

Hunters Fire



A cooking fire. The logs on top are spaced close enough together so a pot, pan, or Dutch oven can be placed on them. Try to lay it as level as possible.

Reflector Fire



Can baking. The fire itself can be of any other form, and is placed in front of the reflector. The item to be baked is placed between the reflector and the fire. This fire is also good for getting oneself warm. The reflector can also be a large rock. If you sit (or sleep) between the reflector and the fire, the side of you facing the fire will be warmed directly, while the reflector throws heat to the opposite side.

Star Fire



The advantage of this fire is that the logs can be of any length, avoiding the need to cut them up. As the ends of the logs burn, they are pushed into the fire. The fire is lit at the center of the star. If the logs are propped up on the fire ring, gravity will feed them in as they burn.

Teepee Fire



It is somewhat difficult to lay however, as getting the logs to balance against one another can be tricky. Sometimes the log pile will topple and upset the kindling and tinder beneath, and you'll have to start again from scratch. If necessary, you can lash them together at the top with twine (but don't use a synthetic rope such as nylon or polypropylene). Once laid, the teepee fire is very easy to light, as convection will take the flames right to the fuel. Adding fuel to a teepee fire can also be challenging as the balance problem is still there.

Log Cabin Fire



The log cabin is easy to lay, and it is fairly stable as well. It is laid very much like a log cabin. It is somewhat difficult to light though, as the fuel is off to the side of the tinder and kindling. When it burns, it falls in on itself, confining itself to the fire ring. It is also easy to add more fuel and maintain a neat orderly fire.

Council Fire



This fire was used by Native Americans during their meetings. It is very much like the log cabin fire except that more than two logs are laid on each layer. Be careful not to lay the logs too close to one another. Leave gaps of at least one inch between each log to allow air to circulate. Like the log cabin fire, the council fire is very stable, and it falls into itself as it burns, remaining within the fire ring. This fire is hot, and will make a nice bed of coals for cooking. It also uses a lot of fuel. This fire is sometimes called a pyramid fire as well.

Making fuzz sticks.

A fuzz stick is a small piece of wood which has had slices cut in the sides to create small shavings. The shavings should remain attached to the stick, but if they are accidentally removed, they can still be used. Because the shavings are thin, they are easy to ignite. Because they are attached, they in turn ignite the larger host stick.



Start a fire with one match

The secret to keeping a fire going after it is lit, is to stack the fuel progressively from smallest to largest. Be sure you have enough kindling to ignite the main fuel, and keep the stack loose enough to allow air to circulate. Stack the kindling atop the tinder and have the main fuel ready to go - but do not add it yet. Light the tinder. As soon as you have a good flame, start adding the main fuel to the fire.

Techniques for Starting a Fire: *Fuel Air and Heat*

Fuel (has 3 categories)

Tinder is light, fluffy stuff that is easy to ignite. It could be different dried grass, dead pine needles, fine wood shavings, feathers, pocket lint, paper, milkweed seeds etc. It should be dry, thin, and wispy. Tinder is laid first, and then it is surrounded with kindling.

Kindling is bigger than tinder. A lot of pencil-sized sticks. Sort it by diameter, and stack the smallest stuff over the tinder. You can arrange it in a tipi, log cabin. As you build up the kindling pile, add larger. Stacking is most important aspect of building a successful fire. If it is stacked too tightly, the tinder will not ignite it.

Fuel is the largest stuff you're going to burn it should not be larger than six inches.. Any larger than that, and you will either be up all night tending it, or you'll find yourself dousing it before turning in yourself

Air

A fire needs *lots* of air, and the way the fuel is stacked can affect this greatly. Do not pack the fuel tightly. Kindling should be stacked so the spaces between pieces are equal to the width of the pieces. Kindling pile should be about 50% air and 50% wood. These gaps will allow the flames to get in between and burn *all* the kindling, thus igniting the larger fuel logs. When you add logs to the fire, make sure there's at least a one-inch gap between each piece. Otherwise, you will cut off the air supply.

Heat

Heat is added to the fuel and air with a match, lighter, or other fire lighting device. If using primitive lighting techniques, the tinder is lit first, and then transferred into the kindling pile. Heat is transferred from the match to the tinder, then from the tinder to the kindling, from the kindling to the main fuel, and finally, the heat from the main fuel will be sufficient to maintain the fire, igniting additional fuel as it is added. To get a fire to die down, separate the logs so that their heat is spread out..

Know and practice fire safety rules.

- Locate the fire in a safe place. It should be clear for 10 feet all around. Not beneath overhanging branches.
- Do not use accelerants, such as lighter fluid, gasoline, kerosene, etc. Learn to light a fire without these.
- Put the fire out **completely** before leaving it. If it's too hot to put your hands in the ashes, it's not sufficiently out. Douse it down with water, turn the coals with a shovel, and be sure to extinguish every coal and ember.
- Do not build a fire on top of flammable material such as grass or leaves.
- Keep fire extinguishing supplies handy and near the fire. A bucket of water or sand, or a fire extinguisher
- Do not remove burning sticks from a fire.
- Watch for embers that escape the fire pit and extinguish them immediately.
- Wear proper footwear around a fire.
- Be aware that paper, cardboard, and leaves create floating embers and could float away
- Do not light a fire when conditions are windy or dry

Start a fire on a rainy day or in the snow

Dry fuel can be found by splitting open a log and taking the wood from the center of it. Another place to find dry fuel is on the underside of dead branches - especially those still on a tree. Set up a dry place to store the wood. Your kindling may be wet so you will need more than the usual amount of tinder. Milkweed seed pods are fairly waterproof, and the fibers inside are pretty easy to ignite. You can also make wood shavings from the same wood you're using as kindling. If available, birch bark can be lit even when wet.

Correctly and safely cut and split fire wood

To chop a log in half, do not lay it directly on the ground. Instead, lay it on another small log. Strike the log to be cut at the point where it is in contact with the supporting log.

To split a log. Steady it on its end and make sure it can stand on its own. Instruct everyone to clear away from you. Grip the end of the axe handle with both hands, and gently lay the blade of the axe on the top of the log, on the edge nearest where you are standing. Fully extend your arms, and back up if necessary. Spread your feet apart by about the same distance as your shoulders are wide, and make sure your footing is firm. If you are right handed, slide your right hand towards the head of the axe as you draw it towards yourself. Take aim, and draw the axe over your head, bringing it down mightily as your right hand slides down the handle. The right hand should meet the left about the same time the axe strikes the log. Note how the axe strikes the wood farther away from you than where you were resting it at the beginning. This is why you should aim for the edge nearest you. When splitting a log, try to divide it into two equal masses. If you try to split off a smaller segment, the split will run out, and the piece you remove will be smaller on one end than on the other.