

Firelighting

Nothing fascinates man more than fire. From earliest times the miracle of fire captured the imagination. Apart from its beauty, fire is a practical source of heat, light and warmth. In survival terms it can mean the difference between living and dying.

Scouting without the fire lacks that hint of adventure. Who wants to cook a sausage on a stick over a primus stove. A fire in Scout hand is a camping tool. It can be used to boil water, bake cakes and bread, burn rubbish, to provide heat on chilly nights and of course to sing around as night approaches.

Skill

In this day and age the skill required to do many daily tasks has been reduced due to labour saving devices and technological advances. Firelighting is a fine example. Stick 3 or 4 firelighters in a fire, coal on top, throw a match in and hey presto, an instant fire. Not much skill required there. You're on a hike and need to light a fire. What do you do? Pull the Sunday newspaper from your rucksack, crumple them up, throw a

few sticks on top, use about 3 or 4 boxes of matches to get it lighting and hey presto a lovely 'flash in the pan' fire. All ablaze until the newspaper burns out. Then you spend the next half hour puffing and blowing the fire to boil a pot of water. The result - I'll bring a flask with me the next time, we'll cook on gaz next weekend - Scout skills out the windows.

The ultimate test

You should not be considered a 'real' Scout until you can light a fire in any conditions with only one match (okay you can have two, just in case you have a bit of bad luck when striking the match).

No paper or man made combustible should be allowed. Once this skill is taught the Scout will retain it for his Scouting life and can be a teacher of this skill to his Patrol.



Back to basics

Before you can learn anything about firelighting you must learn about the fire triangle. Its three sides represent air, heat and fuel. If any side is removed the triangle collapses and the fire goes out.

When lighting a fire, always ensure adequate ventilation, with enough fuel and a heat source to ignite this fuel. To produce flame, this temperature must be maintained to keep air and fuel continuously reacting. The more oxygen

introduced, the brighter the fire: by using the wind, or forcing a draught, the fire is fanned to a high temperature and rapidly burns fuel. By reducing the ventilation the fire burns less fiercely and embers are allowed to glow, needing less fuel.

If these principles are understood, smokey fires can be avoided. Smoke is the result of poor combustion - with care, smoke can be virtually eliminated.

Getting ready

Collecting wood is usually a job for the youngest Scout but yet the most important part of lighting a fire. Three

types of fuel are required : tinder, kindling and logs each have a special purpose in lighting the fire.

Tinder

Tinder is the first material that the flame of the match will touch, therefore its role is most important. Needless to say it must burn first time and must be bone dry. Birch bark, dry grass, fluff from your pullover or pocket linings, dry pine needles and wood shavings make excellent tinder.

The most successful tinder is wood shavings which are obtained from dry sticks using your trusty penknife (the Swiss army type, no Scout should be without one). While whittling wood shavings from sticks you also create fuzz sticks. The fuzz sticks burn like matches and fall into the next area.



Kindling

Kindling is the next step and consists of fuzz sticks, dry twigs and other materials such as bark and pine cones.

The job of kindling is to carry the flame

from the tinder and give it strength so that we can get down to the serious business of logs.

Logs

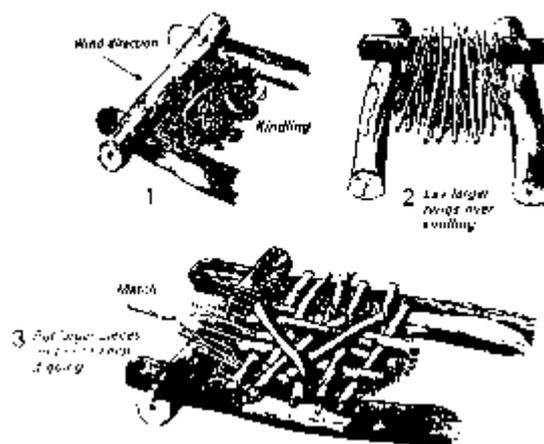
A wide variety of logs will be required from those slightly bigger than kindling to those about 75 mm in diameter. When cutting it is best to cut them small so that you can control the size of the fire. If they are large the fire can become unruly and dangerous. Any wood you burn must be dead. Never cut down branches which are live, they won't burn anyway. Different woods burn better than others. Beech is very good if you need a good flame but it burns

away quickly. Oak is slow burning but is hard to light, however, when it gets going, provides an even heat and little smoke. An ideal wood for cooking on, as it is smokeless, it makes cooking on a fire pleasurable. Holly and hawthorn are great for kindling. So next time a fire is need select the best timber from the best trees available and don't always send the youngest Scout out to collect the firewood.

Lighting the fire

Arrange your wood around the fireplace in easy reach, enough wood to get the

fire going only. Keep the rest in the woodpile away from the fire.



Lay a small bed of dry twigs on the clay if it is damp or wet. If clay is dry proceed.

Using your penknife slice off a dry stick a number of small shavings. If the stick is anyway damp cut down into the stick, it will only be wet on the surface. These shavings should be as thin as possible, so thin that they curl. Cut these shavings away from the stick. You will need enough shavings to make pile the size of your fist.

Again using your penknife cut long thin shavings about 200 - 250mm long. You will need about 12 or more.

Don't throw away any of the sticks used in step 3 and 4 but convert them into fuzz sticks once you have what you require.

It is important in step 3 or 4 and 5 that your shavings and fuzz sticks are white wood. That is to say that they are not twigs covered in bark which can be damp or wet.

Place the fist full of small curled shavings on the ground loosely. Do not squeeze them tight - remember the fire triangle, air circulation.

The lighting of the match is most important. Remember if you want to be

listed in the honour rolls as 'real Scouts' you must light your fire with only one match. Crouch down as close to the fire as necessary. Strike the match and keep alight in cupped hands. Most matches go out because they try to light something before the match is alight. So, hold the match in your hand in such a way that the match can catch alight. When properly alight then put the match to the shavings in the same direction as the wind is blowing so that the flame is blown into the tinder so to speak.

Care for the small bundle of shavings so that it catches alight, feeding small shavings to the flames.

As the shavings catch fire slowly add the long, thin shaving to the fire. Then add the fuzz sticks.

The fire should now have a good flame and you can now add your kindling. As it burns brightly feed sticks and logs to the fire and slowly build it up.

Using the method as described above a quick bed of embers can be built up, thus providing a firm base for the fire. Sometimes it will be necessary to blow gently on the flames to fan them along.

Clean up

When you are finished with the fire you should ensure that it is properly out. If you are using a trench fire then the trench should be scraped clean and the soil revitalised by raking with a stick. The sods that have been removed should then be placed carefully back into the trench and gently tramped back into place particularly at the edges. If the area around your fireplace is dirty with wood chippings etc. then it should be cleaned up. The grass around

your fire will be trampled down so lastly rack it with a stick. If this has been done correctly you should have difficulty finding the fireplace in a number of days. The use of an altar fire is one sure way of preventing damage to the ground and is prepared over a trench fire.

Remember, a Scout leaves nothing but his thanks.

Wood Burning Qualities

These hardwoods burn well and slowly
ASH, BEECH, HAWTHORN, OAK AND
HOLLY

Soft woods flare up quick and fine
BIRCH, FIR, HAZEL, LARCH AND PINE

ELM and WILLOW you'll regret
CHESTNUT green and SYCAMORE wet.