

Fire lighting

The art of firelighting is a real scouting skill to be mastered by all. We are concerned with lighting a fire using only natural materials and one match. No fire lighters allowed. Every Scout worth his or her salt should be able to do it and it is a skill that should be learned from the beginning of their time in Scouting. In order for fire to flourish it required three elements - air, fuel and heat in equal quantities. Fuel in the form of dry timber which will burn efficiently whereas wet timber will smoke killing

the air supply and as a result put the fire out. Heat is required in the form of embers to maintain the fire over a long period and the creation of embers is our ultimate aim for a fire to cook on. By far the most important part of the fire triangle is air. Fire needs oxygen to thrive so your fire needs to be 'loose' to allow air to reach the flame. Stones and logs surrounding your fire need to be spaced to allow air to be drawn into the fire base and feed the fire.

Tinder

Tinder is light dry materials that light quickly. They are essential to lighting a fire quickly and successfully using only one match and no paper or firelighters. The simplest of tinder is fluff from pullovers and fleeces. You can also use frizzed up sisal or dry moss. Another good tinder is paper thin bark strips. By far the best tinder is dry curly timber shavings created by carving a dry stick. These shavings must be from a dry deadwood stick rather than a green sapling. If you cannot find a dry stick carve off the wet bark usually the timber is dry underneath.



Timber shavings Fluff & Sisal Bark

A fuzz stick is an excellent way to create dry tinder. You need a sharp knife and a dry - dead wood - stick. Carve the stick into a fuzz as shown. Create long curly shavings if you wish and collect these to add to your tinder pile. A number of fuzz sticks will be required to light your fire.

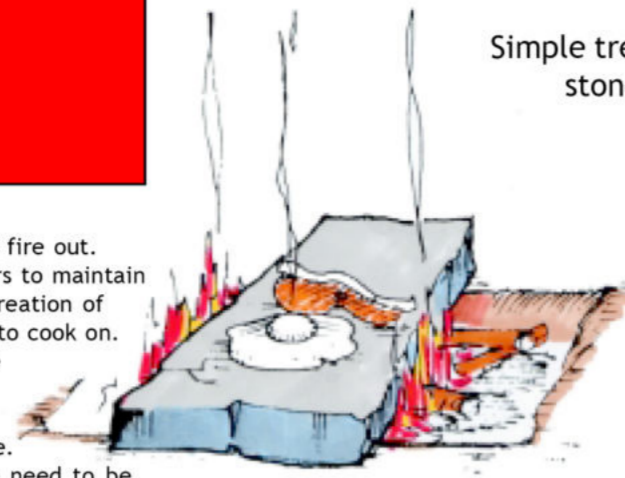
Fuzz Stick



Start building your fire by first placing your tinder on the ground in a light pile. Light your match and let it catch hold on the matchstick then place it carefully under the tinder and hold it there until the tinder lights. As the fire burns place light tinder on top of flame taking care not to kill the flame as you do so. As fire flares up create a pyramid of timber over the fire. Once this timber has taken hold introduce heavier logs onto your fire.



Simple trench fire using flat stone for cooking



Twist - bread dough twisted around a stick and gently cooked over hot embers



Flint and steel



You will need a flint and steel kit as shown which can be brought in camping shops and some dry frizzed sisal or best of all plumbers hemp as tinder



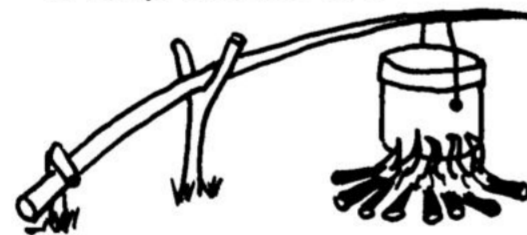
The technique is to draw the steel blade along the flint stick to create sparks. Watch where the sparks are falling and correct the stroke so that they fall into the same area of the tinder.



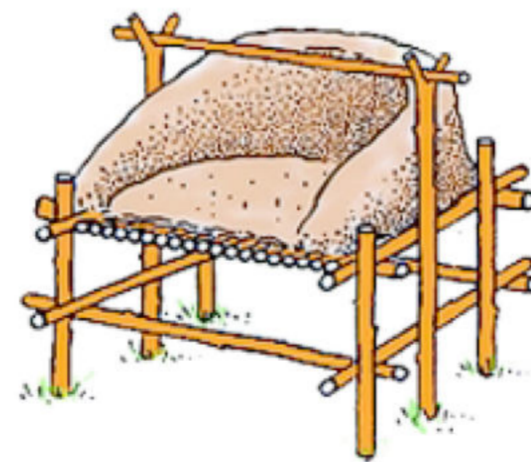
When enough sparks are created and hitting the centre wad of the tinder it will suddenly flash into a flame. Move quickly to tinder bundle and to create your fire.



Brick protected fire



Simple crane fire

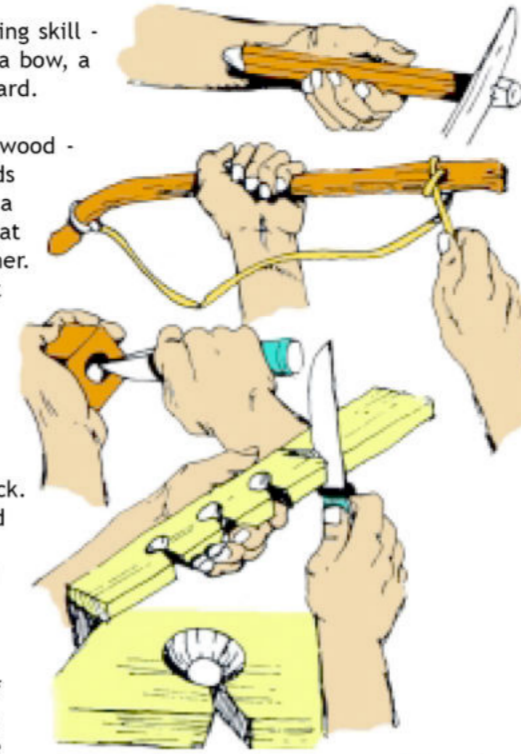


Altar Fire

Altar fire is a rased fire using clay and mud to make a protective base. This fire type is recommended over the trench and bare ground fire as it prevent the digging of a pit and the damaging of grass and ground.

Fire by friction

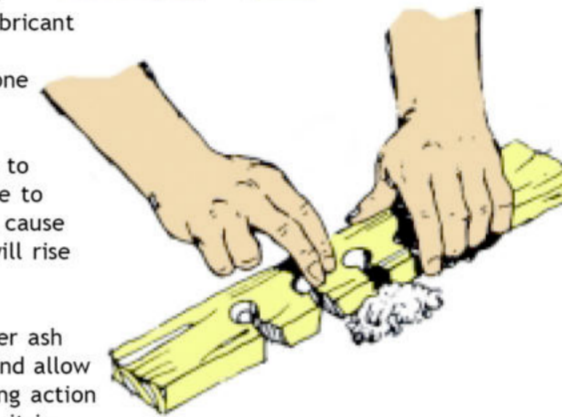
To create fire by friction - a real scouting skill - you first need to make the elements - a bow, a spindle, a 'thunderbird' and a base board.



The timber used needs to be dry deadwood - hazel, ash, lime and elm are good woods to use for this purpose. The spindle is a piece of wood that has a pointed end at one end and a rounded end at the other. To get a good grip on the bow string it is best to flatten out the sides of the stick so it has a hexagonal shape.

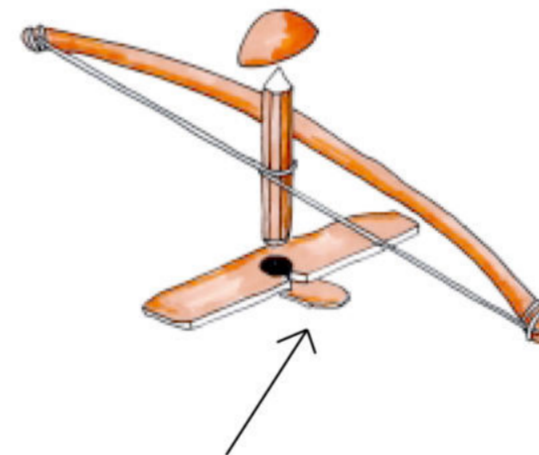
The bow is a bow shaped stick with a loose cord attached as shown. Create a baseboard using a flat piece of wood now more that 10 - 15 mm thick. A number of burn holes will be created using the spindle then a slot is cut so as to create a channel into which you place your tinder.

You will also need a 'thunderbird' or spindle holder. This is a simple block of wood with a groove cut into it so that pressure can be applied to the spindle as it turns. Soap or spit will act as a lubricant



Set up your apparatus as shown with one turn of the bow around the spindle. It is best to kneel down, placing your foot on the baseboard. Apply pressure to the spindle and push the bow from side to side in a sawing action This action will cause friction on the baseboard and smoke will rise into air.

The idea is to create enough hot timber ash that will fall on the tinder in the slot and allow it to smoulder. Continue with the sawing action until the smoke thickens and you think it is about to take flame then stop quickly and blow very lightly onto the tinder. If you are lucky it will catch flame.



A small thin stick placed under the tinder slot makes it easier to lift the smouldering tinder from the baseboard and carry it to the fire.

Key hole fire

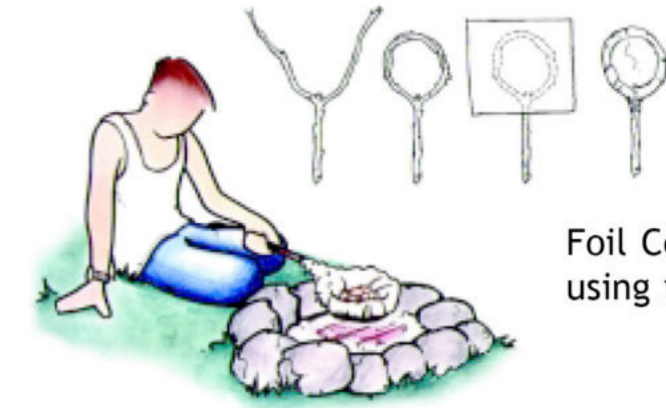
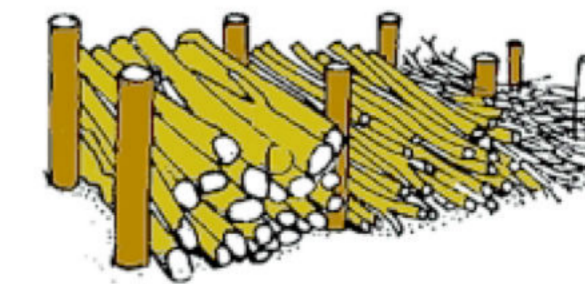
Clear a suitable area by lifting sods or building on gravel or bare earth. Create a keyhole fireplace as shown. Use a bigger fire to create embers which are then dragged into ember area from cooking your food



Collect fallen and dead timber for your fire. This will need to be cut or broken into convenient lengths. This is best done by using a bush saw and an axe. Care needs to be taken at all times while cropping and sawing timber. Observe the safety rules and keep cropping and sawing to a set area of your campsite to control chippings and prevent accidents. When timber has been cut to size sort it as shown so that it is ready to use when fire lighting and maintaining your fire.



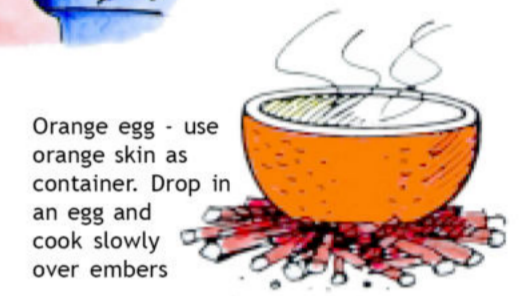
Use a piece of plastic sheeting in your chopping area to aid clean up of chippings and saw dust.



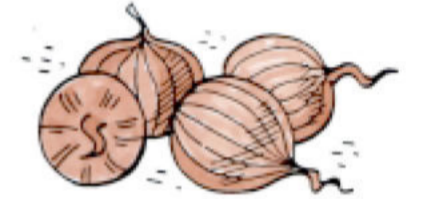
Foil Cooking using tin foil



Kebabs - using a green stick cleaned of its bark as a skewer to hold pieces of food



Orange egg - use orange skin as container. Drop in an egg and cook slowly over embers



Onions make great containers for foods such as eggs or minced meat.

Potato chamber - scoop out a potato to form a container. Drop in an egg. Place on the cap and place in embers to cook. Eat meat of potato and egg when finished



Planked fish using reflected heat from fire of hot embers.

