

## Snow Cave and Snow Tent Camping Gear: The Ten Specials for Snow

We hopefully have an exciting opportunity coming up at the end of February to go camping in the snow, either to build and sleep in snow caves, or camp in tents. It all depends on the coming weather – and you.

Snow is wet and cold (I hope that's not news to you.) Those two features, however, mean that you need some special gear to be comfortable in the snow (yes, you can be comfortable). We'll go over more details at the next two troop meetings, but I want to get this information out sooner so you have a chance to look for these special items:

1. Sleeping bag: A snow cave will be a toasty 32 degrees because of its insulating properties and the melting temperature of water. But if caves don't work and you have to sleep in a tent, temperatures can be down in the teens. So you really do need a zero degree bag. You can buy (expensive), rent (\$15-20) or use two okay sleeping bags (one inside the other) or a good sleeping bag (30 degrees) with a good blanket or comforter inside it and you wearing sweats or long johns.
2. Sleeping pad: Either the snow under you or the ground under you is going to be very cold. You must have a layer of insulation between you and it, and just your sleeping bag isn't enough. (Its warmth is in its fluff; below you it is compressed.) Use either a full length closed cell foam pad or 2 each  $\frac{3}{4}$  length foam pads that will overlap where you hips hit (Thermarest style works, but not an air mattress).
3. Waterproof ground cloth: Snow melts into water (duh) and water runs downhill (double duh) – right under you if you are in a snow cave. You need a ground cloth that doesn't leak and is somewhat larger than your sleeping bag, in case you flop around in the night.
4. Waterproof pants: Ski bibs, snowboard pants, snow pants. Sports Authority has some for \$39 marked down by 25%. REI is having a 30% off sale, but I didn't see any boy's stuff there. Costco often has some reasonably priced items also. I did see one boy spend all day in the snow (he was supposed to be skiing, but...) with jeans that had about 5 applications of Scotchguard. Army surplus winter wool pants work, too. Long johns – non cotton if at all possible -- range from expensive silk to inexpensive polypropylene, work when the pants are on the thin side.
5. Waterproof jacket: Layers are more important above the waist so you can adjust to the temperature and level of activity. But the outermost layer must be waterproof. Rain jacket works. Also wind breaker with 5 applications of Scotchguard. Augment the outer layer with appropriate insulating layers under it – bulky sweater, long john top, under armor, non-cotton T shirts, etc. Sweat shirts if you must, but they will hold moisture and slowly lose their effectiveness. Ski jacket is okay, but then it's more important than ever that you have non-cotton inner layer, because you will wind up sweating or else wet because your jacket is open to cool you off.
6. Waterproof gloves: (see the pattern here?) The exception is knit WOOL gloves -- as long as you take them off and wring the water out every so often – whenever your fingers start feeling cold (I've used them – they work.)

7. Waterproof and insulated boots: Waterproof hiking boots are almost good enough. They are fine for hiking in the snow and for playtime, but when it's time to settle down, heat leaves faster than it's generated in your feet. Having an old piece of sleeping pad to stand on helps. Note that Uggs are for cool weather, not cold. Snow boots or snowboard boots or insulated boots or moon boots are best. I've seen them on clearance for \$40 at Sports Authority. Borrowing is good, too, given how often we go to the snow.

8. Non-cotton sox: poly, wool, silk, etc. keep the moisture away from your feet, even when they sweat, that would otherwise make them cold. Bring at least 3 changes: day, evening, night.

9. Headgear: Knit cap or polar fleece cap is good both day and night (remember, 60% of heat loss is through your head and neck). If you don't wear sun glasses, then a hat with bill or brim is needed to protect your eyes. (It's warmer than nothing.) Similarly, neck warmer or neck scarf/muffler does wonders for warmth.

10. NICE to have: Gaiters that wrap around your ankles with tie around the bottom of your boot to keep the snow out of your boots. Plastic vegetable bags and duct tape can work for most of a day.