

Troop 794 Cold Weather Clothing

Created by Carl Dubler, January 2018.

Part 1: Layers

The key to staying warm is to follow the 3 Ws of layering: Wicking, Warmth, Wind/Water.

Wicking. This is the base layer and cannot be cotton. Cotton absorbs moisture, which leads to cold. Moisture is your enemy! This layer must be polypro or some other synthetic fiber that can “wick” moisture from the skin. This includes socks. Do not get “long underwear” at Walmart or Target as the stuff they carry is typically a cotton blend. Instead, go to REI, Cabela’s, or Colorado Ski and Golf. You will notice there are various thicknesses. Usually, the thicker products are for more sedentary activities like hunting or fishing. Our troop is usually quite active, so get a thinner base layer. You don’t want to overheat and sweat, as sweat is moisture, and moisture is your enemy.

Warmth. The next layer is fleece or wool and is designed to keep you warm. If you can, avoid cotton at this layer, too. Fleece is best, or the inner layers of a ski jacket work fine, too.

Wind/Water. Now you have the outer shell to keep moisture out and cut down on wind. This layer should be waterproof, such as Gore-Tex or one of the many Gore-Tex competitors out there like Omni-Dry, PolarTec, NeoShell, HyVent, H2No, OutDry, and Dry Q. Gore-Tex has a fault in that it doesn’t breathe much at all, which can lead to moisture getting trapped, and as you know, moisture is the enemy. Newer technologies like Omni-Dry (Columbia) and PolarTec (Marmot) breathe better. This is the ideal setup.

The 3W concept works on a small scale, too. For example, a good pair of gloves will have an outer waterproof layer and inner fleece layer for warmth. Your boots should have an outer waterproof layer, a fleece (or similar) layer for warmth, and you wear a thin polypro sock for wicking.

Part 2: Head-to-Toe Ideas for Clothing

Head. Fleece, wool, or synthetic (no cotton) beanie that covers the ears, plus one to change into at night. Hood on a ski jacket for windy or wet weather.

Eyes. Ski goggles for windy or extreme cold weather.

Face. Ski mask or “Turtle Fur” style gaiter that can be pulled up over the mouth and nose. The advantage of a ski mask is excellent coverage and warmth of head, ears, mouth, nose, and neck. The advantage of a gaiter is that it can be pulled down easily when you are getting too warm or need food/drink. Don’t forget sunscreen!

Neck. A fleece gaiter or non-cotton scarf. Gaiters work best because they won't come undone easily with activity. Don't forget sunscreen!

Torso and arms. See the 3W information above—needs to resist water and wind. Columbia brand is great performance for the money. You can sign up online (Columbia.com) and earn points for discounts, get free shipping, exclusive sales, etc. Patagonia, North Face, and Marmot are excellent choices, but hard to justify the expense when a scout will grow out of it quickly.

Hands, part 1. Mittens are warmer than gloves. Mittens are warmer because your fingers stay together with skin-on-skin contact (ever notice the instinct to rub your hands together when they are cold?). Gloves are more practical but since each finger is isolated, they get colder. There are hybrid mittens that have a glove inside them. These don't do any good because you don't get that skin-on-skin contact that keeps your fingers warm.

Hands, part 2. Get waterproof/windproof gloves or mittens. Fleece lining is OK, but not if fleece is the outer layer. While some old-schoolers love leather gloves (and they do have advantages for skiing), be aware that if leather gets wet it will absorb water and that water will freeze. Leather gloves are for experts only who know how to condition leather.

Hands, part 3. If you can, get mittens or gloves with a drawstring that goes over the wrist so when the mitten is taken off, it isn't dropped in the snow (or off a chairlift). Always bring a spare pair of mittens or gloves!

Hands, part 4. Hand warmers are a good idea, too. Look at the back of your hands—see all the arteries and veins there? Your hand warmer should be placed there to warm the circulating blood, not in your palm. The best high-end mittens and gloves will have a hand warmer pocket on the back of the hand.

Legs. See the 3W information above and also the torso and arms section above.

Ankles. Leg gaiters are nice for deep snow as they keep the snow from going down your boots or up your pant legs. You may not need them if you have good snow boots that extend halfway up the calf of your leg.

Feet, part 1. Do not wear cotton socks—ever! Get some polypro ski socks or SmartWool socks. It seems logical that you would want thick socks. But make sure they do not make your boots fit tightly. Tight boots will reduce the blood circulation in your feet and make you cold. Remember the first W is for wicking, and that is what your sock is for. The warmth will come from the fleece or other inner layer of your boot.

Feet, part 2. Get waterproof/windproof boots designed specifically for snow. Avoid leather and hiking boots. Hiking boots and running shoes are designed for ventilation, and they let in water. If possible, get snow boots that have a removable inner lining so when camping these can be placed in your sleeping bag to keep them warm.

Feet, part 3. For ice fishing or other activities, bring a pair of Yak Tracks or other metal gripper that is placed over the snow boot. You can find these at REI, Cabela's, Colorado Ski and Golf, and even Walmart. Be sure to bring the boots with you when buying, so you can make sure they fit.

Part 3: Clothing Procedures

Change your clothes, especially base layer, at night immediately before bed. Especially socks! You must do this—we require it. So make sure you bring a separate set of base layers to sleep in.

- The reason why this is so important is because moisture is the enemy and will make you cold. Even if you don't feel "wet" you have been doing activities all day and there is moisture in your base layer.
- If you are cold at night and come asking for help, the first question we will ask you is this: "did you change your clothes before bed?"
- We know that it is hard to get out of clothes that feel warm (but have moisture) and into clothes that feel cold (but are dry). You are tired. You just want to go to sleep. No matter—change the clothes, get it done, and you will be glad you did.

Bring a spare set of boots or shoes for the drive home. Bring a spare pair of shoes or boots and a large trash bag. Leave these in the car. When you get back to the car, put your snow boots in the trash bag (as well as any wet outer layers) and then wear your spare shoes for the drive home. This way we can minimize the amount of water and mud that gets into our cars, on our gear, etc.

When in doubt, bring more! You won't regret having an extra pair of socks or gloves, even if you don't need them. But you will regret not having them if you do. Also, having extras might come in handy if someone forgot something.