



BOY SCOUTS OF AMERICA

TROOP 175 • NORTH RIDGEVILLE, OHIO



Camp Alaska Training

- Types of clothing for winter
- Camp equipment for winter use
- Sleeping gear
- Food and menus
- Outdoor cooking
- Winter shelters
- First Aid

References

Ruane, Gene, "Sleeping Out In Winter," *Scouting*, Nov-Dec 1993

Venture: Snow Camping, Boy Scouts of America, 1989.

Boy Scout Handbook, Boy Scouts of America

Fieldbook, Boy Scouts of America

Winter clothing

The main purpose of winter clothing is NOT to *make* you warm - but to *keep* you warm by trapping body heat and removing perspiration. The key to this is to dress in layers. This way you may remove or add more layers to make yourself warmer or cooler. All of the layers should be loose fitting – if they're too tight they will cut off circulation and make you colder. Bring extras of everything you can. If any of your clothing gets wet - change it. Do not believe that a fire will keep you warm.

Underwear Layer - synthetic materials for this layer will help to draw moisture away from your body. Many types of thermal underwear have a polypropylene inner layer which accomplishes this. Cotton will hold water and make you colder. Bring extras to change into in case you sweat a lot.

- underwear
- flannel pajamas, long johns, thermal underwear, or sweats



Clothing Layer - This layer is meant to absorb the moisture drawn away by the underwear layer. Generally, close fitting absorbent clothing such as cotton will most likely work the best. This layer is sometimes contained in the newer thermal underwear with a polypropylene lining and cotton exterior.

- Sweat suits
- Moderate weight flannel shirts
- Turtle-neck sweater
- Lightweight pants



Insulation Layer - Thicker is better - to trap more air and thus heat. Wool is the best choice for this layer - even if it gets wet you'll stay warm. Nylon fleece, polyester pile and batting, down, and synthetics such as Thinsulate are also good choices.

- Flannel shirt
- Sweaters (wool)
- Sweat suits
- Wool trousers with suspenders
- Lightweight jacket



Shell Layer - this layer keeps out wind and rain/snow. Try for windproof and/or waterproof materials.

- Jacket or Parka (with hood if available)
- Windproof over-parka
- Windproof over-pants (ski pants, Carhartt's,...)
- Stocking cap (wool)
- Face mask / balaclava
- Bandanna or scarf
- Rain gear (jacket and pants preferred)
- Wool inner gloves with waterproof outer gloves or mittens [bring extras]
- Sunglasses or snow goggles (to prevent snow-blindness)



Footwear - use two layers of socks inside heavy, insulated, waterproof boots

- Inner socks: synthetic (polypropylene) thin socks, cotton socks if you must
- Outer Socks: padded, wool socks
- Boots: heavy insulated *waterproof* hiking boots or snowpac boots with removable liners

Camping Equipment

Gear Transport

- Backpack with hip belt
 - *NOTE: Must be able to carry all your gear and have your hands free.*

Eating

- Mug (Styrofoam ?)
- Bowl (Styrofoam ?)
- knife, fork, spoon
- cooking utensils (appropriate for food)
- cooking materials (see section on Outdoor Cooking)
- food
- canteen filled with water
- thermos bottle
- cooler for perishable food

Toiletry kit

- small towel
- pre-moistened towelettes or soap
- comb & mirror
- toothbrush & toothpaste (tooth powder in extremely cold weather)
- toilet paper
- deodorant

Miscellaneous

- survival kit
- matches in waterproof container
- firestarters
- personal first aid kit
- flashlight with alkaline batteries
- watch
- pocketknife
- chapstick
- repair kit (clothing, pack)
- plastic bags (for keeping clothes and bedding dry)
- canteen
- camera & film
- extra alkaline batteries
- cover for pack for nighttime and if raining or snowing

Group Gear

- camp shovel
- axe, hatchet, saw
- First Aid kit
- Water containers (filled with 2-1/2 to 3 quarts per person per day))
- Dish washing supplies

Other Important Gear (See appropriate sections)

- Materials for shelter
- Sleeping gear

Sleeping Equipment

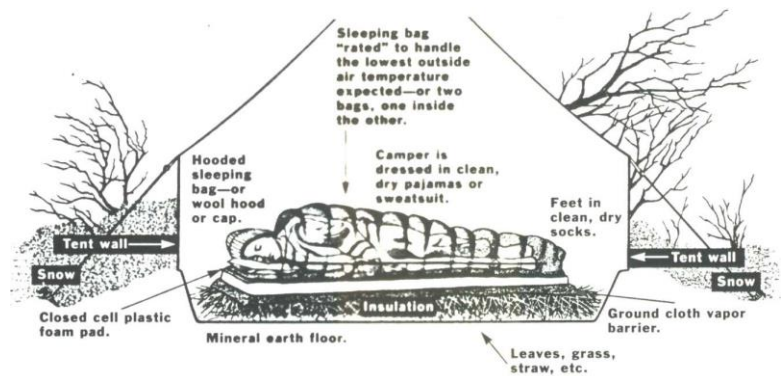
Nighttime is usually the coldest part of the day - but you don't have to be cold when you go to bed. By wearing the right clothes, having the right sleeping bag, and using the right padding you can easily be comfortable all night. Don't be afraid to go to sleep. You'll wake up shivering long before you freeze to death.

Sleeping Bag - You can go out and buy a sleeping bag rated for cold weather camping and spend a lot of money, or you can consider some less expensive alternatives.

- Use a *bag within a bag*. Two lighter weight bags can be placed inside one another to make the combination warmer. Just make sure that the outer bag is large enough to avoid crushing the fill of either bag - this will make them both useless.
- Use a *sleeping bag liner*. These are lightweight liners designed to fit inside a sleeping bag. They can be expensive, but you can use it alone as another sleeping bag in warmer weather.
- Improve a liner with a *blanket*. The camping section in the *Boy Scout Handbook* shows how to fold a blanket properly to fit inside your sleeping bag.

Sleeping Pad - Essential to keep you insulated from the ground. Start off with a thick layer of leaves, grass or straw, covered by plastic or a heat-reflecting space blanket. Then use one of the following pads below. Any sleeping pad should extend the full length of your body. Do not use a conventional air mattress - air is an extremely poor insulator.

- A *closed-cell foam pad* at least 3/8-inch thick: You would need a 2 inch thick pad of open cell foam to do the same job.
- A "*Therm-A-Rest*" type of mattress: These are a combination foam pad and air mattress which insulates very well. Although they can be pricey (\$50-\$100), they are great all year long. There are "look-alike" pads that sell for a lot less.
- Layers of *newspaper inside a plastic trash bag*. You need about a 1/2-inch stack of newspapers inside the garbage bags to be effective, which can be heavy to carry.



Sleeping Clothes - Some campers suggest sleeping in your "birthday suit" to stay warm. You may only want to try this if you are sure your sleeping bag will keep you warm. Most other (normal) people wear a layer of clean clothes to help keep them warm.

- Put on all clean clothes before going to bed. Even if you don't think that you sweat during the day - you did. Change everything!
- Wear a *loose layer* without tight elastic cuffs or waists. A hooded sweatshirt and pants is best. Flannel pajamas are also good.
- Avoid *cotton*, or at least 100% cotton. Synthetic fibers such as polypropylene work best.
- *Protect your head, neck & shoulders*. Wear a knit cap (wool), balaclava, or ski mask to protect your head and neck. You can lose up to 80% of body heat through your head. If your sleeping bag doesn't close at the top use an extra sweatshirt to protect your shoulders.
- *Protect your feet*. Wear a clean pair of wool socks or boot liners.
- Use a *duffel bag* for anything you might need before morning. Include sleeping clothes, extra clothes, flashlight, snacks, water, medicine, clothes for the morning. This will prevent you from having to get out of your shelter to get something from your pack at night.

Food & Menus

Food can be a major source of heat to keep you warm in the winter. The calories you consume will help to fuel your body to stay warm. Camp Alaska is not the time to go on a diet.

Proper food is even more important than a good sleeping bag. The right combination of foods will allow your body to produce all of the heat it needs to stay warm. Plan for most of your foods to be warm with easy preparation. Also plan for some snacks throughout the day to help keep you warm. Keep a pot of water hot throughout the day for soup, hot chocolate, etc...

For Camp Alaska you are "on your own" for food. This means that you are responsible for planning, getting, and preparing your own food - the Troop will not do it for you. You may partner up with one or more other guys and plan, buy and prepare your food together. Remember that you have to carry everything; you should remove the bulky packaging at home and just carry what you plan to eat. Backpacking meals (dehydrated) are usually expensive and taste like cardboard and sawdust - you may wish to consider "real" foods from the grocery store.

NOTES: fats are important to help you keep warm.

Breakfast - This should be a warm (at least partially) meal that will warm you up and get you going in the cold morning. Just remember that we want to pack up and get going early, so don't plan a lot of cooking.

- *Hot Cereals*: oatmeal, wheat, rice, grits, etc... These can be either instant or cooked.
- *Cake Bar*: Nutri-Grain, granola, Pop-Tarts, etc...
- *Main Dish*: pancakes, French toast, eggs
- *Meats*: bacon, sausage, ham
- *Fruit*: a single item like raisins, mixed fruit, bananas, dried fruit, etc....
- *Fruit Juice*: a real fruit juice with Vitamin C is the best. Look for juice boxes.
- *Hot Drink*: usually hot chocolate. Also consider tea, eggnog, hot cider which come in instant packages. NOTE: if the drink is too hot your body will sweat to cool itself off

Lunch - This could be a quick meal with a sandwich and soup, or whatever else you want.

- *Sandwich*: PB & J, lunchmeat, cheese, honey, etc....
- *Soup*: canned soup or instant (Ramen soup in the Styrofoam cup is quick & easy), chili
- *Breads*: regular bread is OK but can get crushed - consider crackers with a sandwich
- *Fruit Drink*: can be hot or cold, consider juice boxes, or a hot Jell-O mix that can provide both energy and warmth

Supper - This should be able to provide enough energy to keep you warm through the long cold night.

- *Main Dish*: should include starch (rice, potatoes, noodles), sauce (broth, gravy, etc...), and meat (chicken, beef, or pork). A good soup or stew (Dinty Moore) covers this area well. Also consider "Hobo/Foil Dinners" prepared at home and cooked in a fire at camp.
- *Bread*: crackers, or bread baked over the fire.
- *Fruit Drink*: see Lunch
- *Hot Drink*: see Breakfast
- *Dessert*: could require some preparation and cooling (pudding, Jell-O, etc...)

Snacks - These help provide energy between meals and just before bed.

- *Candy*: chocolate is best. Hard candy, gum drops, jelly beans, etc...
- *Trail snacks*: GORP, dried fruit, peanuts, jerky, Slim Jims
- *Fruit*: apples, oranges, applesauce cups
- *Desserts*: pudding/Jell-O cups,

Outdoor Winter Cooking

While cooking over a fire is fun, and gives a smoked flavor to everything, it is not always the easiest or quickest way. A simple cooker can be easily made at home, or purchased in the store.

Camp Fire - This is the cheapest way to cook in the outdoors, assuming you have a free wood supply. If a lot of people want to cook on the fire, you will probably need to build more, smaller fires. An easy way to cook foil meals.

Cooking Stove - Probably the best, easiest way to cook outdoors. However, it does require an investment in the right equipment. Make sure you know how to use these well before trying to cook outside in the cold. According to BSA policies these may be used **ONLY** under the supervision of Adult Leaders.

- *White Gas*: these stoves produce a very hot flame and can be found in many stores. Use only in a well ventilated area. Care must be taken when pouring the fuel, as it is *very* volatile. If your stove is designed to use unleaded gasoline - **DON'T**: unless you are sure the fuel is very pure you will clog the stove. Also called naphtha or Coleman Fuel.
- *Butane Cartridge*: relatively easy to use, but you must carry around bulky cartridges. Do not burn as hot as white gas, and have poor performance in the winter. The heat output also decreases as the fuel cartridge empties.
- *Kerosene*: does not burn as hot as white gas and is not as easy to use. Some white gas stoves can be configured to burn kerosene by changing a few components. This is less volatile than white gas, but that causes other problems.
- *Propane*: the large bulky tanks make these stoves unattractive. They suffer from some of the same problems as Butane cylinders.
- *Wood Stove*: uses twigs and smaller sticks. Can be used in any weather and conditions. Smaller stoves require a lot of tiny sticks. Temperature can easily be adjusted by burning more or less wood. Clean burning, so does not deposit soot on cooking pans. Find plans on how to build on the internet, or buy one.

"Buddy Burner" - These are relatively easy to make and cost next to nothing. The drawback is that they only provide a moderate heat.

- *Make the stove*: place vent holes along the top and bottom of the outside surface with a triangular can opener. Racks can be made by punching holes in the sides of the can and passing wire coat hangers through them. You can either place a pot or skillet over the open end, or flip the can over and cook on the closed end.
- *Make the Burner*: coil strips of corrugated cardboard tightly into an empty tuna can and fill with wax. These should burn for a couple of hours. Bring at least two for a weekend.
- *"Sterno" burners*: these can be purchased in many stores, but don't get very hot. They are mostly used for keeping foods warm, but they will work - slowly.

Outdoor Winter Shelters

The ideal shelter will protect you from the wind and elements as well as retain heat and allow moisture to escape.

Shelters - There are a wide variety of shelters that can be constructed with a few simple materials. Most of these will work for both individual and 2-3 man shelters. Make sure that the design is stable and allows for moisture to escape. See the attached sheets for ideas on shelters. Face the open end of your shelter away from the wind.

- *Framing.* Use existing natural structures, or cut up the wood you need from fallen wood
- *Rope:* 8-10 foot lengths of 1/2-3/4" rope for **each** lashing used.
- *Plastic:* generally a roll of 10'x25' plastic sheeting at least 3.5 mil thick works great (Wal-Mart)

