

# Boy Scout Troop 195

## Winter Camping Guide

Winter Camping will introduce the Scout to a whole new world of camping. As temperature drops and winter conditions move in, the familiar meadows, campsites, and trails of summer disappear beneath the drifts and become a wonderland sparkling with ice and snow. A hot meal cooked over a stove, steaming mugs of soup cooked with melted snow, and a camp beneath a frosty sky are pleasures reserved for those willing to learn how to thrive when even the thermometer seems to be in hibernation.

The following pages of this handout are full of cold weather camping and cold weather outing tips. It is mandatory that each scout have this handout in their position. The Scout and Parent/Guardian must sign the last page, stating that they have read and will comply with all cold weather camping/outing procedures and recommendations set forth in the following pages. In addition to the information in the following pages, it will be mandatory that each

scout have the following equipment:

- Cold weather headgear: Hat, full face mask type hat, hood on the jacket, scarf, neck warmer. Recommend extra hat.
- Footwear: Insulated and waterproof boots, mukluks, etc. Tennis shoes will not be allowed. If a scout shows for the trip wearing inappropriate footwear, he will be sent home.
- Hand gear. Gloves or mittens or both. Minimum 2 pair. No cotton gloves.
- Extra socks, minimum 2 pair per day. Wool or Synthetic. No Cotton.
- Synthetic long underwear
- 1 Extra blanket. More is better
- **Sleeping bag with a rating no higher than 15 degrees. A zero degree, mummy style bag is highly recommended.**
- Sleeping bag pad, closed cell foam pad. NO AIR MATTRESSES
- Large plastic bottle with a large opening and screw cap. Empty juice bottle should work.
- Avoid wearing jeans. Once they get wet, they lose their insulation value. Wool or other synthetics are best. Snow pants over your trousers will help keep you dry and warm.
- Read Chapter 11, camping, Cold Emergencies: Pages 322-324 of the BS handbook and chapter 13 "Cold Weather Travel and Camping" of the BS Field Book (if you have one)

- Before leaving for the campout, fill a non-breakable thermos with a hot drink: Hot cocoa, tea, etc.

## 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.

## 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.

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, Synchronia, and Polartec; and fiber fills such as Hollofil, Lamilite, 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.

## **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 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. Hang your sleeping bag up or just lay it out, between trips, so the filling will not compress and lose its insulating properties.

### **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.

# Hypothermia: First aid

Under most conditions your body maintains a healthy temperature. However, when exposed to cold temperatures or to a cool, damp environment for prolonged periods, your body's control mechanisms may fail to keep your body temperature normal. When more heat is lost than your body can generate, hypothermia can result. Wet or inadequate clothing, falling into cold water, and even having an uncovered head during cold weather can all increase your chances of hypothermia.

Hypothermia is defined as an internal body temperature less than 95 F (35 C). Signs and symptoms include:

- Shivering
- Slurred speech
- Abnormally slow breathing
- Cold, pale skin
- Loss of coordination
- Fatigue, lethargy or apathy
- Confusion or memory loss

Signs and symptoms usually develop slowly. People with hypothermia typically experience gradual loss of mental acuity and physical ability, so they may be unaware that they need emergency medical treatment. Older adults, infants, young children and people who are very lean are at particular risk. Other people at higher risk of hypothermia include those whose judgment may be impaired by mental illness or Alzheimer's disease and people who are intoxicated, homeless or caught in cold weather because their vehicles have broken down. Other conditions that may predispose people to hypothermia are malnutrition, cardiovascular disease and an underactive thyroid (hypothyroidism).

## To care for someone with hypothermia:

1. **Dial 911 or call for emergency medical assistance.** While waiting for help to arrive, monitor the person's breathing. If breathing stops or seems dangerously slow or shallow, begin cardiopulmonary resuscitation (CPR) immediately.
2. **Move the person out of the cold.** If going indoors isn't possible, protect the person from the wind, cover his or her head, and insulate his or her body from the cold ground.
3. **Remove wet clothing.** Replace wet things with a warm, dry covering.
4. **Don't apply direct heat.** Don't use hot water, a heating pad or a heating lamp to warm the victim. Instead, apply warm compresses to the neck, chest wall and groin. Don't attempt to warm the arms and legs. Heat applied to the arms and legs forces cold blood back toward the heart, lungs and brain, causing the core body temperature to drop. This can be fatal.
5. **Don't give the person alcohol.** Offer warm nonalcoholic drinks, unless the person is vomiting.
6. **Don't massage or rub the person.** Handle people with hypothermia gently, because they're at risk of cardiac arrest.

# Frostbite: First aid

When exposed to very cold temperatures, skin and underlying tissues may freeze, resulting in frostbite. The areas most likely to be affected by frostbite are your hands, feet, nose and ears. You can identify frostbite by the hard, pale and cold quality of skin that has been exposed to the cold. As the area thaws, the flesh becomes red and painful.

## If your fingers, ears or other areas suffer frostbite:

- **Get out of the cold.**
- **Warm your hands** by tucking them under your arms. If your nose, ears or face is frostbitten, warm the area by covering it with dry, gloved hands.
- **Don't rub the affected area.** Never rub snow on frostbitten skin.
- **If there's any chance of refreezing, don't thaw out the affected areas.** If they're already thawed out, wrap them up so they don't refreeze.
- **Get emergency medical help** if numbness remains during warming. If you can't get help immediately, warm severely frostbitten hands or feet in warm — not hot — water. You can warm other frostbitten areas, such as your nose, cheeks or ears, by covering them with your warm hands or by applying warm cloths.

# Parent/Scout Confirmation Form

The scout and parent confirms that they have read and discussed the information in these pages. They also understand that if they show for the winter camping trip underprepared, they will be sent home until properly prepared. It is also mandatory the scout attend the two regular troop meeting before the campout. We will use these two meeting to prepare for the winter camping.

Please sign below and return to the scoutmaster.

Parent/Guardian \_\_\_\_\_ Date \_\_\_\_\_

Scout \_\_\_\_\_ Date \_\_\_\_\_