

Camp Stoves

There are many different types of camp stoves but basically they all fall into 2 categories. They are either backpacking stoves or camping stoves.

Backpacking stoves are light weight, single burner stoves used for back packing or bike touring. These stoves range in weight from 80 grams to 1 kilogram. They are usually collapsable for easy storage.

Camping stoves are heavier. They most often have 2 burners but can have 1 or 3. They have a table-like surface and usually a folding lid for storage and wind protection. These stoves are used for car, boat, canoe or even horseback camping.

In this months program information, I am only going to deal with camp stoves. We will leave backpacking stoves for another day.

Camp stoves can either burn liquid fuel or gas fuel but except for 1 Primus model, camp stoves use one type of fuel or the other - not both.

The liquid fuel stoves that you will encounter will more than likely burn white gas. This fuel is sold all over Canada and the US in most hardware stores like Canadian Tire. It will be sold in a can or a bottle and will be labeled, "camp fuel"



fuel filter funnel



The liquid fuel will have to be poured into your stove's fuel tank. This is best done with a fuel filter funnel. Once you have filled the fuel tank it will be necessary to pressurize the gas in order to make it burn. This is done by pumping air into the stove's fuel tank with a small hand pump attached to the end of the tank. (Notice the small silver knob at the right of the red tank in the picture below). Usually 10 or 15 pumps will be enough to pressurize the tank. Once the tank is pressurized you simply light a match or striker, turn on the burner and light it.

As you burn off the fuel, pressure in the tank decreases and it will be necessary to pump more air into the tank. This can be done while the stove is on and burning. However, never refill the tank while the stove is lit.



Gas fuel camp stoves look very much like liquid gas stoves except they will not have an attached fuel tank.

Gas stoves can burn a variety of gases but the stoves you will be using will burn propane. Propane is sold in refillable large tanks or much smaller propane canisters. The smaller propane canisters screw directly into the stoves hardware as shown below. If you are using a large propane tank you will have to have the necessary adapter and hoses to connect the stove to the tank. Some tanks have a left hand thread and some have a right hand thread so be sure you know which way your hose attaches to your tank.

Propane stove and canister



adapter and hose



propane tank



Camp stoves are very convenient and easy to operate. However, you should always read the owners manual (if it is still available) and familiarize yourself with your stove especially before you try to instruct the girls in there use. Aside from that, here are 15 rules that should be followed for your protection, the girls protection and for mother natures protection

1 – Girls need to be properly instructed on the use, refueling and storing of a stove. Changing propane tanks and fuel bottles should only be done under the instruction of a knowledgeable adult.

2 – Use only approved, undamaged fuel containers. Keep them far from open flames and any other source of heat.

3 – When you need to change the propane cartridge or when you need to refill liquid fuel containers, allow the stove (or lantern) to cool completely . Always fill your stove (or change the fuel canister) outdoors, never inside a tent or cabin. To avoid lighting spilled fuel, don't light the stove in the same place you filled it.

4 – Refill stoves or lanterns outside away from any other flames or heat source. Use only the fuel(s) that your stove is designed to burn. For liquid fuel use a funnel and then allow any spilled fuel to evaporate before attempting to ignite your stove. Don't use old fuel that has been stored for a long period of time. Fill the stove or fuel bottle only to the safe fill line. Ensure the pump is well-lubricated and functioning.

5 – Place your camping stove on a cleared, level surface. On snow, place it on a large piece of plywood or sturdy, well-balanced pieces of wood. This will keep the stove warmer and reduce the tendency for it to tip over.

6 – Check stoves, hoses and tanks before each outing. Check for bent valves, cracked hoses and stripped treads that could cause leaks and possible explosions. Use a small amount of soapy water to check for leaks. Any bubbles indicate leaks. Retighten the connection and recheck. If there are still leaks, don't use the stove.

7 – Keep the fuel tanks as far from the actual camping stove as possible. Clear away any flammable debris near the stove before lighting. Always keep your head and body to one side when lighting in case it creates a flare up.

8 – Never leave a lit stove or lantern unattended.

9 – Do not over load the stove. These are not made for heavy duty cooking but transportability.

10 – Do not discard empty containers. If they are not refillable, they should be disposed of properly. Pack out what you pack in.

11 – Camping stoves or lanterns must never be used inside a tent or any building with poor ventilation. Fire and carbon monoxide poisoning are significant hazards.

12 – All liquid fuel bottles/canisters should be bright red or at least marked well so they don't get confused with water bottles

13 - Carry fuel cartridges away from all foods. This may mean carrying it on the outside of a back pack.

14 - Shut off the supply valve at the tank before disconnecting hoses. Allow the extra gas in the line to bleed off. Empty your liquid fuel stove before you store it.

15 – Always read the manufactures guide lines and follow them.

Camp stoves are a necessary part of much of the camping we do with our girls. Once girls get to Guide age, they should become familiar with camp stoves. I also believe they should become familiar with cooking on a fire but that is not always practical or feasible. Camp stoves, if used correctly, are safe. The best way to ensure they are used correctly is through familiarizing yourself with their use and then through proper instruction and supervision of the girls. Proper supervision does not mean adults only use the stoves. It means we teach the girls to use the stoves and then we let them do it. All the teaching does not have to happen at camp. Why not have a “camp stove night” where you show the girls the stoves and how to use them and then let them practice setting them up and lighting them. Finally use them to make hot chocolate or some other snack.

The safe use of camp stoves is like any other skill we learn. The more we do it the better we get. Have fun with this. Let me know of any “clever” snacks you or your girls managed to create on your camp stoves.

Happy camp cooking

Joy

