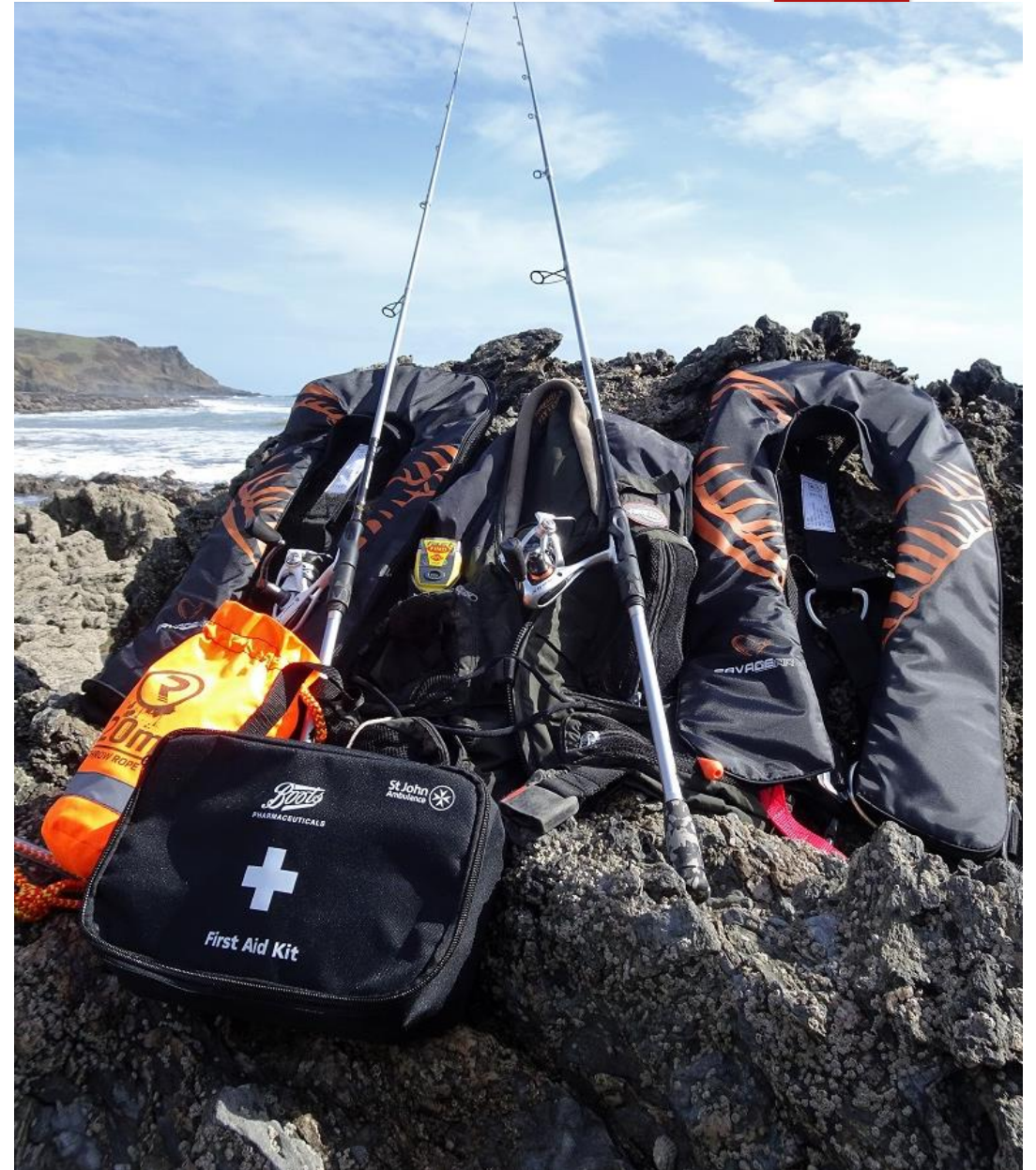




Fishing Merit Badge

SCOUTS BSA

Requirement #1 Health and Safety



Health & Safety Requirements

- a. Explain to your counselor the most likely hazards you may encounter while participating in fishing activities, and what you should do to anticipate, help prevent, mitigate, and respond to these hazards.
- b. Discuss the prevention of and treatment for the following health concerns that could occur while fishing, including cuts and scratches, puncture wounds, insect bites, hypothermia, dehydration, heat exhaustion, heatstroke, and sunburn.
- c. Explain how to remove a hook that has lodged in your arm.
- d. Name and explain five safety practices you should always follow while fishing.

1a/b – Hazards, Prevention & Treatment

Hazards

1. Getting hooked
2. Dehydration
3. Sun issues
4. Heat issues
5. Wild animal bites
6. Insect bites

Prevention or Treatment

1. Wear eye protection and a brimmed hat; learn hook removal techniques
2. Drink plenty of water
3. Wear SPF-rated clothing; use sunscreen
4. Wear light, breathable clothing; stay out of direct sun; drink plenty of water
5. Avoid wild animals
6. Wear insect repellent

1a/b – Hazards, Prevention & Treatment

Hazards

7. Falls
8. Cuts
9. Falling in; drowning
10. Weather
11. Lightning/storms
12. Getting lost

Prevention or Treatment

7. Use a hiking/wading staff
8. Bring a First Aid kit
9. Wear a PFD, especially in running water or on a boat
10. Check weather before you go; bring raingear
11. Seek shelter; keep your rod down low
12. Create a trip plan; leave it with an adult. Fish with a buddy. Bring a compass & map.

1c - Removing an Embedded Hook

The method you use depends on the hook type and how deep it went.

IMPORTANT NOTES:

- ▶ If the hook is embedded in or near the eye or on the face or neck **DO NOT** attempt to remove the hook!
- ▶ Cut the line and stabilize the hook if you can, then seek medical attention immediately!
- ▶ All head injuries should be shown to a doctor. Keep your tetanus shots up-to-date.

1c - Removing an Embedded Hook

Cut the line and (if possible) the lure off the hook.

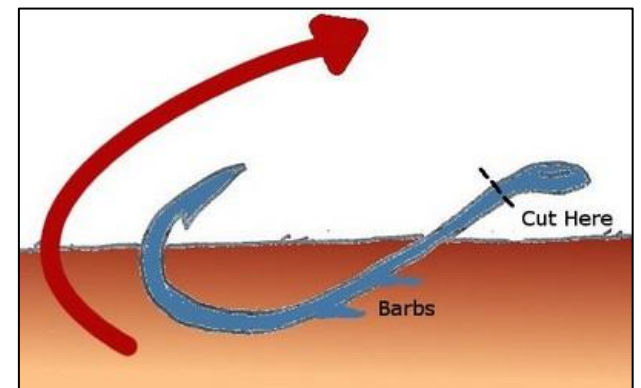
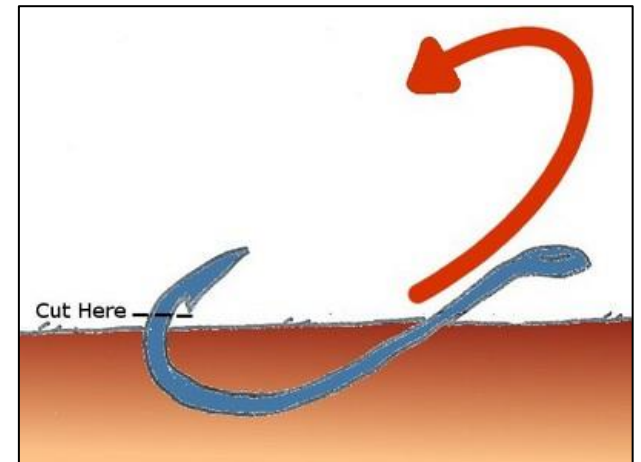
- ▶ If the embedded hook is a treble hook, cut off all the uninvolved points.
- ▶ A wire cutter or Leatherman tool works great for this - always have one with you when fishing.
- ▶ Wash your hands and clean the wound area before you begin. Rinsing it with some antiseptic like Bactine™ is a good idea.

1c - Removing an Embedded Hook

The Hard Way

- ▶ Push the hook the rest of the way out, until the barb is clear of the skin.
- ▶ Cut off the barb, and back it out the way it came in. Yes, this is as much fun as it sounds.
- ▶ If the hook shank barbs are embedded, cut the eye off and pull it out by the barb.

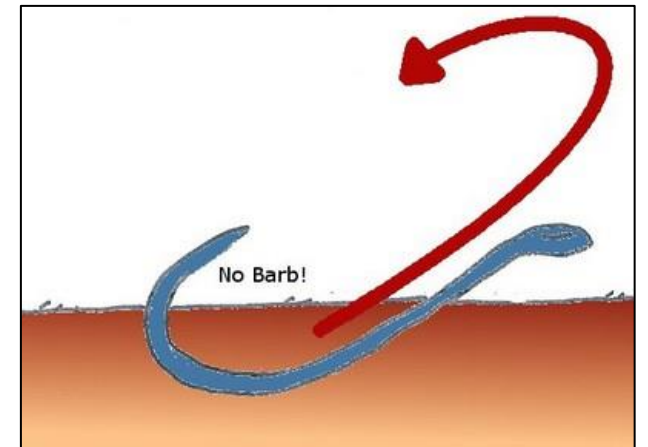
OUCH!



1c - Removing an Embedded Hook

A (Super) Easy Way

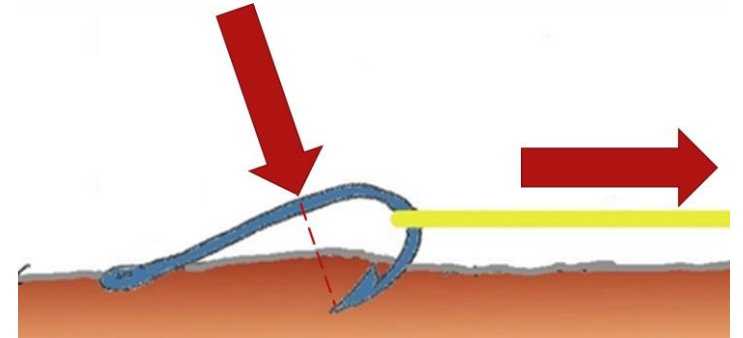
- ▶ Always use barbless hooks or pinch down the barb.
- ▶ If your hook is barbless, just back it out the way it came in.



1c - Removing an Embedded Hook

The Best Way with Barbed Hook

- ▶ This is the best method to use if the hook is not barbless and the hook is not deeply embedded.
- ▶ Stabilize the hooked part on a flat surface. If the hook is in your arm, place your arm on a rock or in your lap.
- ▶ Use a non-stretchy string or piece of heavy fishing line and loop it twice around the hook.
- ▶ Press down on the eye so it's flat against the skin.
- ▶ Yank the line sharply in the direction opposite the eye. Make sure you pull PARALLEL to the skin. The hook should pop right out.
- ▶ Disinfect, add a little antibiotic ointment, slap on a Band-Aid and it's all done. Keep fishing!



1d - Safety Practices Requirement

“Name and explain five safety practices you should always follow while fishing.”

How many can you name?

1d - Some Safety Practices

- ▶ Go with a buddy. Tell a parent or guardian where you're going and when you expect to return.
- ▶ Check weather and water conditions to make sure it's safe to go. If a storm approaches, put your rod down and seek shelter.
- ▶ Dress correctly for the conditions you expect. Stay warm and dry. Have extra dry clothes handy.
- ▶ Use sunscreen and insect repellent - but don't get any on your bait, lure or fly!
- ▶ If afloat, wear a personal flotation device and carry safety gear. If your boat capsizes, stay with it!
- ▶ If wading, use a wading belt and wading staff. Wear cleated or studded boots. Take small steps and move slowly.
- ▶ Be aware of your surroundings, especially changing water level, weather, animals and other anglers.
- ▶ Stay hydrated - bring and drink plenty of water.
- ▶ Wear protective eyewear and a hat.
- ▶ Learn how to safely remove a hook.

Can you name some more?

1d - Health & Safety Game

- ▶ You will have 20 seconds to view each of the following slides and write down the number of each health or safety item that you should bring on a fishing trip.
- ▶ If using Zoom, we'll run a poll after each slide to have you lock in your answers, then discuss everything after 2nd set.

Ready?

You have 20 seconds
to decide which health and safety items to bring...

1



2



3



4



5



6



7



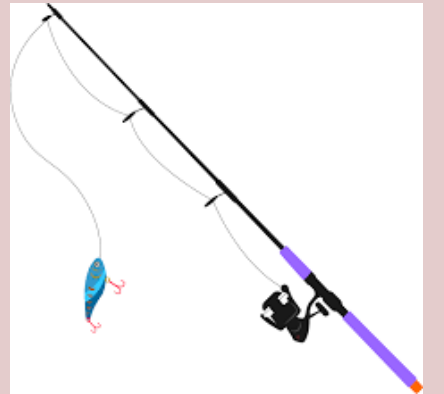
8



9



10



One More - Ready?

You have 20 seconds
to decide which health and safety items to bring...

11



12



13



14



15



16



17



18



19



20



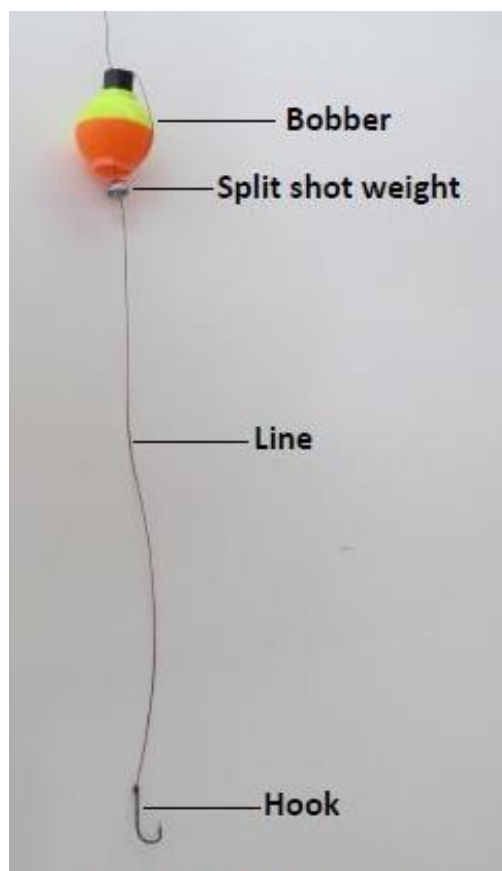
Requirement #2 Fishing Outfits



Fishing Outfit Requirements

- ▶ Discuss the differences between two types of fishing outfits.
- ▶ Point out and identify the parts of several types of rods and reels.
- ▶ Explain how and when each would be used.
- ▶ Review with your counselor how to care for this equipment.

Basic Fixed-Line Cane Pole



- ▶ If the pole comes in two pieces, push them firmly together.
- ▶ Attach your line to the tip end. There's usually a metal ring there. An improved clinch knot or uni knot work great.
- ▶ Measure the line along the pole and cut it to match the pole length.
- ▶ Attach your terminal tackle – hook, split shot and bobber.



Fishing Reel Types



Spincast Reel

Price: \$ - \$\$

Pros:

Easy for younger Scouts to learn and use.

Good for smaller fish.
Somewhat limited size range.

Cons:

Prone to line twist.
Low hauling power.



Spinning Reel

Price: \$ - \$\$\$

Pros:

Easy for older Scouts to learn and use.

Works well with all baits.
Easy to change from right to left-hand crank.

Comes in many sizes.

Cons:

Prone to line twist.
Limited gear ratios .



Baitcast Reel

Price: \$\$ - \$\$\$

Pros:

Hauling power.
Good for larger baits.
Good casting accuracy.
Use with heavier Lines.

Cons:

Prone to line tangles.
Not good for light baits.
Used by professional fishermen.



Fly-Fishing Reel

Price: \$ - \$\$\$

Pros:

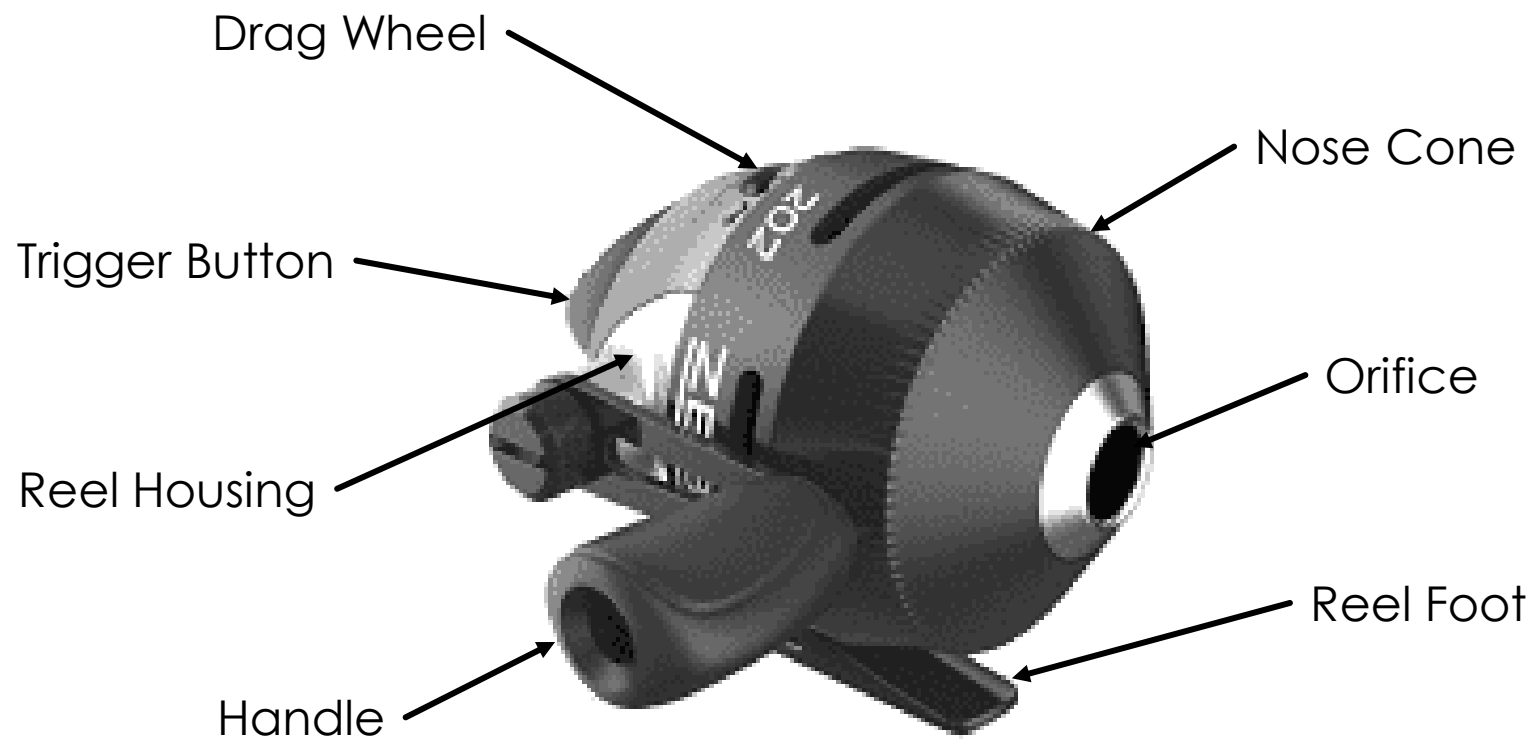
Moderately easy to use.
Works well for small flies.
Can present flies gently.
Easy to change from right to left-hand crank.

Comes in many sizes.

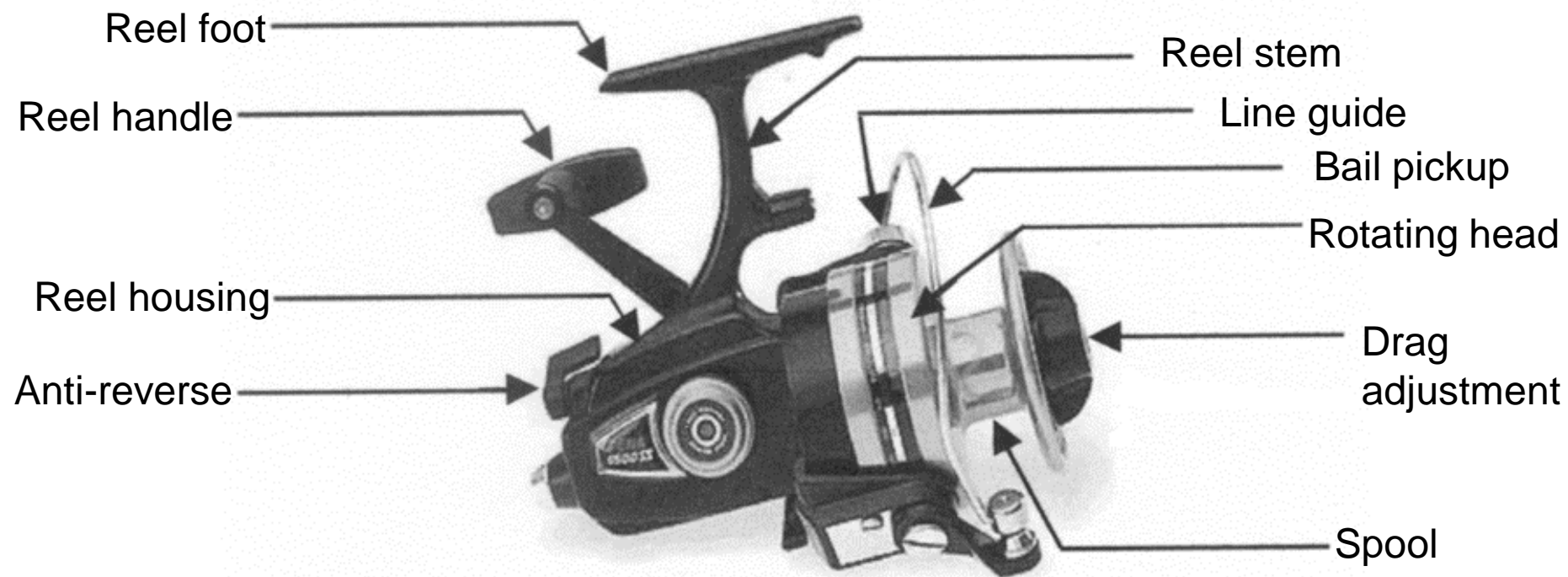
Cons:

Takes time to learn.
Requires back room to cast.

Closed-face Spincast Reel

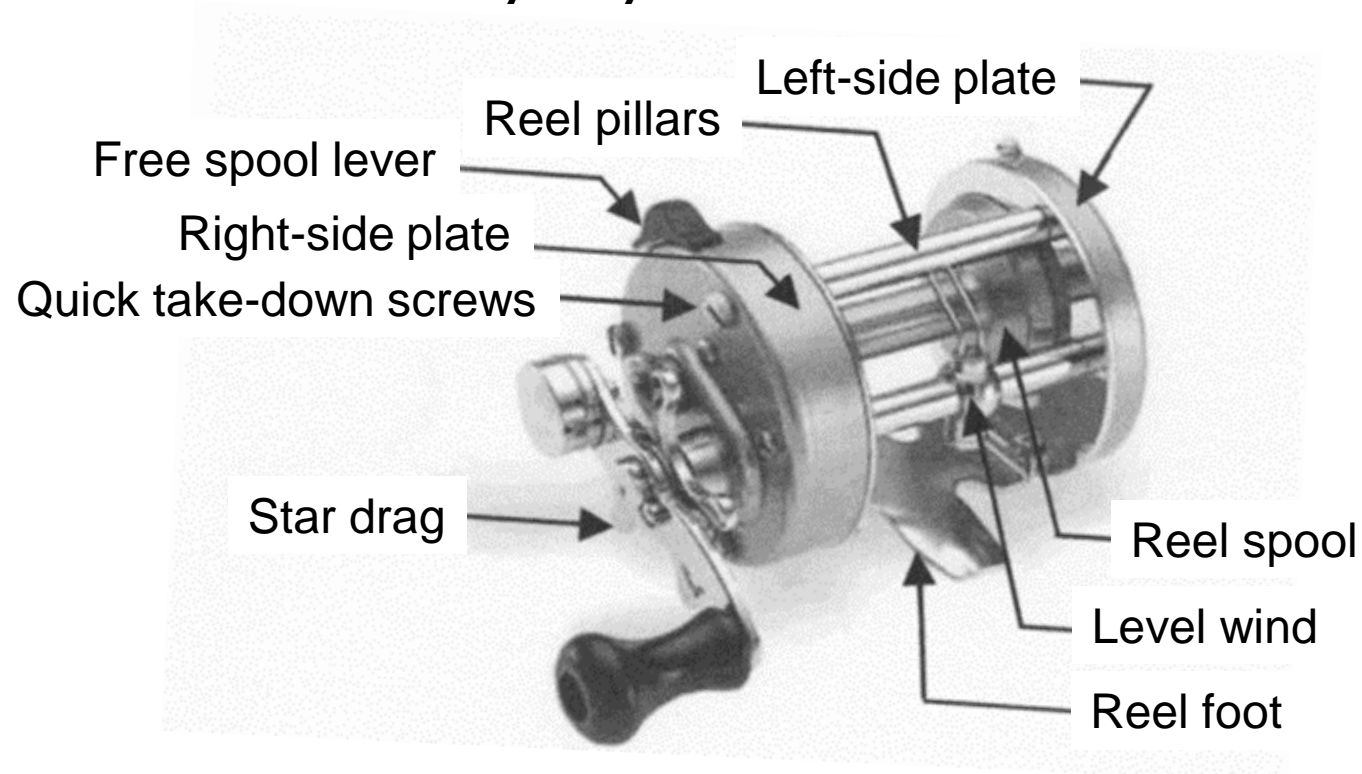


Open-face Spinning Reel



Baitcast Reels

Heavy Duty - Round Profile

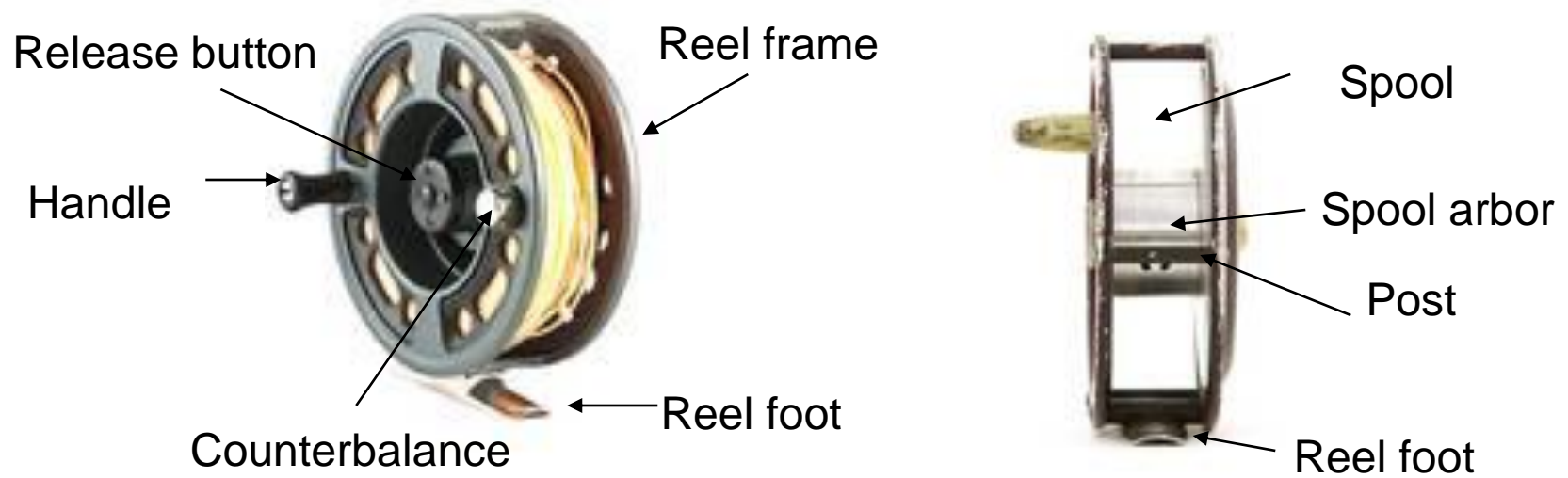


Medium Duty - Low Profile



**Can you find similar parts
on this baitcast reel?**

Basic Fly Reel



A 'Reel' Review Ready?

Which reel is which?



A

Reel Review



C



B

Which Is Which?

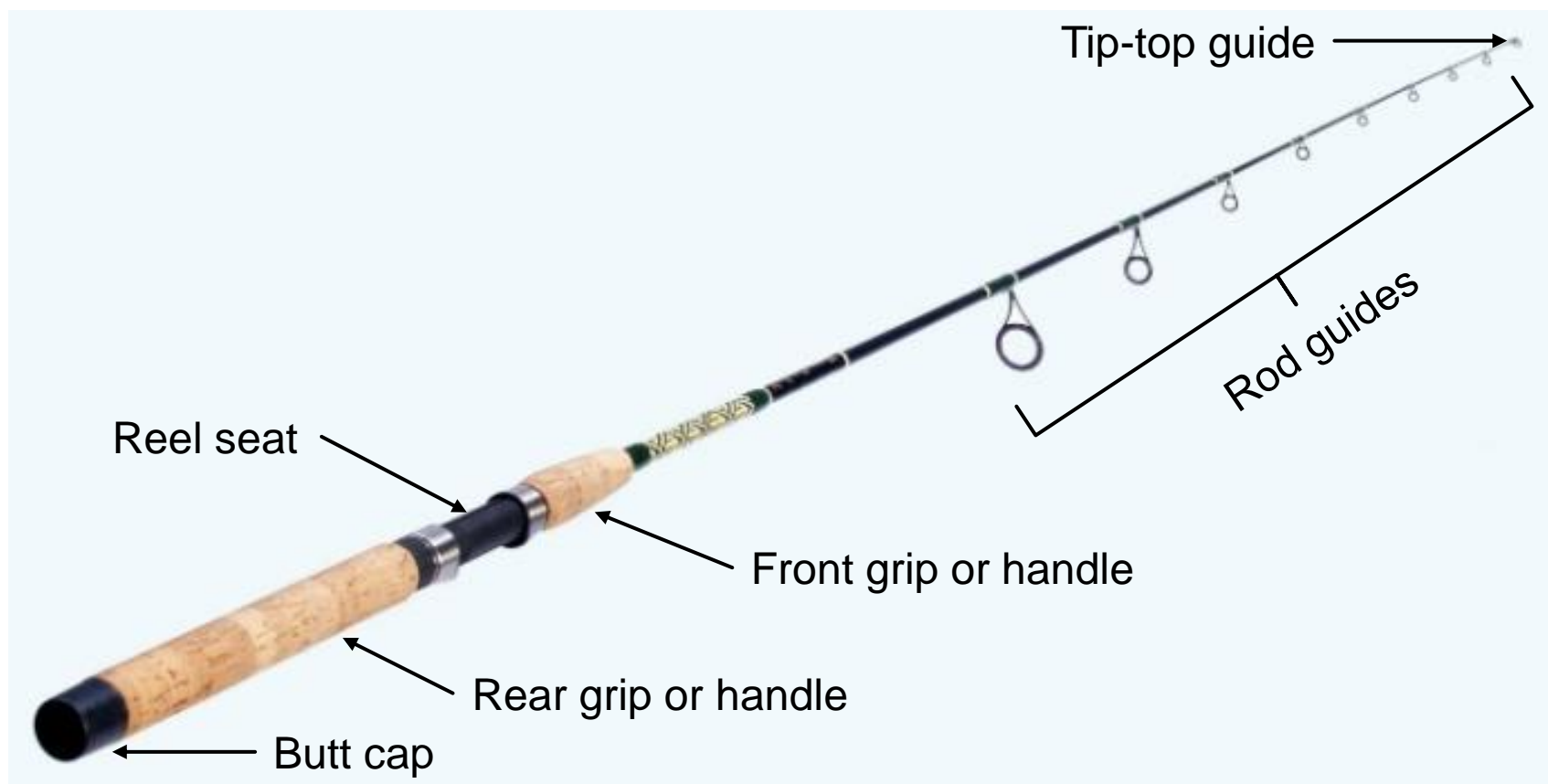


D

**A****A - Spinning****B - Spincast****B****C - Fly****D – Baitcast****C****D**

Anatomy of a Fishing Rod

(Start at the Bottom)



Types of Fishing Rods

Type 1 - Reel mounted above the rod

Spincast Rod



Baitcast Rod



<https://www.takemefishing.org/how-to-fish/fishing-gear-and-tackle/>

Types of Fishing Rods

Type 2 - Reel mounted below the rod

Spinning Rod



Fly Rod



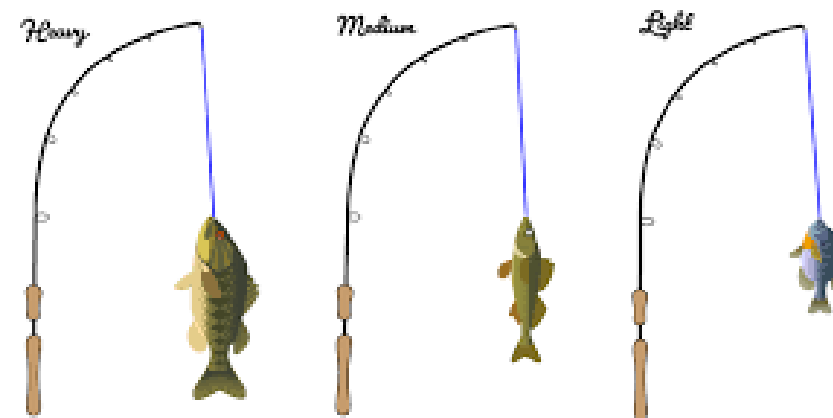
<https://www.takemefishing.org/how-to-fish/fishing-gear-and-tackle/>

Balanced Fishing System



Balance is important.

- ▶ Determine your fishing location and target species.
- ▶ Choose the appropriate size lure, bait or fly.
- ▶ Choose the appropriate line type and weight.
- ▶ Select the rod and reel that are best suited for the fish you're targeting and waters you're fishing.



Power:	Line Weight:	Lure Weight:
Ultra Light	1 to 4 lb Test	1/64 - 1/16 oz
Light	4 to 8 lb Test	1/32 - 1/8 oz
Medium	4 to 12 lb Test	1/8 - 3/8 oz
Medium Heavy	8 to 14 lb Test	3/16 - 1/2 oz
Heavy	15 to 25 lb Test	Up to 1 1/2 oz
Ultra Heavy	25 lb Test and Up	1 1/2 oz and Up

Spinning SJ70MHF
7'0" Medium Heavy-Fast
10-20 lbs 3/16-3/4 oz

Rod & Reel Cleaning & Maintenance

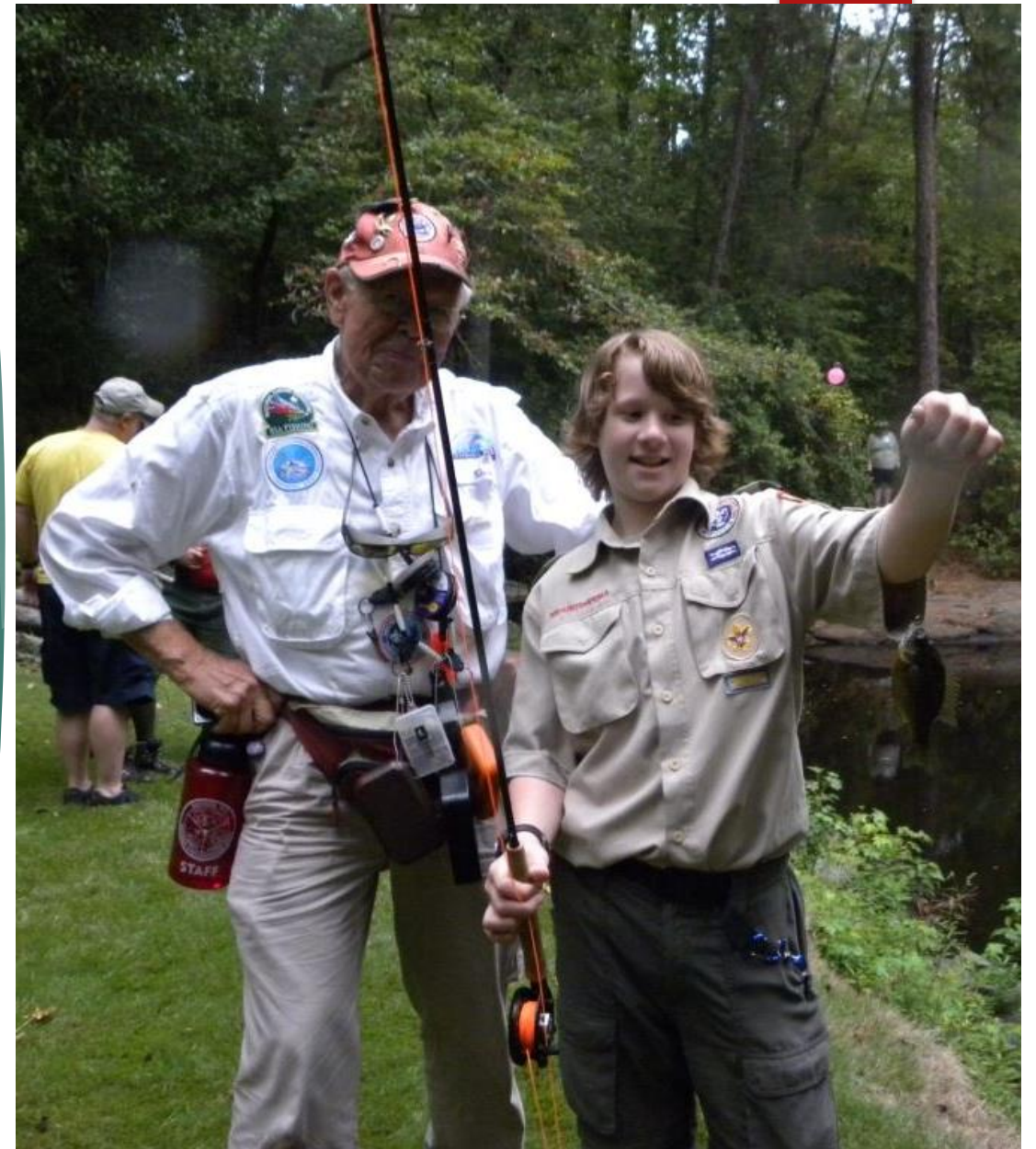
<https://www.youtube.com/watch?v=mewRSP037cY>



1. Tighten the **drag** on the reel to prevent water contamination of the drag stack and lightly sponge with warm, soapy water.
2. Rinse the reel off **gently** with fresh water and wipe dry with a clean cloth. Do not spray with hose as it may force sand / dirt / grit into working parts.
3. It is a good idea to wipe the rod and line clean as well.
4. When dry, store the reel with the drag **loose**.



Requirement #3 Equipment Use



Equipment Use Requirement

Demonstrate the proper use of two different types of fishing equipment:

- ▶ Fixed-line cane pole or Tenkara fly rod
- ▶ Close-faced spincast rod and reel
- ▶ Spinning rod with open-faced spinning reel
- ▶ Baitcast rod and reel
- ▶ Fly-fishing rod and reel

Note - most reels have an adjustable “drag” which allows a heavy or strong fish to take line without breaking the line or rod.

Some Equipment Use Resources

YouTube Casting Videos:

Spinning and Baitcasting - <https://www.takemefishing.org/how-to-fish/how-to-catch-fish/how-to-cast/>

Fly - <https://www.takemefishing.org/fly-fishing/fly-casting/>

Inshore Saltwater Fishing:

<https://www.takemefishing.org/blog/august-2018/inshore-saltwater-fishing-10-tips-for-beginners/>

Take Me Fishing:

<https://www.takemefishing.org>

Practice, then demonstrate the above casting techniques in person, by video or live streaming.

Requirement #4

Knots



Fishing Knot Requirements

- ▶ **Demonstrate how to tie the following knots:**
 - ▶ Improved Clinch Knot
 - ▶ Palomar Knot
 - ▶ Uni Knot
 - ▶ Uni to Uni Knot
 - ▶ Arbor Knot
- ▶ **Explain how and when each knot is used.**

Getting Started with Knots

- ▶ When just starting out, begin with:
 - ▶ Heavier fishing line or light cordage
 - ▶ Large hooks, or even a coat hanger bent like a hook.
- ▶ Get comfortable with each knot before trying to tie it with smaller, more realistic materials.
- ▶ Practice, practice – before you get on the water...

Examples of 'Practice' Knot Materials

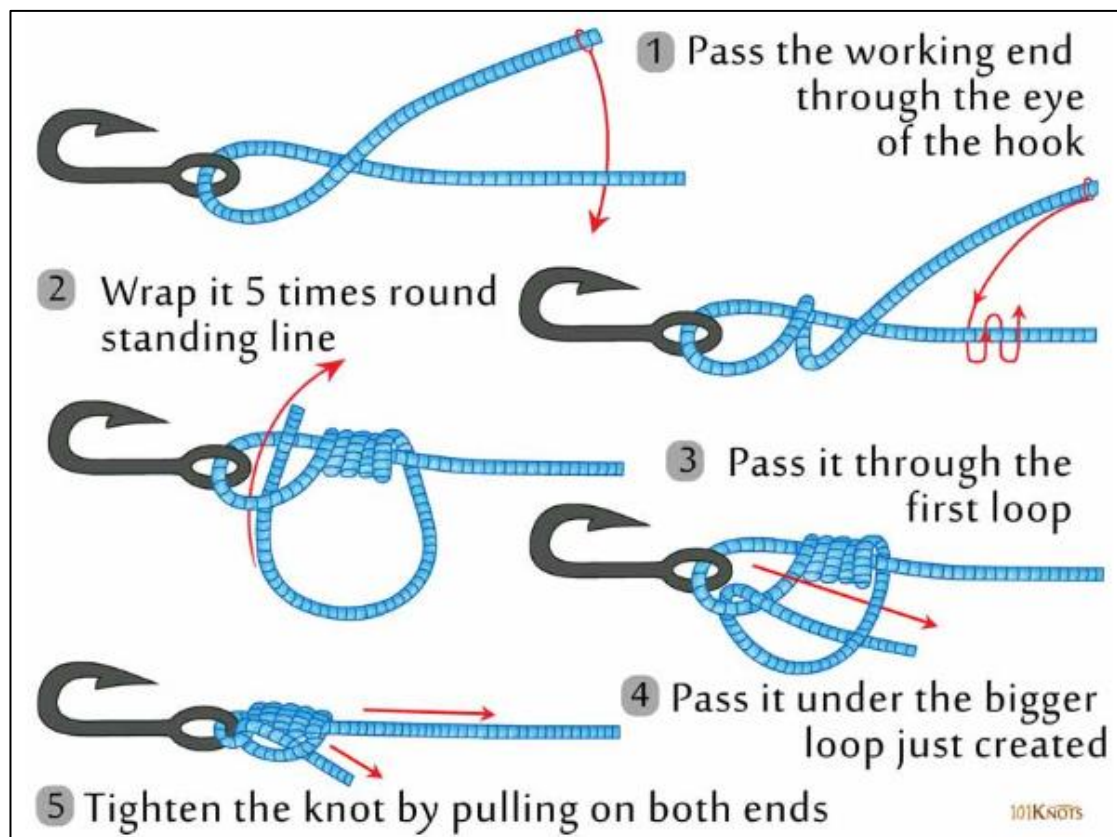


Rules for Strong Knots

- ▶ Knots must be neat!
- ▶ Lubricate before tightening!
- ▶ Test your knots!

Click on links in the following slides
to see step-by-step instructions

Improved Clinch Knot



If you want to tie your fishing line securely to a hook, swivel or lure, the improved clinch knot is a good choice. This widely-used fishing knot scores above the regular clinch knot owing to an extra tuck under the final turn, making it suitable for holding on to strong fish.

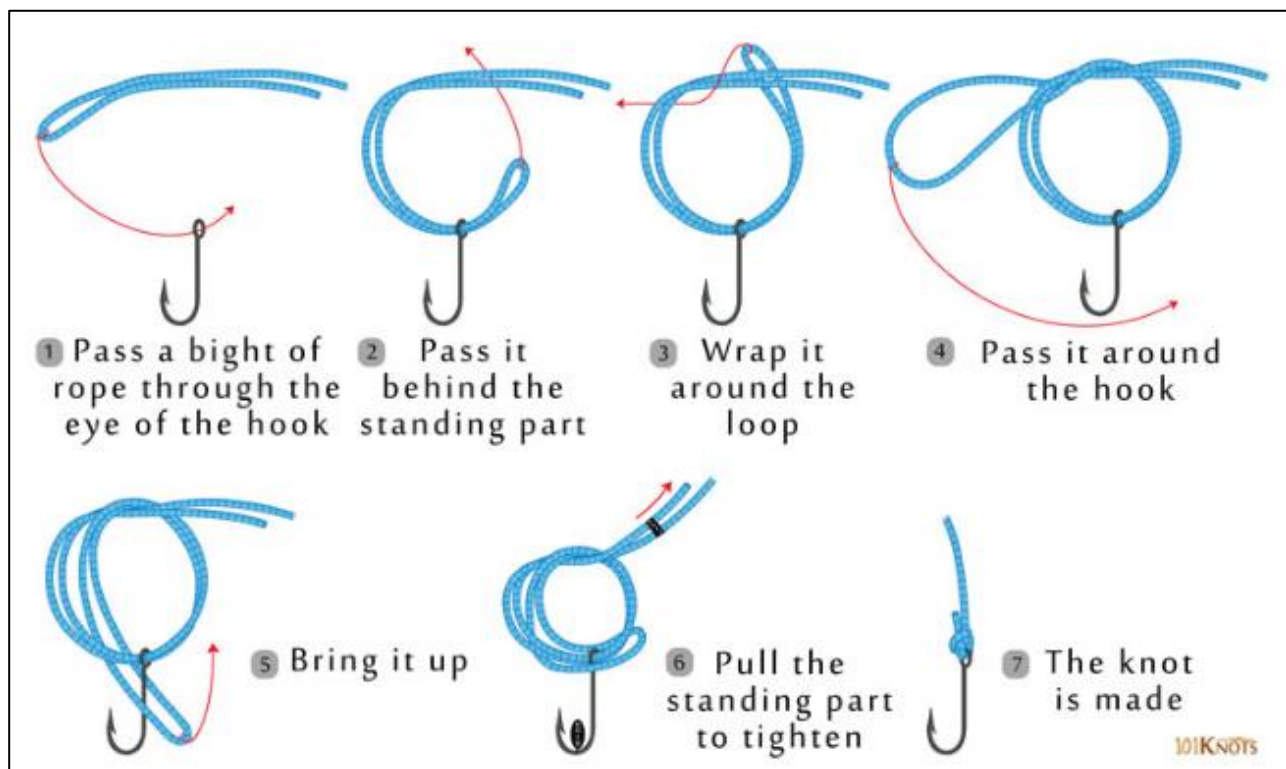
Hyperlinks:

<https://www.animatedknots.com/fishing-knots>

<https://www.101knots.com/category/fishing-knots>

https://www.netknots.com/fishing_knots

Palomar Knot



The easy-to-tie, strong Palomar (pronunciation PAHL-oh-mahr) knot attaches a fishing line to a hook, snap or swivel and a fly to a tippet or leader. Though it is good for monofilament and fluorocarbon fishing lines, it performs best with braided lines.

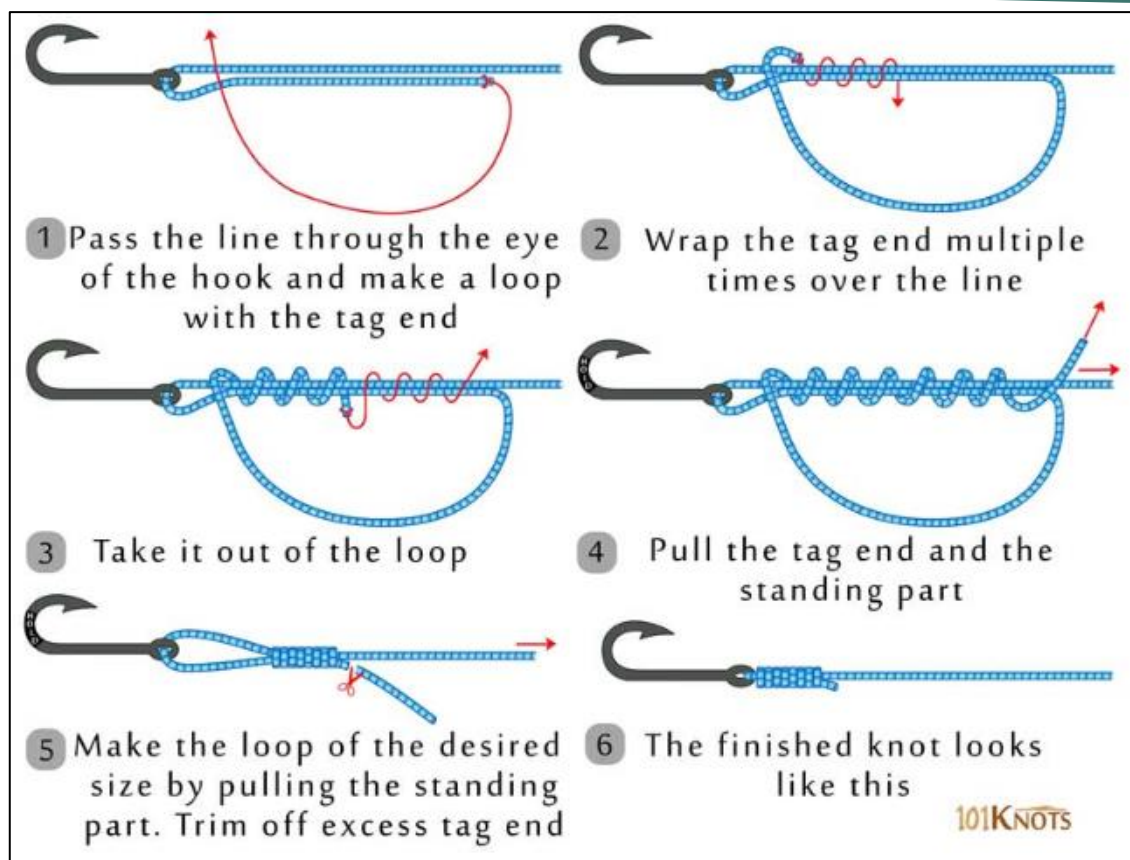
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<https://www.101knots.com/category/fishing-knots>

https://www.netknots.com/fishing_knots

Uni Knot



Also known as the **Duncan Loop** or the **Grinner Knot**, the uni knot not only connects your line to the hook but also joins the line to the arbor of a reel or swivel or any other rigging hardware. The uni knot has greater strength than the improved clinch knot, snell knot or blood knot. It comes in handy when trying to join the line to terminal tackle.

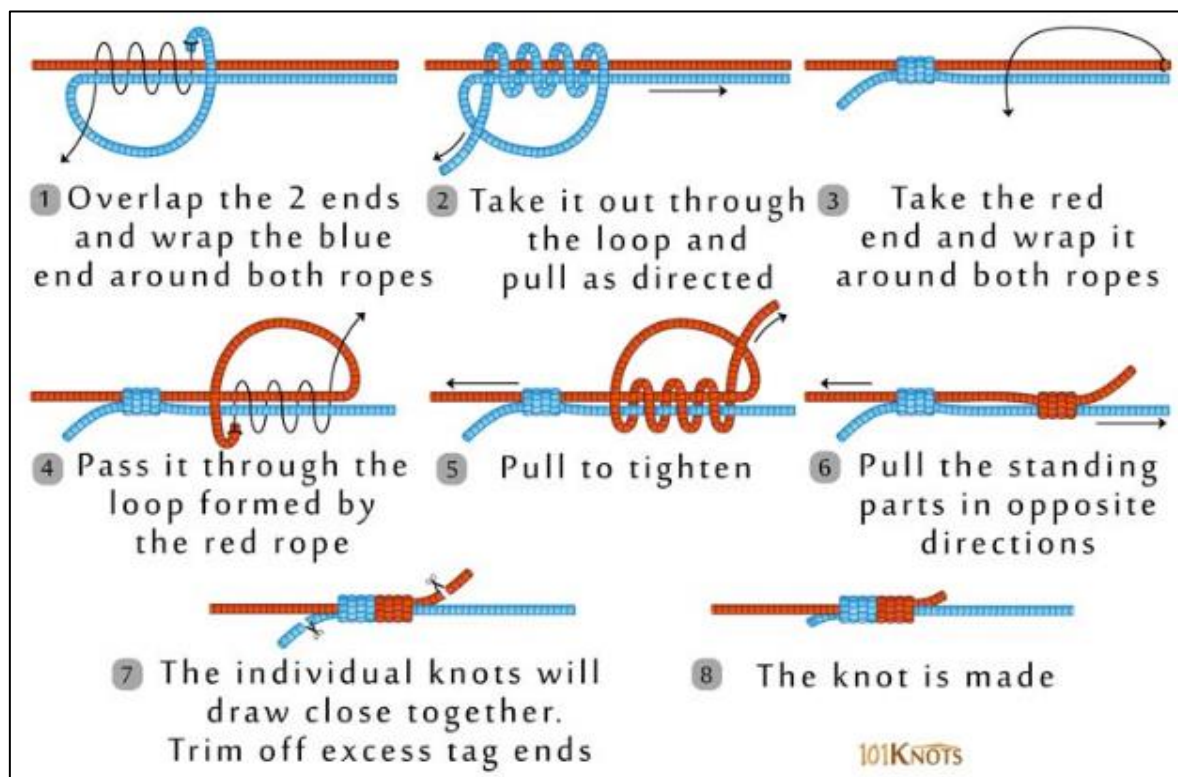
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<https://www.101knots.com/category/fishing-knots>

https://www.netknots.com/fishing_knots

Uni to Uni Knot



You can join 2 lines of varying or similar strengths with this knot. It is basically tying two Uni Knots with the lines doubled. It can connect a fluorocarbon leader with a braided main line and is a good mono to mono connection. It is also known as the **Double Grinner Knot**.

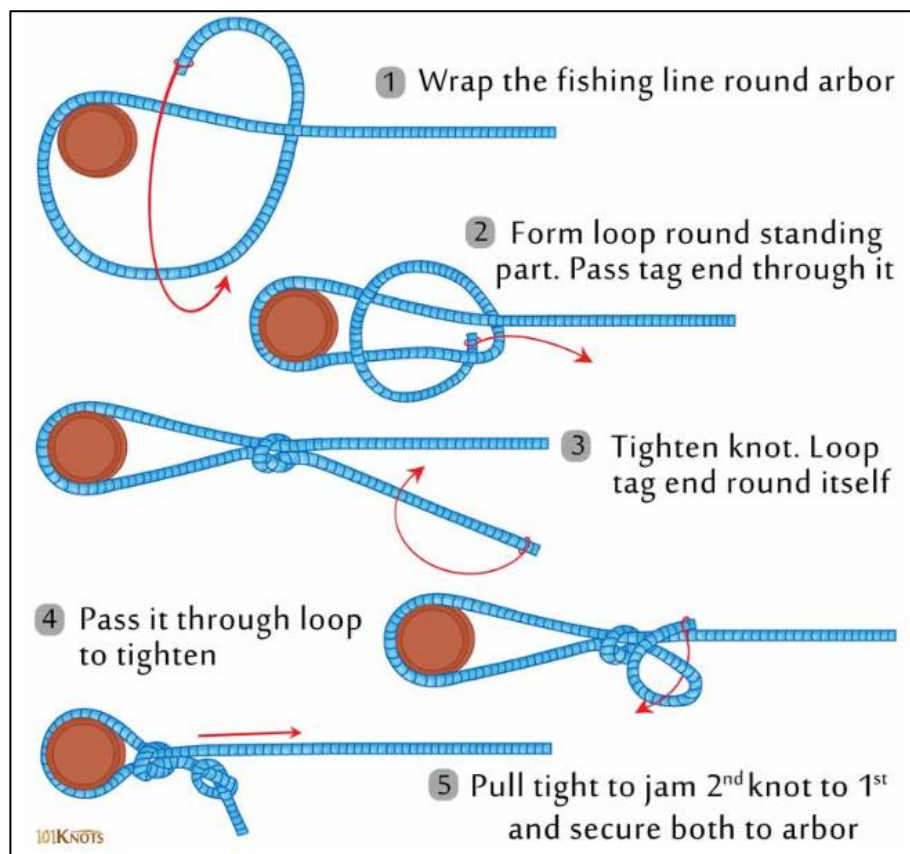
Hyperlinks:

<https://www.animatedknots.com/fishing-knots>

<https://www.101knots.com/category/fishing-knots>

https://www.netknots.com/fishing_knots

Arbor Knot



The primary use of an arbor knot is to secure the line or backing to the spool of a fishing reel. It could be a spincast reel, spinning reel, baitcast reel or fly reel. It is good for anchoring fly line backing to the reel arbor for big fish that may take out more than the fly line.

Hyperlinks:

<https://www.animatedknots.com/fishing-knots>

<https://www.101knots.com/category/fishing-knots>

https://www.netknots.com/fishing_knots

Requirement #5 Lures and Baits



Lure & Bait Requirements

- ▶ Name and identify five basic artificial lures and five natural baits and explain how to fish with them.
- ▶ Explain why baitfish are not to be released.

Some Artificial Lures



Plastic Worm



Spoon



Spinner



Spinner Bait



Crank Bait



Jig



Plastic Frog



Popper

Different Types of Flies



Dry Fly



Emerger



Nymph



Saltwater
Critter



Bass Bug



Wet Fly



Steamer



Crayfish



Popper

Check out <https://www.youtube.com/watch?v=95LsX9a8WQQ>

Some Live and Other Baits

- ▶ Earthworms
- ▶ Mealworms & Waxworms
- ▶ Grubs & Maggots
- ▶ Minnows
- ▶ Crayfish
- ▶ Leeches
- ▶ Crickets & Grasshoppers
- ▶ Aquatic Nymphs & Larvae
- ▶ Cut Bait (fish, hot dogs, etc.)
- ▶ Bread
- ▶ Corn
- ▶ Cheese
- ▶ Rice
- ▶ Salmon Eggs

Some Natural Baits

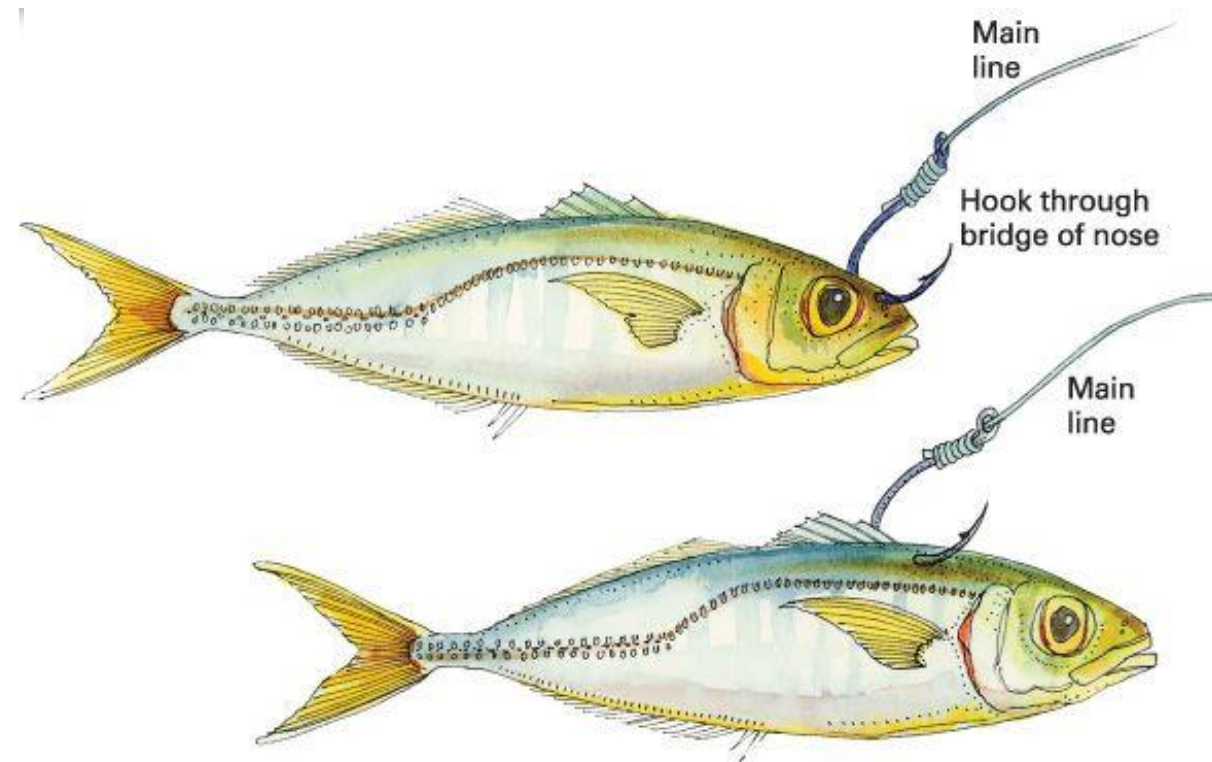
Night Crawler



Meal Worm



Bait Fish or Minnow



Live Bait - Best Practices

- ▶ Before choosing live bait, check local fishing regulations.
- ▶ Keep bait cool and moist so it stays fresh and lively.
- ▶ Do **NOT** release live bait or bait water into the watershed.
 - ▶ It can introduce undesirable fish, parasites, or diseases.
 - ▶ Try to use baits that are native to the watershed.
 - ▶ Dispose of unused bait and bait water on land, well away from the water.

DIY Catfish Bait Recipe

- 1 package strawberry Jell-O (sugar free or regular)
- 3-4 tablespoons minced garlic (from jar)
- 1-2 tablespoons vanilla
- 2 packages of cheap wieners, sliced into about ½ inch thick pieces

Let the mixture sit overnight in a sealed container in the refrigerator.

While the garlic is a bit strong, it's a LOT better than most of the baits out there. The Jell-O tends to get your fingers sticky, but a quick rinse in the lake takes care of that.

If you really want some heavy scent, add anise oil (licorice) to the mix. That will definitely make it stink!

**Requirement #6
Leave No Trace &
Catch and Release**



LNT & C&R Requirements

Do the following:

- a. Explain the importance of practicing **Leave No Trace** techniques. Discuss the positive effects of Leave No Trace on fishing resources.
- b. Discuss the meaning and importance of **Catch and Release**. Describe how to properly release a fish safely to the water.

Leave No Trace

Online resources to visit to learn about LNT and the impact on fishing

- ▶ <https://Int.org/leave-no-trace-fishing/>
 - ▶ <https://Int.org/tackling-fishing-line/>
 - ▶ <https://Int.org/minimal-impact-fishing/>
- ▶ <https://www.takemefishing.org/blog/october-2018/what-native-fish-conservation-means/>
- ▶ <https://www.takemefishing.org/how-to-fish/fishing-and-conservation/>

Catch and Release

Why Catch and Release Fishing?

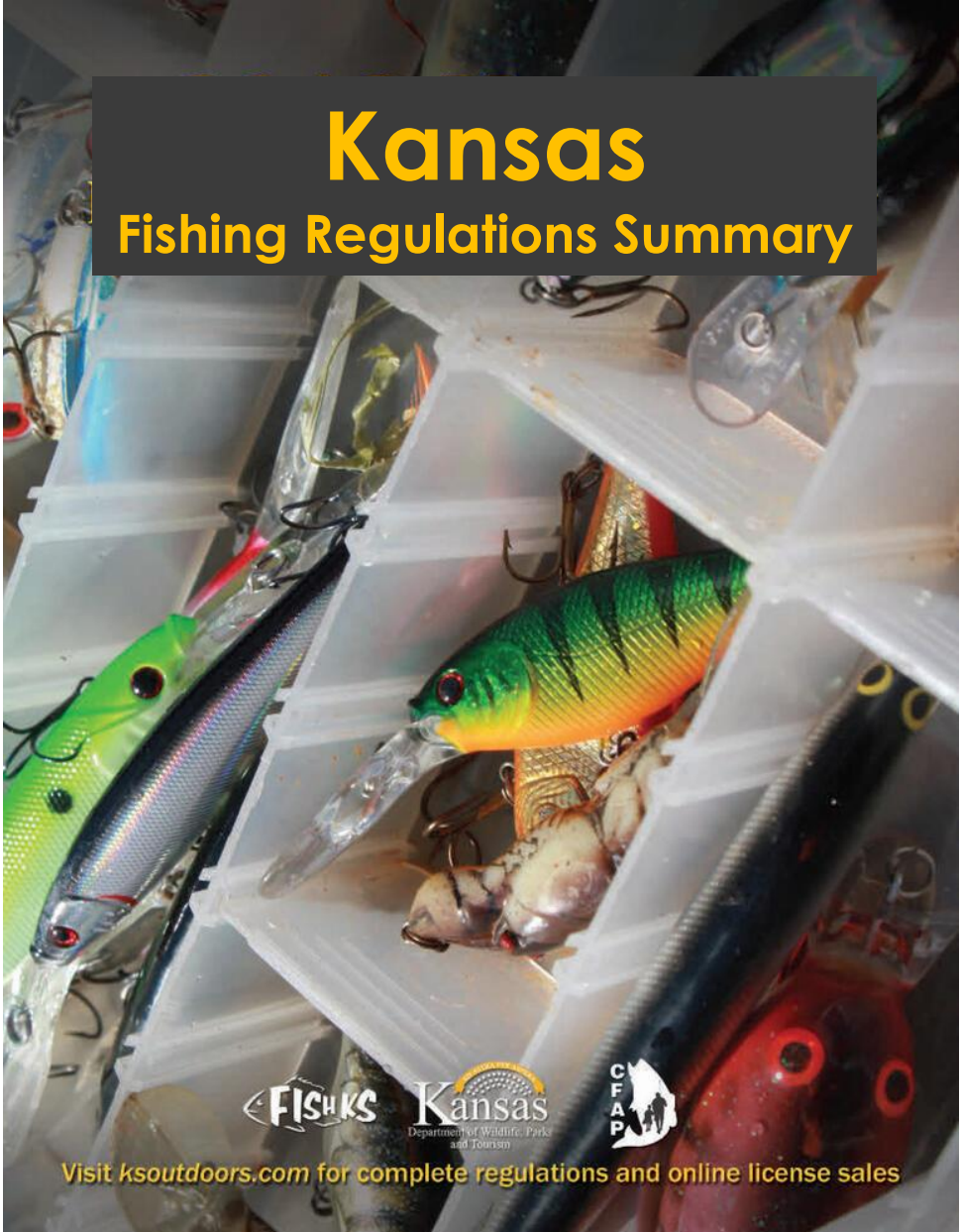
https://www.youtube.com/watch?v=E_26Hf8PNhM

<https://www.takemefishing.org/blog/april-2015/catch-and-release-why/>

Online Resources for Properly Releasing a fish

<https://www.takemefishing.org/how-to-fish/how-to-catch-fish/how-to-release-a-fish/>

Requirement #7 Regulations



Kansas Fishing Regulations Summary

FISHKS **Kansas** Department of Wildlife, Parks and Tourism **CPA**

Visit ksoutdoors.com for complete regulations and online license sales

Regulations Requirements

- ▶ Obtain and review the regulations affecting game fishing where you live.
- ▶ Explain why they were adopted and what is accomplished by following them.

Regulations

- ▶ Each State has its own rules & regulations.
- ▶ See the **Take Me Fishing** website for links to each State's regulations and to get a license.
 - ▶ Go to <https://www.takemefishing.org>.
- ▶ License Information: For example, the State of Virginia will send a downloadable PDF, which you can print and sign. See <https://dwr.virginia.gov/fishing/regulations/>. You can also have the Virginia Department of Game and Inland Fisheries send your license in the mail.

Requirement #8 Good Outdoor Sportsmanlike Behavior



Good Sportsmanlike Behavior Requirements

- ▶ Explain what good outdoor sportsmanlike behavior is and how it relates to anglers.
- ▶ Tell how the Outdoor Code of the Boy Scouts of America relates to a fishing sports enthusiast, including the aspects of littering, trespassing, courteous behavior, and obeying fishing regulations.

Good Sportsmanlike Behavior

What does this mean?

- ▶ Leave No Trace.
- ▶ Follow the Outdoor Code.
- ▶ Respect the rights of fishermen and others who use the resource.
- ▶ Keep only the fish you want.
- ▶ Release unwanted fish carefully and unharmed.
- ▶ Never litter or pollute the waters.
- ▶ Know and follow angling and boating regulations.
- ▶ Share knowledge with others.

For more details go to <https://stillwateranglers.com/fly-fishing-etiquette-rules-need-know/>.

The Outdoor Code

As an American, I will do my best to:

- **Be clean in my outdoor manners**
I will keep my trash and garbage out of lakes, streams, fields, woods, and roadways.
I will treat the outdoors as a heritage.
I will take care of it for myself and others.
- **Be careful with fire**
I will prevent wildfire.
I will build my fires only where they are appropriate.
When I have finished using a fire, I will make sure it is cold out.
I will leave a clean fire ring, or remove all evidence of my fire.



The Outdoor Code

As an American, I will do my best to:

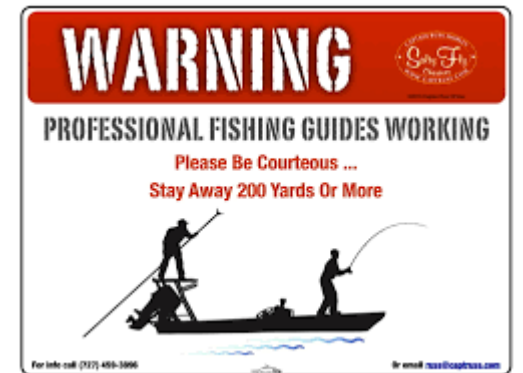
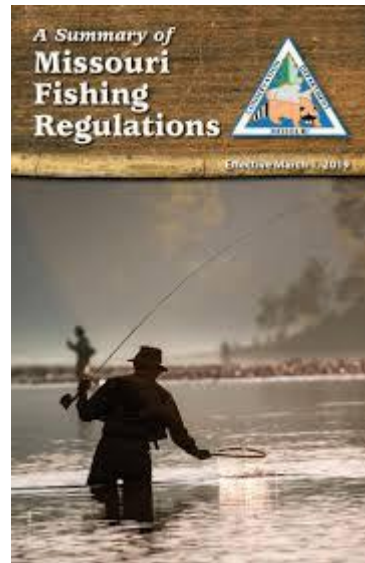
- **Be considerate in the outdoors**
I will treat public and private property with respect.
I will use low-impact methods of hiking and camping
I will LEAVE NO TRACE.
- **Be conservation-minded**
I will learn how to practice good conservation of soil, waters, forests, minerals, grasslands, wildlife, and energy.
I will urge others to do the same



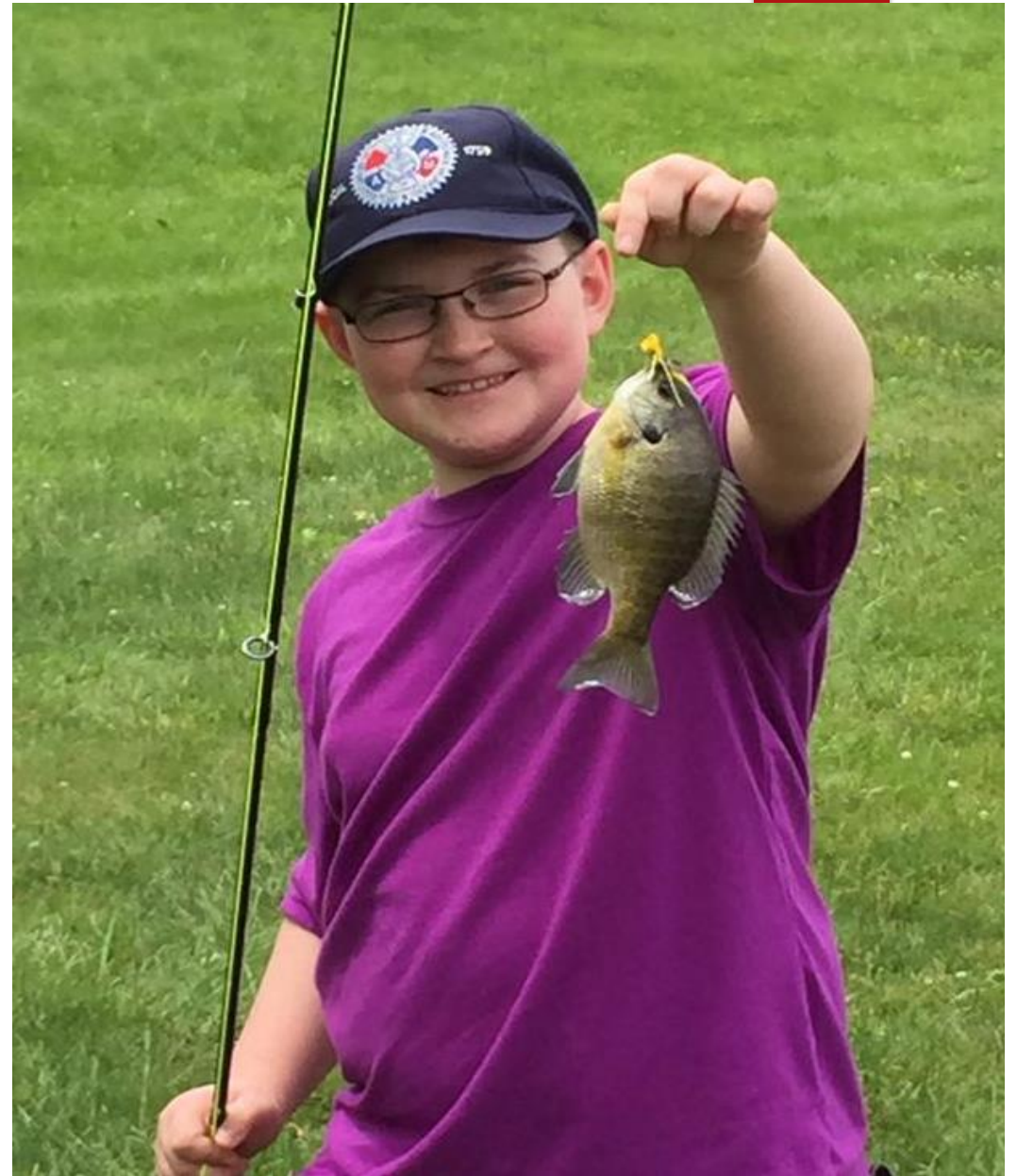
What Does the Outdoor Code Mean to a Fisherman?

What about:

- Littering
- Trespassing
- Courteous behavior
- Obeying fishing regulations



Requirement #9 Catch and Identify a Fish



Fishing Requirements

- ▶ Catch at least one fish.
- ▶ Identify it.



Catching and Identifying Fish

▶ Catching Fish

- ▶ What do fish need to thrive?
- ▶ What are some of the best practices for fishing?
- ▶ Where can you find fish?
- ▶ What is the nature of fish?

▶ Identifying Fish

- ▶ See your state fishing website for fish identification information.
- ▶ Go to <https://www.takemefishing.org/fish-species/> to identify both freshwater and saltwater fish.
- ▶ For additional freshwater fish information go to <https://fws.gov/fisheries/freshwater-fish-of-america.html>.

WHAT FISH NEED TO THRIVE

- ▶ Clean, oxygenated water at the right temperature
 - ▶ A place to safely feed*
 - ▶ A place to safely rest*
 - ▶ A place to hide from predators*
 - ▶ A place to reproduce
- “Prime Lie”**

BEST PRACTICES for FISHING

- ▶ Use barbless hooks or crush the barbs on your hooks.
- ▶ Practice STEALTH. Approach from behind (usually from downstream) to sneak up on fish. Act non-threatening - move slowly and keep your arms and rod down. Dress in subdued colors to match the background - woods, rocks, sky, etc.
- ▶ Use fine line to avoid spooking fish. Position yourself and your line to avoid cross currents.
- ▶ Loud noises can scare fish, especially sloshing water. Wade gently. Use a rubber-tipped wading staff for stability.

FINDING STREAM FISH NEAR SEAMS

73



FINDING STREAM FISH NEAR OBSTRUCTIONS

74



FINDING STREAM FISH BELOW LEDGES

75

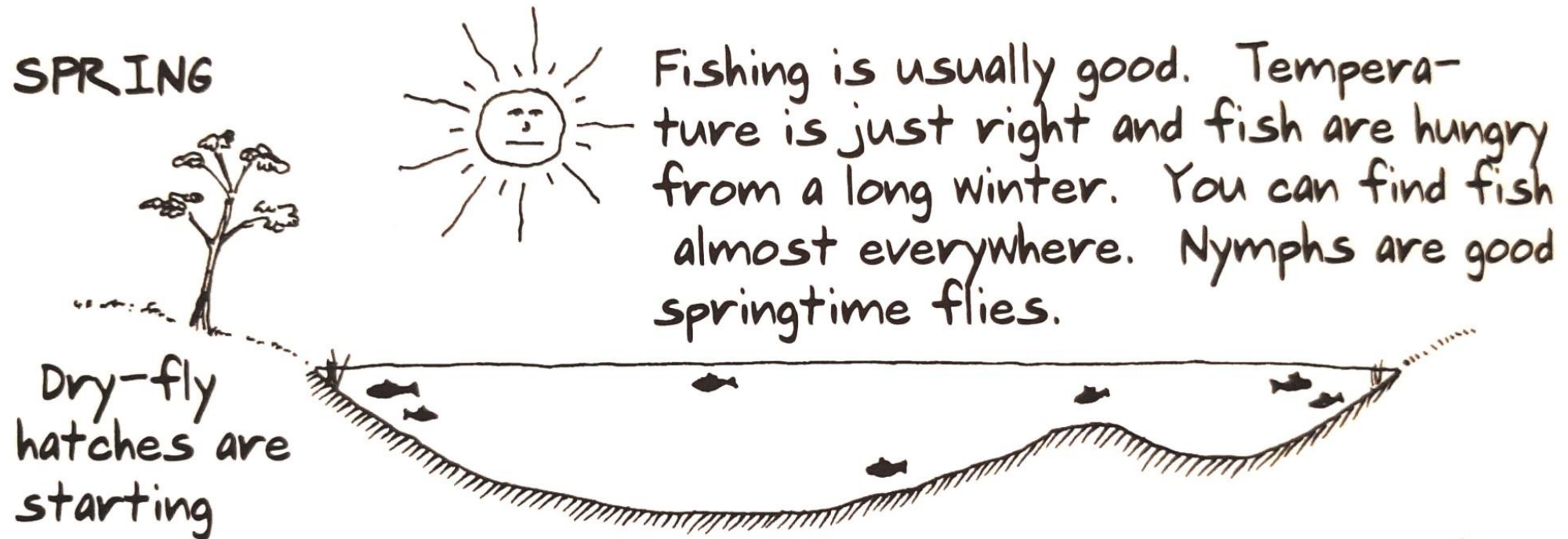


FINDING STREAM FISH IN WEEDS

76

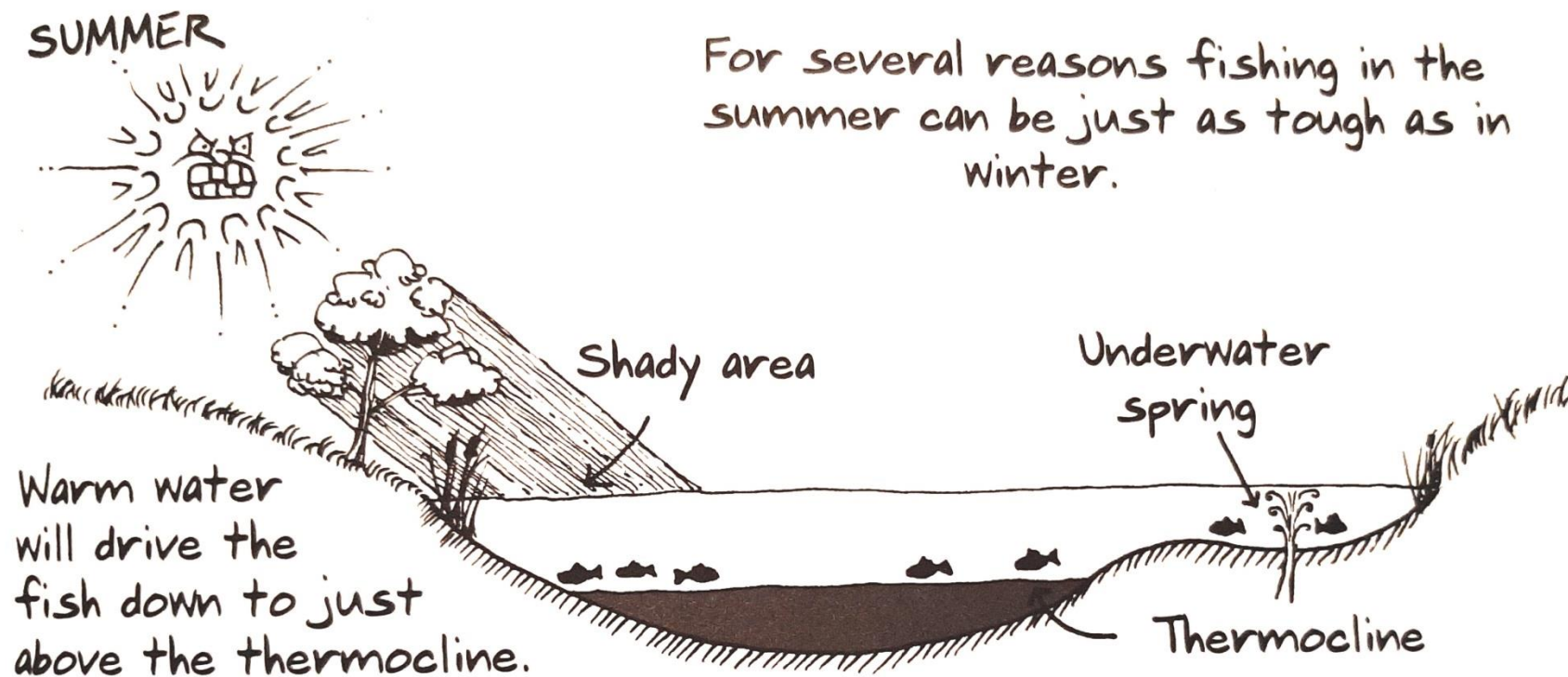


FINDING FISH IN PONDS & LAKES IN THE SPRING



From *Lake Fly-Fishing Manifesto* by Mike Croft

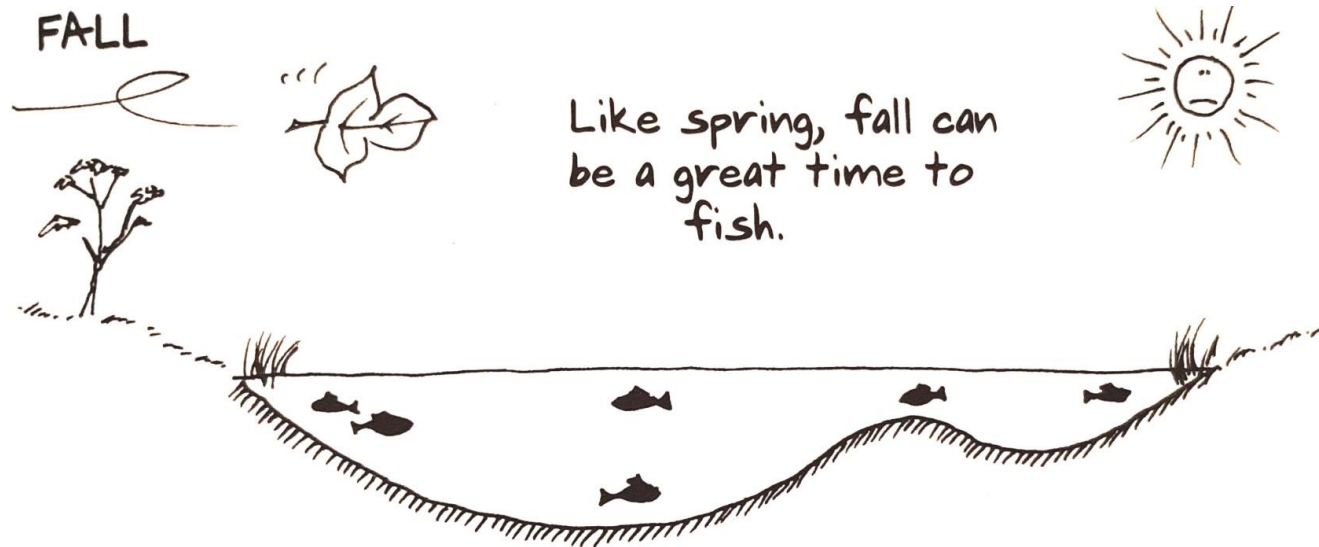
FINDING FISH IN PONDS & LAKES IN THE SUMMER



From *Lake Fly-Fishing Manifesto* by Mike Croft

FINDING FISH IN PONDS & LAKES IN THE FALL

79

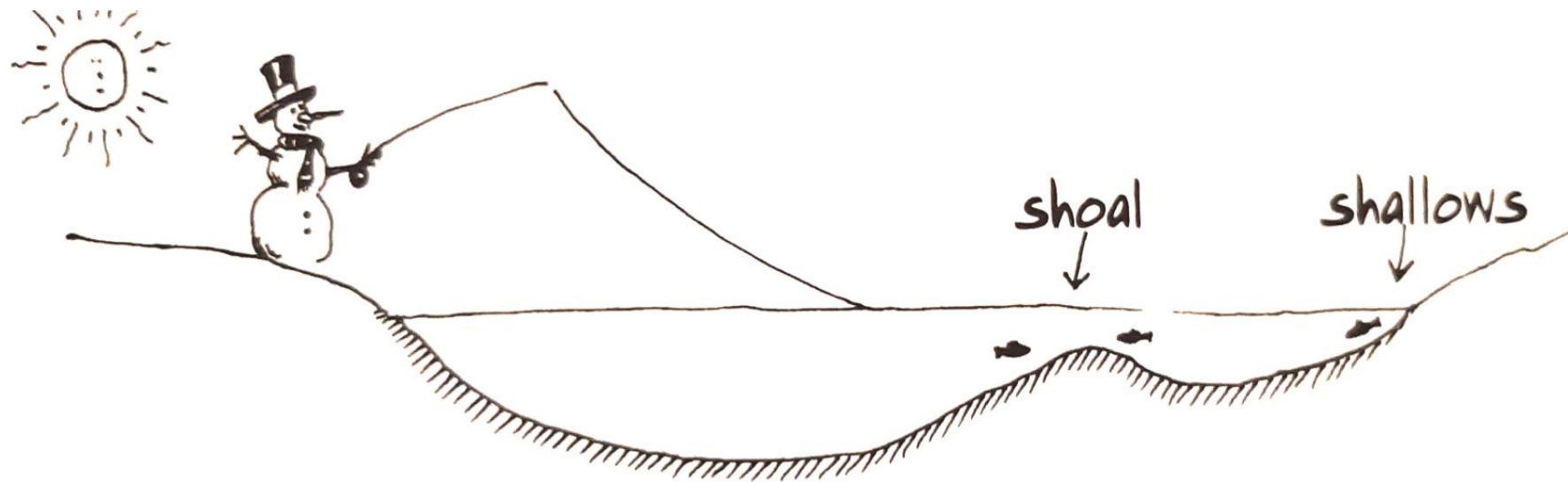


Think of fall as starting when your nighttime temperatures drop into the low forties. This will start the cooling effect for your lakes. The last of the big dry-fly hatches will happen but the insects will usually be smaller than in spring and summer.

From Lake Fly-Fishing Manifesto by Mike Croft

FINDING FISH IN PONDS & LAKES IN THE WINTER

80



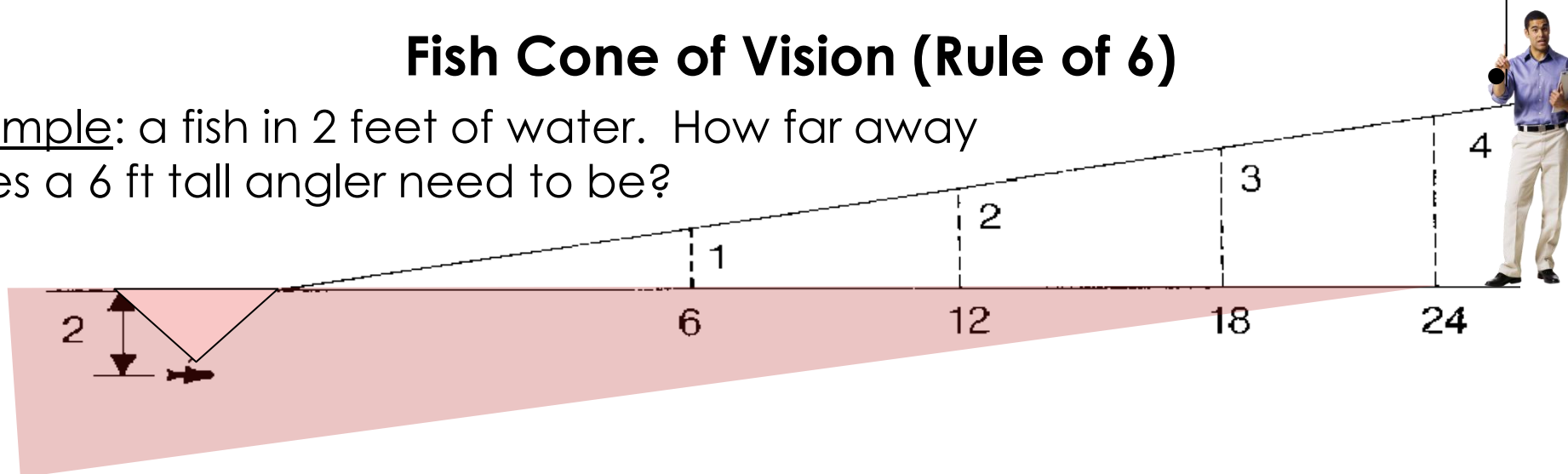
Fishing is usually slow. The fish just don't eat that much in cold water. Fish the shallow areas that are warmed by the sun.

From *Lake Fly-Fishing Manifesto* by Mike Croft

FISH CAN SEE YOU !

Fish Cone of Vision (Rule of 6)

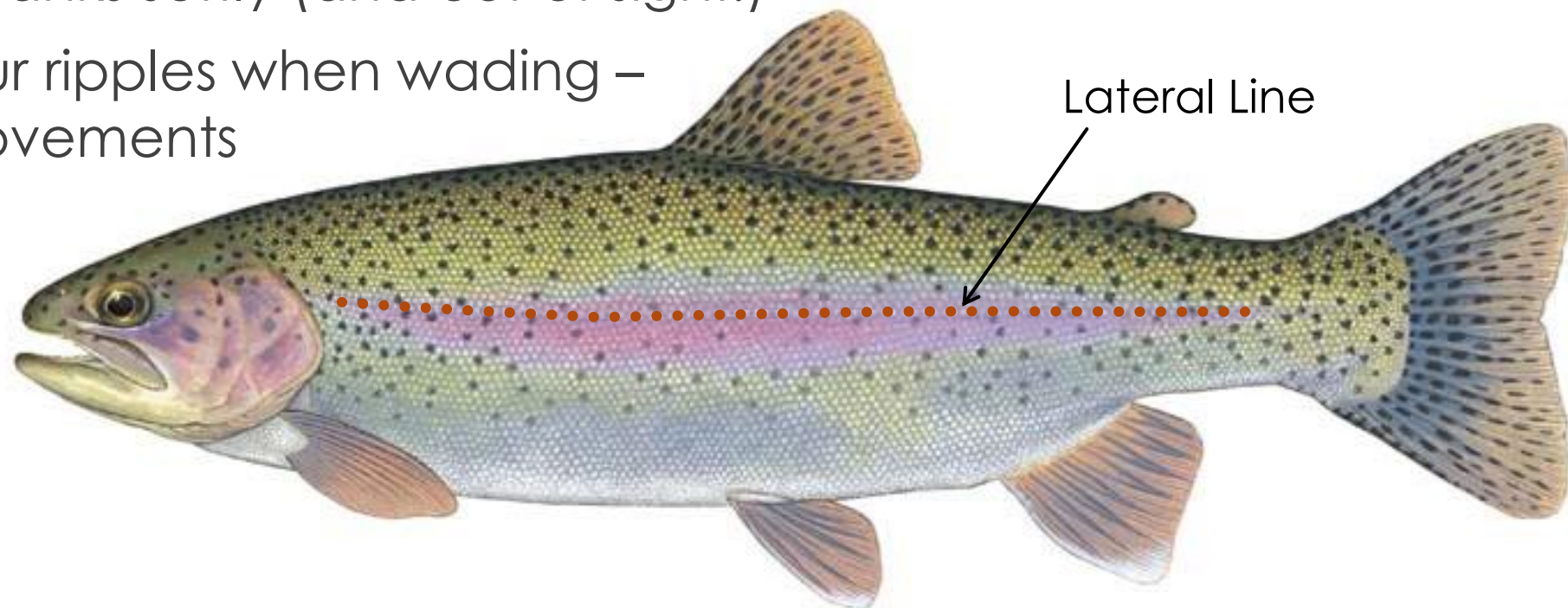
- Example: a fish in 2 feet of water. How far away does a 6 ft tall angler need to be?



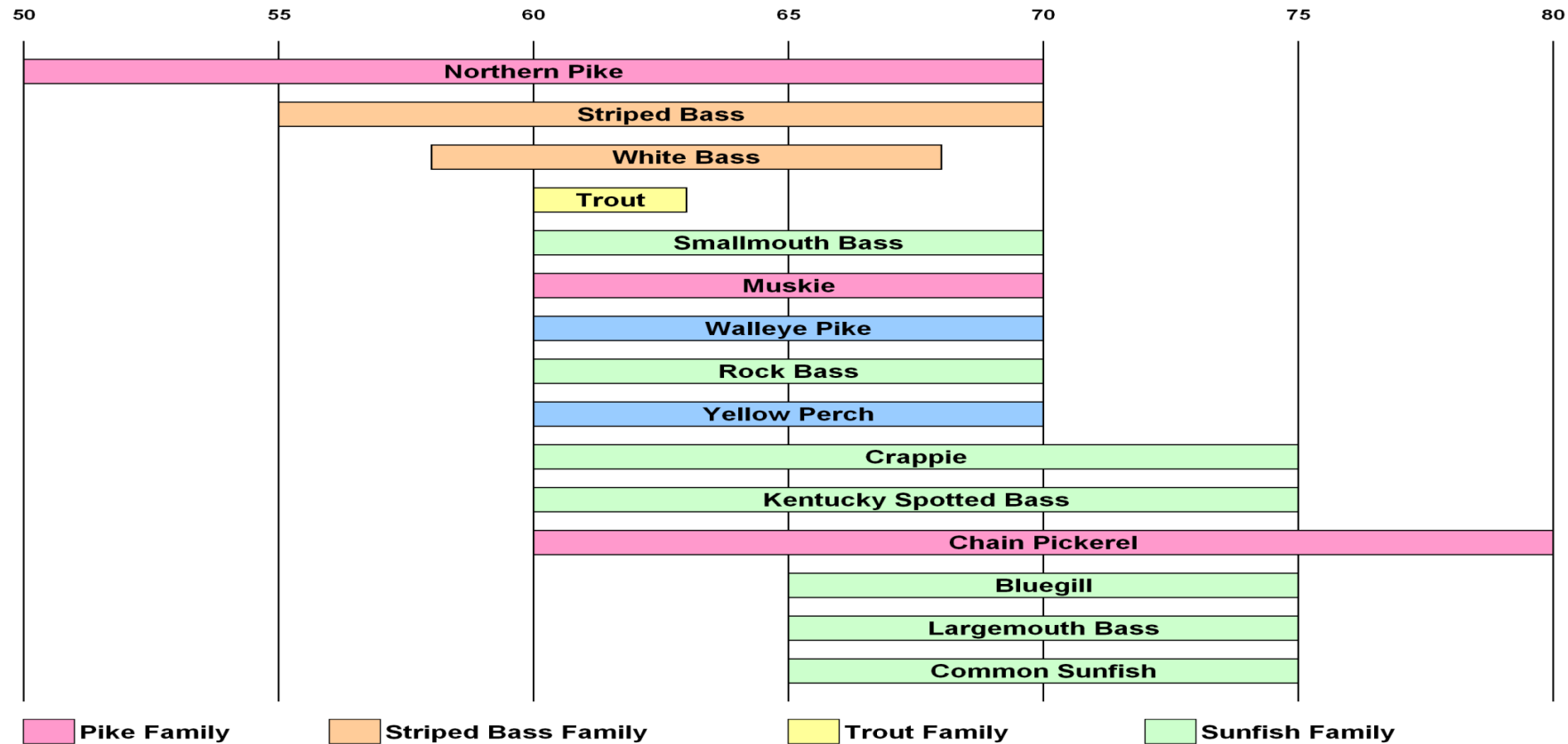
- Answer: 6 X height above water = 36 feet (unless the 6 ft angler is wading, kneeling, sitting, crawling or lying on his stomach). To get closer, get on your hands and knees and cast sidearm or hide behind a rock, bush, tree, etc. Wear drab clothing. Move slowly. Don't cast a shadow on the water. STEALTH!

FISH CAN HEAR & FEEL YOU !

- ▶ With their ***Lateral Line***
 - ▶ Walk the banks softly (and out of sight!)
 - ▶ Watch your ripples when wading – slooow movements

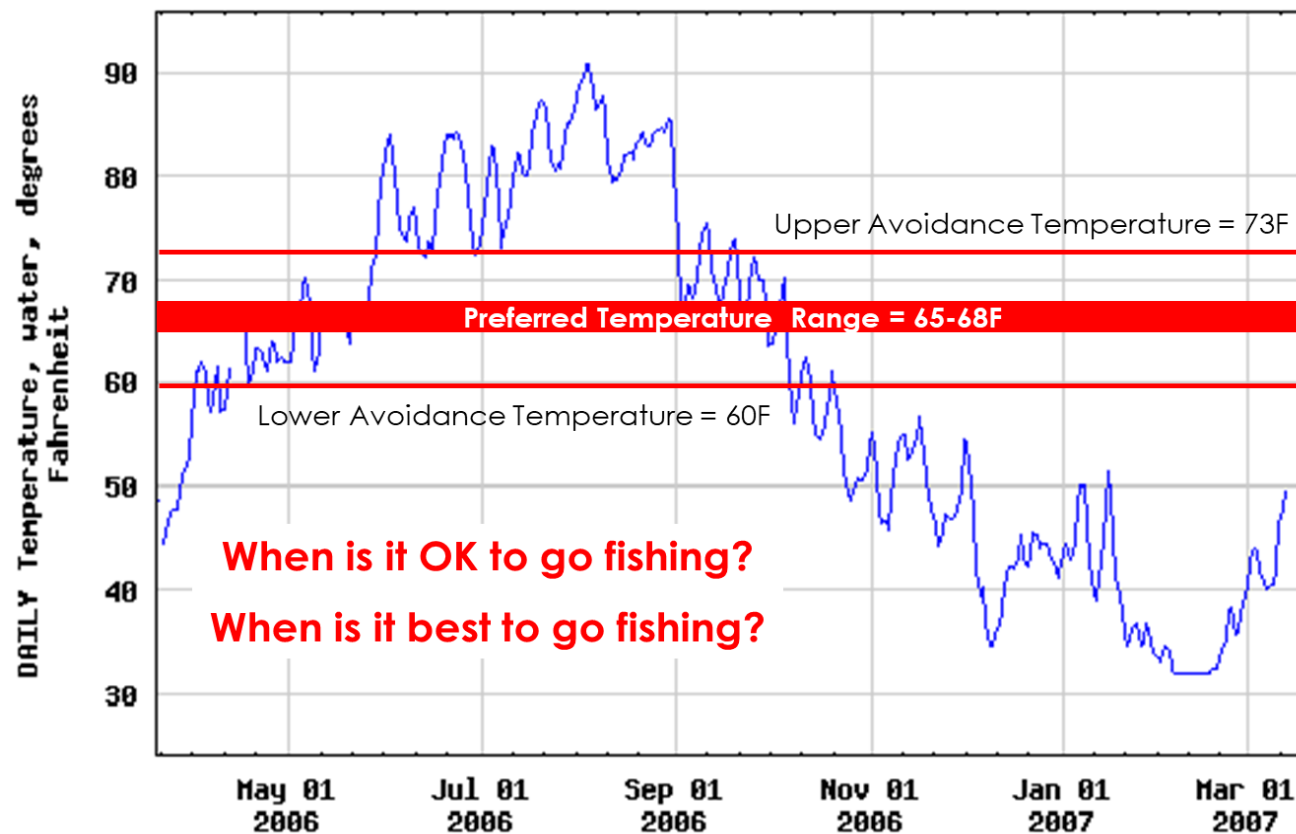


FISH TEMPERATURE PREFERENCES

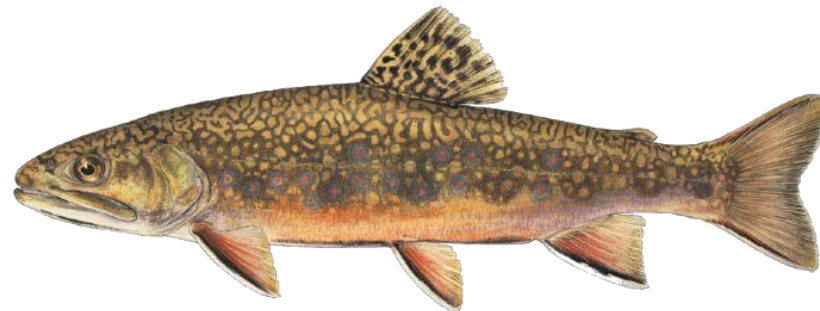
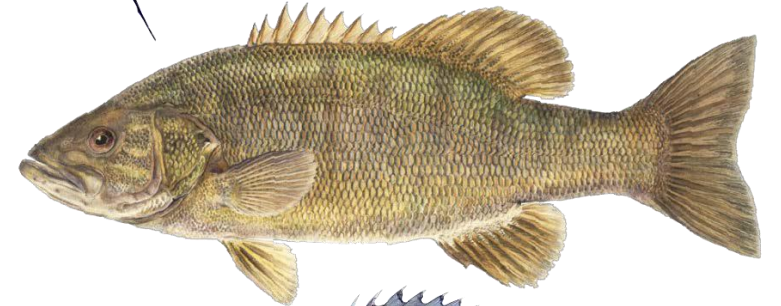


USGS RIVER TEMPERATURE vs. TIME (Rappahannock River, Fredericksburg VA)

- ▶ Use USGS water data to help you plan!
 - ▶ See <https://waterdata.usgs.gov/nwis/rt> for water data for the country.
 - ▶ Select **Data Category** and **Geographic Area** to narrow your search.
 - ▶ From the many sites shown, select the water body you want.
 - ▶ You can then select how data is displayed and the time period.
- ▶ This sample chart shows ideal temperature ranges for Smallmouth Bass.
 - ▶ Pick a time of year when the fish are happy and hungry!



Fish Identification



Can you identify these common freshwater fish?

Requirement #10 Cleaning and Cooking Fish



Cleaning & Cooking Requirements

- ▶ If regulations and health concerns permit, clean and cook a fish you have caught. Otherwise, acquire a fish to clean and cook it.
- ▶ You do not need to eat your fish.

BEST PRACTICES for CLEANING FISH

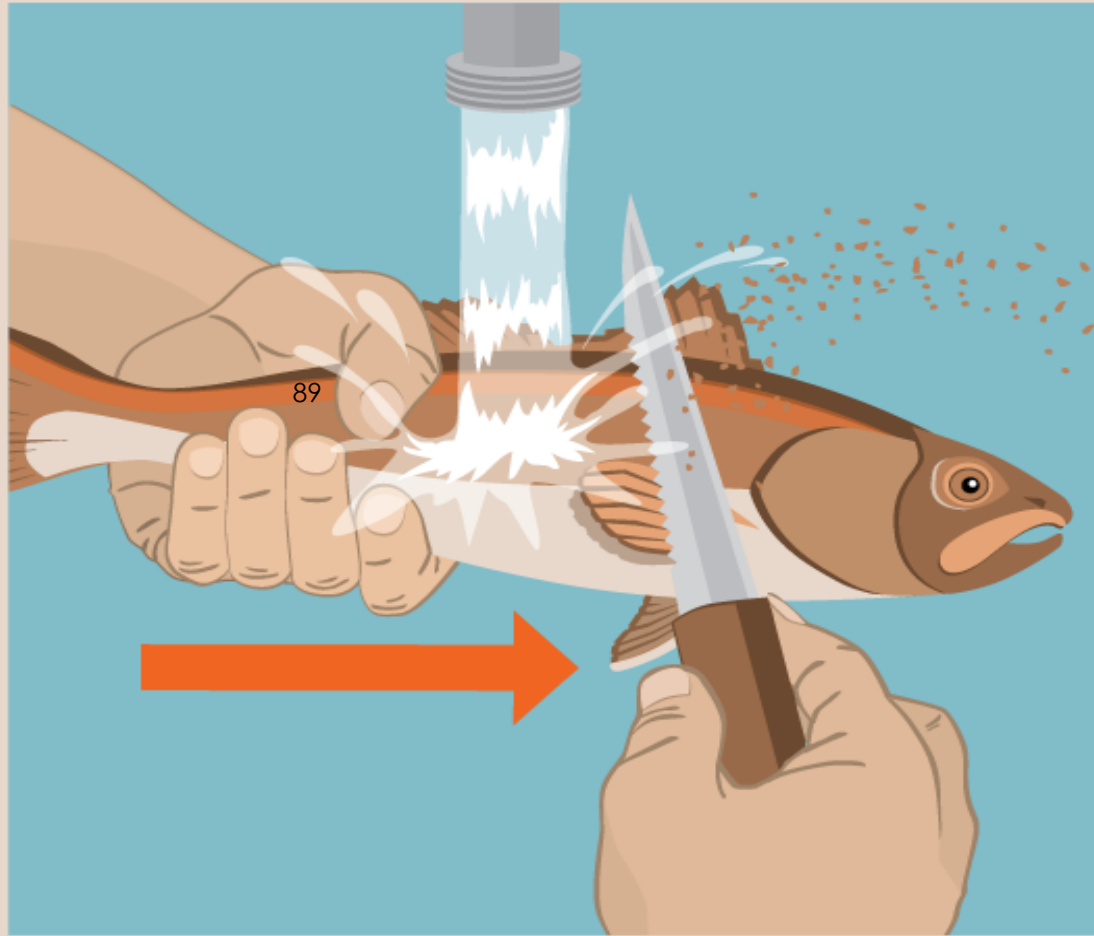
- ▶ Clean your fish as soon as possible, while it's fresh.
- ▶ Keep fish on ice or refrigerated until they're cleaned.
- ▶ Make sure everything is clean and ready before starting.
- ▶ You can use any sharp knife to clean a fish, but a thin, flexible fillet knife is best.
- ▶ Knives should be very sharp and fish can be slippery – be careful!
- ▶ You can wear plastic or rubber gloves to keep your hands clean while you work.
- ▶ A Kevlar or metal mesh cleaning glove is highly recommended. See <https://www.amazon.com/s?k=fish+cleaning+glove>.
- ▶ Keep rinsing the fish in cool water as you clean it and give it a final rinse when you're done.
- ▶ Discard the carcass and guts, and clean up when you're done.

CLEANING – STEP 1

89

1

Use the back of a knife, or scaling tool, to remove scales under water.



CLEANING – STEP 2

90



CLEANING – STEP 3



CLEANING – STEP 4



4

Gouge out kidney with a small spoon.

CLEANING – STEP 5

5

Rinse
stomach
cavity with
water.



FILLETING – STEP 1

94



#1

Cut down to the backbone just behind the fish's head, then turn the knife and cut down towards the tail. Repeat on the other side.

FILLETING – STEP 2

95



FILLETING – STEP 3

96



MAKING STEAKS

97



If cutting into steaks, use a heavy-duty standard or serrated knife to cut at a 90° angle.

BEST PRACTICES for COOKING FISH

- ▶ There are many delicious ways to cook fish, including:
 - ▶ Grilling
 - ▶ Poaching
 - ▶ Steaming
 - ▶ Broiling
 - ▶ Baking
 - ▶ Frying
- ▶ Remember KISMIF – Keep It Simple, Make It Fun
 - ▶ When cooking with Scouts, give them choices of spices, sauces, condiments, etc.
 - ▶ Let them do as much as possible.
 - ▶ Foil dinners are great for this.
- ▶ Make sure fish are well cooked, but not overdone.
 - ▶ This is a delicate balance, especially with “dry” cooking methods like grilling, broiling and baking, and with delicate fish like trout.
 - ▶ Most fish cook quickly.
 - ▶ Test frequently for doneness by slicing to see the inside or pushing with a fork to test for firmness.
- ▶ Recipes are available:
 - ▶ Online
 - ▶ Recipe books
 - ▶ Mom, Grandma or a neighbor – ask!

For some great advice on how to cook with youth, see <https://growing-minds.org/documents/cooking-in-the-classroom-best-practices-guide.pdf/>

GRILLING

- ▶ When you're grilling fish, keep a close watch. Fish only takes a few minutes per side to cook.
- ▶ Brush the fish lightly with oil or spray with nonstick cooking spray.
- ▶ Place fish near the edge of the grill, away from the hottest part of the fire.
- ▶ Don't try to lift up the fish right away; it will be stuck to the grill.
- ▶ Start checking for color and doneness after a few minutes, once the fish starts to release some of its juices.
- ▶ Flip the fish over when you see light grill marks forming.



POACHING

- ▶ To poach fish, use vegetable or chicken stock, or make a court-bouillon, a homemade broth of aromatic herbs and spices.
- ▶ Use a pan big enough to lay each piece of fish down flat. Pour in enough liquid to just barely cover the fish. Bring the liquid to a simmer, and keep it there.
- ▶ If you see bubbles coming up from the bottom of the pan, it's too hot - the liquid should "shimmer" rather than bubble. The ideal temperature is between 165 and 180 degrees F. Gently simmer until the fish flakes easily.



STEAMING

- ▶ Steaming produces a mild-tasting fish that is often paired with a flavorful sauce.
- ▶ Rub the fish with spices, chopped herbs, ginger, garlic, and chile peppers to infuse flavor while it cooks.
- ▶ Use a bamboo steamer or a folding steamer basket with enough room for each piece of fish to lie flat.
- ▶ Pour about 1½ inches of water into the pan, place the steamer over the water, cover the pot, and bring the water to a boil.
- ▶ Begin checking the fish for doneness after 10 minutes.



Some Extra Resources

▶ Fishing Merit Badge Jeopardy Game

▶ <https://jeopardylabs.com/play/fishing-merit-badge-6#.XzMTjrPWON4.gmail>

▶ Quizzes on the Outdoor Code and Leave No Trace

▶ <https://create.kahoot.it/details/the-outdoor-code/ec3a524f-a9c0-461e-828d-dd069ad29e3f>

▶ <https://create.kahoot.it/details/outdoor-code-leave-no-trace/2f1a8acb-3d46-4e0b-ace3-ac72283c4da3>

▶ Some BSA Fishing Partners

▶ International Game Fish Association <https://igfa.org/>

▶ Aquatic Resources Education Association <https://www.areanet.org/>

▶ Take Me Fishing <https://www.takemefishing.org/>