

SURVIVAL SKILLS - FIRE

Fire is one of the most basic skills to have, yet it is quite amazing how many people can't start a fire without dry wood and fuel at hand. I won't go into minute detail on this subject, as there are plenty of sites out there that already do. This site is made primarily for those who already have some modicum of outdoor skills. Fire is a skill that should be practiced by anyone who spends time away from civilization. Anyone can practice making fire in their backyard. Fire is the means to warmth, water purification, cooking food, and a general sense of well being. The following tips will help you to start fires in less than ideal conditions with limited tools (I practice with flint and steel, but prefer a lighter when available).

Rule number one for a fire is similar to that for shelter... LOCATION, LOCATION, LOCATION!!! Find a place that is out of the wind and elements, that has ample fuel at hand, and that doesn't cause a hazard. It's hard enough surviving in a forest, it's even harder trying to survive in a forest fire! The more you do in preparation before ever striking a match, the easier it will be to start and maintain a fire. A large boulder is usually a prime place to build a fire. Besides acting as a wind break, it will also reflect warmth back at you, and will keep the smoke flowing up the side of the rock face, and out of your eyes.

Make your fire as small as possible... you'll use less wood, and therefore less energy. If you're using the fire as a signal, you can still keep it small, yet have a large pile of dry material ready to throw on at a moment's notice.

To build a typical campfire, you'll need three types of fuel . These are Tinder, kindling, and logs. The first rule of fire making is to always have twice as much of each as you

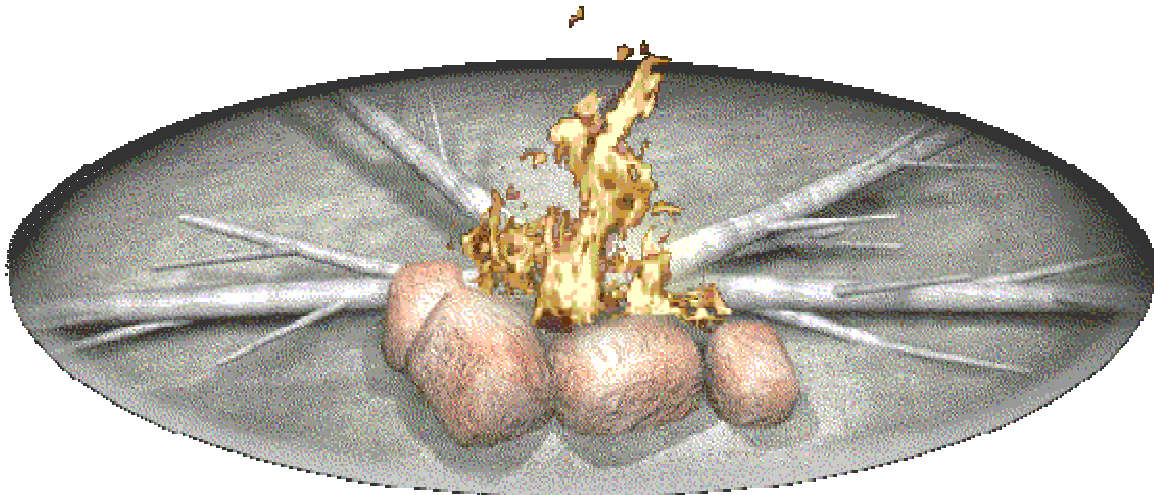
think you'll need. Have these ready before you ever strike a match. Whereas the logs and kindling are typically just little sticks and big sticks arranged in a nice tepee or log cabin arrangement, I will not waste time comparing the burn rates of different types, etc. In a survival situation, the hard part is getting the first flame to take to your tinder. Once you have a nice little pile of tinder material burning, it's relatively easy to get the rest of the fire going, so I will not waste time explaining it. I will focus on some tinder sources and tips.

Know your tinder sources! There are a multitude of mosses, grasses, and other thin and fibery materials that can be easily ignited. A key to these is that they need to be dry. When walking along in the woods, I collect wispy looking materials, and put them in my shirt pocket (body heat dries them out in a hurry). Some other great tinder that will light in just about any conditions are as follows

- Cat-o-Nine Tails. The large bulb at the top of this plant has enough "fluff" to start a LOT of fires.
- The large, black, lumpy growths on the sides of birch trees is a type of fungus that burns VERY well. Lop or break off a clump. It is orange to brownish on the inside. This can be ignited with a spark and forms a very nice coal. This material can also be used to carry fire from place to place. This stuff may be orange, but it's gold to me!
- Low lying, gnarly pine shrubs and trees (common in sandy soils) build up amazing amounts of sap. The wood becomes infused with it and is VERY flammable. Dead branches on these fill with sap to seal them off (also makes them waterproof). Use these. A small piece can be used to start many fires. Shavings from this type of wood will ignite with nothing but a good spark. A little goes a long way. If you find a piece of this, chalk it amongst your assets, and find a pocket for it.
- Pocket Lint... No Kidding... if you knew how flammable this stuff really was, you'd be carrying a fire extinguisher around with you. It only takes a spark. Once I learned this, I became fanatical about cleaning the lint screen in my dryer !!

TYPES OF FIRE

LAZY MAN FIRE - Fire making is not all about starting the fire... sometimes it's about how you maintain it! Here's a type of fire called a "Lazy Man's Fire". If you are in a survival situation, save your energy. Don't burn energy chopping firewood. Feed large branches and logs into the fire, and let the fire do all the work (see below). Be careful with these, as they must be watched more closely than a fire contained in a proper pit. As the logs burn, move each further into the fire. It's amazing how much wood you can gather when you're not wasting time chopping or sawing!



I prefer this fire type to all others, as it saves a LOT of unnecessary chopping!

Fire Piston - A VERY Cool Lighter?

One of the pieces of kit that I tried out is called a Fire piston. A fire piston is, quite simply put, one of the the coolest concepts I have come across in quite some time. Just when I think I've seen it all, some new piece of kit like this comes along, and makes me have to go camping yet again. A fire piston is based on the fact that when a gas is compressed, heat is generated. This is the reason that a bicycle pump tends to get hot (and the same reason that an aerosol can gets cold as it loses pressure).

The Fire Piston has three primary parts. An outer barrel with a smooth bore (plugged at the base), a plunger with a hollowed tip, and a gasket to seal them effectively. It is elegantly simple in its operation as well. A small piece of tinder is inserted into the hollowed tip of the plunger. The plunger is then inserted into the barrel and is given one or more hard thrusts, which ignites the tinder. You then remove the small coal that forms, and drop it into your waiting dry tinder and blow to flame.



NOTE on the Fire Piston Project !!! What can I say about fire pistons? Yes, I tried to make one. After a few go 'rounds, I have one that "works". This was done with some machining, laborious polishing of the bore, fitting the piston with O-rings, etc etc. After making it, I found that using it is easier said than done. If you have some VERY dry tinder, and you work it just right, you can "ignite" it. This means that you'll end up with a tiny smoldering piece of lint or whatever you used for tinder.

I can't even imagine being huddled in the snow lost at night and trying to find both tinder

and fuel dry enough to use with a fire piston! My survival kit contains a Bic lighter, a magnifying glass, a ferrocerium rod*, and a few other odd and ends that can be used to build a fire. As a smoker, I also typically have my trusty Zippo on my person as well.

To sum up.... stick with Bic like normal folks, and you'll never want for fire.