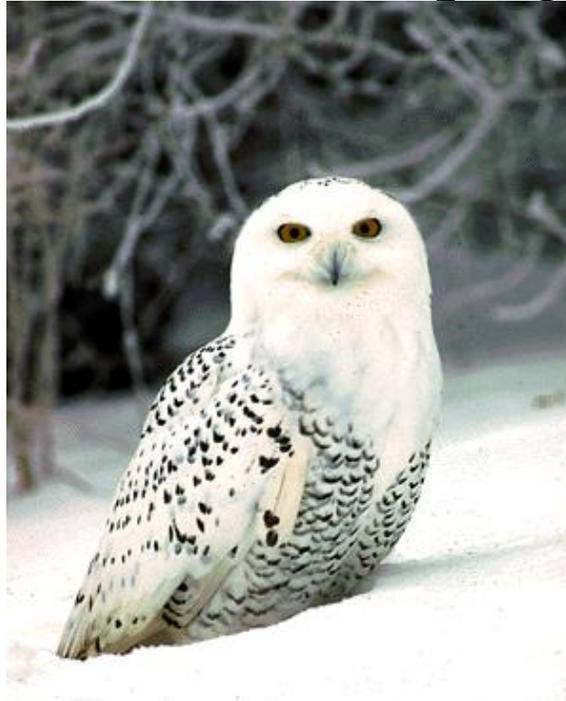


BSA Cold Weather Camping Overview



OKPIK (Snowy Owl)

CLOTHING

THE KEY TO KEEPING WARM IN COLD CLIMATES IS THE WORD: COLD

1) Keep Clothing **CLEAN**

Dirty clothes are cold clothes.

Dirt and grease clog the air spaces in clothing and reduce the insulation value

2) Avoid **OVERHEATING**

If you want to stay warm, don't get too hot, ventilate.

In cold weather you're better off being a little cool rather than run the risk of sweating.

3) Wear it **LOOSE** and in **LAYERS**

There is good reason for your cold weather clothing to be loose fitting and worn in layers. Loose clothing allows your blood to circulate freely and that, itself, helps to prevent frostbite. Suspenders are better than belts to improve circulation. Remember – weight of clothing does not mean warmth, layers do.

4) Keep clothing **DRY**

You've got to keep your clothing dry from the outside as well as from the inside.

From the outside you must guard against melting snow or rain.

From the inside you must guard against sweating.

Stay dry; thermal conductivity of water (wet clothes) is 30 times greater than still air (dry insulating clothes)

- **TYPES OF COLD**

There are basically three types of cold: wet, dry, and artic-like. Wet cold is the most dangerous, and it is the type of cold we are most likely to experience.

- Wet-cold temperatures range from 50 deg F to 14 deg F. Wet cold can occur either with or without snow.
- Dry-cold temperatures vary from 14 deg F to –20deg F. Dry cold is usually associated with snow conditions
- In Artic-cold, temperatures are below –20 deg F. Rarely if ever, would you encounter temperatures this low without snow.

Each type of cold requires different clothing considerations. Our typical weather requires you to be prepared for a variety of conditions with a variety of clothing and equipment.

During wet-cold conditions, temperature differences between the warmest time of day and the coldest period at night may be as great as 30-40 deg. This wide temperature fluctuation causes melting during the day and a hard freeze at night. The cycle of freezing and thawing, often accompanied by rain or wet snow, causes the ground to become muddy or even slushy. Wet-cold clothing is designed to cope with these conditions.

During dry-cold conditions, the ground is usually frozen and the snow cover is relatively dry, in the form of small crystals. Strong winds cause the low temperatures to seem colder and increase the need for protecting the entire body. Dry-cold clothing is the same as for wet-cold conditions except that more insulating layers are added, and the rain protection layer can be replaced by windproof outer clothing that is water repellent.

Artic-like cold requires the most insulation, especially when you are not active. During times of Artic-like cold, many materials change their physical properties, becoming brittle; they may break or shatter. Camping comfortably at these temperatures takes a great deal of experience. The correct layering of clothing is essential. The outer layer should be a windproof barrier that covers most of the body.

- **INSULATION, how does it work, see page 19**

- Synthetics used for winter clothing absorb very little moisture. <1% of wool
- Cotton absorbs much more and loses its insulation value when wet.

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- **THREE “W”s OF LAYERS OF CLOTHING**
 - Inner layer – Wicking
 - Thermal underwear
 - Wool, polypropylene, polyethylene, silk, fishnet, ...
 - Middle layer(s) – Wool /Insulation, adjust layers as needed
 - Wool
 - Synthetics
 - Outer layer - weather/ wind
 - Coat/ jacket/ wind breaker
 - Insulated pants
 - Water repellent
 - Use suspenders
 - Rain suit with hood
 - Good for rain and wind
- **TYPES OF CLOTHING – page 18**
 - Eliminate or minimize cotton
 - Cotton loses its insulation value quickly when damp or wet
 - Use suspenders to keep things loose
- **CONTROL PERSPIRATION**
 - Your body loses 1 ½ pints of fluid each day in the form of insensible perspiration. This is in addition to the perceptible perspiration of sweating.
 - Don't overheat
 - Ventilate by loosening or removing clothing and layers
 - Bring extra clothing
 - Change wet layers before they soak other layers
 - Change socks a couple times a day if needed.
- **HOW YOUR BODY LOOSES HEAT – page 13-15**
- **FROSTBITE AND HYPOTHERMIA**
 - Review pages from First Aid MB book, pages 73-75
 - Use the Buddy system
 - Finger test
- **HAND WARMERS/ HEAT PACKS**
- **SUMMARY**
 - Everything must be adjusted for weather conditions
 - You must be more organized and pay attention to details for cold weather camping.
 - Try different combinations of clothing – experiment, find out what works best for you
 - Try it out at home
 - Keep an eye on your buddy for signs of hypothermia.
 - Remember C.O.L.D.

CLOTHING RECOMMENDATIONS FOR COLD WEATHER OUTINGS

Before you buy anything look in your closet. Look at team jerseys, nylon cargo pants, synthetic soccer socks, and sweatpants, check the materials. Look in second hand stores. Look for sales at this time of year

- INNER LAYER – WICKING
 - Thermal Underwear
 - Wool, polypropylene, polyethylene, silk, fishnet, ...
- MIDDLE LAYER(S) – INSULATION
 - Wool, synthetics such as fleece
- OUTER LAYER - WEATHER/ WIND
 - Coat/ Jacket/ Windbreaker
 - Water resistant (Nylon shell, Gortex, ...)
 - Pants – **no cotton blue jeans**
 - Insulated if possible
 - Water repellent
 - Use suspenders
 - Rain suit with hood
 - Good for rain and wind
- FEET
 - Boots
 - Boots with liners are best
 - No tennis shoes
 - Keep feet loose to generate heat by movement
 - Hiking boots with gators
 - Socks
 - **No cotton**
 - Wool or synthetics
 - Liner socks
 - Bring extras
- HEAD
 - Hats
 - Wool or synthetic ski caps
 - Face & neck mask (balaclavas) – stops drafts
 - Painters face mask for extreme cold temps help pre-warm air to avoid drying out lungs
- HANDS
 - Gloves & mittens
 - Bring extras
 - Use layering for hands also
 - Run a string through sleeves to each glove to avoid loosing them in the snow
- Goggles
 - Snowmobile/ Ski
 - Over glasses
 - Fit over prescription glasses, available @ Walgreen's
 - Electrical tape with small slit over swim goggles
- Lanyards on knives, keys, wallet, flashlight
- Add zipper pulls using a small cord or string