



Venturing – BSA Ranger Award



TEACHING THE FISHING ELECTIVE

A Guide for Leaders
by John Lively

This information is available on-line at: <http://www.twintiersfff.org/FFFresources.htm>

Introduction

John Lively

- Eagle Scout, Troop 11, Waverly NY, 1972
- Attended Camp Brule for several years, 1969 – 1972
 - including introduction to fly fishing, first trout, and largest bass
- Have fished both locally and internationally for over 40 years
- Publisher of Southern Tier Fishing website (non-profit) since 1997
- President of Twin Tiers Five Rivers Chapter of Federation of Fly Fishers
- Have taught fly fishing merit badge for BSA, and for the FFF have taught beginning fly tying, and 'how to select your first fly fishing outfit'

Introduction

Why encourage our children to fish?

- It will get them outdoors
- Can build family ties when shared with parents, grandparents, etc.
- Builds a connection to the natural physical and biological world, and encourages good stewardship
- Basics are easily mastered, boosting self-esteem. yet..
- Provides on-going challenges and opportunities for discovery
- Gives opportunities to develop ethics and morals
- Fun and enjoyment! (Theirs and ours)



Introduction

Objective of this presentation

- Help you be an effective leader-teacher of the Fishing Elective

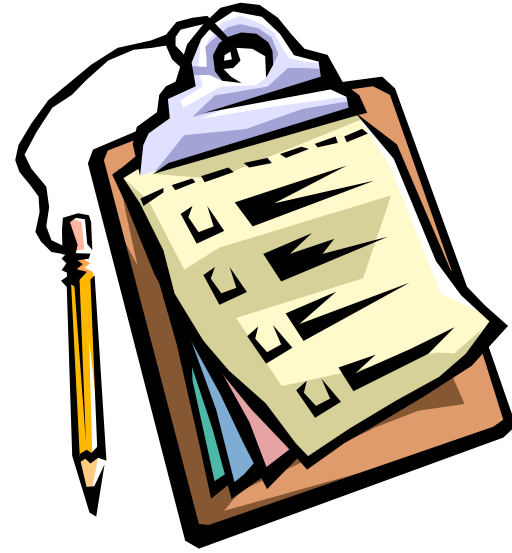


- ideas for each requirement
- things you may not know
- materials needed, sources
- ways to organize a class

- Answer questions you may have
- Leave you ready to lead a group in achieving the elective

Outline

- Elective requirements
- Teaching notes & suggestions
- Materials needed
- Designing your schedule
- References



Requirements - simplified

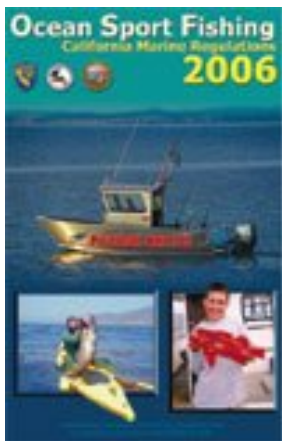
1. Learn the fishing laws for your state.
2. Identify different water types and where different fish are found
3. Learn, then teach:
 - Spin-casting, spinning, bait-casting, and fly fishing
 - How to put line on each reel
 - How to cast two types of equipment.
 - How to tie three different fishing knots.
4. Discuss several ethical situations. Develop a personal ethical code.
5. List 10 dangerous situations and how to protect yourself in each.
6. Learn about the ecology and preferred habitat for two game fish in your state; catch at least one of each.
7. Build a fishing rod; or tie six flies; or make your own lure
8. Complete a fishing outreach or teaching project
9. Give a talk telling what you learned about fishing

Teaching suggestions

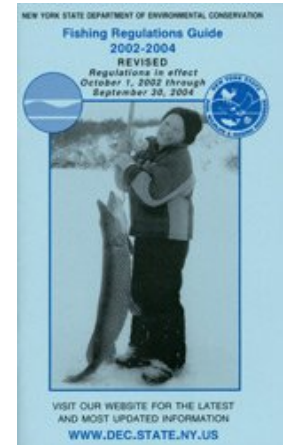


Requirement One: Rules and regulations

1. Pick up fishing regulations booklets ahead of time where you buy your fishing license (Wal-Mart, sporting goods stores)
2. Hand out fishing regulations booklets, and ask the students to look up the following information:



- At what age licenses are required
- The daily bag limits on trout, bass, sunfish
- The day that trout and bass seasons open
- A special regulation for the county they live in
- If a saltwater license is required for your state
- Name a saltwater fish with a season and bag limit
- Phone number to report violations of fish and game laws



Requirement Two: Water types

Water type	Characteristics	Game fish	Example
Warm water	Above 65 degrees in summer	Sunfish, bass, pike, carp	Susquehanna River, Oneida Lake
Cold water	Below 65 degrees year-round	Trout	Smaller spring-fed streams and ponds
Tail water	Cold water discharged by a reservoir	Trout	West Branch of the Delaware River
Brackish water	Partly salty water near mouths of river	Black bass, Striped bass	Lower Hudson River
Salt water	Ocean water	Flounder, bluefish, striped bass	Atlantic Ocean, Long Island Sound, Chesapeake Bay

Requirement Three: Equipment types



Bait casting – one of the oldest types. Now favored by many bass anglers. Also for trolling and deep sea fishing.



Fly casting – a few hundred years old, revolutionized by modern plastic fly lines and graphite rods. Favored by many trout fishermen.



Spinning – invented in France about 50 years ago, probably the most versatile and popular worldwide.



Spin casting – similar to spinning reel but covered, probably the easiest of all to cast

Requirement Three: How to spool line



Bait casting, spinning reels

- <http://www.fintalk.com/fishing-knots/reel-spool.html>
- <http://www.bassresource.com/fish/lines.html>
- <http://www.wikihow.com/Spool-New-Fishing-Line-Onto-a-Reel>



Spin casting reel – similar to spinning reel, just be sure to put line through the cover first



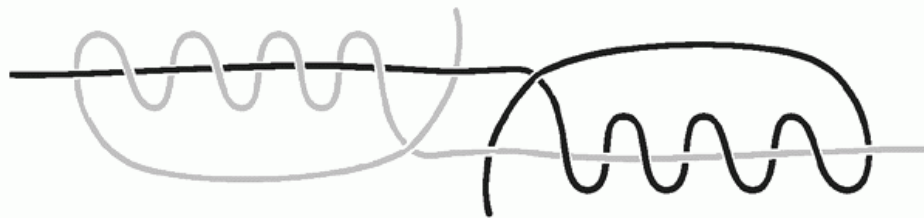
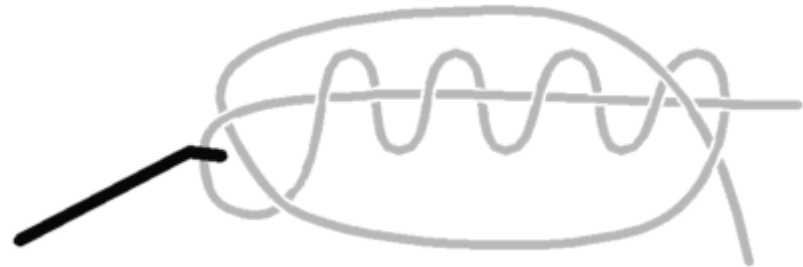
Fly reels

- <http://www.rioproducts.com/images/flylinecare.pdf>
- <http://www.cortlandline.com/technical>

Requirement Three: Tie Three Knots

Improved Clinch Knot

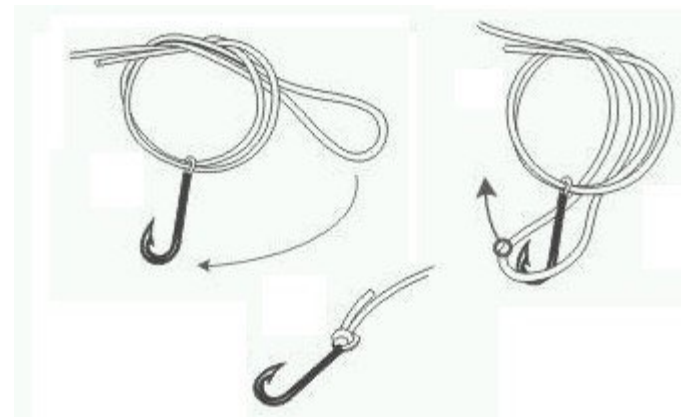
Most common knot for tying fly, lure, or hook to your line. Use 7 turns of line to start the knot.



Blood Knot

Used to repair broken monofilament line, and other mono to mono connections. Use 6 -7 turns on each side.

Palomar Knot
A non-slip knot to use with "Spiderwire" and other gel-spun or fusion type fishing lines.



Requirement Four: Ethics

Situations you may encounter while fishing, for discussion.

1. You land a nice big fish, only to discover it is hooked in the tail. The law requires you to throw it back. No one is watching. Do you throw it back or keep it ?
2. You catch a nice big fish (legally) but your camera is out of film. Should you kill the fish and take it home to show your friends, or let it go?
3. While walking along the stream you come upon a large trout trapped in a small pool. Do you catch it and release it into the stream? See if it will strike your lure? Leave it alone? Pick it up with your hands and put it on your stringer?
4. A friend invites you to sneak into a private pond to fish at night. Do you go?
5. You and uncle Bob enter a bass tournament one Saturday but don't catch anything. Going to the weigh-in, you stop in a cove where he retrieves three large bass from a stringer, that he caught in another lake the week before. He tells you not to tell anyone where the fish came from. Do you keep quiet? What do you do?
6. You and a friend go out and catch your daily limits of trout in the morning. He wants to go out that afternoon and try to catch another limit. Do you go with him?

Requirement Four: Ethics

A personal ethical code – example

As an ethical fisherman, I will respect:

- the fish and the water it lives in
- the land and landowner who allows me access to fish
- other fishermen who share the stream with me
- fishing rules and regulations

Requirement Four: Ethics

A personal ethical code – examples of what it means in practice

1. Any fish that I keep will be used (eaten), and not wasted. Any fish I do not keep will be released unharmed
2. I will not introduce any pet store fish or live bait fish into a pond or river because it might displace a native species.
3. I will not dump garbage, waste oil, throw soda bottles, urinate or defecate into any lake or stream
4. I will not litter the stream bank. I will take out at least one grocery bag of litter with me, as a gesture of good will to the landowner who allows me to fish on their land
5. I will not trespass on private land to fish without permission
6. I will not argue with or put down any other fisherman because of his/her appearance, fishing methods, or actions.
7. Whoever catches the fish has sole responsibility for deciding to keep it or let it go.
8. I will learn all state fishing regulations regarding seasons, limits, type of tackle allowed, etc. and I will obey them.

Requirement Five: Safety

For each situation below, you can discuss what dangers are present (primarily hypothermia and/or drowning), how to prevent it from happening, and what you would do if it did happen.

1. You hike into a remote area to fish, fall, and break your leg
2. Your motor quits in the middle of a large lake. It starts to rain, you get soaked, and start shivering.
3. You motor across a large lake in the morning. By afternoon, when you want to return, there is a strong wind and large whitecaps on the lake.
4. While on a float trip down a river, you stop on a gravel bar for lunch. Your two younger brothers get out and play near the waters edge.
5. You and your friends go fishing on a hot summer day in the river. One of them dares the other to swim across the river to cool off.
6. You are fishing a lake by canoe one evening. It gets dark, and you have no lights, but the fish are still biting. What should you do?

Requirement Five: Safety

Additional situations:

7. You are fishing a mountain stream in PA and come upon a waterfall. There is not much water coming down, but the rocks are green and wet. It's look like fun to climb up.
8. You're fishing a cove in a large reservoir, when some campers on shore begin target shooting a rifle from one side of the cove to the other. Do you ask them to stop, ignore them, or leave?
9. A friend invites you to go fishing down the river in his new boat. It turns out to be a vinyl inflatable raft which is easily punctured. Do you go?
10. You want to fish a river after a morning of rain. Normally you wade across to get to your favorite spot. Today the water is muddy but it seems OK. Part way across the gravel under foot starts rolling away and you feel like you might be swept away.. What did you do wrong?

Requirement Five: Safety Precautions Summary

Boat safely

- Carry all required equipment – anchor, whistle, light, etc.
- Wear a PFD
- Watch the weather; play it safe
- Radio, raingear

Wade safely

- DO NOT WADE if you can't swim
- Know the bottom and current
- Use a wader belt if wearing waders
- Wear protective shoes

Fish safely

- Wear eye protection
- Pinch down barbs on your flies
- Look behind you before casting
- Use pliers or forceps to remove hooks from fish (not fingers)

Requirement Six: Habitat

	Trout	Bass
Temperature preference	Most active from 45 to 65 degrees	Most active in 55 to 85 degree water
Spring location	Mid-stream pockets & runs	Shallow water (ponds), slack water (rivers)
Summer & fall structure	Mid-stream pockets & runs, cooler springs	Near rocks, timber
Winter structure	Deep holes with no current	
Predators	Great blue heron, osprey, man	
Prey	Minnows, crawfish, insects	

More information: [Reading Trout Streams](#) by Tom Rosenbauer; [Trout Stream Insects](#), by Dick Pobst; [The Bass Fisherman's Bible](#), by Erwin Bauer; <http://www.dec.state.ny.us/website/dfwmr/fish/fishspecs/>

Requirement Seven: Rod building

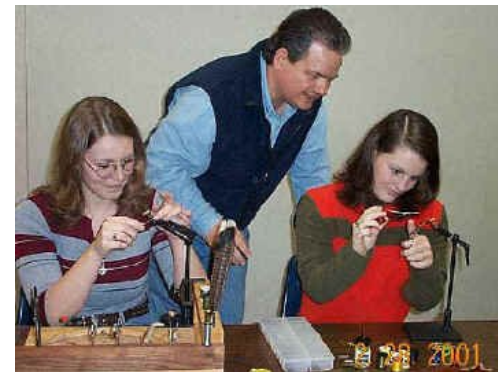
1. Fairly easy to do, provided cosmetics are not important
2. Cheapest kit will cost in excess of \$100, and up to \$750
3. Several 2 – 3 hour sessions are required
4. An experienced instructor is very helpful but not an absolute requirement



On-line tutorial at: www.flyangleronline.com

Requirement Seven: Fly tying

1. Typical beginners class takes 15 – 20 hours; tools and materials cost \$ 40 – 60.
2. Six simple-to-tie freshwater flies common to NY, PA, and CN
 1. Black wooly bugger (streamer)
 2. Green weenie (nymph, attractor)
 3. Glo bug (egg imitation)
 4. Pheasant tail (nymph)
 5. Renegade (dry fly)
 6. Black foam beetle or spider (terrestrial)



On-line tutorials at: www.flyanglersonline.com

Requirement Seven: Lure making

1. Probably the simplest and easiest way to get requirement seven – since you only have to make one.
 - Can make spinners from wire, beads, blades, and hooks.
 - Can assemble plugs from pre-shaped bodies, add paint, rings, and hooks.
 - Can buy spoon blanks, decorate with paint or tape, add ring and hook.



On-line tutorials at: www.luremaking.com

Requirement Eight: Outreach

Plan and assist in one of the following:

A **fishing trip** or event to introduce other youth to fishing. Could be via local Cub Scouts, Boy Scout troops, 4H clubs. Could be just younger members of your own family.

National Fishing Week or **National Hunting and Fishing Day** event.

Contact local Trout Unlimited, FFF, or BASS Federation clubs to see what they have planned, also sporting goods stores like BassPro Shops, Gander Mountain, and state DEC (NY) or DEP (PA)

<http://www.dec.state.ny.us/website/dfwmr/seasons/00ffdcln.html>

Hooked On Fishing, Not On Drugs program

Sponsored by the Future Fisherman Foundation

see <http://www.futurefisherman.org/programs/hofnod.php>

Requirement Nine: Presentation

Make a tabletop display or presentation to your crew, another crew, a Cub or Boy Scout group, or other youth group on what you've learned.

- Could be done in conjunction with Requirement Eight.
- Could be part of a Mall Show display
- Or just a presentation to the Venture group

References - for more information

www.flyanglersonline.com	How to tie flies, and how to build fly rods
www.twintiersfff.org	Presentation on 'Selecting the right fly fishing equipment'
http://www.luremaking.com	How to make spinner and crank bait lures
www.cabelas.com	Supplier of rod building, lure making, fly tying, rods, reels
www.feather-craft.com	Supplier of fly tying materials, rods, reels, etc.
www.troutunlimited.com	Trout Unlimited – national with local chapters – source for volunteers to help teach casting, rod building, fly tying, etc.
www.FFF.com	Federation of Fly Fishers – national with local chapters – source for volunteers to help teach casting, rod building, fly tying, etc.
www.bassfederation.com	Bass Federation, has chapters in PA, NY, CN, etc. - – source for volunteers to help teach casting, rod building
www.southerntierfishing.com	Where, when, and how to fish for different game fish in the Five Rivers Council area
http://www.uky.edu/~agr/danny/flyfish/main	A list-serv offering advice on anything fly fishing
http://www.dec.state.ny.us/website/dfwmr/fish/	Official NYS DEC website on salt water fishing
http://www.dec.state.ny.us/website/dfwmr/marine/finfish/	Official NYS DEC website on salt water fishing
http://sites.state.pa.us/PA_Exec/Fish_Boat/mpag1.htm	Official site of the Pennsylvania Fishing and Boating Commission

Materials needed

1. **Fishing regulations booklets.** Available where fishing and hunting licenses are sold (e.g. Wal-Mart), and through the state.
2. **Map** showing lakes, ponds, rivers, streams. Road map is OK.
3. **Rods & reels** – spinning, spincast, baitcast, and fly rod. At least one of each, may be borrowed.
4. **Knot tying guide** – handout or booklet. Available on-line from Berkeley, Scientific Anglers, and other fishing line manufacturers.
5. **Rod-building, fly tying, or lure making equipment**
6. **Volunteers** who can use, explain, and teach items 1- 5 above.
7. Recommended – a **computer with internet** for accessing on-line tutorials and references

Designing your class schedule

- Course will require minimum 12 hours classroom plus 1 – 2 half-day field trips.
 - How many hours per session available ?
 - How many sessions in total available
- Combine classroom and hands-on activities in each session, to the extent possible

Activities breakdown by location & type

Requirement	Classroom	Hands-on indoor	Hands-on outdoor	Field trip
1. Rules and regulations	X			
2. Locating water types	X			
3. a. Learn rods & reels	X			
3. b. Learn fishing knots	X			
3. c. Spooling line on reels	X			
3. d. Casting			X	
4. Ethics	X			X
5. Safety	X			X
6. a. Learn fish habitat	X			X
6. b. Catch two kinds of fish				X
7. Equipment building		X		
8. Teach others	X	X	X	X
9. Presentation	X			

Things to do in the first class

1. Review course objectives & requirements
2. Set expectations. Ask for commitment to see it through to completion
3. Assess the level of existing knowledge among the students, by asking them to share their own fishing experiences. Ask the advanced students to help the less advanced.
4. Decide which of the tackle building options the group wants to do: rod building, fly tying, or lure building. (It will be much easier to teach if the entire class does the same thing.)
5. Pick dates for fishing trips
6. Hand out regulations booklets and give requirement number 1 as homework

Official Requirements

Source: <http://usscouts.org/advance/venturing/Electives/Fishing.html>

1. Become familiar with the freshwater fishing laws, regulations, and license requirements for your state.
 - If you live in a coastal state, become familiar with the saltwater fishing laws, regulations, and license requirements for your state. If you live in an inland state, become familiar with the saltwater fishing laws, regulations, and license requirements for a coastal state of your choice.
2. Using a map of your state, identify different varieties of water, such as warm fresh water, cold fresh water (include tail waters), brackish water, and salt water.
 - On the map, note the most popular game fish found in each spot you marked.
 - On the map, note any protected fish species found in your state.
3. Learn and then teach the following to someone else:
 - The four main types of fishing equipment: spincast, spinning, baitcast, and fly. Explain how they differ and the benefits of each type, describing how each may be better for certain fishing situations.
 - Three different fishing knots.
 - How to correctly spool line on a reel of the four types of fishing equipment.
 - How to execute three different types of cast with two of the four types of fishing equipment. Use targets. Know safety measures needed while casting.
4. Develop a personal ethical code for fishing. List a variety of potential ethical situations where choices may have to be made and describe how you plan to make decisions for those situations.

Official Requirements

Source: <http://usscouts.org/advance/venturing/Electives/Fishing.html>

5. List at least 10 potential safety situations that you could encounter while fishing in your area, and precautions you should take to protect yourself and your partners.
6. For two different species of game fish found in your state, learn where they are in the food chain, the types of waters they can be found in, and the type of underwater structure and temperature they might be most likely to be found in during the fall, winter, spring, and summer.
 - Catch at least one fish of each of the above two species.
7. Do one of the following:
 - Build a fishing rod-the type of your choice.
 - Tie six freshwater or saltwater flies common to your area.
 - Design and make your own fishing lure (not a fly) and explain its fish-attracting principle.
8. Do one of the following:
 - Plan or assist with a National Fishing Week or National Hunting and Fishing Day event.
 - Assist with a Hooked On Fishing, Not On Drugs program.
 - Organize and lead a fishing trip or event to introduce other youth to fishing.
9. Make a tabletop display or presentation to your crew, another crew, a Cub or Boy Scout group, or other youth group on what you've learned.