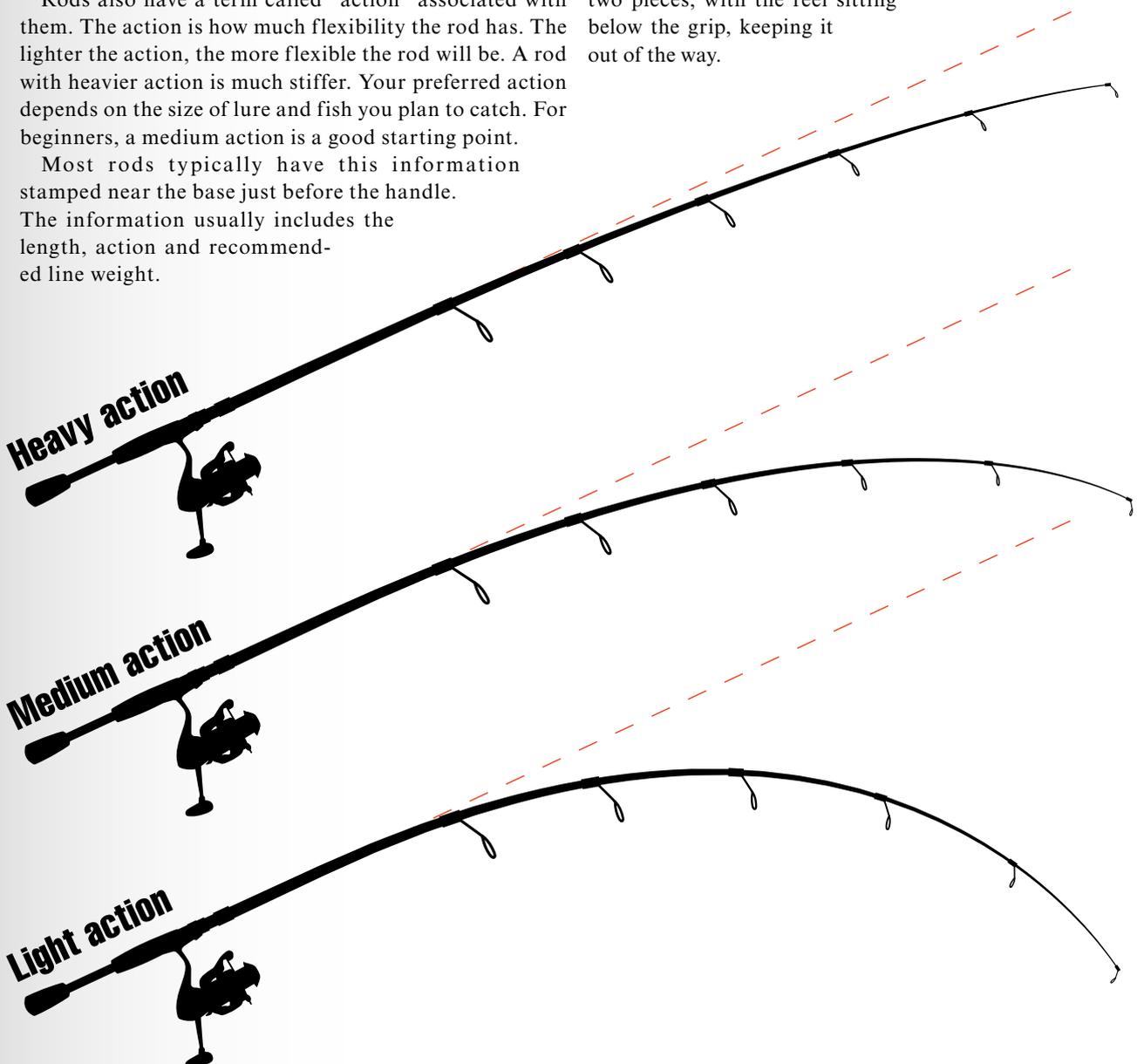
Most rods typically have this information stamped near the base just before the handle. The information usually includes the length, action and recommended line weight.



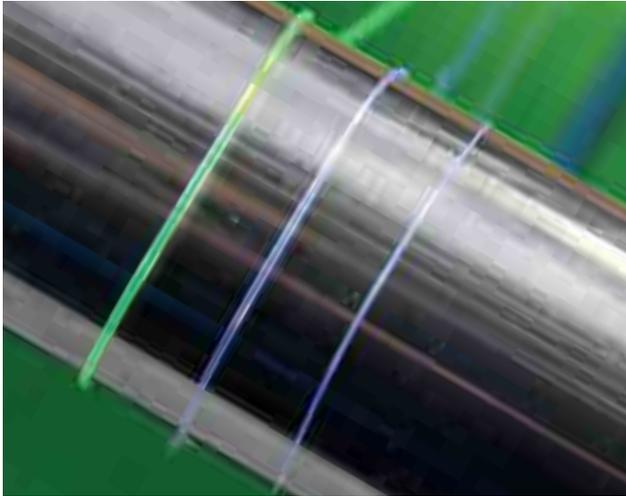
Rod handles for spincast & baitcast (bottom) and spinning (top) reels.

PURE FISHING

Fly rods are different in that they are longer, usually 7 to 10 feet, and vary in action depending on the weight of line you are using. They are normally two pieces, with the reel sitting below the grip, keeping it out of the way.



The Line

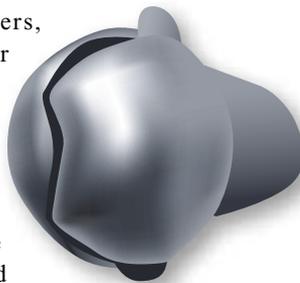


Different sizes of monofilament line, shown 30#, 14# & 4# (from left to right).

Fishing line is typically a monofilament material that is designed to be nearly invisible in water. Fishing line is classified in pound-test. This measurement is a reference to the amount of force, in pounds, that is required to break the line. The larger the pound-test number, the stronger the line. The downside of stronger line is its thicker diameter. Thicker line means it will be easier for fish to see it in the water. Finding the right balance of pound-test and diameter for the type of fishing you are doing is important. For a beginner, and with most spincast reels, an 8 to 12 pound-test line is recommended.

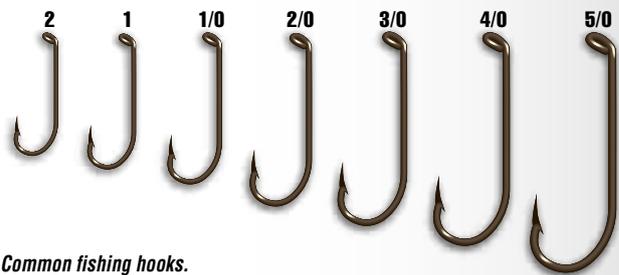
The Weight

Weights, also called sinkers, are an important part of your fishing rig. Weights come in different shapes and sizes for different uses. The weight of the fishing line and hook is not enough to hold your bait down in the water. A sinker helps hold your bait or hook down in the water. The weight also provides additional casting support to help throw your bait into the water. One of the most common weights is the split shot. A split shot is usually a round lead ball with a groove in it. The fishing line is placed in the groove and the weight is crimped around the line with pliers. The benefit of split shot is you can easily add more weight to your line without having to tie it on. Some split shot are reusable and will have small wings that allow you to uncrimp it from the line. Use caution when crimping split shot on the line; crimping too hard can damage the line.



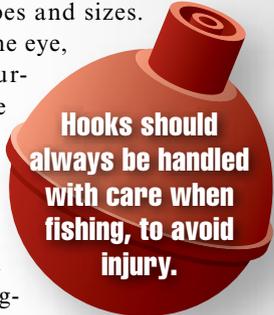
A split shot weight.

The Hook



Common fishing hooks.

Hooks come in different shapes and sizes. The basic parts of a hook are the eye, shank, bend and barb. The purpose of the hook is to grab the fish and keep the fish from getting away. The barb is an important feature that keeps fish from sliding back off the hook. Some hooks don't have a barb, because certain fishing regulations require you to use a hook without barbs. Some hooks have more than one point, and they are referred to as a double or treble hook. The most common hook, and a good hook to start with, is a simple Aberdeen hook. The Aberdeen hook usually has a u-shape bend and a longer shank. The longer shank makes it easier to remove the hook from the fish.



Hooks should always be handled with care when fishing, to avoid injury.

Once the type of hook is selected, then the size of hook is chosen. Using a hook that is too large might not allow a smaller fish to get the hook in its mouth. Using a hook too small could allow a larger fish to bend or break the hook. Most anglers usually have a few hook sizes on hand so they can switch should they believe the current hook being used is too small or too large. Hook sizes are generally referred to using numbers. The smallest size hook is 32, and the largest size is 20/0 (twenty aught).

Cork/Float/Bobber

A float, generally called a bobber, is a plastic bulb or cork that attaches to your line and floats in the water. The bobber is placed above the hook and weight on the line, and can usually be adjusted up or down on the line to allow your bait to stay at a certain depth below the surface. Another purpose is to indicate to the angler when a fish has taken the bait.



A bobber is a great tool for a beginning angler, since it will help to indicate when the angler should reel in the fish. Bobbers come in different shapes and sizes.

Fishing Tackle & Supplies

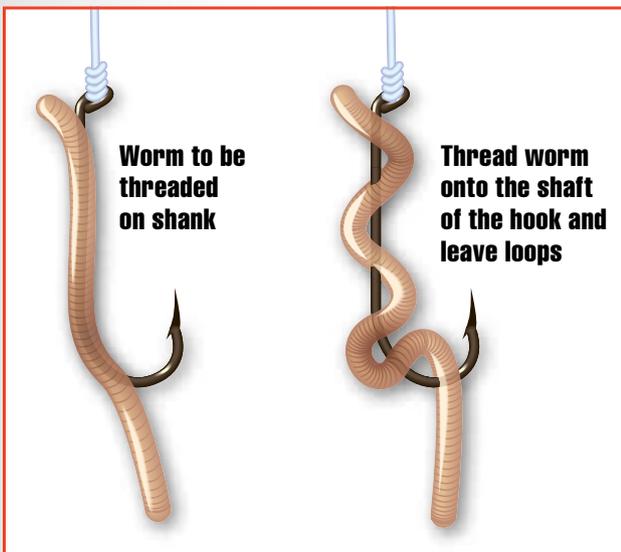


Trying to pick out a lure at any sporting goods store can be a challenging task. Artificial lures come in many shapes, sizes and color. Practice and experience is the best way to learn what lures work for each situation.

Bait

Bait is one of the most important decisions an angler makes. Bait can be live, such as worms, crickets or minnows. Bait can also be dead or nontraditional, such as cut fish, corn or dough

balls. Worms are a common bait, and can be used to catch just about any species of fish in Oklahoma. For the beginner, worms are the best choice, and they make catching sunfish which are plentiful easy to catch. Live bait is better than any nontraditional or artificial bait since it is natural, but live bait typically is not reusable and doesn't last forever.



Artificial Lures

The choice in artificial lures is almost unlimited. The size, color combination and type are difficult choices an angler has to make when using artificial lures. The purpose of the artificial lure is to imitate something natural. The benefit is that they are typically reusable, and some lures can be used for years.

Plugs/Crankbaits

Plugs, often referred to as crankbaits, have the shape and action of a baitfish or aquatic food. Some plugs are made to stay on top of the water, some are designed to go just below the water surface, and some go deep. The depth they travel will depend on the size of the bill or lip on the front of the lure. The larger the lip or bill, the deeper the lure will go when pulled through the water. Topwater crankbaits usually

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Try different colored lures to find out which color fish are biting best.

PURE FISHING



Crankbait with lip. Targeted species: largemouth bass, smallmouth bass, spotted Bass, White Bass, striped bass, striped bass hybrid, walleye, sauger, and saugeye.

have a cup at the front to create more action in the water, which draws a fish's attention. Crankbaits are usually made of plastic and sometimes contain small metal beads in them that rattle as the lure is pulled through the water. This rattle sends vibrations through the water that are felt by fish, creating interest in the bait.

Spinners/Spinnerbaits

Spinners are metal lures that have spinning blades that rotate through the water. This metal blade imitates another fish swimming through the water. Spinnerbaits, primarily used for bass fishing, have a weighted head with a skirt to hide the hook.

PURE FISHING



Spinnerbait with a skirt and two blades. Targeted species: largemouth bass, smallmouth bass and spotted bass.

Fishing Tackle & Supplies



A topwater buzzbait. Targeted species: largemouth bass, smallmouth bass and spotted bass.

Buzzbaits

Similar in design to a spinnerbait, the buzzbait is used as a topwater lure. It is a popular lure primarily for bass fishing. It has a propeller-like blade that creates a surface disturbance as it is pulled across the water's surface. This disturbance on the surface will draw a fish's attention, just as a topwater crankbait does.

Soft Plastics



Assorted soft plastic baits. Targeted species: largemouth bass, smallmouth bass, spotted bass.

Soft plastic baits come in many sizes and shapes. They are designed to imitate something that would be a natural food for fish. Plastics require a little more work on the angler's part since they don't have the action of other artificial lures. More skill and finesse are required to properly imitate the natural food source you are trying to imitate with the lure.

Jigs

A jig is simply a hook with a weighted head, and a soft plastic or skirt over the hook. Similar to soft plastics, jigs do not have a built-in action, so they require some additional skill on the angler's part to work the lure.



A small jig with a plastic tail. Targeted species: sunfish, crappie, largemouth bass, smallmouth bass, spotted bass, walleye, saugeye and sauger.



A larger jig with a skirt. Targeted species: largemouth bass, smallmouth bass, spotted bass.

Flies

Flies are associated with fly fishing and are typically hooks with hand-tied materials around them. They are designed to imitate a fly or other insect. Commonly used materials include thread, feathers, fur, wool, nylon, tinsel, Mylar and chenille. The assortment of flies is seemingly limitless. Tying flies is a hobby of many experienced anglers.



Bee and grasshopper flies. Targeted species: sunfish and trout.

The Tackle Box

The tackle box is every angler's best friend. It holds your tackle and helps organize the various tackle an angler will acquire through time. Tackle boxes come in different shapes and sizes. For the beginner, something small and simple is all that is needed. ■



Small red tackle box.

Angler Responsibility

3 CHAPTER

Anglers are responsible for everything they do. It is the individual's responsibility to follow the rules and regulations, and to make good ethical decisions when fishing.

Angler Responsibilities:

- Always think of safety when around the water and dealing with tackle.
- Follow the rules and regulations outlined in the "Oklahoma Fishing" guide.
- Value the resource and treat it with respect.
- Respect other anglers and be courteous to others on or near the water, giving them the space they need.
- Practice proper fish-handling techniques and release fish immediately back to the water if you decide not to keep them.

Private Ponds

In Oklahoma, many great fishing opportunities are found on private property. Landowner permission must be granted to the angler who wants to fish in a private pond. It is up to the angler to ask for that permission. Fishing a private pond without permission is considered trespassing and could result in a fine. Responsible anglers who gain permission to fish in private ponds always leave the pond the way they found it. Anglers should not leave trash or anything behind. Trash found around a pond should always be picked up to help out the landowner.

Angler Code of Ethics

It is important as an angler to have a personal code of ethics. Ethics are not always rules or regulations that we are required to follow by law, but they are beneficial to the sport of fishing and its future.

A good ethical angler:

- Supports conservation efforts.
- Practices selective harvest.
- Does not pollute and properly disposes of trash.
- Practices safe angling and boating.
- Obeys fishing and boating regulations.
- Respects other anglers' rights.
- Respects property owners' rights.
- Shares fishing knowledge and skills.
- Does not release live bait into waters.
- Promotes ethical sport fishing.

Preparing for a Successful Fishing Trip

The definition of a successful fishing trip varies for each person. For many people, just having an opportunity to get away and enjoy the outdoors is enough. Some might measure the success of a trip on the number of fish caught, or the size of a fish caught. Whatever your definition, preparation is important if you want to come home with a great story to share.

As an angler, you are responsible for your actions when fishing.

Water Safety

Anglers who use boats should always put emphasis on water safety. Every angler who is on the water should wear a personal flotation device regardless of whether he or she knows how to swim. Children and non-swimmers should always wear them when near the water. ■



ANDREA CREWS

Fisheries Management

The Oklahoma Department of Wildlife Conservation is the agency responsible for the fisheries in the state. Fisheries biologists across the state stock, sample and collect data on the many bodies of water. These data are used to help create the rules and regulations that help the Department maintain the resource. Fish are found in lakes, ponds, rivers, streams and wetlands. The fish and habitat found in each of those areas are unique.

Data Collection Methods

Netting

Biologists use three types of nets to collect fish. The trap net, gill net and hoop net vary in shape, size and purpose.

Trap Net

This is a funnel-shaped net with a rectangular frame, having a fence or lead on the front. The net is set perpendicular to the shoreline on a preferred 30-degree slope to a depth no greater than 20 feet. Anchors are attached to both ends to hold it in place. The net is designed so that when fish swim into the fence or lead, they try to swim around it and go into the funnel. The target species for this net is crappie and walleye.



A U.S. Fish and Wildlife Service worker and a Wildlife Department employee remove a paddlefish from a gill net.

Gill Net

This a net made of monofilament netting with varying mesh sizes to collect open-water fish species. The net will have foam floats on the top and a lead-lined core on the bottom to hold the net down. Anchors are used at each end to hold it in place. The mesh size will determine the size of fish that will be caught as they try to swim through the net. The typical targeted species is temperate bass, walleye, saugeye, catfish and shad.

Hoop Net

Similar to the trap net, but lacking the fence or lead, the hoop net is funnel-shaped to trap fish in compartments. Hoop nets are usually set in shallow water, and a bait bag is



A Wildlife Department employee pulls up a hoop net.

inserted into compartments to attract fish. The target species is channel catfish and bullhead catfish.

Electrofishing

Electrofishing, sometimes referred to as shocking, is a fast way for biologists to collect a sample of fish along the shoreline. This can be performed with a boat or backpack, with a gasoline-powered generator that supplies voltage when leads are dropped into the water. The voltage and amperage can be adjusted through a control box to target a specific species. This method stuns the fish temporarily, allowing for them to be dipped up by someone working a net. Fish of all sizes are collected in a live-well where they can be later counted, measured and weighed, then released back into the water. Target species are typically bass, trout, sunfish and catfish.



Wildlife Department workers electrofishing in a Tulsa city pond.

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DANIEL GRIFFITH



Habitat Improvement

Good habitat is important for a good fishery. Sometimes habitat improvements must be made to help a certain species in a body of water. Biologists use natural or man-made methods to improve fish habitat.

Brush Piles

Cedar trees are cut down and hauled to a body of water. A cement block is tied to the tree to keep it submerged. Trees are arranged in piles to provide cover for fish. When you see a “Fishing Area” buoy in Oklahoma, it typically means that cedar trees have been sunk in that location. Target species are crappie, sunfish and catfish.

Spider Blocks

This manmade solution can be thought of as an artificial tree. It consists of recycled plastic tubing inserted into cinder blocks and buckets, held in place by cement. Spider blocks are typically arranged in rows. These sites provide cover for all types of fish and are also typically marked with buoys. Target species are crappie, bass, sunfish and catfish.

Law Enforcement

Fishing regulations help conserve the resource for future generations. Game wardens work year-round across the state to make sure anglers are following the regulations. Wardens help protect the resource that we all use. People who follow the regulations benefit most from the work law enforcement does. Always remember that a game warden is your friend, working to protect what you love most about fishing.

The Angler as a Management Tool

One of the best management tools a biologist has is the angler. The angler’s success in a body of water helps tell the biologist that something positive is happening there. Biologists also collect data from anglers by asking them survey questions. ■

The Wildlife Department has about 75 staff members that manage Oklahoma’s fisheries.

Knots & Casting Techniques

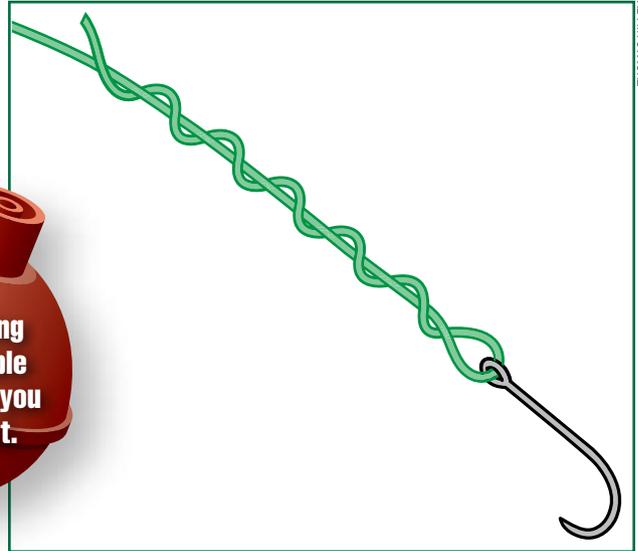
Knots

A good fishing knot is important to the success of any angler. Tying a fishing knot takes practice to learn but will help reduce the chance of losing a fish because of the line breaking or the knot coming undone. The purpose of a fishing knot is to provide a strong knot while not degrading the quality of your fishing line. Tying a regular knot in fishing line will reduce its strength significantly.

If you are using 12 pound-test line and tie a simple knot in the line, the strength of the line at that knot will be much less than the advertised 12 pounds. An improper knot will easily result in a broken line and loss of the fish, bait and lure.

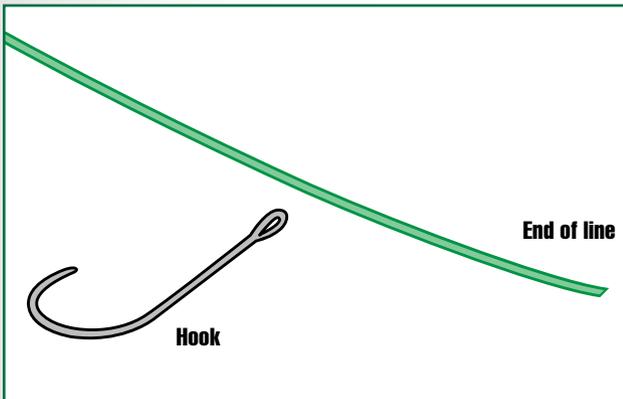
The improved clinch knot is one of the easiest fishing knots to tie and is a knot many anglers learned when they were beginners. Read on for instructions on how to properly tie an improved clinch knot.

Practice tying a knot multiple times to help you remember it.

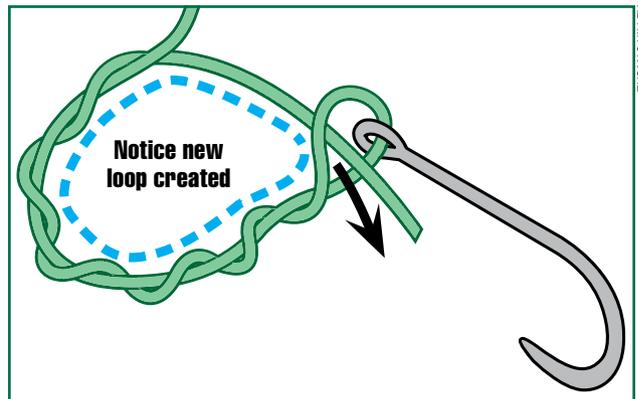


Step 3: Twist the line around five or six times.

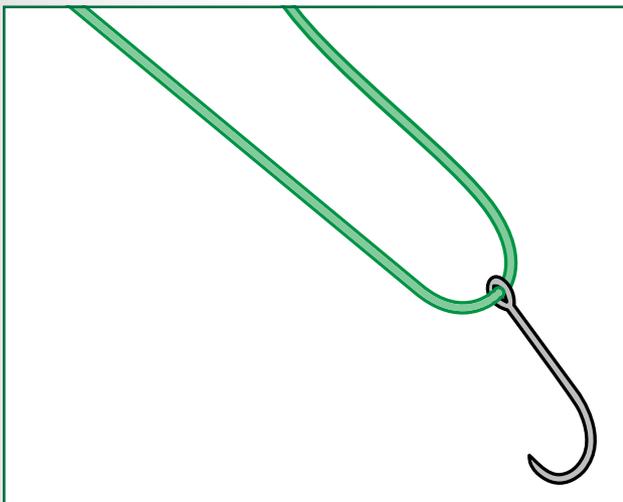
How to tie an improved clinch knot:



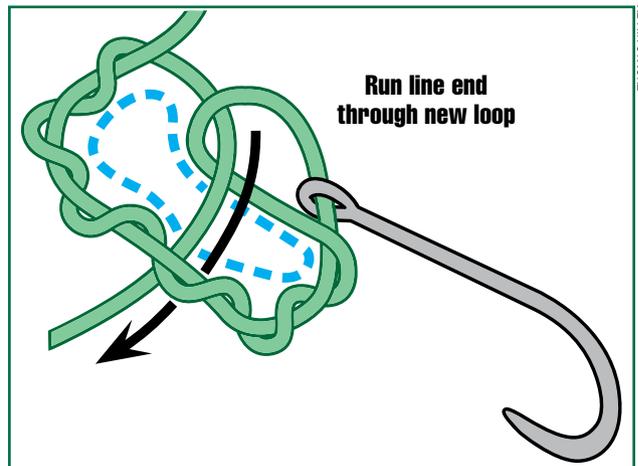
Step 1: Have your hook and the end of your fishing line.



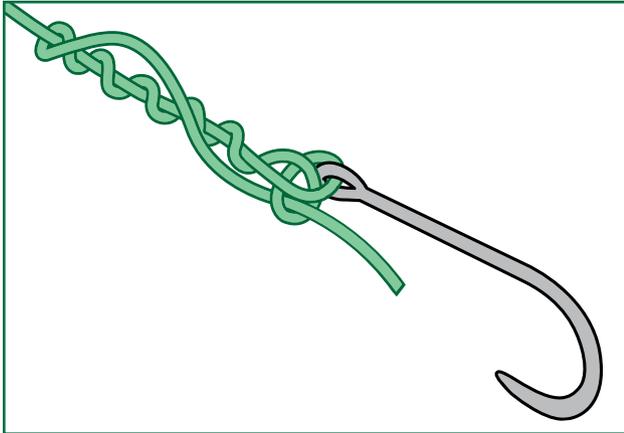
Step 4: Run the end of the line through the loop above the hook's eye, but notice the new loop you are creating as you run the line through the loop.



Step 2: Run the end of your line through the eye of the hook.

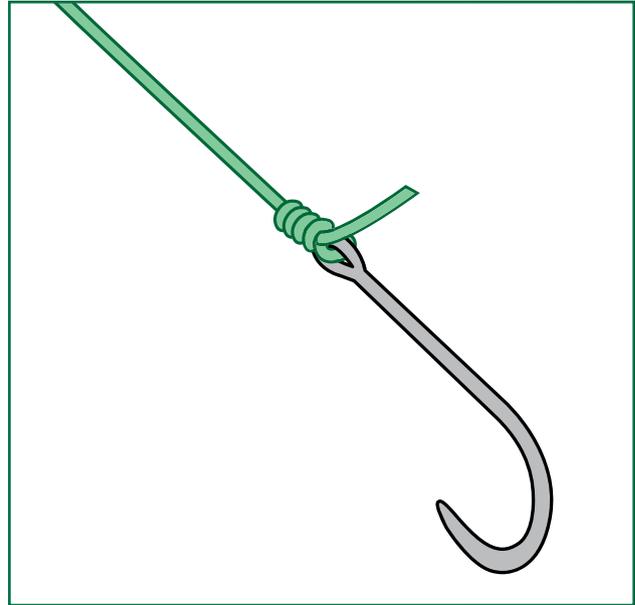


Step 5: Now run the end of the line through the new loop you created in the last step.



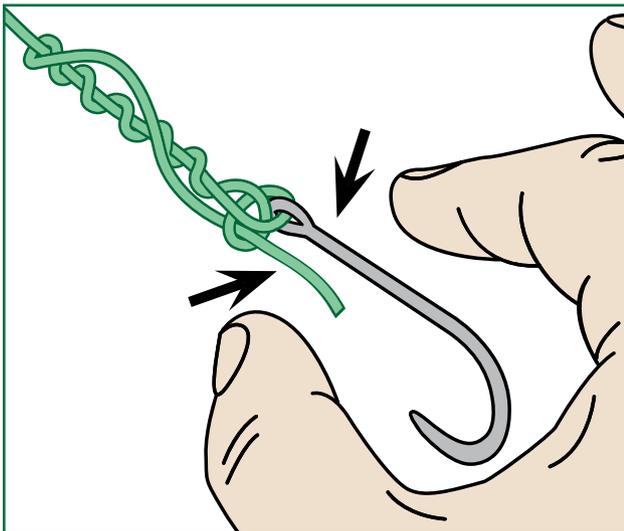
THOMAS HILLEY

Step 6: Straighten your line for the next step.



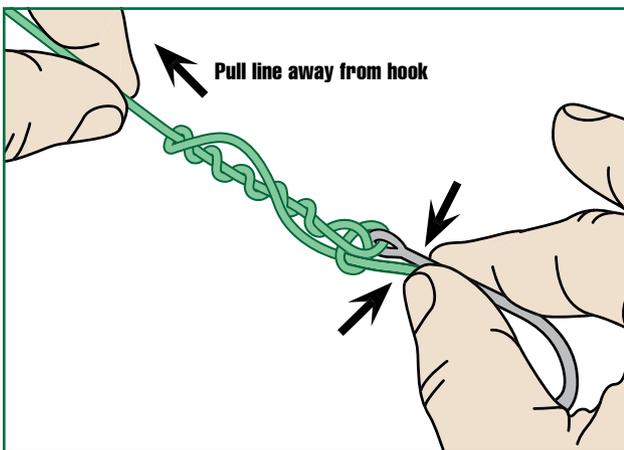
THOMAS HILLEY

Step 9: Once your knot is pulled down tight, this is what you should have. If you have excess line hanging from the knot, you can cut it. But don't cut it too close to the knot or it will come undone.



THOMAS HILLEY

Step 7: Hold down the end of the line and the hook together with one hand.



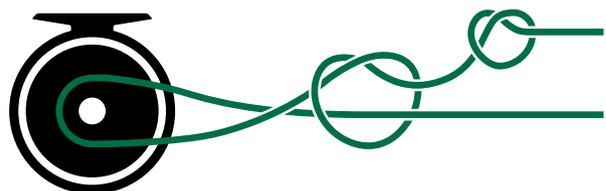
THOMAS HILLEY

Step 8: With the end of the line and hook in one hand, gently pull the other end of the line away from the hook. Remember you have a hook in your other hand, so be careful not to pull too hard or you could hook yourself.

Tip:

When using monofilament line it helps to “wet” your line before pulling it tight. To “wet” your line either place the line in your mouth or water. The moisture provides a lubricant that will help the line synch down easier, but will also protect the line from being damaged by the friction of the line pulling tight.

Arbor Knot



Another useful knot is the arbor knot. It can be used to tie your fishing line to your reel.

Knots & Casting Techniques

Casting

Knowing how to properly cast is an important part to becoming an angler. There are many different ways to cast, but the simplest and easiest to do is the overhand technique using a spincast reel. The key thing to remember when casting is SAFETY! Remember you have a hook swinging from the other end of the line! Make sure nobody is in the way to avoid any serious injury. And be aware of any other objects such as trees that could be hooked to help avoid damage to equipment and save time from possible tangles.

Anyone who can drink a cup of water can cast. Before casting, practice this simple motion of drinking from a cup.



Just like picking up a cup from a table, your elbow should be at your side and bent at a 90-degree angle.



Keep your elbow pointed down at your side, then bring the cup to your mouth.

Now using a spincast rod and reel, repeat the same thing.



1: Hold the rod pointed out in front of you, and be sure your feet (toes) are pointed in the direction you wish to cast.



2: Push the button on the back of the reel, hold in the button, and slowly bring the rod over your shoulder. (Notice how your elbow should remain pointed down and at your side.)

DANIEL GRIFFITH

DANIEL GRIFFITH

Knots & Casting Techniques



DANIEL GRIFFITH



DANIEL GRIFFITH

3: Now look behind you to make sure nobody is standing there or that no objects are in the way before you finish your cast.



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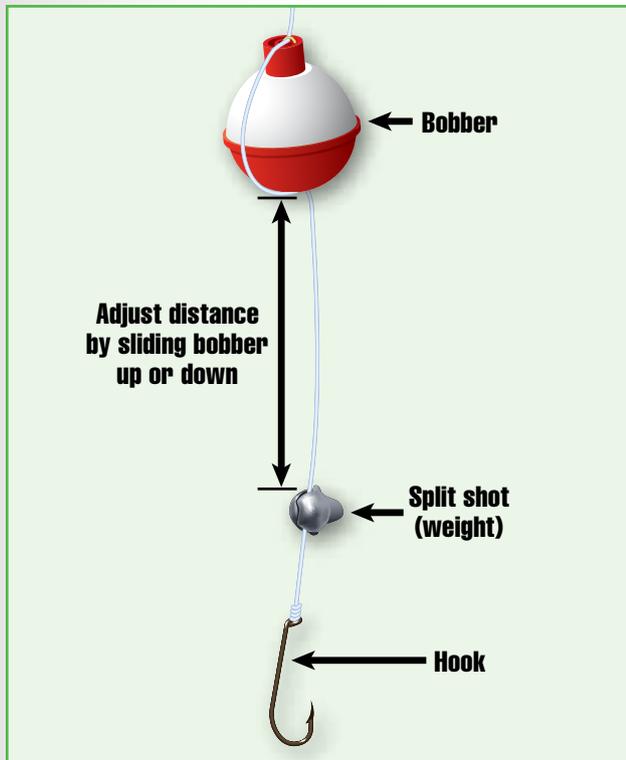
4: When you are sure the area behind you is clear, bring the rod forward while keeping your elbow down, and release the button right after the rod points directly up. ■

Fishing Techniques

This chapter covers some basic fishing techniques that will help you land your first fish. There are hundreds of different fishing techniques, and it takes years of experience for any angler to master them.

Spincast Fishing

While many think of fishing from a boat, the majority of anglers will start off fishing from a dock or shore. One of the simplest fishing rigs to use is a spincast rod and reel, with a small hook, split shot weight and a bobber. When used with live bait, typically a worm, this method is guaranteed to bring success if fish are present and biting.



For this method, place a small split shot weight on your line to provide weight that will keep your bait submerged. The hook is typically below the weight and holds your bait. The bobber helps suspend your bait in the water so fish can see it. You can also adjust the bobber up and down your line to adjust the depth of your bait in the water.

The bobber also acts as an indicator when a fish is on your hook. When the bobber goes underwater, you have a fish on the hook. For best results, it is recommended that you “set the hook” before you start reeling in your fish. To do that, simply jerk the rod tip up quickly, but not too hard or you could pull the hook out of the fish’s mouth.

Once you have set the hook, you can reel in the fish, but be sure to keep the rod tip pointed up. This will allow the rod to reduce the strain on the line so that it doesn’t break.

Eventually you will see your fish coming up to the water’s surface. Be careful not to jerk the fish out of the water but to gently pull it up. For larger fish, using a dip net to pick up the fish is recommended.

Where to Fish

One of the first things to do is decide where you want to go fishing. Finding a body of water close to home is more convenient, but there are many places to go fishing all across the state!

The best resource for finding a nearby place to fish in Oklahoma is wildlifedepartment.com.

Once you have picked a place to go fish, you’ll want to know where on that body of water is the best place to fish.

Where are the Fish

Fish don’t just randomly swim around in the water. There are places they prefer to be. As an angler, knowing where fish prefer to be is good information to have.

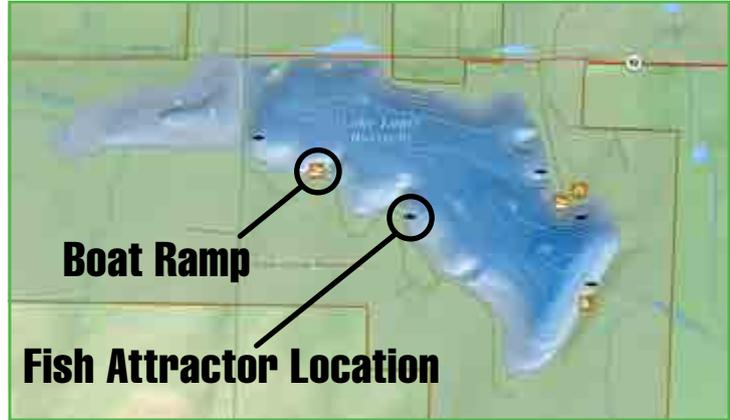
Finding “structure” in the water or changes in elevation are key places to look for fish. Structure can be anything such as a log or rocks under the water. Downed trees or structure hanging over the water can also be a point of focus for fish. Fish will typically congregate around these objects for cover or shelter. A change in elevation also can be a focus point for fish, so fishing from a point or steep bank can result in success.

Also look for fish attractor sites. These sites are marked with small, typically orange-and-white buoys. The structure at these sites is typically man-made items or sunken cedar trees that provide cover for fish. These sites concentrate fish for anglers.

Maps are a useful tool for any angler to find places where fish might be found. Maps may show contours, changes in elevation, boat ramps, or the location of fish attractors. One of the best resources for Oklahoma lake maps is the “Lakes of

Remember to always obtain landowner permission when fishing private ponds.

LANCE MEEK



Oklahoma” atlas, published by the Wildlife Department and the Oklahoma Water Resources Board.

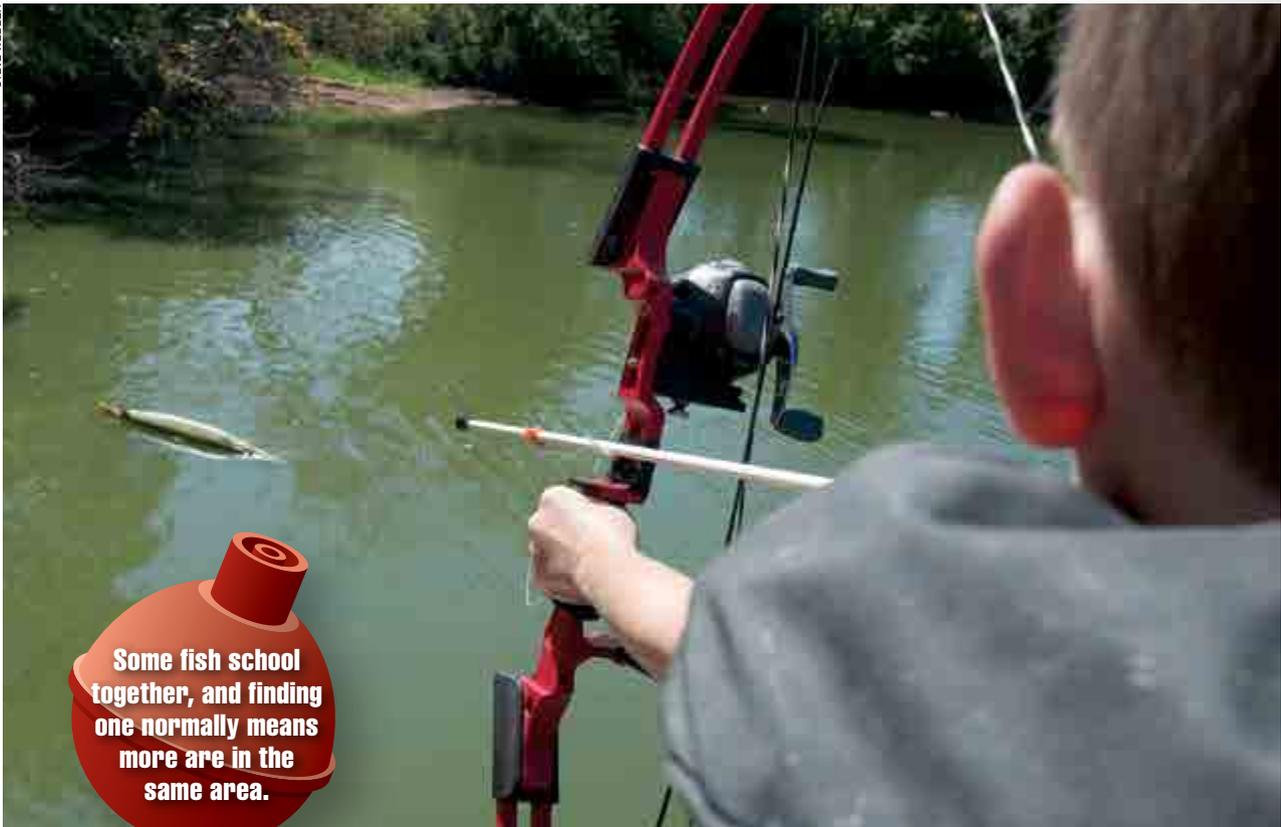
Other Fishing Methods

As you progress, you may want to try other methods of angling. Some require using different types of rods and reels, with different types of live bait or artificial lures. Other methods don't require using a rod and reel at all, such as juglines, trotlines, bowfishing or throw nets. These other methods do have special regulations on how they can be used, which are different from rod and reel, and it is up to the angler to be responsible and know those rules. ■

Go online to [youtube.com/outdooroklahoma](https://www.youtube.com/outdooroklahoma) for “How To” videos on different fishing tips and techniques. Check back often for new videos.



STEVE WEBBER



Some fish school together, and finding one normally means more are in the same area.

Fish Identification

Being able to properly identify fish is an important part of fishing. The responsible angler knows the fishing regulations, and knows how many of each fish he or she can catch and keep, or what size a certain species of fish must be in order to keep. So, knowing how to identify fish will help you know what rules or regulations apply to that fish species.

Sunfish

Bluegill



- Typically have vertical bars on the side of their bodies
- Dark gill flap with a black spot at the base of the dorsal fin

Redear Sunfish



- Red border on its short gill flap
- No black spot at the base of the dorsal fin

Green Sunfish



- Large bass-like mouth
- Orange flanked gill flap, with blue-green color lines on cheek



A boy holds up the bluegill sunfish he caught while attending the Oklahoma Department of Wildlife Conservation Outdoor EXPO.

Fish Identification

Crappie
White Crappie



- Distinct vertical bands of blue/gray spots
- 5-6 bony spines in dorsal fin

Black Crappie



- No true pattern to black spots
- 7-8 bony spines in dorsal fin



Fish Identification



COLIN BERG

Black Bass

Largemouth Bass



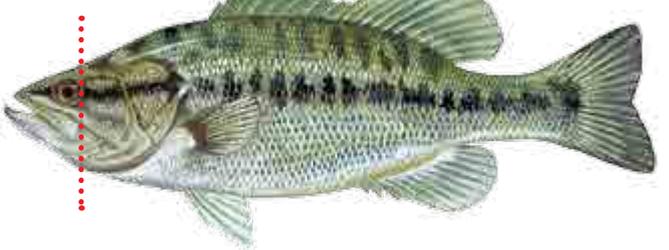
- Mouth hinge well behind eye

Smallmouth Bass



- Mouth hinge in front of eye

Spotted Bass



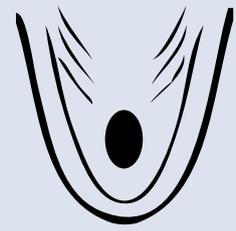
- Mouth hinge even with back edge of eye

Distinguishing Black Bass

The presence or absence of a tooth patch is another way to distinguish black bass. The majority of largemouth bass have no tooth patch on the tongue, while smallmouth and spotted bass do have a tooth patch on the tongue.



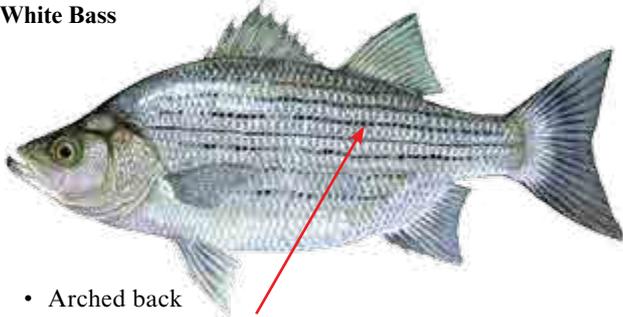
Largemouth Bass
Most largemouth bass have no tooth patch on the tongue.



Smallmouth Bass
Smallmouth and spotted bass display a tooth patch on the tongue.

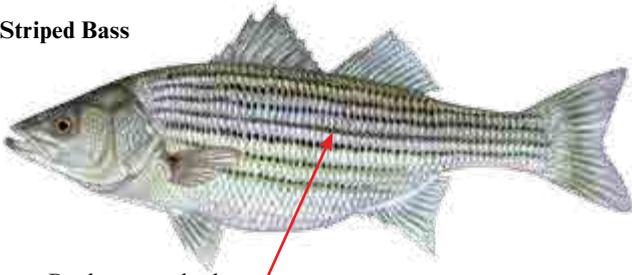
White Bass, Striped Bass and Hybrids

White Bass



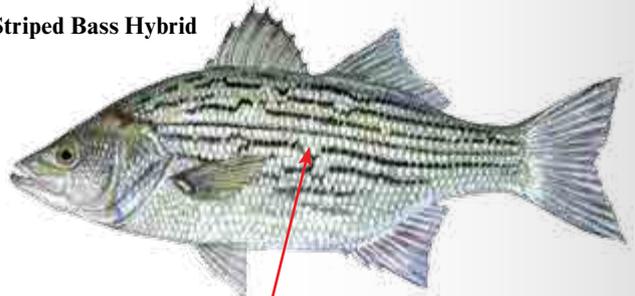
- Arched back
- Faint lines, usually unbroken

Striped Bass



- Back not arched
- Strong, unbroken dark lines

Striped Bass Hybrid



- Back slightly arched
- Some broken lines

Distinguishing White Bass

White bass are also distinguished from striped bass and striped bass hybrids by tooth patches on the tongue. White bass have a single tooth patch, striped bass and striped bass hybrids have two tooth patches.

The state fish of Oklahoma is the white bass, also referred to as a sand bass.

Downward Views Inside Mouth of Lower Jaw and Tongue.



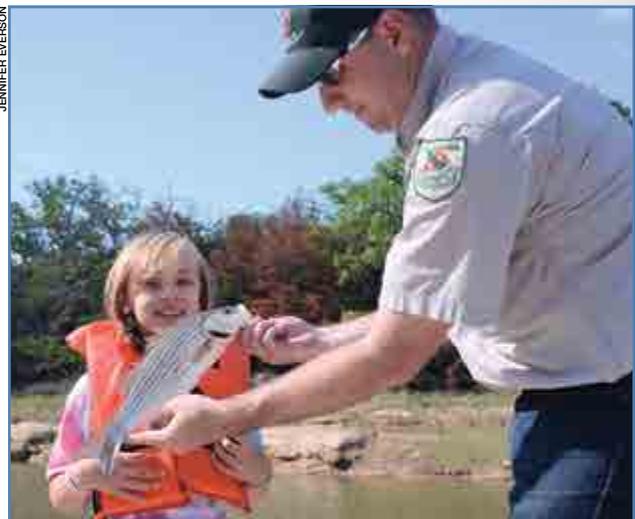
White Bass
One round or heart-shaped patch on tongue



Striped Bass & Striped Bass Hybrids
Two long patches on tongue



DANIEL GRIFFITH



JENNIFER EVERSON

Wildlife Department employee holds a striped bass hybrid for a young girl at an Aquatic Resources Education clinic.

Fish Identification



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Catfish

Blue Catfish



- Straight anal fin

Flathead Catfish



- Tail not forked
- Lower jaw protrudes out past upper jaw

Channel Catfish

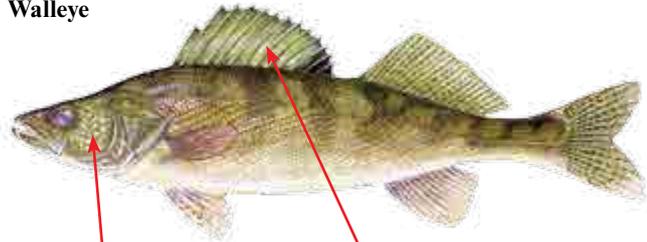


- Curved anal fin

Fish can change color depending on the amount of light they receive, and may appear darker or lighter.

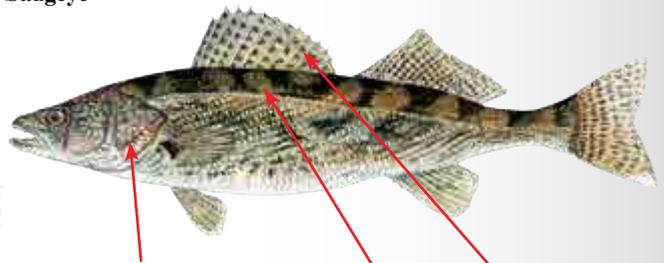
Walleye, Sauger & Saugeye

Walleye



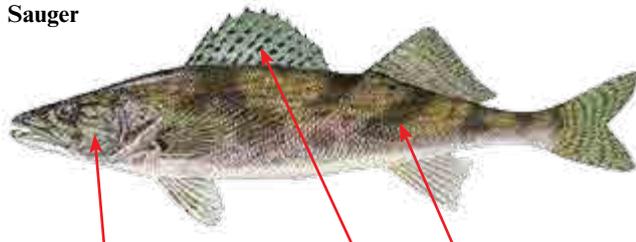
- Few or no cheek scales
- No spots on spiny dorsal fin

Saugeye



- Cheek covered with scales
- Body gold with distinct brown blotches
- Spiny dorsal fin with distinct spots and bars in webbing

Sauger



- Cheek covered with scales
- Distinct spots on spiny dorsal fin
- Tan body with distinct brown blotches



WADE FREE

Fish Identification

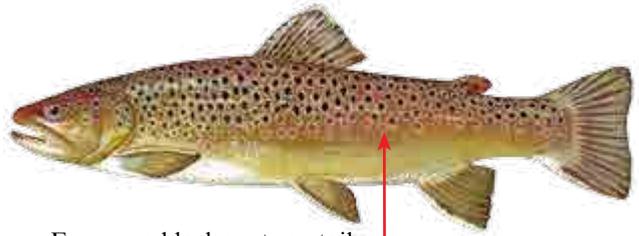
Trout

Rainbow Trout



- Black spots on tail
- Iridescence on sides

Brown Trout



- Few or no black spots on tail
- Orange and red spots on side

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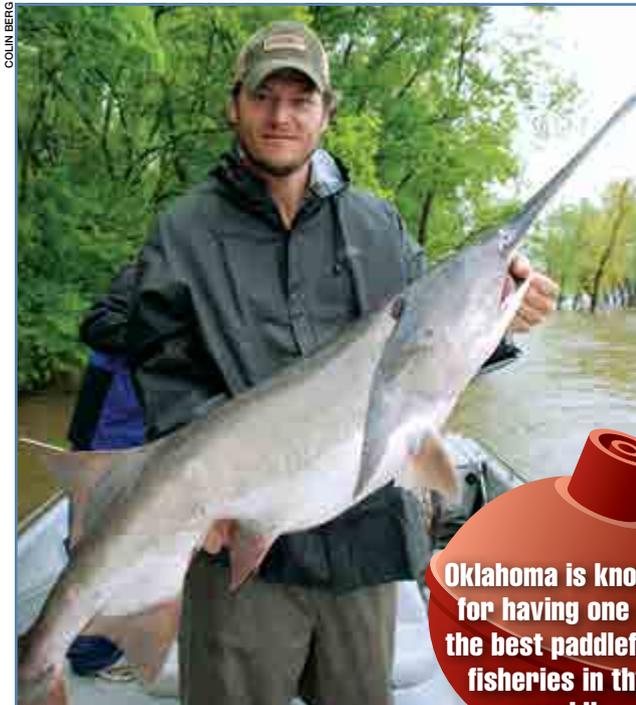


DANIEL GRIFFITH



Fish Identification

Oklahoma is home to 176 species of fish. Many of these fish can only be found in specific parts of the state, while others range across the entire state. For additional information on other fish found in Oklahoma, visit wildlifedepartment.com and check out the “Field Guide to Fishes of Oklahoma.” ■



COLIN BERG

Blake Shelton holds a paddlefish he caught.

Oklahoma is known for having one of the best paddlefish fisheries in the world!



BRANDON BROWN

The rock bass is a sunfish that can be found in dense cover in Ozark streams area of northeastern Oklahoma.



BRANDON BROWN

Banded sculpin camouflaged in the bottom of a creek bed.



BRANDON BROWN

The cardinal shiner is one of the most common minnows in the Ozark streams.

Fish Cleaning & Cooking

Fish Cleaning

While many people enjoy fishing for sport, many others catch fish to use as food. Fish has always been an important part of the diet. And being able to clean and cook a fish that you caught is great, especially for those who enjoy the taste of fish!

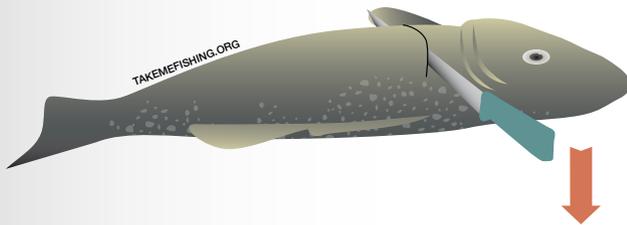
When cleaning your fish, filleting means cutting out the meat of the fish without the bones. Larger fish, like largemouth bass, catfish, striped bass and walleye, are usually filleted. A filleted fish has its skin and all of its bones removed before cooking.

Fillet knives have a long, thin blade that's very sharp and specifically designed for filleting fish. To work properly, the knife must be really sharp. If you have any slime on your hands or the fillet knife handle, wash it off to prevent slipping.

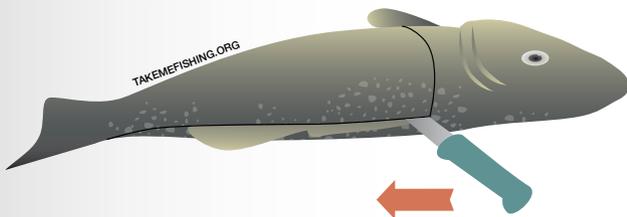
Tip: When learning how to fillet a fish, you can also wear metal- or rubber-mesh fish-cleaning gloves to protect your hands.

Here are the steps to fillet a fish:

1. Place the fish on its side on a flat surface.



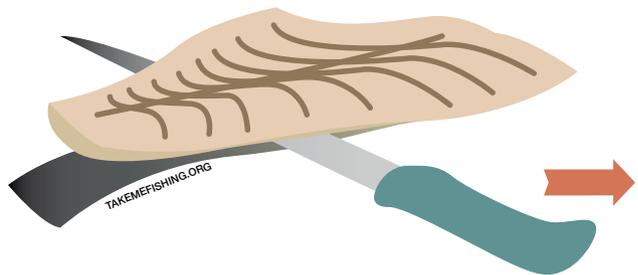
2. Cut the fish behind its gills and pectoral fin down to, but not through, the backbone.



3. Turn the fish so that its back (dorsal fin) is facing you. Make a long slice along the back of the fish from the cut you made behind the gills all the way to the tail.
4. Repeat this slicing motion until you can lift the meat part way away from the back bone with your thumb.



5. Once you can lift the meat partially away, continue to run the tip of the knife along the ribs of the fish till you lift the fillet most of the way off the carcass.
6. Push the blade of your fillet knife all the way through the body of fish from the dorsal (top) side through to belly at the anal vent, and pull the knife towards the tail to separate the fillet from the rest of the fish.
7. Repeat these steps on the other side of the fish.
8. Put the fillet on the table with the skin side down. Insert the knife blade about a half-inch from the tail, gripping firmly, and put the blade between the skin and the meat at an angle.



9. Using a little pressure and a sawing motion, cut against, but not through, the skin.
10. Remove the fillets from the skin.
11. Wash each fillet in cold water.
12. Pat dry with a clean cloth or paper towel. The fillets are ready to cook or freeze.



For additional fish cleaning and cooking tips, go online to TakeMeFishing.org.

Fish Cooking

Cooking is the next-to-last step in finishing a great fishing trip. Below is a simple recipe for cooking your fish fillet.

Pan Frying Fish

Pan frying is a popular way to cook fish, and it is the quickest and easiest way to cook your catch at your campsite, at the park or on shore. Here are basic steps:



Step 1: First, coat the fish fillet with flour. Feel free to add your favorite seasonings to the flour before coating.



Step 2: Dredge the flour-covered fillet in a beaten egg.

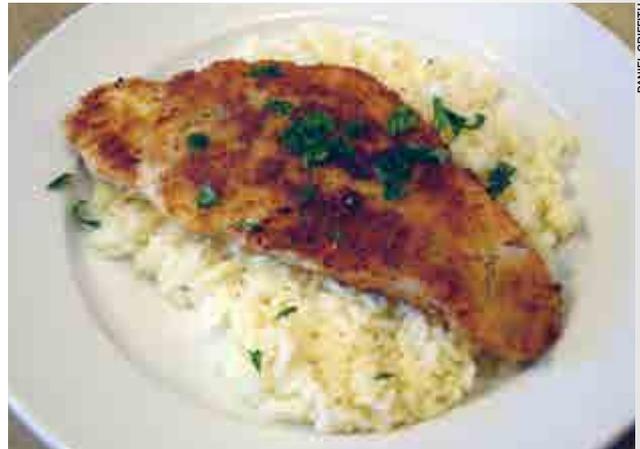


Step 3: Coat the fillet with bread crumbs.

Step 4: Heat some cooking oil in a skillet. Test the heat by dropping a small piece of fish into the skillet. If it sizzles, the oil is hot enough.



Step 5: Add your fish to the skillet, cooking on each side for 3 or 4 minutes, or until the coating is brown.



Step 6: Enjoy with fellow anglers or family and friends.

The final step to a successful fishing trip is enjoying the taste of your catch. ■

Activity Guide

1. Name the agency responsible for managing Oklahoma's fisheries:

2. Identify each type of reel.





3. What does an angler use to hold his or her line in the water?

4. What type of artificial lure could be used to catch a crappie? (Give one example.)

5. Who is responsible for an angler's actions?

6. Responsible anglers know all the rules and regulations associated with fishing. You plan to take a friend bass fishing but can't remember how many fish you are allowed to keep. Go online to the "Oklahoma Fishing" guide and find out how many largemouth bass you are allowed to keep in one day.

7. To help improve fisheries, biologists place habitat in the water to provide cover for smaller fish and a place to concentrate fish for anglers. What is one type of habitat improvement discussed in this manual, and what species does it benefit?

8. This manual taught you how to tie the improved clinch knot. Go online and find another type of knot an angler might use when fishing.

9. Safety is important to a successful cast, and you should always look _____ you before casting.

10. What piece of tackle is used to help suspend your lure or bait in the water?

11. Go online to find the closest body of water to your school. What is the name of it?

Activity Guide

12. A fish _____ is typically an orange-and-white buoy that marks the location of structure for fish.

13. Which sunfish is identified by its large bass-like mouth and blue-green lines on the side of its face?

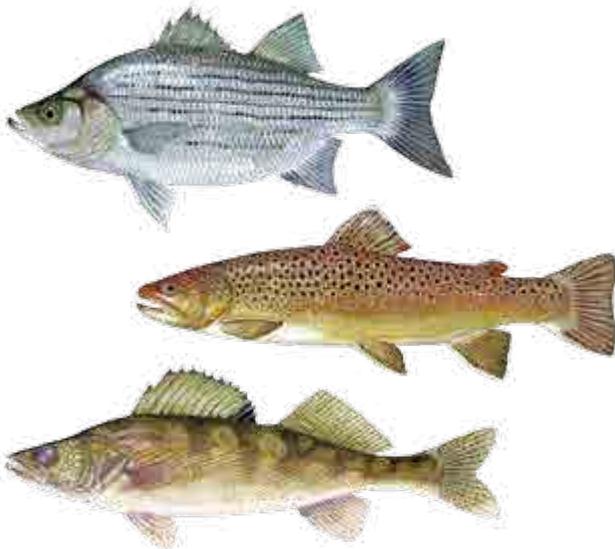
14. True or False: For regulation purposes, Oklahoma anglers must know how to tell the difference between a white crappie and a black crappie when fishing. (Hint: Go online to the "Oklahoma Fishing" guide to read the regulations about white and black crappie.)

True False

15. What three bass are in a group called "the black bass"?

16. What is the state fish of Oklahoma?

17. Which of these fish is a brown trout? (circle)



18. Go to wildlifedepartment.com and find the "Field Guide to Oklahoma Fish." Find one fish species in the guide that you didn't see in this manual and explain how you would identify it.

19. What is one thing you learned from this manual that you didn't know before?

For additional activities, go online to wildlifedepartment.com



Go to facebook.com/OKOutdoorEd and like ODWC Outdoor Education for more information and activities.



You can also check out wildlifedepartment.com/fishing/fishrpt.htm for Oklahoma fishing reports.

Outdoor Education



OKNASP

Schools across the state are discovering an exciting program that hits the bullseye. Through the Oklahoma National Archery in the Schools (OKNASP) Program, students have the chance to excel today, tomorrow and throughout a lifetime in the unique sport of archery. Designed for students in grades 4-12, the curriculum covers archery history, safety, techniques, equipment, mental concentration and self-improvement. Over 400 Oklahoma schools are offering the OKNASP program as part of their regular classroom curriculum. For more information, contact:

Jay Rouk, jay.rouk@odwc.ok.gov or (405) 919-1623



Hunter Education

Hunter education covers a variety of topics including firearms safety, wildlife identification, wildlife conservation and management, survival, archery, muzzleloading and hunter responsibility. Hunter education certification is available to students 10 years or older as a standard eight-hour course, or Oklahoma residents can complete their hunter education certification online. There are well over 200 Oklahoma schools offering hunter education as part of their in-school curriculum. For more information, contact:

Lance Meek, lance.meek@odwc.ok.gov or (405) 919-2817



Fishing in the Schools

The Department has operated an Aquatic Resources Education Program for more than 25 years. In 2011, the Department launched an effort within Oklahoma schools. The new program is called Oklahoma Fishing in the Schools (OKFITS). Schools that are involved with the OKNASP program are eligible to receive training and a fishing equipment kit free of charge from the Department. More than 150 schools are now involved with the OKFITS program. For more information, contact:

Daniel Griffith, danie.griffith@odwc.ok.gov or (405) 990-9753



Explore Bowhunting

In 2010, the Wildlife Department began sponsoring another archery based program called Explore Bowhunting. This program is designed to teach students ages 11-17 the basic skills of bowhunting. The Archery Trade Association created this program. Through hands-on experiences, students gain confidence interacting with the natural environment and strengthen their appreciation for wildlife and the woods. In 2013, Explore Bowfishing curriculum was added to the program. Nearly 200 Oklahoma schools that offer OKNASP and HE are also offering this very exciting program. For more information, contact:

Jay Rouk, jay.rouk@odwc.ok.gov or (405) 919-1623



Oklahoma Scholastic Shooting Sports Program (OKSSSP)

The Wildlife Department recognizes that today's youth will be tomorrow's sportsmen. The OKSSSP is a high school trap-based shotgun program that is focused on providing a fun, safe environment for participating in shooting sports and reconnecting kids with the joy of being outdoors. The OKSSSP will raise awareness of conservation-related sports, promote safety and responsibility, and raise self-esteem. We train teachers in basic shooting skills, trap-shooting basics, gun safety, how to get the kids started, etc. For more information, contact:

Damon Springer, damon.springer@odwc.ok.gov or (405) 317-6316



Sport Fish Restoration

America is home to large numbers and varieties of wild creatures. Yet, only a few decades ago, wildlife's survival was very much in doubt. Early settlers harvested an abundance of wildlife, wiping out some species and reducing others to just a fraction of their original numbers.

Because of this, Congress passed the act known as the Dingell-Johnson (DJ) Act on Aug. 9, 1950. Previously an act known as the Pittman-Robertson Act was passed in 1937. Together, these acts are administered through the Wildlife & Sport Fish Restoration Program (WSFRP).

Since then, numerous species have rebuilt their populations and extended their ranges far beyond what they were in the 1930s.

Federal funding from WSFRP pays for up to 75 percent of project costs, with the Oklahoma Department of Wildlife Conservation paying at least 25 percent. A steady source of funding lets the Wildlife Department make a lasting impact on species populations. The Department

receives about \$18 million each year from federal excise taxes for sport fish and wildlife restoration.

WSFRP has greatly aided in a nationwide effort to enlist science in the cause of wildlife conservation. About 26 percent of WSFRP funding to the states is used for surveys and research.

Surveys provide solid information on the numbers and activities of species, which helps biologists make management decisions. This includes season dates, bag limits, habitat improvements, etc.

Research findings have enabled managers to keep wildlife in balance with their environments and to permit more people to enjoy the wildlife without endangering the future of any species.

Aquatic Education is designed to make each angler aware of how his or her behavior affects others and the resource. It also helps introduce new anglers to the sport of fishing by teaching the basic knowledge an angler needs. ■

Cycle of Success for Wildlife and Sport Fish Restoration Programs



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