

Winter Camping Tips

[Introduction](#)
[Clothing](#)
[Other Gear](#)
[Food](#)
[Other tips and tricks](#)
[Where to buy](#)
[Related WebPages](#)

by Marc Godbout
INTRODUCTION

Up here in NH, 3 - 4 months of the year are spent in a winter environment. As I like to camp, it was either learn a few tricks to make it easier or just read about camping during those months. I'm also a Scoutmaster and what follows is pretty much what I try to teach the boys. I don't know what temperatures you deal with in your area, so some of this may not apply. FWIW - The coldest I've camped in is -5F and I've done outside activities as low as -15F.

Winter camping is a lot of fun, but it presents some subtle dangers. I consider it a high adventure activity, but it's different from rock climbing, where you experience a relatively short-term thrill. Winter camping, if not prepared, is dangerous even when sleeping. But for many boys it's a fun challenge, and a "cool" (pardon the pun) thing to do. My son has actually said that he couldn't wait for summer to be over so that he could go on **Winter Trek**, [Daniel Webster Council](#)'s high adventure program.

[Back to top of page](#)

CLOTHING

[Head](#)
[Torso](#)
[Hands](#)
[Legs](#)
[Feet](#)

Head



Starting with the top, a wool or polypropylene **hat**. A good hat is very important. Not only because much of the body's heat is lost through the head, but also because the body will start shutting down blood flow, and therefore heat, to the extremities in order to keep the core warm. A common saying is, "Cold feet - put a hat on". This hat will also be valuable at night in the sleeping bag.

Some sort of **face shield** is needed. A wool or acrylic scarf, or even a spare wool sock for those boys who forget the scarf, keeps frostbite away. The nose is an extremity and is real sensitive to cold breezes. Balaclavas are hats which also cover the nose, mouth, and neck. These also work well.

Torso

I think just about everybody knows about layering. We've had that drilled into us since kindergarten. I personally don't bring a "winter" coat with me at all when winter camping. My "system" consists of a medium-weight polypropylene long-sleeved undershirt, a wool sweater, an insulated flannel shirt (Wal-Mart deal which luckily is made of all man-made fibers - no cotton!!!), all topped with a wind-breaking, water resistant, shell. Total cost is about \$50.

Most important here is another saying - "Cotton kills". Cotton has this annoying habit of holding onto moisture, keeping it close to the skin, and thereby losing all insulation value. Worse yet, by holding it in, perspiration which would normally drip off the body is now kept close by, further cooling the body. This could easily mean the difference between comfort and hypothermia. Those waffle-weave, "thermal" undershirts found at dept. stores are almost always 100% or 50% cotton. Go to the sports dept. and look for the poly. Most man-made fibers and wool will wick moisture away from the skin. Even when wet, they will still keep a pretty good amount of insulation.

A good replacement for the wool sweater might be a Polartech or similar fleece top. I don't own any of this, mainly because I've got the sweater already, but those who do swear by it. It has the added advantage of being lighter weight, something to consider when backpacking.

Hands

I try and make sure the boys get mittens with long cuffs. These keep hands much warmer than gloves. You can tell them that the fingers help keep each other warm or the Mr. Wizard explanation that there is much less surface area to radiate heat. Either way, mittens are the way to go. The cuffs should extend past the wrist. Snowmobile mittens work very well.

I've got a pair of "glomitts" which I find fantastic. These are a pair of finger-less wool gloves with the finger part of a mitten attached to the back of the knuckles. Normally the mitten is over my 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. When I need my fingers to manipulate something, I like to keep as much hand covered as possible.

Under these (yes, I layer here as well), I wear some thin acrylic knit gloves. You can either buy glove liners at some outdoor store or do as I do; go to the women's section of some discount dept. store like Walmart. They have these one-size fits all mini-gloves for around a buck. I've got long fingers and these work fine for a fraction of the cost of an "official" glove liner. On top of this I'll wear a pair of waterproof overmitts.

Legs

The layering and no cotton rule works here as well. I start with my poly long johns, put on some wool pants over that and then thin, wind-breaking, snow-pants over that. Please keep the kids from bringing sweatpants. These are almost always cotton and are only warm when inside that nice, cozy cabin. Wool pants are hard to find cheaply in kid's sizes, mine are army surplus, so I

let the boys substitute poly's topped with the heavier snow pants. Just make sure they're not cotton-filled. I do allow the boys to wear cotton briefs or boxers. This is too personal a choice. I wear them and it doesn't seem to be a problem.

Feet	<p>Do I really need to repeat "no cotton" here? I didn't think so. For comfort, I wear poly sock liners. Over that would be a vapor barrier. I've used zip-lock bags (a bit constricting in the toes), bread bags, and plastic shopping bags. The best I've found, though are those bags that my newspapers come in. They're thin and just the right size. The reason for the bag is to keep sweat from being absorbed by the boot's insulation. Overnight, moisture in the boot will freeze if the boot is not kept warm (more on that later). I had one boy just one year who woke up to find his boots frozen solid. He could not get his feet into them. We had to thaw them by the fire (this was a Scout camp) before he could leave his tent. On top of the bag, I put some thick wool socks. As for boots, your basic dept. store snow boot should do fine, as long as they are bought at least one size too big, in order to fit the socks and bag. Fit is very important. Anything too tight will cut off circulation to the toes and be a potential frostbite problem I like having removable wool felt liners, but any decent, thick insulation should work.</p> <p>I've used gaiters on top of my boots and like them very much in deep snow. Gaiters are basically a cordura or maybe leather sleeve which bridges the gap between boots and pants. They do a great job keeping snow out of the boots.</p>
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[Back to top of Clothing table](#)

[Back to top of page](#)

OTHER GEAR

Sleeping bag	Mattress pad	Tents	Mess Kit	Stoves	Lights
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Sleeping bag	<p>No skimping here. Down works great, but if it gets wet it will lose all insulation value. For experienced, responsible, older, scouts (and scouters) this shouldn't be a problem - just keep it dry. Plus, down is the most compressible material around. But boys will be boys, so I usually recommend some man-made fiber, such as LiteLoft, which is almost as compressible as down. A good bag will be expensive, but many gear stores will rent them. Construction is probably more important than filling. Things to check for are:</p> <ul style="list-style-type: none"> • full length draft tube • if quilted - make sure the inside seams are offset from outside seams, • a full coverage hood, mummy construction. <p>Another thing that helps out is to get a longer bag than necessary. That way you could stuff things that you'd like to keep warm during the night.</p> <p>I personally use a layered technique, mostly because I don't have the space and money for three different bags. My inside layer is my poly top and bottom with generously thick socks (I get cold feet at night), then I get in a vapor barrier made by wrapping a space blanket around myself. Then I slip into an acrylic blanket bag my wife sewed up. I wear a wool hat and my bag is a +20F-rated down bag. The major problem with this is the time it takes to finally get in position. Without exaggeration, I believe that I squirm around for 10 - 15 minutes. Then again, all that activity generates heat, so maybe this is a good thing. This season I might try one of those emergency Mylar bags instead of the space blanket. I could buy a vapor barrier liner, but they cost too much. Another problem was that my system didn't work so well at -5F. I was cold during the night. Not enough to keep me awake all night, but it was very uncomfortable. I think a thicker acrylic or wool blanket might do the trick.</p>
Mattress pad	<p>This is almost as important as the bag. The self-inflating or closed-cell foam type work pretty well. Stay away from any of those inflatable type, more suitable as floats in the pool. These allow air to move around under you and could actually help cool you off. I recommend two pads when sleeping on the snow. More is warmer.</p>
Tents	<p>Don't know much here because I haven't used one in the winter, yet. I've been told that the fiberglass poles have a tendency to crack, so you might want to stick to aluminum.</p> <p>We've used quinzees (a type of snow-dome), dugloos (dig a hole and sleep under the stars), snow-kitchens, and scout-camp lean-tos. Out of all of these, I think the lean-tos are the coldest. We strung tarps around the bunks to cut down on drafts and the amount of air needing to be heated. Whatever you try, bring as many tarps as you can. Those blue, PVC, things work pretty well in very cold weather. Visit this page to see how to build a quinzee</p>
Mess kit	<p>I use a plastic cereal bowl from the local Name-Your-Favorite-Mart. Get something thick, as extreme cold could cause it to crack. I don't like the metal mess kits because they seem to allow the food to cool too quickly. Also, keep it light colored. Chances are, you'll be eating at least one meal, probably supper, in the dark, and a dark plate/bowl makes food disappear.</p> <p>An insulated coffee mug, with lid, works great. Avoid those metal cups. They transfer too much heat from the hot chocolate directly to the lips.</p>
Stoves	<p>Propane and butane have problems in the cold. They start losing pressure below freezing and it's pretty much gone by the time you</p>

get to 0F. We stick with the white gas stoves during winter time.

Lights

Lanterns should also be white gas. I've seen batteries die out at extreme cold, too. Candles always work. Flashlights should be kept on your person even during the day, because of the cold battery problem.

[Back to top of Gear table](#)

[Back to top of page](#)

FOOD

You need extra calories to keep your body warm, so leave your low-fat diet at home. Make sure you have lots of carbos.

- Oatmeal for breakfast and pasta for supper works well. Eggs and pancakes lose heat quickly and IMHO taste pretty bad cold, but bacon can be eaten cold. If you don't cook it too crispy then any leftovers (yeah right - leftovers of bacon?) can be snacked on during the day.
- Lunches could be pepperoni and cheese on crackers. Peanut butter on Syrian bread.
- Have plenty of snacks available. Granola bars, chocolate, and trail mix are great. Apples and oranges will turn into rocks, no matter what you keep them in.
- I like melting butter in a pan and toasting bagels or English muffins in the butter. There's a lot of energy there.
- Have plenty of hot chocolate. This will be drunk any time someone is in camp. If you've got to have coffee, use decaf. Caffeine is a diuretic and you'll need all the water you can get.
- Make sure everyone has plenty of water. Dehydration leads to hypothermia. But leave your pump/filters at home. They are pretty much useless when frozen and you could crack the filter element. Melt snow or boil water when you need to refill the bottles.
- Cooking meat doesn't seem to work very well. It's hard to keep a big frying pan hot enough to effectively brown any hamburger. If you've got to have meat in the spaghetti sauce, bring pepperoni and throw it in the sauce when heating that up.
- Instant soups will go like crazy. Use your insulated mug to eat this, and you won't need the hot chocolate for this meal/snack.

[Back to top of Food section](#)

[Back to top of page](#)

OTHER TIPS AND TRICKS

- To keep boots from freezing up overnight, lie them on their sides beneath your sleeping bag under your butt with the soles sticking out. Put one on each side of you and tie the laces together with a simple knot. There should be enough heat escaping there to keep the frost out, plus the placement will help keep you from rolling off your mat.
- Keep gloves, socks, and any of tomorrow's clothes as will comfortably fit inside the sleeping bag. Any other clothes, jacket, sweater, whatever doesn't fit, should be put under the bag. It's much more comfortable to dress in pre-heated clothes and the added insulation doesn't hurt.
- Keep at least one water bottle in the sleeping bag, if it will fit and not leak. If you can't, put it under your bag at the knees. All other water bottles that don't fit under your knees could be put in some of your extra wool socks. Also, heat the water up at night before you go to bed and put the filled bottles in your sleeping bag as you fulfill your nightly duties. Then when you get to bed, your bag will actually be warm.
- Don't forget the nightly duties. A full bladder requires more heat than an empty one, plus getting up at 2:00 AM in sub-zero weather is absolutely no fun.
- Carry and store water bottles upside down. Ice forms on the tops of bodies of water first, so this helps keep ice from forming around the mouth. If you're not carrying a water bottle, stick it in a spare sock or shove it in a snow bank, upside down, of course. Snow will insulate better than nothing.
- If you've got a self-inflating mattress don't roll it up with the valves closed. A frozen mattress valve is real hard to open.
- When standing around eating, cooking, or whatever, stand on your mattress pad. When sitting, sit on your pad.
- Keep active as much as possible. If you feel your feet freezing up, start getting the shakes, or if you see anybody else showing initial signs of hypothermia - go for a long, brisk walk/jog. Take the whole troop with you, because they may be feeling the same way, but are too "cool" (there's that pun again) to show it. Keep going until the signs go away.
- Go for a night hike or play an active game just before you crawl in the bag. After you get in the bag, take a mouthful of water and eat something fatty like cookies. This gets the furnace started and helps keep it going throughout the night.
- The standard 3-tub method of doing the dishes just doesn't work in the extreme cold. Heat up some water and pour this in individual bowls to melt the leftover bits and pieces of food. Soak your utensils in this. Then use a paper towel or even a snowball to scrub. Any cloth dishrag will freeze.
- Bring extra everything. Stoves and lanterns will fail. Water bottles will freeze and crack. Things, like boys, just behave differently in the cold.
- **Everyone on the trip should know the signs and treatment of hypothermia!!!**

[Back to top of Tips section](#)

[Back to top of page](#)

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Sources for Clothing, Equipment, & Supplies

NH:	 Eastern Mountain Sports Mall of New Hampshire Mall at Rockingham Park	WalMart Rte 28 Derry	Benson's Ski & Sport 6 Martin St. Derry, NH 03038 432-2531 fax 432-2018
Maine:	Kittery Trading Post PO Box 904 Route 1 Kittery, ME 03904 1-888-KTP-MAINE	L.L. Bean Freeport, ME	
Online:	 123-camping.com Adventure and Camping Gear		
		 www.rei.com	

No cotton!!!!