Learn to Layer Clothing
Written by Tim Allard

Proper layering is one of the most fundamental concepts in outdoor recreation. Learn how to layer and you'll be more comfortable outdoors.

For many outdoor enthusiasts, the importance of dressing in layers is well known. This method of dressing allows you to regulate your temperature by peeling-off or putting-on clothing layers -- clothes that together wick moisture, insulate and protect from wind and rain. Each year, outdoor clothing becomes more specialized and better designed to support a layered system. Let's review the art of layering for outdoor activities.

What is Layering?
Layering is wearing a combination of clothes to regulate your body temperature, so you don't overheat or get cold. The system must match the climate conditions you are in, your activity level and your individual thermostat. Layers are broken into three categories: Inner, mid, and outer. These three layers act in unison (to trap heat, wick moisture, breathe, block wind, and repel water) but individually each layer performs specific functions.

Inner Layer for Comfort: The inner layer, also called a base layer, is the first layer of clothing you wear, directly contacting your skin. Long or short sleeve tops, full-length bottoms or briefs, and sock liners are examples of inner layers. A base layer should fit snug. This fit lets the material quickly wick away moisture from your skin keeping you dry and warm. Inner layer materials are often made of polyester, polypropylene, silk, or a mix of synthetic and natural insulating and wicking fibers, like polyester and wool. It's important to anticipate the temperatures you'll be in and pick the appropriate weight for an inner layer.

Mid Layer for Warmth: The mid layer should be a looser fit than the inner layer, but not baggy. It needs to maintain contact with the inner layer to function properly. These materials are designed to trap and hold your
body heat in small air spaces in the material; hence, why mid layers can feel lofty. Mids layers are also designed to carry moisture away from the inner layer, moving it from the body and pushing it to the outer layer. Mid layer materials range significantly, but some common ones are fleece, polyester, down, and wool. Many manufactures produce patented synthetic and natural blended materials for mid weight layers as well.

Mid layers are not universally categorized in lights, mids or heavyweights, but you may see these terms occasionally used by some companies to describe the degrees of insulation their clothes provide. Depending on the temperatures you are in, you may need to wear more than one mid layer. For example, in cold conditions you may have a wool top and then a fleece jacket as well. That's the benefit of dressing in layers; you can add or remove clothing as you need to keep comfortable.

**Outer Layer for Protection:** Manufacturers do not define outer layers consistently. Some describe outer layers as a shell (i.e., wind and rain type jackets) to protect you from the elements, while being breathable so your internal moisture can escape. As long as the units block wind or water they classify as an outer layer.

If you don't anticipate wet conditions, a lighter outer layer may suit you fine. Clothing design can also aid in breathability. Zippers under arms help you air out when engaged in aerobic activities or when you're caught in the high humidity of a summer thunderstorm. Ankle zippers aid in putting-on or taking-off pants while wearing footwear, and also allow for a snug fit over boots. The outer layer should also be rugged and able to stand up to abuse. If its material tears on a tree branch, you've just ruined not only a jacket, but also your layering system if it starts to rain! That said if you're just out on a walk on an autumn day, a nylon windbreaker-type shell might suffice.

**Say Goodbye to Cotton**
Don't wear cotton clothing as part of a layering system. You might get by wearing a cotton T-shirt fishing in a boat on a mild summer day, or wearing cotton socks for some minor yard work, but once you get active cotton works against you. Cottons inherent properties cause it to trap moisture, as oppose to releasing it. When damp cotton is against your body it draws heat from you. Also, if you're wearing damp cotton socks or underwear it can cause discomfort and chafing. Do yourself a favor and replace the cotton clothes you have for sport activities with new synthetic ones.
Head, Hands and Feet
You could have the best layering system in the world, but if you don't keep your extremities protected, you'll be uncomfortable. It's important to match hats, mitts, socks and footwear to the climate and your activity level, but also to your own personal nuances. Blocking the wind is also important for hats and mitts. Fleece models can be extremely warm on cool days, but a wind can easily blow through them carrying away your body heat. In this case wear an outer liner, or invest in ones with a wind-blocking layer that's laminated on the inside.

Layering Tips:

- Don't let yourself overheat when outdoors. Peel off layers as needed to regulate your temperature when active, and add layers when not generating enough heat.
- Err on having too many layers. It's better to be prepared and flexible, than to be underdressed and exposed to cold-related risks.
- Don't forget to stay hydrated when outdoors. The effects of dehydration will counteract the effectiveness of your layering system and your body's ability to keep you warm.

Proper layering is one of the most fundamental concepts in outdoor recreation. Learn how to layer and you'll be more comfortable outdoors. Stay away from cotton, focus on using the three layers where appropriate, and remove layers to prevent overheating or add them to stay warm. Follow these basic rules, and you'll get a lot more enjoyment from your time outdoors.