

# Cold Weather Camping Tips

Cold weather camping as defined by BSA is “camping in weather where the average daily temperature is below 50 degrees Fahrenheit and conditions are cold, wet, or windy.”

## TYPES OF COLD

- **Wet cold: 50° F to 14° F** The most dangerous. Wide temperature variations from melting during the day to freezing at night makes proper dressing difficult, and important. Damp conditions from melting snow or rain makes keeping dry difficult. *These are the most common type of conditions our Troop is likely to encounter.*

- **Dry cold: 14° F to -20° F** Ground is frozen and snow is dry and crystallized. Strong winds cause the most concern with keeping warm. Extra clothing layers and wind-proof outer garments should be added.

- **Arctic cold: below -20° F** Requires the most insulation and wind-proofing. Many materials change physical properties, becoming brittle. Only for the most experienced campers.

## Preparation

- Always bring a bit more than what you think you'll need – water, food, and clothes.

- Make sure that you have a good knowledge of the signs of frostbite and hypothermia. You should be able to recognize it in others and in yourself. Tell someone right away if you or another Scout is showing signs of cold-related problems.

Peter Antaya 2/22/2015 8:44 PM

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· Bring extra WATER. It's easy to get dehydrated in the winter. You aren't visibly sweating, so you don't think to drink water, but since the air is so dry, you lose a LOT of water through breathing.

Drink lots of water!

· Bring extra food that doesn't need to be heated or cooked. Granola bars, trail mix, etc.

· Keep out of the wind if you can. A rain fly for a tent can be pitched to serve as a wind break. The wind chill factor can often be considerable and can result in effective temperatures being much lower than nominal.

· Eat a snack. Staying warm is just like keeping a fire burning; every fire needs a steady supply of slow-burning fuel. Unlike a fire, your body will also need lots of water to help digest food and stay hydrated.

· Build a wind break outside your tent by piling up snow or leaves to a height sufficient to protect you when lying down.

· Exercise before bedding down to increase body heat. This will help to warm your bag quicker. Be careful not to start perspiring.

## **Clothing**

· Proper dress for cold weather camping is an absolute must for keeping warm and dry in order to have an enjoyable camping experience. AVOID COTTON! Cotton holds onto moisture, keeping it close to the skin, and thereby losing all insulation value. Perspiration which would normally drip off the body is absorbed by the cotton keeping it close to the skin, further cooling the body. This could easily mean the difference between comfort and

hypothermia. “Thermal” undershirts found at department stores are almost always 100% or 50% cotton. Go to the sports department and look for polypropylene. Most man-made fibers and wool will wick moisture away from the skin.

- Your body heats itself most efficiently when it’s enveloped in a layer of warm air. If your clothes are too tight, you’re strangling the cold right out of your body. Dressing in loose layers helps aid this convection layer of air. Tight clothes or too-tight boots can also restrict blood-flow.

- Layer like an onion to stay warm and comfortable.

- For this system to work, it’s imperative that each piece of clothing be sufficiently large so that every item can be worn at once, in any order, in the worst of conditions.

- When you’re active, wear only those layers needed to stay comfortable. As you cool down, add a layer. If you feel yourself heating up, simply remove a layer before you start to sweat.

### **Under Layer/Underwear**

- The innermost layer must wick perspiration from the skin and transport it to an adjacent, outer layer. For this to occur, the wicking layer must be very thin and in direct contact with the skin. Look for underwear tops and bottoms, face masks, liner socks, and liner gloves made from polypropylene, Capilene, Coolmax, Dryskin, Powerdry, Thermastat, and Thermax.

### **Insulating Layer**

- The middle, insulating layer traps air and restricts its circulation. This layer keeps you warm. **Remember, several thin garments are**

| **warmer and more flexible than a single thick layer.** It also makes it easier to regulate temperature if you get too warm by being able to remove some layers.

· Since cotton and down are very poor insulators when wet, look for pants, shirts, sweaters, jackets, vests, socks, hats, and mittens made from wool; piles and fleeces such as Berber Pile, Borg Pile, Synchronilla, and Polartec; and fiber fills such as Hollofil, Lamelite, Lite Loft, Microloft, Polarguard, Primaloft, Quallofil, Thermoloft, Thermolite, and Thinsulate.

### **Outer Layer / Shell**

| · The outer shell layer protects you from the wind, rain, and snow. For the upper body, a parka with a hood as well as wrist and waist closures is best. | Pants with waist and ankle closures work well to protect the lower body.

· Both of these garments should be sufficiently oversized so they'll fit over all of the insulating layers when they're worn at once in extremely cold weather.

| · Breathable, windproof shell garments are often constructed of Ripstop, Supplex, Taslan, Versatech, etc. | Waterproof and breathable shells are typically made from Gore-Tex, the industry standard, or Avalite, Entrant, Extreme, Hely-Tech, Ultrex, etc.

### **· Hat...A MUST!!!**

· Always carry a thin polypropylene balaclava (or face mask) as well as two warm hats as you can lose from 50 to 70 percent of your body heat through an uncovered head.

## Hands

- To keep from losing what little heat reaches your hands, use a layered mitten system consisting of polypro glove liners, one or two insulating mittens, and mitten shells.

- Get mittens with long cuffs. These keep hands much warmer than gloves. The cuffs should extend past the wrist. “Glomitts” are finger-less wool gloves with the finger part of a mitten attached to the back of the knuckles. Normally the mitten is over the fingers, but when it comes time to fiddle with the stove, or even light a match, the mitten part flips up and Velcro’s to the back of the glove.

- Under the mitten wear some type of thin acrylic knit gloves. You can either buy glove liners at some outdoor store or go to the women’s section of some discount department store like Walmart. Look for the one-size fits all mini-gloves for around a buck. These work fine for a fraction of the cost of an “official” glove liner.

## Feet

- To keep your feet warm, wear one or two pairs of thick insulating socks over a pair of polypro liner socks. Waterproof boots with thick, removable felt liners and one or two insoles are a good choice in cold weather.

- No matter what type of footwear you use, make sure they don’t fit too tight. If your feet lack wiggle room, remove a pair of socks. Adequate circulation is essential as tight footwear means cold feet.

- The long plastic bag (bread bag) can stretch over your foot and serve as a liner between your sock and your boot.

## Sleeping

### *Bedding*

· Natural fiber sleeping bags do not maintain their insulation properties when damp, down bags also fit here. A 3 to 4 pound synthetic bag will take care of most of your needs.

· A mummy style bag is warmer than a rectangular, as there is less space for your body to lose heat. Also, most mummy bags have a hood to help protect your head.

· If you only have a rectangular sleeping bag, bring an extra blanket to pack around your shoulders in the opening to keep air from getting in.

· Do not sleep with your head under the covers. Doing so will increase the humidity in the bag that will reduce the insulation properties of the bag and increase dampness.

· Remember to air out your sleeping bag and tent, when weather permits. Perspiration and breath condense in the tent at night and the water will reduce insulating properties of your bag.

· Insulate yourself from the ground as much as possible to avoid cold spots at the shoulders and hips.

· Use a sleeping pad of closed cell foam instead of an air mattress. 1/2-inch-thick, closed-cell foam pad is essential. Many experienced winter campers add a second 3/4-length pad for extremely cold temperatures.

· Use a ground cloth to keep ground moisture from your bag. Your body will warm up frozen ground to a point where moisture can

become important.

- A bag liner made from an old blanket, preferably wool, will greatly enhance the bags warmth.
- Put a trash bag over the bottom half of your sleeping bag to help hold in the heat. A zipped up coat pulled over the foot of a sleeping bag makes an extra layer of insulation.
- Hang your sleeping bag up or just lay it out, between trips, so the filling will not compress and lose its insulating properties.
- No cots or deep air mattresses! Better to lay on with 30° earth instead of -10° air. A ½-inch closed cell foam pad or 2 and/or a thin air mattress will insulate you much better.

### *Clothing for Sleeping*

- **Always change into dry clothing before you go to bed.** Put on dry clothing or pajamas before entering the sleeping bag. During colder periods, wear additional synthetic-insulated layers of clothing to extend the comfort range of your sleeping bag. Adding additional layers will only work if they fit loosely on you and in the bag itself.
- Wear a hat to keep your head warm and reduce heat loss. Wear a loose fitting hooded pull over type sweatshirt to sleep in.
- Cold feet make it difficult to sleep. Wear two pairs of thick, dry socks, and a pair of thickly insulated sleeping booties.
- Put a hand warmer (in a sock) at the foot of your sleeping bag before getting into it.
- Fill a canteen with hot water (not boiling) and place at foot of bag to

| keep warm. \_Be careful with plastic canteens and make sure it does not leak.

· Before you get out of bed bring the clothes you plan to wear inside your bag and warm them up some before dressing.

### **Nature Calls:**

| · Place an empty capped plastic bottle outside your tent door for “night calls.” \_This will reduce your exposure when you have to answer that call. Think twice before using it inside the tent, you do have a tent mate. \_Remember to empty the bottle away from the camp in the morning.

### **Cold weather camping references:**

OOPIK manual, No. 34040

BSA Field manual

BSA Snow Camping Venture manual

“The Rucksack” The Wilderness Tripper’s Portal