

A Nice Warm Fire

- Use hardwoods for fire-making. Softwoods catch quickly but also burn very quickly and throw off lots of sparks.
- Dead branches on evergreen trees are drier than any wood on the ground. You'll find dead wood near the base of most of these trees. The twigs make great tinder; use larger sticks once the fire is burning well.
- Break open dry cattails for an excellent source of tinder.
- Check inside hollow logs, stumps or small caves for dry leaves you can use to get a fire started.
- If worse comes to worst and you can't find dry fire-lighting materials, check your toilet kit. A stick of solid deodorant burns well.
- Survival experts recommend that campers and hikers carry along two or three self-lighting emergency flares. They burn as long as 20 minutes, which means you should be able to start a fire with them under almost any conditions.
- If you're out of matches, on a sunny day you might be able to ignite tinder with the reflector from your flashlight. Remove the reflector and stuff some cotton wool or paper into the bulb hole. Hold the reflector to catch as much direct sunlight as possible. Like a magnifying glass, it will concentrate the heat until the cotton or paper catches fire.
- Carry candle stubs as fire starters for wet wood. A candle will burn a long time in the tinder to dry the wood.
- To get a fire going quickly, toss a couple of candle stubs into the kindling before lighting.
- Old paper egg cartons, stuffed with drier lint with melted candle wax makes a great firestarter and you recycle some stuff.
- Make waterproof firestarters by tightly rolling a newspaper to a diameter of about 1 ½ in. Tie string around it every 2 inches, then soak it in melted paraffin. When the wax is hard, cut the fire stick into 2 inch lengths. Package in plastic bags to carry in your pack.
- To make it less likely for smoke to follow you around your fire, build a short wall of rocks behind one part of the fire ring and sit on the opposite side of the fire. The smoke will rise towards your wall and leave you alone.
- Now that you've got a nice roaring fire, why not bake a cake? You don't need an oven. Put the mixed batter in a metal baking pan. Rake aside the fire coals and place the pan on the hot ground. Cover with a metal dish and rake the coals back around the pan. Your cake should be baked in 25 to 35 minutes.
- It's much easier to wash soot off the pans you use over your campfire, if you coat the outside of the pans with a thick layer of dishwashing liquid before you cook.
- When cooking over coals or a small fire, line the fire box with heavy duty foil and build the fire on the foil. It reflects the heat and distributes it more evenly for more efficient cooking. Clean-up is easy, too. Simply bundle up the ashes and drippings when you're done.
- Large # 10 cans, usually available free from restaurants, are great for boiling water and cooking food. Their light-weight makes them ideal for backpackers, and you can stuff them with other things (stove, food, and clothing) to save space.

Tricks of the trade

- Never use paraffin, petrol or methylated spirits to light or revive a fire.
- Use a left over candle end to build a wigwam shape around (see Teach Yourself for details).
- Get everything ready first. The kindling (thin twigs and sticks) is very important. If it has rained recently, dry kindling will still be found under bushes, trees and so on. Keep your kindling dry while hunting for larger twigs and small sticks.
- Feed a fire - don't smother it. Fires are fickle and tend to go out if they are not looked after in the early stages.
- Replenish fuel frequently, remembering that it is important not to allow the fire to become too 'dead'.
- Leave the fire place as you found it, so that there is no trace that you have been there.
- For real emergencies, always keep a supply of waxed matches and take readymade firelighters.
- If you are intending to cook on your fire, it should not only be 'smokeless' but also 'flameless'. Hot embers give a constant heat suitable for cooking. Do not cook over flames.

Fire Starters and Helpers

Burning stuff is fun, so what better excuse to burn stuff than to do research on making fire starters? It's also fun to make fires in primitive or interesting ways, like with the sun or by friction or with sparking tools. But, for those times when you just want a good fire and you want it fast, you should have some items handy to help make that fire fast. Here's a list of some fire starters and helpers that you can find or make. Have fun!

These things should be kept in ziploc baggies to keep them dry and to keep the rest of your gear clean. Some of them can be messy and sitting in your backpack in your car in the sun will melt wax and other stuff.

- Birthday Candle - easy to light, little weight and space, waterproof, long burn time, use multiple times.
- 'Trick' Birthday Candle - even better, this one is great in wind and rain.
- Dryer Lint - the fuzz that wears off your cotton clothes makes great tinder. Keep some in a film canister or baggie.
- Snack Food - Just light some Fritos, Cheetos cheese puff or Pringles potato chip and see what I mean!
- Vaseline - rub into cotton balls and keep in a film canister. They will start with a spark.
- Wax Sticks - commercial version of the homemade wax and woodchip starters.
- Fire Lighters - pressed wood and wax with a match tip.
- Fire Paste - looks like a tube of toothpaste, this fire starter gel smells terrible, weighs a bit, but burns great.
- Purell - The hand sanitizer evaporates quickly because it is 66% alcohol. A squirt of this on tinder ensures a quick light from any flame. Be careful because the alcohol flame can be invisible.
- Pinecones - Pick up dry ones under pine trees. The high pitch content really burns. They are natural fuzz sticks.
- Fatwood - the pitchy parts of pine knots or heartwood. Prepare this as small sticks of kindling and keep some in a pouch.
- Wax and Woodchips - make these yourself. They take up a little space and weight, but are fun to make yourself.

Putting Out Your Campfire

By far more important than building a good campfire is to make sure you completely put it out! Every year, careless people destroy thousands of acres of wilderness and forest land by leaving campfires.

- Extinguish your campfire at least 1/2 hour before you plan to leave.
- By planning ahead, you should have burned down all the coals to ash. There should be very few chunks of coal left and no partially burned wood.
- If you are extinguishing a burning fire rather than hot ash and coals, first use a stick to stir the wood and ash. This is to extinguish the flames as much as you can.
- Sprinkle water over the coals. If they are hot, this will cause a lot of steam mixed with ash so avoid standing directly above or downwind of the fire. You may want to move your gear too.
- Once you have wetted down all the ash and coals, use a stick to stir everything together.
- Continue to sprinkle water and stir until no more steam rises and you hear no hissing steam.
- Let the fire area sit for 10 minutes. Good opportunity to get more water.
- Feel the area for hot spots - hold the back of your hand close to the ash, but not in it. Feel around for heat spots.
- If everything is cold, you've done good! If there is still heat, sprinkle more water and stir.
- Once you feel no heat, the ash can be disposed of:
 - Scoop all the coals, ash, and partially burned wood into a bag, cooking pot, or some other container.
 - Carry it far out into the woods and spread it around.
 - Or, carry it down the trail a 1/2 mile and then disperse it far off the trail.
- Scatter unused wood back into the surrounding woods or leave it nicely stacked if this is a high-use, established camp site.

Tips & Warnings

- Using commercially available tinder will make fire-starting quicker.
- A great natural tinder is birch bark. Find a dead and down tree, peel the bark from the tree, and rip it in quarter-inch-wide strips. When the smoldering steel wool is placed on this tinder, it ignites.
- Carry homemade tinder, like the lint from a drying machine, to speed up fire-making.
- Practice this skill at home before your life depends on it in the woods.