

HOW TO STAY WARM WINTER CAMPING

SHELTER

Site Selection

- ◆ Stop early and set up camp before temperatures drop.
- ◆ Choose a campsite that is sheltered from wind and weather.
- ◆ Stay away from open water since the humid air will feel cold.
- ◆ On clear nights, avoid valley bottoms as cold air pools there.

Shelter Design

- ◆ Sleep in a shelter rather than under the stars. A shelter reduces heat loss.
- ◆ Make sure your shelter is wind and weather proof.
- ◆ Use a 4-season tent as it will protect better than a 3-season one.
- ◆ Any tent should have at least one vestibule for wet clothing and gear.
- ◆ Don't rely on building a snow shelter—such as a quinzee or igloo—unless you are familiar with effective and safe design.
- ◆ Sharing a shelter is warmer than camping alone.



Choose a tent with vestibule

Camp Set-Up and Routine

- ◆ Set up camp as soon as you stop for the day.
- ◆ Build your kitchen and latrine in separate, sheltered areas.
- ◆ Pace yourself while setting up to minimize sweating.
- ◆ If you're warm, you can wear damp clothing until it dries. If not, change into dry clothes and layer up when you stop moving.
- ◆ Leave wet clothing and equipment in the vestibule or outside.
- ◆ Exercise lightly to raise body temperature before going to bed.
- ◆ Spend most of your time in the shelter and in the sleeping bag.

NUTRITION AND HYDRATION

Cooking

- ◆ Insulate the stove from wind and snow so it works faster.
- ◆ Melt snow and cook at the same time as setting up camp.
- ◆ Cooking in your vestibule is dangerous. If you must do it, keep flammables clear, ventilate well, and have an escape route.
- ◆ Go to bed as soon as possible after eating.

Nutrition

- ◆ Choose hot foods that cook quickly, like freeze-dried meals.
- ◆ Eat about 50% more calories than you would in summer.
- ◆ Focus on foods that provide sustained warmth from a mix of carbohydrates (+/-50%), fats (+/-30%) and proteins (+/-20%).
- ◆ If there are no wildlife concerns, keep some snacks handy at night. Have one every time you're up to pee or feel cold.



Protect kitchen and stove



Freeze-dried meals cook fast

Hydration

- ◆ The urge to drink will be suppressed. Drink even if you don't feel thirsty.
- ◆ Hot liquids will help you keep warm.
- ◆ Avoid alcohol, which makes you feel warmer temporarily, but actually lowers your body's core temperature by increasing blood flow to the skin.

SLEEPING SYSTEM

Sleeping Bag

- ◆ Fatigue is a major factor in feeling cold. Rest and sleep plenty.
- ◆ Use a mummy or barrel-shaped bag. Avoid rectangular bags.
- ◆ Ensure the bag is the right size and length to minimize dead air.
- ◆ Get a winter bag rated for colder temperatures than you expect to encounter—it is easier to cool down than to heat up a bag.
- ◆ Synthetic bags will feel colder over time as the insulation breaks down from being repeatedly compressed.
- ◆ Add a liner or over bag to increase the comfort range.
- ◆ Bring extra dry clothes into your bag to displace air. You can use these to cover cold spots without putting on another layer.
- ◆ Zip up your bag instead of using it as a blanket. You can easily unzip the bag or take off layers to prevent overheating.
- ◆ Use the integrated hood and drawstrings to seal in warm air.
- ◆ Don't breathe inside the bag as the moisture will make you cold.



Use a winter mummy bag



A warm sleeping pad is critical

- ◆ Fluff up the bag before getting in.
- ◆ Some bags can be attached to a partner's bag to share heat.
- ◆ On multi-day trips in very cold conditions, consider using a vapour barrier liner to protect the bag's insulation from moisture.
- ◆ Once in the bag, avoid going outside until morning.
- ◆ Use a pillow, ear plugs and eye shades to stay asleep longer.
- ◆ In the morning, air out the bag and dry it in the sun if possible.

Sleeping Pad

- ◆ An insulated sleeping pad is critical to prevent losing body heat into the cold ground or snow.
- ◆ Your weight will compress the sleeping bag insulation below you so it cannot be counted on to protect you from the cold.
- ◆ Use a winter sleeping pad with an R-value (insulation value) of about 5 or higher (or combine pads to reach that number).
- ◆ Use a full length pad if you doubt your ability to keep warm.
- ◆ If you forgot a pad—or the pad does not insulate enough—add clothing, a tarp or an empty pack between you and the ground.

Clothing

- ◆ Change into dry clothing to sleep.
- ◆ Use wool or synthetic clothing, as it wicks away moisture.
- ◆ Add and subtract layers so you stay warm but don't sweat.
- ◆ Keep extra layers and tomorrow's clothing warm in your bag.
- ◆ Wear a hat, socks, and gloves as needed.
- ◆ If you're very warm, bring your insoles and damp socks into the sleeping bag, which helps keep your feet warm in the morning.

Peeing

- ◆ It takes energy to keep your urine at body temperature, so pee before going to bed and anytime you feel the need to.
- ◆ Use a pee bottle so you don't have to go outside in the cold (female adapters are available).
- ◆ Use the bottle without fully getting out of your sleeping bag.

EXTERNAL HEAT SOURCES

- ◆ Bring several sets of chemical hand and foot warmers.
- ◆ Fill a bottle with hot water, wrap it in an insulating cozy or socks, and keep it in your sleeping bag overnight.
- ◆ Exercise extreme caution with lanterns, stoves and heaters as they consume oxygen and produce gasses that can kill you. They can also start a fire, so keep them away from combustibles.
- ◆ Some propane heaters have catalytic converters designed for indoor use. Consult the manufacturer if this is safe with yours.

- ◆ Use only candles protected in a lantern, never open candles.
- ◆ Do not use a stove to heat a tent, unless both stove and tent are made for this by the manufacturer(s).
- ◆ Don't leave lanterns, stoves or heaters unattended, and never leave them burning while sleeping.
- ◆ You should not rely on camp fires for heat except in limited cases.



A portable propane heater