

Staying Warm In The Winter

The most important thing that anyone brings with them on a winter camp out, or any camp out, can't be bought in any store or made at home. It is a positive mental attitude. Don't go camping without it! Keep warm by following the guidelines that spell the word: C-O-L-D

- **Clean** - Clothing should be clean. Since insulation is only effective when heat is trapped by dead air spaces, keep your insulating layers clean and fluffy. Dirt, grime, and perspiration can mat down those air spaces and reduce the warmth of a garment.
- **Overheating** - Avoid it. Pace your activity to avoid overheating which causes you to sweat. Sweat will dampen your clothing and cause chilling later on.
- **Loose Layers** - Use loose layers to keep warm. Warm air is trapped between the layers, keeping you warmer than one single bulky layer. By adding or removing layers, you can regulate your body temperature. Wear loose fitting clothes that will not restrict the blood flow and that will ventilate or wick the moisture away from your body.
- **Dry** - Keep all clothing, bedding and your body dry. Damp clothing and skin can cause your body to cool quickly, possibly leading to frostbite or hypothermia. Keep dry by: avoiding cotton clothing, brushing snow from your cloths before it melts, and loosening the clothing around your neck and chest.

What Kind Of Clothes To Buy

Choose your clothing wisely. Make sure it will protect you from the wet, wind and cold. Clothing should be bulky enough to trap air and loose enough so you can move freely. The appearance or style of your clothes is NOT important. Fancy, expensive skiwear is often not the right choice.

Wool, Fiberfill, Holifill, Polarguard and Thinsulate are good choices because they keep you warm longer when wet. Wool clothing is ideal in cold weather because it is durable and water resistant and even when soaked it can keep you warm. Wool makes excellent blankets, socks, hats, mittens, sweaters, and even pants. Army surplus stores have good wool clothing for winter camping. If wool irritates your skin, you may be able to wear wool blends or wear it over clothing made of other fabrics. Many synthetics are also good in winter for use as windbreakers and insulation.

Footwear is important in winter camping. Use the layering system on your feet. Start with a pair of silk, nylon, polypropylene or thin wool socks. Then layer on a pair of heavier wool socks. Make sure your boots are big enough to wiggle your toes, with two pair of socks on. If your feet get wet, change your socks as soon as possible.

One method that can be used in wet conditions is to put plastic bags on your feet, either between the two layers of socks or directly on your feet. NEVER wear cotton socks under plastic bags as they will get wet from your perspiration and your feet will feel cold. Thin synthetic socks under the plastic bags with heavy wool socks over them are the best combination.

Mittens keep your hands warmer than gloves. In very cold conditions, wear glove liners in your mittens. Additionally, a good pair of gloves lined with Thinsulate is a must for many tasks around camp. Extra gloves and/or mittens are an absolute necessity as gloves and mittens tend to get very wet and/or lost.

Stocking hats are great to wear outdoors and at night in your sleeping bag. Even better is a stocking hat (ski mask) that covers your head and neck, and all of your face except your eyes, nose and mouth. A coat with a hood is also helpful, as is a scarf around your neck that can be used to cover your face if needed.

Long Underwear is an essential part of the layering system. Do not buy cotton or cotton blends. Cotton is a summer fiber; it keeps you cool.

Helpful Hints - During The Day

1. Eat food high in calories – beef, nuts, stews, cheeses. Eat lots of snacks.
2. Prevent heat loss. Your body loses heat from:
 - Wind – wear clothes that protect you from the wind
 - Wet – you MUST STAY DRY
 - Radiation - wear a hat. 50% of your body heat escapes from your head
 - Breathing - keep your face and mouth covered if it is really, really cold
 - Conduction – avoid contact with cold objects. Keep your gloves on and drink warm fluids
3. Keep your neck, ears and head covered. Up to 50% of your body heat escapes through your neck and head. Wear several layers on your neck and head, just as the rest of your body.
4. Hoods that extend beyond your face and has fake fur trim dramatically reduces the wind chill on the face.
5. Breathe through a scarf. It will warm the air before it reaches your lungs and help keep you warm.
6. Outermost layer should be WINDPROOF and WATERPROOF – both coat and pants.
7. Mittens are warmer than gloves because they keep your fingers together. Wearing large waterproof outer mittens with wool glove liners is a great idea. Always carry extra mittens and gloves. Change them, if they get wet.
8. Wear 2 pairs of socks – a polypropylene sock liner and a pair of woolen or wool blend socks are the best combination. Make sure you can still wiggle your toes. Cramped feet will freeze very quickly.
9. Wear warm, insulated hiking boots. Do NOT wear sneakers or your toes will freeze off! In extreme weather, wear felt lined "snowmobile" boots – waterproof on the outside with felt or Thinsulate liners. Boots must be large enough to wiggle toes with 2 pairs of socks. Cramped feet hurt and freeze!
10. Wear long johns (thermal underwear) – tops and bottoms. Bring an extra set to change into before going to sleep. It is important to change all your clothing before retiring.

11. Wear wool, if possible. If not wool, then wear Polar Fleece. Do NOT wear cotton. It retains moisture and gets wet easily. It will keep you cold....
12. Suspenders are better than a belt in the winter. The belt cuts off the warm airflow.
13. Wear the right amount of clothes. You should be comfortably cool – not hot. If you are hot you will get wet from sweat and become cold. Match your clothing to the exercise level. You need less layers when you are "working" than you do if you are "standing around"
14. You should never eat snow or drink lots of cold liquids. They will make your insides cold. Drink lots of warm or tepid liquids.
15. Drink lots of liquids. You lose a lot of body fluids on the cold and never even know it. Try to keep your water bottle warm by keeping it close to your body.
16. Be active enough to keep warm without sweating. Standing still or sitting for long periods of time will not keep you warm.
17. Carry a whiskbroom to brush the snow off. The idea is to KEEP DRY. If your clothes become wet, change them immediately.
18. Attach your mittens to your coat. Losing a pair of mittens could spell disaster to your fingers! Always carry an extra pair.
19. Bring a campstool. Don't sit on the cold ground.
20. Choose your campsite wisely. Avoid low-lying areas, such as, valleys, ravines, and canyons because cold air sinks and settles there. Also avoid the tops of a hill, vast open areas or other areas where the wind is strong. Wind makes cold feel even colder – wind-chill factor! Look for an area between these extremes, such as a small meadow, or a gentle sloping hillside.
21. Camp with a Southern exposure. It will get a lot more sun (solar energy) and will be warmer. Avoid the Northern exposures. They are colder. If you are in snow, look for the areas where the snow has melted – they get more sun.

Helpful Hints - At Night

1. Insulate your sleeping bag from the ground with a full-length foam bed pad. A close cell pad should be at least $\frac{3}{4}$ inch, while an open cell pad needs to be $1\frac{1}{2}$ inches thick. Place the bed pad on top half of a survival blanket silver side up allowing the exposed half to be pulled over the top of your sleeping bag as a cover.
2. Foam pads can be purchased at the Army/Navy store or Sports Authority for less than \$10.
3. Put a survival blanket on the floor of your tent, silver side up. It will keep moisture and cold out. Survival or Emergency blankets are available at Sports Authority, EMS, etc. for about \$10.
4. Make sure your bedding and sleeping clothes are dry. Air your bedding during the day to allow body moisture to escape. Sleeping bags will dry, even in freezing weather. The average adult loses one pint of body moisture while sleeping.
5. Never sleep with your mouth and nose inside the sleeping bag. Breathe outside of it. Your breath will make your sleeping bag wet.
6. Change your clothes before going to sleep. Your daytime clothes will be damp from sweat and are dirty. This will cause you to chill.
7. Put on clean socks and polar fleece booties for sleeping.
8. Wear a hat to sleep. 50% of your body heat escapes through your head.
9. Your sleeping bag needs to be a cold rated (at least -20 degree) bag. If not, use two bags, one inside the other. Alternatively, put a polar fleece blanket, sewn on 3 sides inside your bag for extra warmth.
10. NEVER sleep on an air mattress in the cold.
11. Keep your boots warm and dry at night. If necessary, after cleaning and drying them, put them inside a plastic bag and then in the bottom of your sleeping bag.
12. In the morning, put boot warmers in your boots before putting them on.
13. If you have removable boot liners, remove them before going to bed. They will dry quicker that way.

14. Wear a sweatshirt with a hood at night to keep your neck, head, and shoulders warm.
15. Dress and undress in your sleeping bag.
16. Keep your clean clothes inside your bag or underneath it.
17. Fluff your sleeping bag before getting inside.
18. Nibble on high calorie food before going to sleep. Pepperoni or cheese is a good choice.
19. Still shivering? Put on your rain gear – pants and jacket. It will act as a vapor barrier to hold in your body warmth.
20. Use the latrine BEFORE getting in that sleeping bag! No one wants to get up in the middle of the freezing night. But if you have to go, get up and go!

Other Hints

1. It always takes longer to do things in the cold – Plan accordingly.
2. Cooking time will double. Always use a lid on your pot to trap the warmth.
3. Start hot water for cleaning, before you start cooking.
4. Wear rubber gloves to wash dishes. They keep your hands dry.
5. Try to keep your menu to "one-pot" meals. Chili, stews, pasta and beans are good choices.
6. Always collect twice as much firewood as you think you need. Remember it takes twice as long to cook, so you use more fuel.