

Winter Camping



What Gear Should I Bring?

<http://www.princeton.edu/~oa/winter/wintcamp.shtml#Trip%20Planning>

Winter Camping – Personal Equipment

- Heat Loss
- Insulation
- Layering
- Clothing Materials
- The Body & Clothing
- Clothing Techniques
- Sleeping Bags
- Foam Pads

Winter Camping – Personal Equipment

- Heat Loss
 - The body is a furnace
 - Produces heat chem. reactions and activity
 - Heat is lost through...
 - Conduction
 - Convection
 - Evaporation
 - Radiation
 - Respiration

Winter Camping – Personal Equipment

- Insulation
 - What is the best insulator when camping?
 - Why?
 - Clothing is not what keeps you warm!

Winter Camping – Personal Equipment

- The Layering Principle
 - Dead air space made through having layers
 - Layers provide certain CLO value
 - Allows for add/remove layers based on temp and activity levels
 - Body is heat source, clothing traps dead air
 - Too much on = OVERHEAT=>Sweat=>COLD
 - Too little on = Never staying warm
 - Must find proper balance

Winter Camping – Personal Equipment

- Clothing Materials

- Wool
- Pile/Fleece
- Polypropylene (Hydrophobic Fabric)
- Vapor Barrier Systems
- Polargurard, Hollofil, Quallofil...(Synthetic Fills)
- Primaloft, Microloft, Thinsulate...(Superthin Materials)
- Down
- Radiant Barriers



Winter Camping – Personal Equipment



- The Body and Clothing
 - Head
 - Hands
 - Feet
 - Outer Layer
 - Zippers
 - Miscellaneous

Winter Camping – Personal Equipment

- Clothing Techniques

- In the morning when you wake up
- When you are getting ready for the day
- When you stop for more than a few minutes
- If you get covered in snow
- End of the day...Bedtime

Winter Camping – Personal Equipment

- Sleeping Bags

- Rated below the temp you will be camping in
- Fills
 - Primaloft, Microloft, Qualofil, Polarguard, ect...
- Mummy Style w/ hood best
- Have the wrong bag? Don't worry...You can compensate for the temp deficiency

Winter Camping – Personal Equipment

- Foam Pads

- Must insulate yourself from the snow
- Foam Pads and inflatable pads work well
- Must be at least 1/2” thick
- Best to use a full length pad
 - Backpackers may have a $\frac{3}{4}$ length pad (not a good idea to use in winter)

Winter Camping – Personal Equipment



- Cotton is your enemy
- Layer, Layer, Layer
-