



Skills Session: Woods Tools—Knife, Camp Saw, and Ax

Time Frame

1 hour

Materials

There should be one of each of the following items for every two participants.

- Knife
- Ax
- Camp saw
- Sharpening stone
- Honing oil
- 8- or 10-inch mill bastard file
- Chopping blocks
- Ignition file

Resources

- *Boy Scout Handbook*—chapter 4, “Second Class Scout”
- Totin’ Chip pocket certificate, No. 34234B

Goals

By the end of this session, participants will be able to

- Demonstrate the proper methods when using a pocketknife, camp saw, and ax.
- Properly care for and sharpen woods tools.
- Explain when woods tools should be used.
- Using the knife, saw, and ax properly, prepare tinder, kindling, and fuel for a cooking fire.

Assignments

- On one campout, demonstrate proper care, sharpening, and use of the knife, saw, and ax, and describe when they should be used. (S2c)
- Use the knife, saw, and ax to prepare tinder, kindling, and fuel for a cooking fire. (S2d)

Before You Begin

The Woods Tools session should take place before the session on fire building (when the woods tools will need to be used—preceding lunch).

Lesson Plan: Woods Tools— Knife, Camp Saw, and Ax

Woods Tools Know-How

Whether you are splitting firewood, repairing equipment, or clearing a trail, woods tools can make your work easier. Proper use and care of your pocketknife, camp saw, and ax will help ensure that these tools will be in tip-top shape whenever you need them.

You should also know how *not* to use them. Carving or chopping on live trees can kill them. Hacking at dead trees and logs can leave unsightly scars. Don't cut any trees without the permission of a landowner or land manager.

Pocketknife Tips

Use a pocketknife to cut rope or cord, open a can of food, whittle a tent stake, tighten a screw, make wood shavings for fire starter, trim a bandage. A good general knife has a can opener, screwdriver, and a blade or two for cutting.

NOTE: The Boy Scouts of America does not encourage the use of large sheath knives, which are heavy, awkward to carry, and unnecessary for most camp chores.

CLEANING. Keep your pocketknife clean. Open all the blades, then twirl a small bit of cloth onto the end of a toothpick, moisten the cloth with light oil, and wipe the inside of the knife. Wash any blade that has been exposed to food using hot, soapy water.

SHARPENING. Sharpen your knife with a whetstone (follow the manufacturer's instructions). Most knives can be sharpened as follows:

- Hold the blade against the stone at about a 30-degree angle. Tilt the blade off the stone about one-third of the way to vertical. (Some specialty knives may require a sharper angle to produce a keener edge.)
- Push the blade along the stone as though you were slicing layers off the top, or use a circular motion. Sharpen the other side of the blade in the same manner.
- Wipe the knife clean and examine the edge of the blade under a bright light. A dull edge reflects light and looks shiny; a sharp edge is so thin it has no shine at all.

USING A POCKETKNIFE SAFELY

Do

- Keep the blades closed except during use.
- Cut away from yourself.
- Close the blades before passing a knife to someone else.
- Keep fingers clear of the sharp edge as you open and close the blades.
- Keep your knife sharp and clean.

But

- **Don't** carry a knife with the blade open.
- **Don't** throw a knife.
- **Don't** cut toward yourself. If the blade slips, you could be injured.
- **Don't** strike a knife with another tool or pry with the point of a cutting blade.

Camp Saw Tips

The camp saw works well for most outdoor woodcutting. The blades of a *folding saw* close into their handles (like those of a pocketknife). The *bow saw* has a curved metal frame that holds its blades in place.

- When sawing a branch from a tree, first make an *undercut*, then saw from the top down.
- Keep folding saws closed when they aren't in use and store in a secure place.
- Protect the blade of a bow saw with a sheath when not in use.
- Replace dull blades, which make sawing hazardous. Take along a spare if you have to do a lot of cutting.

When cutting firewood:

- Brace the piece of wood against a solid support.
- Use long, smooth strokes.
- **Let the weight of the saw pull the blade into the wood.**

SAFE SAW USE

Do

- Sheathe a saw whenever it's not in use.
- Carry a saw with the blade turned away from your body.
- Replace dull blades. Sharp saws are easier to use and to control.
- Use care when passing a saw to another person.
- Wear gloves and protective eyewear when using a saw.

But

- Don't cut any trees—alive or dead—without permission.
- Don't allow the saw's blade to cut into the ground because soil and rocks will quickly dull the blade.
- Don't leave a saw lying around camp. Store it properly, out of harm's way.

Tips for Safely Using the Ax

The ax comes in handy for splitting firewood, clearing fallen trees, and trail work. The size and implementation of the ax makes it an especially dangerous woods tool. Follow these safety tips for safe ax use.

- **SAFE TOOL.** Keep your ax in top condition. Make sure your ax has a secure head and sharp blade; otherwise, don't use it.
- **SAFE SHOES.** Wear proper footwear to help protect your feet while using the ax.
- **SAFE WORKING AREA.** Rope off an ax yard large enough to work in, and enter this area only to chop and saw wood. Check for clearance, and select an area free of brush and branches. Be certain others stay at least 10 feet away while you are cutting. Clear the area of chips, bark, and debris when you are done.
- **SAFE TECHNIQUE.** Follow the proper techniques for *limbing* (chopping branches off a log) and *buckling* (cutting through a log). Learn how to swing the *bit* (cutting edge) into the log, split wood on a *chopping block* (piece of a log that provides a solid, flat surface), and how to use the *contact method* (placing the ax bit against the stick).
- **SAFE CARRYING.** Cover the blade with a sheath whenever it is not in use. Carry the ax at your side in one hand, with the blade turned away from your body. Never carry an ax on your shoulder—that will put the ax bit too close to your neck and head! If you stumble, toss the ax away from you as you fall.

- **SAFE HANDLING.** Hand an ax to someone by holding it vertically, with the handle facing up and ax head facing down. Pass it with the bit turned away from both of you. The passer should always wait until the receiver says "Thank you" and has a firm grip on the handle.
- **SAFE STORAGE.** Keep your ax sheathed when not in use. Store it safely out of the way, and keep it dry.

MORE AX SAFETY TIPS

- Use leather gloves for protection from splinters and to help prevent blisters.
- Wear safety goggles to keep flying debris from injuring your eyes.
- Keep your ax sharp using a sharp 8- or 10-inch-long *mill bastard file*. While using the file, protect your hands by wearing leather gloves and a *knuckle guard*.
- Remove the protective sheath only when you are ready to use the ax correctly.

Activity

During fire building and cooking preparation, let participants practice what they have learned about using woods tools.