How to Stay Warm and Dry in the Outdoors
Clothing Choices to Keep You Comfortable
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Staying warm and dry outdoors is part science and part art. Having the right clothing made from the right fabrics is important, as is wearing them properly. In order to be warm and dry (or as cool as possible in warm or hot weather) you have to

- Repel rain, snow or other precipitation
- Disperse the moisture your body releases
- Maintain a comfortable temperature inside your clothing by making adjustments when needed

This brief summary of factors to consider contains both facts and opinions. My opinions are based on years as a scout, scout leader, hunter, fisherman, boater, backpacker, skier, etc. In many cases, there many options and in the interest of brevity, I have listed only a few examples. I would be happy to discuss any of these areas in more detail with anybody who is interested.

Underwear. In the outdoors, the primary job of underwear is to get moisture away from the body. Products such as UnderArmor or cheaper imitations available at WalMart and similar outlets make a big difference. Cotton holds moisture in and is a bad choice in the outdoors. In colder weather, Polartec and similar fleece products transport moisture and retain warmth and make great long underwear.

Clothing. "Quick dry" nylon shirts and pants are a good choice because if they do get wet, they dry readily. They take up less space and often offer a lot of pockets that have zippers or flaps to keep things from falling out. They can get hot to wear if they do not offer sufficient ventilation, since they do not breathe as well as cotton. So, look for mesh ventilation in the back and armpit area and pants legs that zip off to make shorts. Cotton, such as jeans, is a poor choice since it takes a long time to dry, is relatively heavy and does not provide warmth if wet. When backpacking, jeans and a leather belt under your backpack's hip belt can be very uncomfortable. In cold weather, wool provides warmth whether wet or dry and breathes well. It does not dry as quickly and is heavier than some of the synthetic products. Some people find it scratchy. One exception is socks. I highly recommend Smartwool socks (and the Readhead imitations at Bass Pro Shops) year round. Footwear should be the subject of a separate discussion.

Outerwear. In rain, this is your primary defense. With respect to raingear (pants and jackets) There are several options.

- Waterproof. These include traditional raincoats. They are generally coated with a plastic coating that nothing, water or air, can get through. They keep out the rain, but trap body moisture, making them sweaty and uncomfortable. In cold weather, the trapped moisture can make you cold.
- Water resistant. Examples include nylon windbreakers. These garments have materials and/or coatings that repel water, much like the wax on a car. They are breathable, which makes them comfortable to wear and pass body moisture, but in heavy rains, water can soak through and get you wet.
- Waterproof/Breathable. These garments are generally water resistant to shed most water, but also contain a special inside layer that has microscopic pores that will allow water vapor to escape but will not allow liquid water to enter. The original such product was GoreTex, but there are a variety of generic options today. The best of these products can cost hundreds of dollars, but cheaper alternatives can be found at places such as REI, Bass Pro Shop and sometimes at Costco.

The key to remaining comfortable is to be able to control temperature and moisture. If you are exerting in freezing temperatures, you can sweat heavily. If you cannot get rid of the moisture (or prevent sweating from occurring by regulating your temperature, you will get cold (and possibly hypothermia) when you stop exerting. While waterproof/breathable fabrics help, adjusting ventilation is essential. Better jackets have "pit zips," which are zippers in the armpit area, which allow ventilation. In warm areas, pit zips can be unzipped even in the rain to allow internal moisture to dissipate while keeping the rain out. Ventilation and layering are keys to success. If you get too warm, shed layers/open ventilation. When you get cool, do the opposite.

Outerwear can be insulated, as in common skiwear, or you can purchase "shells," which do not have insulation. My preference is to purchase un-insulated shell type outerwear. This makes it more packable and usable in summertime. In cool or cold weather, a Polartec (or other "polar fleece") jacket can be worn under it to provide warmth. Polartec is made from recycled soft drink bottles. I have seen various knockoffs that seem to be just as good as Polartec. The key is the quality of the workmanship more than the name on the fabric. It comes in various thicknesses for varying conditions. I like fleece layers that have pit zips for temperature regulation. Multiple layers give the versatility to adjust to changing conditions. In cold rainy weather, you can take off your wet shell in the tent and keep the dry insulating layer on. Down is great as an insulating layer, but for most areas where we camp, it is too warm. Down is worthless when wet. For kids, I recommend purchasing a waterproof breathable shell jacket a size or two too big. This facilitates putting additional layers underneath it and allows you more use for your investment. Look for Velcro cuffs that can be adjusted to keep the sleeves from sliding over the hands. My favorite for lightweight raingear is the basic Marmot Precip. You can spend less and get serviceable gear or spend far more and get great jackets and parkas that offer all sorts of pockets and special features for use in cold weather and snow. I recommend polar fleece for warmth. I do not like the "rain proof" polar fleece shells because you cannot separate the wet part from the warm part, when you get inside the tent or a cold rainy or snowy day. I don't like wearing wet clothes in the tent, as they tend to get everything else wet.

For outer pants, ventilation is important as heat builds up, especially in the crotch and thigh areas. Better pants have zippers to provide ventilation in these areas. In my opinion, the best pants are the full zip models, which have zippers from the waist to the cuff on the outside of each leg. This allows you to put them on while standing, without removing your boots. It also allows you to adjust ventilation around the hips and legs. Another benefit is the zippers allow you access to the pockets of your pants underneath. For most purposes, I like the lightest, most packable pants I can find (like the Marmot Precip full zip). For skiing or other activities in snow, heavier weight outerpants with built in snow gaiters are a good choice.

Staying warm at night. Choosing a sleeping bag is beyond the scope of this document, but clothing is part of the art of staying warm on a cold night. Drink something warm before going to bed. This will cause your body to generate and release heat. Capturing this heat in your sleeping bag will keep you warm throughout the night, as your body releases less heat as the night goes on. The last thing to do before going to bed is to put on clean, dry underwear, socks and whatever other garments you will sleep in. The clothes you wore all day have moisture in them that will make you cold. By changing the night before, you will be ready to go the next morning. If you get warm or hot when you get in your bag, ventilate it to allow some heat to escape. Avoid sweating at all costs. If you stay dry, you are much more likely to stay warm.

While you can spend a fortune and purchase the best of everything, this is generally not a practical alternative for growing boys. Less expensive gear can provide most of the functionality and durability of the expensive gear. One should also recognize that younger scouts may not appreciate the value of their gear and give it proper care. Even if your son takes proper care of his gear, his tentmates may not have proper respect for the gear of others and mess it up.