



#### The purpose of the adventure:

The Bear Cub Scout <u>Den Leader Guide</u> says, "Fishing is a skill that can become a lifelong hobby, or possibly a career. It can be done alone, or with family or friends.

#### Takeaways for Cub Scouts:

- Learning a lifetime skill
- Learning about fish and habitat
- Engineering a pole from the most basic materials
- Learning knots and how they can be used
- Learning basic Leave No Trace and Outdoor Code practices
- Fishing promote patience, kindness and courtesy.

The Bear Cub Scout needs to complete 3 of the 4 requirements. We will look at all four and you can decide which ones fit your level of interest.

1. Discover and learn about three types of fish in your area. Draw a color picture of each fish, record what each one likes to eat, and describe what sort of habitat each likes.

2. Learn about your local fishing regulations with your den leader or a parent or guardian. List three of the regulations you learn about and one reason each regulation exists.

3. Learn about fishing equipment and make a simple fishing pole. Practice casting at a target.

# 4. Go on a fishing adventure and spend a minimum of one hour trying to catch a fish. Put into practice the things you have learned about fish and fishing equipment.

#### Suggested Teaching Approaches and Materials:

#### 1. Discover and learn about three types of fish in your area.

California has a wide variety of fish, both fresh and salt water. For this requirement we will use fresh water fish as that is what you will most likely be fishing for.

- a. Trout, several species, most popular is the rainbow
- b. Blue gill, known as a pan fish, very tasty
- c. Catfish, the janitor of the habitat, catfish are always welcome
- d. Bass, big mouth and small mouth, very fun to catch
- e. Crappie, another pan fish, great for a fish fry

Can you draw a color picture of me? I am a rainbow trout.



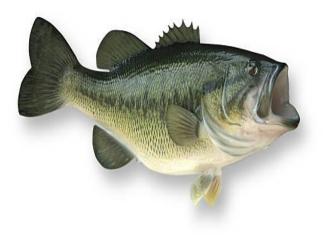
Can you draw a picture of me? I am a Blue Gill.



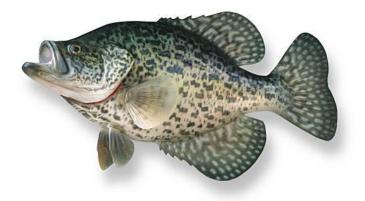
Can you draw a picture of me? I am a catfish.



### Can you draw a picture of me? I am a Bass



Can you draw me? I am a Crappie



What do these fish like to eat?

They all like natural food, such as worms, flies, bugs and spiders. The natural food that drops into the water is known as the hatch and the hatch changes during the seasons. They will also eat other smaller fish, and some will eat plant life, such as algae and moss. Catfish are the scavengers of the habitat, cleaning up dead bits and pieces and debris.

#### What sort of habitat do fish like?

First, lets talk about what a habitat is. Simply, a habitat is home. It's where the fish live and have friends and family and even other species of fish. Like your home, the habitat protects the fish from predators and provides a feeding ground for the fish to survive. A healthy fish population equals a good clean water source for all.

Trout like cold water and small deep holes in the lake, stream or river. You can often find them in the quiet water of a faster moving body of water. In lakes they like to be in the coldest areas of the lake.

Blue Gill are a very hearty pan fish. They are common in most lakes. They are called pan fish for their size and the way they fit in a frying pan. They are good tasting and easy to cook. They hang out near vegetation.

Catfish roam wherever there is food or leftovers. They eat anything which is why they are the janitors of the habitat. They keep it clean from debris. They live in all habitats and water temps and can grow quite large.

Bass are the sports fish of the nation. They fight well when caught and live mostly in lakes and some rivers. They will eat smaller fish as well as the usual banquet of bugs and insects.

Crappie are another pan fish and are extremely popular to catch and eat. They like to hover in schools and I find them mostly around boat docks and piers. They feel safe with cover over them.

#### 2. Learn about your local fishing regulations with an adult leader or parent.

Fishing as well as all wildlife are protected by regulations. Regulations are set up to make sure the animal populations thrive and are not over harvested. We will explore some fishing regulations and why the exist.

- 1. Seasons for fishing exist to allow the fish to repopulate by taking a time out from anglers. Most fish have a season for reproduction called spawning so we must leave them alone so they can make more fish.
- 2. Size requirements are set in place, so fish that are to small and sometimes to big to keep. We want the fish to grow up so they can make more little fish. If a fish is to be released because it is to big, it is because that size usually means it might be carrying eggs.
- 3. Catch and release only. This is for fish that are endangered and are trying to make a comeback. There are certain trout that you are not allowed to keep and, in the ocean, the state fish, a Garibaldi is endangered and not allowed to be kept.
- 4. Fishing license is required by all persons over the age of 16 in California. This regulation allows the dept of fish and wildlife a source of revenue and enforces the regulations by writing tickets to offenders. However, adults do not need a license to fish from a public ocean pier. All children under the of 16 can fish free.
- 5. Fish limits are in place to prevent anyone from overfishing and not leaving anything for anyone else to catch. There can be harsh penalties for overfishing the limits or keeping protected fish. A Scout will only keep what they will eat and release the rest.

# 3. Learn about fishing equipment and make a simple fishing pole. Practice casting at a target.

Watch the BSA video and/or use the following document to help you make a simple pole.

A Super Simple (and cheap) Bear scout Fishing pole for the "A Bear Goes Fishing" Belt loop

> By Eric W. Brown My Bear Scouting Blog (New Reqs)

#### **Goals of this document:**

- The primary goal is to show how to make a simple fishing pole to meet the Belt loop requirements, using only knots the boy have learned up to and including the Bear year.
- I'd like it to be inexpensive and the parts to be easy to source.
- I'd like it to be easy enough for a scout to build with the assistance of a parent, in a short amount of time.

In short, I want you to be able to make one of these...



Parts:

A 6 foot pole

Masons Twine (really any strong braided twine will do)

Duct tape

Fishing line + any tackle you want to put on it.

#### Really that's it... it's that simple;

This design rips off idea from a lot of sources, including a Japanese fishing tradition called tenkara, which eliminates a lot of the parts required from the fishing pole, replacing it with a loop.

#### **Parts Sourcing:**

6' Bamboo Pole, or 6' PVC pipe.

The thin bamboo poles used in this tutorial are available in the garden section at Home Depot. You get 6 poles for about \$4 at the time of this writing.

<u>6 foot Bamboo garden stakes, 6 pack</u>

They are used as garden stakes. They are pretty thin, so if you want the poles to last longer, you can use PVC pipe, or ½" bamboo poles that you can buy on Homedepot.com for about \$20 for 25 of them (but you have to have them shipped to you)

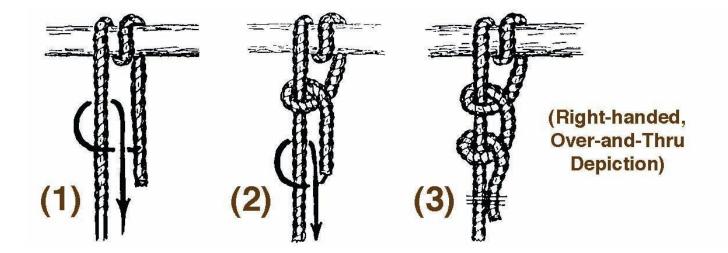
1/2" by 6' bamboo poles

1/2" by 10 foot PVC pipe (around \$2 each)

#### Knots Used:

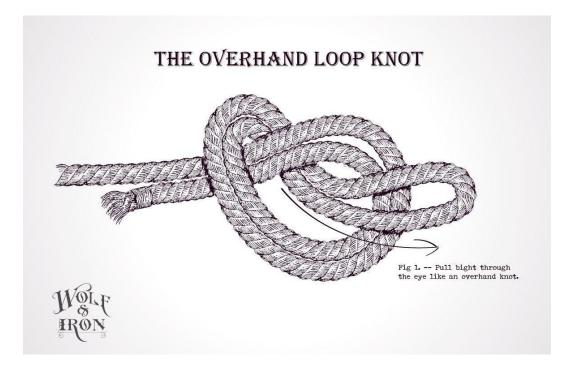
#### 2 Half Hitches:

The first knot we are going to use is the 2 half hitches. Just like in the picture we are going to wrap it around the pole extra times, but we are going to wrap if 5 or 6 times, then tie the knot.



#### **Overhand Loop Knot**

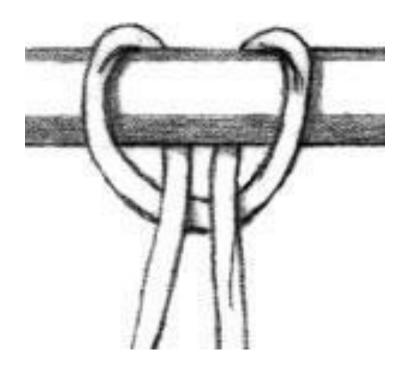
The second knot is a variant of the overhand knot. The boys learned the over hand knot as tigers, and this is just tying an overhand knot on a piece of string that's doubled over, called a bight in knot tying lingo. It's called an overhand knot on a bight, or an overhand loop knot. It forms a non-slipping loop on the end of a line.



#### The Larks head.

Ok, I cheated, the boys have never learned the larks head knot, but look at the picture, it's so simple

The boys will easily learn it, and it allows us to use the Tenkara style of connecting fishing line to a pole which removes the needs for more parts. I'll teach the Cubs to tie it step by step later in the document



Step by step instructions

Step 1 Determine which is the handle end and the tip.

Large end is the handle, skinny end is the tip. Step over :D

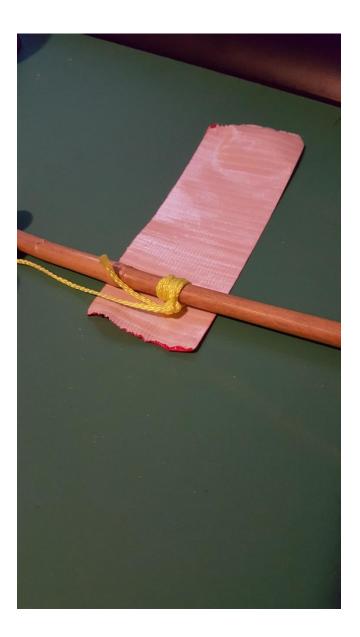
Step 2 – Tie the string to the handle end with 5 wraps and a 2 half hitches.







Step 4 - Wrap the knot we just tied at the handle end with duct tape, so it never loosens or unties.



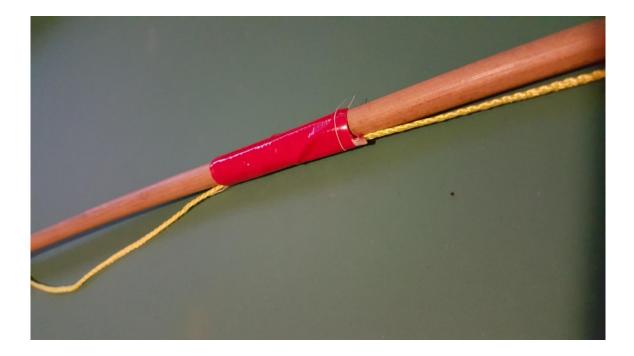


Step 5 – Run the string along to the tip.

Along the way, especially if your pole is bent, you should wrap the string with duct tape to keep it near the pole.

This will keep it from tangling and being annoying.

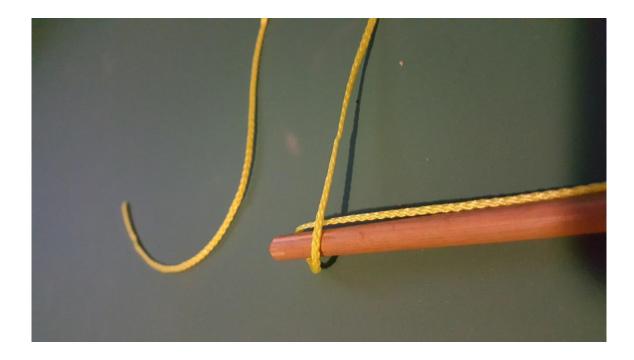
In case you wonder why we are running the string along the whole length of the pole, this is so that if you catch a fish big enough to break the pole, you can still land the fish.



Step 6 – At the far tip, we wrap it again

Like at the bottom we are going to wrap it 5 times and tie a two half hitches, but unlike at the bottom we have to run the string up to the end, then go back down to wrap it. If we don't' do this the knot will not hold till we tape it.

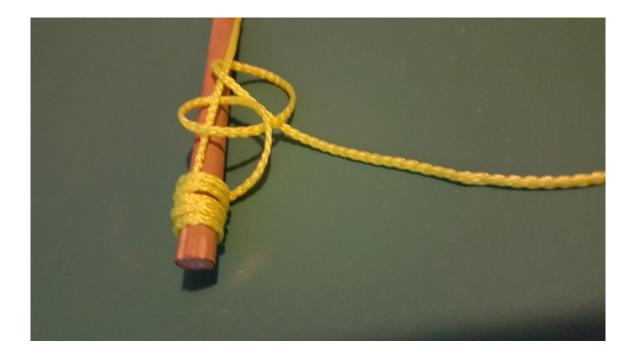
Up and back, and start to wrap.



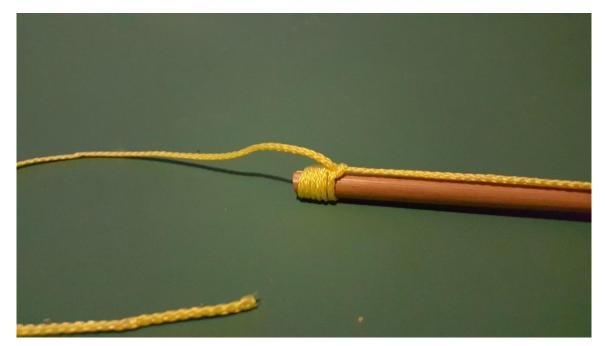
After you wrap, tie a two half hitches on the end that goes back to the tip



### Another angle



## Pull it tight



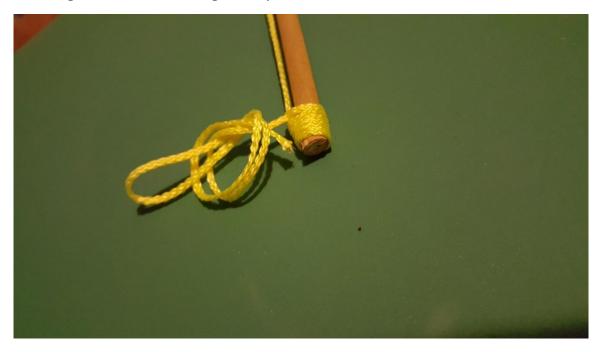
Then Cut the string with about a foot to a foot and a half left over.

Step 7 - Put a loop on the end of the pole

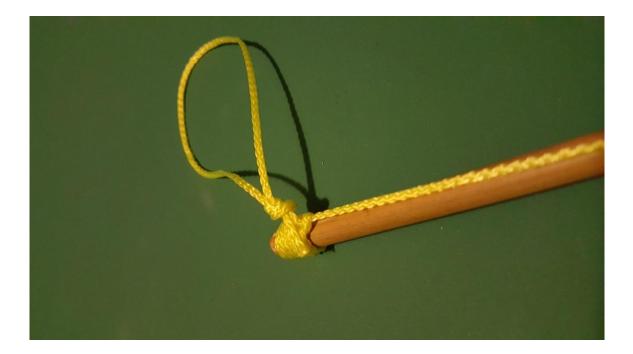
Here we tie the overhand loop knot.

Fold the string over, tie an overhand knot.

Note that I didn't have a foot of string here in this picture; it's easier to tie with extra string then cut the string after you are done



Pull it tight



Step 8 – Tie a second overhand loop knot right next to the first.

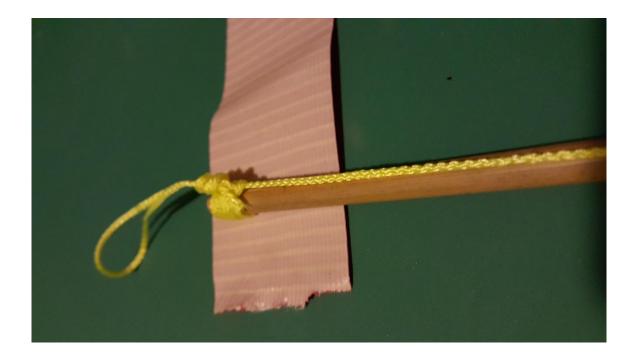
You might not need this, but I'm paranoid and don't want to lose a fish, this way there should be no slipping of the knots are tight

Make sure they both are good and tight, this is the biggest weak spot in this design, if this loop comes undone, no fishy.

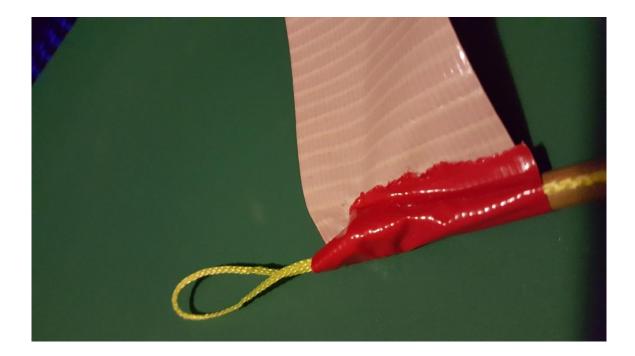


Step 9 – Wrap it in duct tape, so the knots will not move or come untied.

I should have show you before, but here's the trick to wrapping it



Fold a flap over.



Wrap it tightly.



At this point the fishing pole is "done" but you can't fish with it yet, we're going to use this loop to attach the string via a larks head knot. The cool thing about this is, it's really easy to remove it and put a different sting on if this one breaks, knots or you need to cut it.. just unloop it. So, let's tie a piece of line to the pole Step 10 – Attaching a fishing line

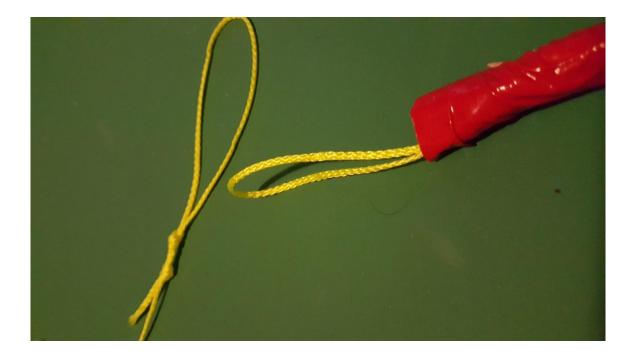
Cut a piece of fishing line. In this document I'm using more masons twine so you can see what I'm doing. In real life I'm using spiderwire high strength fishing line. This is a ridiculous strength of line, 10 lb monofilament line would work great, I'm just a fan of too much is just enough strength, so I use the strong stuff.

Use whatever you can afford. A 10lb fish will probably break these thin bamboo poles, but hey, I'm weird that way.

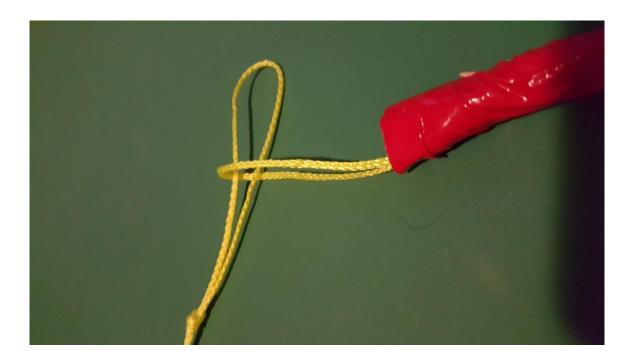
Tie a double overhand in the fishing line, just like we did on the end of the pole to form a string non slipping loop. Pull hard on the loop to test if it's going to slip, if it slips go online and find a fancy fishing knot... this worked ok on my spider wire.

You can make your fishing line as long or as short as you want, but I recommend having the line about as long as the pole.

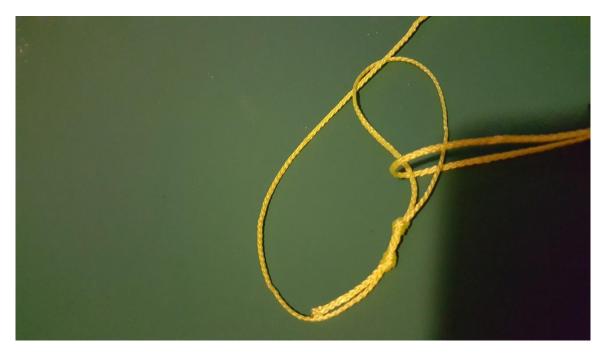
The cool thing about this larks head system is you can change it later easily.



Now to tie the larks head, slip the fishing line loop up through the loop on then end of the pole.



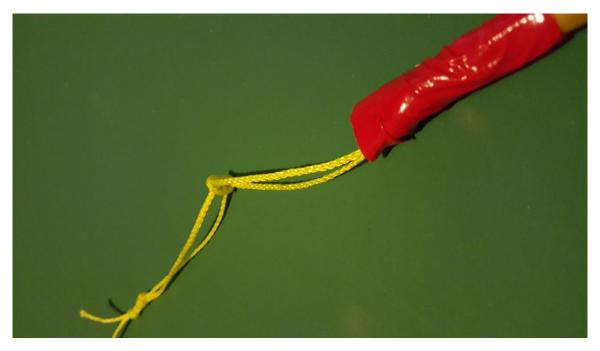
Take then other end of the fishing line and tuck it through the loop on the fishing line



Pull the end of the line to tighten the knot



#### Pull it tight



Now put whatever you want on the other end of the line. I put a snap swivel so I can change out my hooks. You could put another larks head and go all primitive, to save money just remember to put a leader on anything so the larks head can't come undone.

I put a snap swivel, with a # 4 hook on it, a pinch weight to pull the hook down and about 12" up from the snap swivel I put a bobber. For panfish (sunfish bluegill etc), what you'll be catching most of the time as close to the shore as this pole will go, put the hook about halfway to the bottom...by adjusting the bobber further and closer to the snap swivel.

Here is the finished pole with mason's line instead of fishing line (same pic as at the beginning of the document)



Once you know how to tie the knots you can make a pole like this in a few minutes, easily...

I recommend you practice the knots a few times and then make one ahead of your meeting, so you will know how to help the boys/ parent teams get it done.

# 4. Go on a fishing adventure and spend a minimum of one hour trying to catch a fish. Put into practice the things you have learned about fish and fishing equipment.

So now it's time for an outing. There are many Parks with "fishing holes" to complete this adventure with a catch. Most local parks with fishing lakes require catch and release. Check with Park guidelines prior to fishing. You can go to "info@takemefishing.org" and receive valuable information on local fishing spots and more.

BSA Certified Angling Instructors are always willing to help and are another resource your local District or Council can help you find.