Comfort in the Outdoors

Introduction to Backcountry

Heat flow principle: hot to cold

- Hot air to colder body
- 98.6 degrees
- Air temps can exceed.
- Radiant temp transfers from sun higher than air temp
Heat transfer mechanisms

- Radiation
  - Transfer of heat in form of electromagnetic waves
- Conduction
  - From molecule to molecule in a solid substance
- Convection
  - Moving particles of a fluid or gas
- Evaporation
  - Heat carried away as liquid changes to gas

The fight against the heat

Strategy # 1 - Do something different

- Acclimatize when possible (slow adjustment)
- Maintain adequate hydration
- Limit physical activity (siesta)
- Seek shade
  - Hats/ tarps/ trees
- Remove insulators
  - Add wet materials if possible
Hyperthermia

Heat Stroke (a big problem/emergency)
- Symptoms: skin hot & dry, skin flushed, temp up
- Treatment: immediate cooling, hospital transfer

Heat Exhaustion (a problem)
- Symptoms: tired, headache, sweat, nausea, faint
- Treatment: shade, fluids, rest, slow down

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Possible heat disorder
- Faint, giddiness, headache, and heat exhaustion likely possible
- Sunstroke, heat cramps, and heat exhaustion possible
- Heat stroke highly likely with continued exposure

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Key questions

- What are the symptoms of hyperthermia and why is this an issue of immediacy?
- What air temperature does the danger of hyperthermia significantly increase?
- What are the responses or treatments for both heat exhaustion and heat stroke?