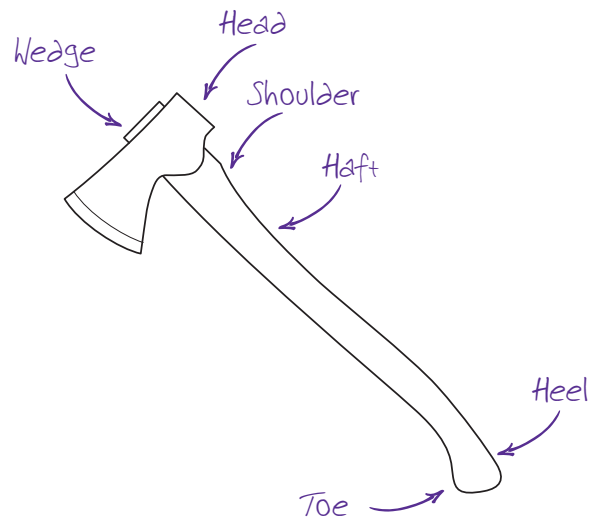
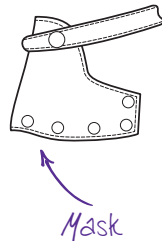


USING AXE AND SAWS

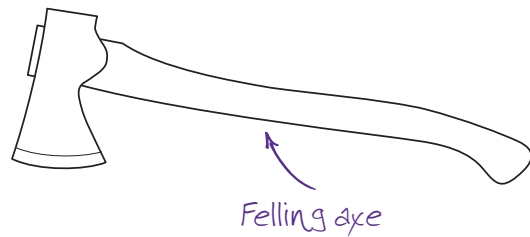
ESSENTIALS

Axes and saws are essential tools for preparing firewood around camp. It is vital to know how to take care of these tools and how to use them safely and correctly.

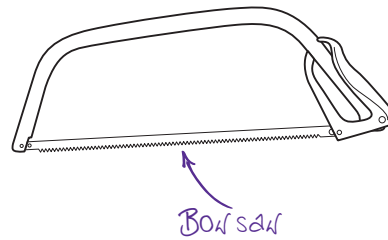
A hand axe or hatchet is a one-handed tool for cutting and trimming small branches and twigs for firewood. It should not be used to chop live wood. All hand axes should have a mask to cover the blade, which fits securely around the head.



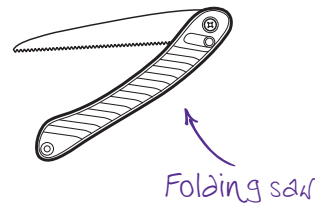
A felling axe is a two-handed tool for felling timber. It is larger than the hand axe, and has a very sharp single or double bit to cut across the grain of wood.



A **bow saw** is used to cut timber that is too large for a hand axe, and is often safer and easier to use than a felling axe. One variation of the bow saw is the bucksaw. Folding bucksaws are popular camp tools.



A **folding saw** is a portable saw with a folding, locking blade. Like the hand axe, it is ideal for cutting and trimming small branches and twigs for firewood. Folding saws are a popular camping and bushcraft tool.



GOOD PRACTICE

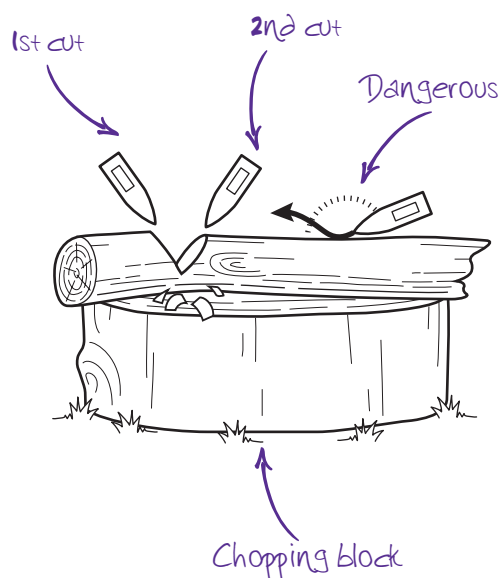
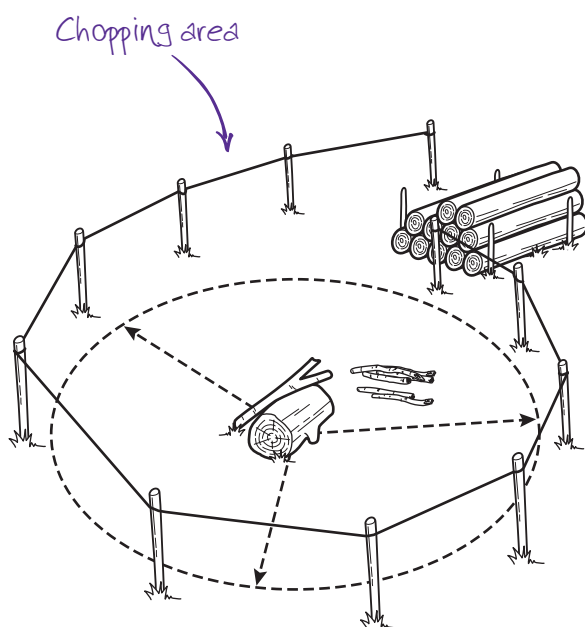
- Fit masks or sheaths to axe heads and saw blades, which should fit securely. Do not plant the head in the ground. An axe can be masked temporarily in the chopping block but make sure that the blade is securely wedged in the grain of the wood and that the haft does not pose a trip hazard. Saws are usually supplied with plastic clip-on masks that fit over the blade. Alternatively, make a mask from a split length of hosepipe.
- Keep axes and saws dry, and never leave them out overnight. Keep them in a stores tent in a locked box.
- Maintain axes by sharpening them regularly, ideally after use and before putting them in storage. Saw blades are relatively cheap and can generally be replaced rather than sharpened. Treat axe heads and saw blades with gun oil or camellia oil to prevent rusting. Protect wooden handles by rubbing them with boiled linseed oil.

SAFETY GUIDELINES

- Axes and large saws can be difficult and dangerous to handle if they are too big for you to control effectively. Use a tool of a size and weight that is suited to the job and your level of ability.
- Wear appropriate clothing and footwear, avoiding scarves, lanyards or any loose items that could be snared. Boots should be worn rather than trainers. Tie long hair back.
- Inspect tools before use. Check for damage and ensure that the parts are aligned and held together securely. Never use a blunt axe or saw, which is likely to slip or bounce on impact.
- Do not use axes or saws after dark or when tired.
- Crouch or kneel on one knee when using small axes and saws to avoid risk of injury.
- Always use a chopping block when splitting firewood. Chop directly over the block, positioning the wood on the far side of the block.
- Carry axes cradled upside down in your hand with your arm by your side. Make sure the axe bit is facing forward, keeping fingers out of the way.
- Pass tools to others carefully and safely; axes should be passed head first. Support the head with your free hand.

USING A HAND AXE

1. Mark out a clear chopping area, situated close to the fire area but separated from it by a graded woodpile. The chopping area must be free of obstructions and trip hazards, and at least three axe lengths in radius (ie an outstretched arm and the length of three axes). Place the chopping block in the centre. Axes should only be used in this area, which should be clearly marked and enforced as a 'no go' zone for anyone who is not properly trained or clothed.
2. Crouch or kneel on one knee behind the chopping block.
3. Hold the wood to be chopped in one hand, and firmly grip the haft of the axe with the other.
4. Aim carefully and always try to hit the wood in the same place. When practising, it may help to make a chalk mark on the log.
5. Swing the axe in a chopping motion by bending your arm at the elbow, aiming to create a small 'V' with alternate angled cuts at 45 degrees. Do not chop straight down onto the wood, as this will cause the axe head to bounce.
6. As the 'V' widens, you will create chippings, and the wood will soon split. Clear the chippings away regularly and use them for kindling.

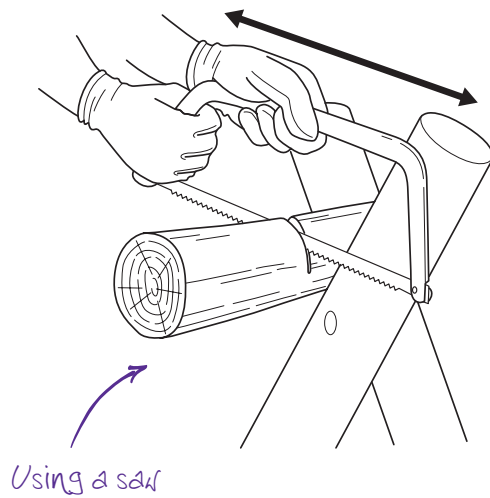


SHARPENING AN AXE

Use a round carborundum stone for sharpening. Make sure the axe head is free of dirt or resin, and move the stone in small circles towards or away from the bit, applying light pressure and keeping fingers clear. Change sides and sharpening angles often until the edge has a smooth and even surface. If the edge becomes too thin and fragile you can work against the bit, to give a wider cutting angle and a stronger edge.

USING A BOW SAW

1. Ensure that your work piece is held firmly, ideally in a sawhorse, and wear heavy duty gloves. Position the wood so that its weight naturally opens the cut, rather than closing it around the blade. If you need to hold the wood, the safest way is to pass your free arm through the saw, grasping the wood firmly until the cut is deep enough for the saw not to bounce out. This way, if the saw jumps out, only the blunt side of the blade can make contact with the hand or arm.
2. Saw by slowly pulling the blade towards you until it bites into the wood. Then push and pull steadily, using the entire length of the blade.



FIND OUT MORE

Good sources of information include the books *The Outdoor Adventure Manual* (Haynes, 2013), *The Complete Guide to Scouting Skills* (Doubleday, 2010) and *Bushcraft: Outdoor Skills and Wilderness Survival* by Mors Kochanski (Lone Pine Publishing, 1988).