

# Stoves and Cooking in the Winter



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# Stove Basics

- Being able to produce hot food and drink quickly is essential in winter.
- Reliability, rather than weight or bulk, of your stove is paramount.
- You will need more than twice the amount of fuel in winter than you require in the summer.
  - ½ cup of kerosene or white gas per person per day
  - 1 cup of alcohol per person per day
  - 7 - 9 fl. Oz/198-250 g butane/propane per person per day (one standard size canister)
- Make sure you have at least a day's surplus of fuel in case of bad weather, water being unavailable, etc.

# Butane/Propane Stoves

- Don't use pure butane. It is useless in below-freezing temperatures.
- Lighter weight than other types of stoves.
- Work well if the cartridge is full, but the heat output lessens as the cartridge is depleted.
- These stoves are best suited to three-season use.



# Alcohol Stoves

- Alcohol is not a hot fuel. Twice as much is needed for the same heat output as other fuels.
  - Weight is an issue. Fine for short trips.
- Work well in cold & stormy weather.
- Highly reliable ... no moving parts.
- Easy to use
- Safe ... fuel isn't pressurized (generally...)
  - Only caveat: refilling the stove after it has gone out during use.
    - Flame is hard to see.
    - To avoid igniting your fuel bottle, pour a little alcohol into the burner cover and tip it into the stove.

# Alcohol Stoves

Trangia brand picture below.



For more information, visit <http://zenstoves.net/>

# Kerosene & White Gas Stoves

- Best for maximum heat output unaffected by temperature.
- Kerosene is harder to light than white gas and won't ignite if spilled.
- White gas is easier to light than kerosene, but still needs priming.



# All in one...

- Some stoves can burn white gas, kerosene, gasoline, diesel, white spirit, jet fuel, and more.
  - MSR X-GK EX or MSR Dragonfly
- These are light weight, fuel efficient, stable, simple to use, and are easily maintained.
- Preferred stoves for international expeditions.



MSR X-GK EX

Minimum weight: 13.2 oz

Boils 1 liter of water in 2.8 mins.

# Stove Accessories

- Fuel bottles
- Wind screen & heat reflector
- Matches & lighters in waterproof container
- Base to prevent stove from melting down into the snow
- Repair kit



# Stove Safety

- Read instructions thoroughly and practice at home before heading out.
- When cooking, make sure the cook area is clear of people & flammable items and that the cooking platform is stable.
- If using white gas, be careful not to spill it on exposed skin. It evaporates rapidly and can give you frostbite.
- If using a stove in the tent vestibule (do this only if the weather is absolutely miserable)...
  - Make sure there is adequate ventilation.
  - Make sure nothing flammable is within touching/melting distance.
  - Kerosene/white gas stoves should be lit outside and then brought under the fly.

# Campfires

- Use as a last resort or in emergencies.
- Look for an area that will be least affected.
  - River banks that will be swept clean by snow melt.
  - Don't light fires above timberline.
- Look above you. The heat from the fire can melt snow in over-hanging branches, causing it to fall off and douse your fire.
- Look below you. Make a substantial platform of logs and build your fire on top.
- Wood for fire should be gathered from dead sticks/logs on the ground.
- All wood should be burned to ash and then scattered widely so that you leave a minimal trace.

# Cooking a Meal

- Make sure your fuel tank is more than half full.
- Place the stove on a surface that will not melt.
- When you have your pot ready, light the stove.
- When cooking, remember to use the windscreen and heat reflector.
- Start the meal with hot drinks. When everyone has one, start the main meal.
- Clean up thoroughly and pack out all waste.



# In the Kitchen...

- If you are out for an extended period of time and decide to set up a base camp, it is a good idea to set aside an area for a kitchen.

