# Cold Weather Camping Essentials

# #1 Goal - Keep your own heat!

You are the most important source of heat, so most of these tips focus on how you can keep as much of your own body heat as possible. There are three ways you lose body heat:

- Radiation Most body heat is lost through your skin. Keeping every possible part of your body covered (especially your head) can reduce the amount of body heat you lose.
- 2. <u>Conduction</u> When parts of your body come in contact with something else that is colder than you (like the ground, a rock, or even your silverware), your body heat transfers to that something else.
- 3. <u>Convection</u> Your body heats the air around you, and moving air will drain more of your body heat. Proper insulation will consist of "dead cells" of air, tiny pockets in which air currents are absent (air mattresses are BAD).

#### Remember COLD...

### C - stay Clean

Your insulating layers must be clean and fluffed in order to do their job (trap "dead cells" of air).

# O - avoid Overheating

Staying active during a cold weather camping trip, along with higher than normal food and water intake, will ensure that your body core can send heat out to your hands and feet. However, too much activity (or too many insulating layers) can cause you to sweat (BAD! See "D" below.); and exhaustion accelerates heat loss.

# <u>L - use Loose Layers</u>

Tight layers of clothing, including socks, do not insulate as well as loose, baggy layers which can actually create more "dead cells" of insulating air. Also, tightly-fitting socks and gloves may constrict blood flow.

## <u>D - stay Dry</u>

Your body naturally releases water vapor until it reaches equilibrium with the air around it. It is important to choose layers of clothing which allow that water vapor to escape. As your activity level increases, remove layers of clothing so that you can avoid sweating. Also be sure to avoid (if possible) activities that will get your clothes, sleeping bag, tent, etc. wet! If you do get wet, change into something dry (especially foot- and head-wear).

#### General Tips

- Pack each change of clothes in a plastic bag to keep it dry.
- Always change into clean, dry clothes before sleeping.
- Go to the bathroom before bed—nobody wants to go out in the cold at 3 a.m.!
- Don't sleep with your face inside of your sleeping bag. Instead, a ski mask or scarf can be used to keep your face warm, while keeping the moisture in your breath out of your sleeping bag.
- Wear nylon/synthetic layers next to your skin, and wool on top. Avoid cotton, which wicks moisture, but replaces the "dead cells" of air with it.
- Use a foam pad mattress, or wool blankets under your sleeping bag to insulate you from the ground. Generally, you should have 2-3 times as much insulation under you as you do on top, since your body compresses the layers under you.
- Air out your tent and sleeping bag during the day.
- Don't pitch your tent on low ground—cold air stays low, and rain runs downhill. Also use natural wind breaks, or build them.
- Eat and drink at least as much as you normally do. A high-protein snack before bed will give your body fuel to keep you warm through the night.

## Equipment Checklist (in addition to regular camping gear)

- ✓ winter-rated sleeping bag (20 degrees or colder); if you don't have one, use one or more liners, extra blankets (wool or synthetic), or another sleeping bag
- ☑ sleeping pad, extra blankets (a second sleeping bag will work too); NO air mattresses!
- ✓ at least 3 layers for torso, 2 for legs
- ☑ extra socks (at least 3 pairs per day)
- ☑ extra gloves (mittens are better)
- ☑ extra hat
- ☑ ski mask or scarf
- ✓ something to sit on (square foam pad or camp stool)