



Objective:

The objective of this workshop guide is for the Scout Leader and/or Scout youth to be able to describe and demonstrate safe use of the Hatchet.

Hatchet or Axe: What's the difference?

A *hatchet (or hand axe)* is typically 20 inches or less in length and will weigh less than 3lbs. It is designed to be held with one hand and to cut and trim small firewood blocks (less than 4 inches in diameter, thin branches and twigs).

An axe is larger than a hatchet and is intended to be used with both hands and is designed for chopping larger and wider blocks of wood. The larger handle length and weight of an axe allows the user to apply greater cutting force when chopping. The same cutting force is simply not possible with a smaller and lighter hatchet. That said, there is nothing that an axe can do that a hatchet cannot mimic. You just have to put in the additional time and effort.

The same safety guidelines for axes apply for hatchets.

Establishing a safe Chopping Area

- Whether you are conducting a training activity or at camp, if you plan to chop wood, a chopping area with a clearly visible perimeter must be setup in order to establish an area where hatchets can be used without fear of hitting anyone else.
- In the event of both Axe and hatchet being used, the safe chopping area should be set for the axe it is a larger area and thus effects greater safety.
 - Identify an area that is relatively flat, has little people traffic, free of overhanging branches, ropes or other obstructions.
 - The restricted area should be at least 3 x the length of the axe/hatchet + arm length of an adult. **This is called the "Blood Zone"**
- Ensure that there is a marked entry/exit path into the chopping area. This helps keep people away from the chopping area.
- Ensure that there is suitable first aid kit within easy reach of the chopping area



Safety Precautions when using the hatchet

Check the hatchet

- Do not unsheathe the axe until you are in the safe chopping area.
- Inspect the axe before use. Never use the axe if you note the following:
 - *The head is not secure*
 - *The head and handle do not line up straight.*
 - *The blade is cracked or chipped*
 - *If the handle is split, chipped or otherwise damaged or broken*
- Never use a blunt axe as it can slip or bounce off the wood you are chopping wood. A blunt axe may bounce off the wood and can penetrate flesh



Chipped blade

Clothing

Do not wear sandals or bare feet" when working with hatchets. Running shoes offer little protection except maybe secure footing.





Environment

- Ensure that there are no unauthorized people in your chopping area
- Make sure that there are no overhanging branches or other items that would interfere with your chopping motion
- Place a flat chopping block on the ground where you will use your hatchet. Do not make the flat chopping surface out of soil or rocks.
- Do not use the hatchet at night

Holding the wood

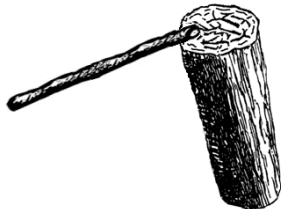
The safest position for using a hatchet is to kneel down on both knees in front of the wood that you wish to chop.

- *This method provides the greatest protection from hitting your leg with the hatchet. *NOTE* that this is not a foolproof means of eliminating self inflicted injury.*
- Make sure that you position the wood within an arms reach. This will allow you to chop the wood without extending your arms and be avoid 'reaching' when chopping as this will put you in an unsafe posture.



Holding the wood

DO NOT ask anyone else to hold the wood for you whether it is for chopping firewood or kindling.



Chopping firewood

- Only use wood that is dead and dry.
- Place the wood you wish to cut on the flat chopping surface.
- When chopping a piece of wood at least 4 inches in width **DO NOT** hold the wood with your fingers when you chop it, instead find a thin stick at least 12in in length and use this to hold the wood while you chop.

Chopping Kindling

- Kindling is defined as wood less than one inch in width.
- **DO NOT HOLD** the kindling. Instead hold the kindling between two sticks that are at least 12 inches in length.



Chopping Action

- Visualize the full swing of the hatchet. If it misses the wood target the hatchet should land in the flat chopping area not the ground, rock, or your legs. This can be done by practicing a slow swing of the hatchet
- With your arm bent, raise the hatchet above your head and Bend your arm and in one fluid movement bring the hatchet down blade first on the top of the wood.
- **DO NOT** attempt to hit the side of the wood. Try to aim the hatchet in the centre of the wood. This helps reduce the chances of the hatchet bouncing off the wood and possibly hitting you legs.
- Periodically inspect the hatchet for damage as you are chopping

Avoid Serious Injury: DO NOT ASK ANYONE to hold the wood for you while you are chopping with hatchets.

Avoid Serious Injury: DO NOT LET ANYONE hold the wood for you while you are chopping with a hatchet

Carrying and passing a hatchet.

- Carry the hatchet parallel to the ground with the sharp edge of the sheathed blade pointed away from you and to the ground. If you were to trip and fall, the hatchet will fall away from you out of harms way and you will avoid landing on it.
- When passing a hatchet to someone else, hold the hatchet by the handle with the head facing down.
- Allow the other person to take the hatchet by the head and only allow the hatchet to pass when the other person has acknowledged that they have the hatchet.





Care of a Hatchet

- Sheath the hatchet when not in use, using a correctly fitting sheath and not by sticking it in the ground. An hatchet may be sheathed temporarily in the chopping block but make sure that the blade follows the grain of the wood, is secure in the wood, and that the handle is not overhanging the block and can trip anyone.
- In camp, keep all hatchets and saws dry. Never leave them out overnight. Fit the sheath or sheath and keep them out of the way in a store tent (but not just inside where someone might kneel or step on them going into the tent!).
- Replace a damaged handle with a new one



Sharpening your Hatchet

Sharpen the hatchet with a round carborundum stone (available in different grades of coarseness). You should start with a coarse stone and then finish with a fine stone depending on how much sharpening the hatchet requires. (It should be used with oil.)

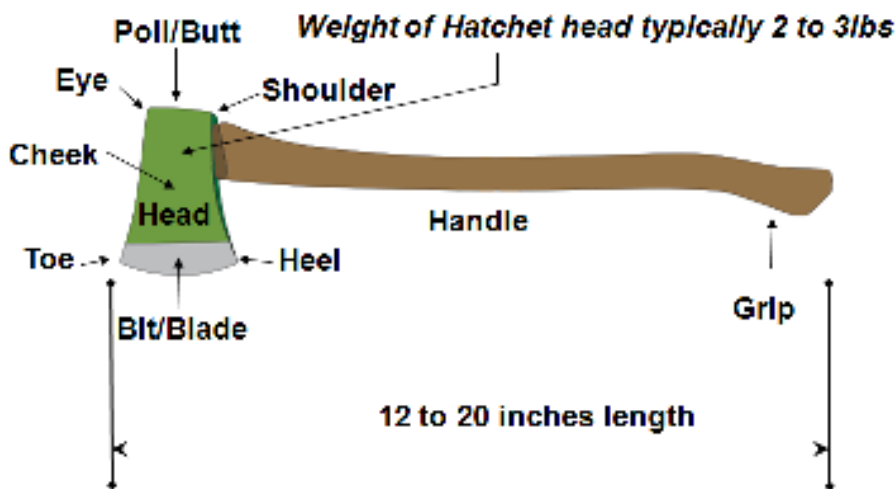


Move the stone round in small circles on each side of the hatchet face. Keep your fingers away from the bit.



Keep the hatchet head greased to prevent it rusting and oil a wooden handle regularly with linseed oil.

ILLUSTRATION OF A HATCHET



You hold the Hatchet at the grip





PERMIT DEMONSTRATION

In the presence of your instructor, perform the following:

Questions to be answered

1. State why a hatchet is a better tool to use than an axe
 - a. *Hatchets can be used for splitting large firewood logs into smaller pieces*
 - b. *Splitting small sticks for kindling is easier with hatchets*
 - c. *Hatchets weigh less than axes making them more suitable for youth to use*
2. Identify the key parts of a hatchet
 - a. *Handle*
 - b. *Head*
 - c. *Blade*
3. Identify three items on a hatchet that need to be inspected prior to use?
 - a. *Handle is in good shape*
 - b. *Blade is sharp and not chipped*
 - c. *Head is not loose or misaligned*
4. How much space is needed to setup a chopping area?
 - a. *Three x length of hatchet + length of adult arm OR*
 - b. *Three x length of axe + length of adult arm if axes are being used (as this is a larger area)*
5. What are the key elements to setting up a chopping area?
 - a. *Clear of obstructions*
 - b. *Boundary is clearly marked*
 - c. *Chopping block is setup*
 - d. *Chopping area must have sufficient area (3 x hatchet length + arm length)*
6. What equipment should always be present when chopping?
 - a. *Suitable first aid kit*

Demonstration

1. If a chopping area has not been setup, do so and talk about what you need to setup
 - a. If a chopping area has already been setup, perform an inspection of the chopping area and talk aloud what you are expecting to find.
2. Demonstrate and describe the hand and body positions when you use an axe or saw
3. Demonstrate safe chopping a 4 inch piece of firewood
4. Demonstrate safe chopping of kindling
 - a. *A hatchet is preferred for chopping kindling whereas an Axe is better for larger wood blocks*
5. Demonstrate what you would do to an axe when you have finished chopping.
6. Demonstrate how you would pass an axe or hatchet to another person