



Troop 30

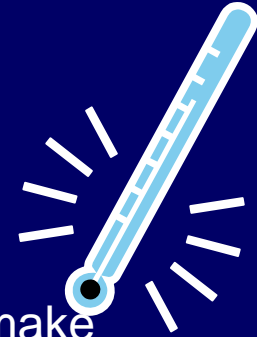
Introduction to

Winter Camping

**Dell Fischer and Bill
Baumgartner**

Version 1.4

How Cold is Cold?



- ❑ 0 degrees is 32 degrees *below* freezing
- ❑ There is essentially no useable water (you have to make water)
- ❑ Fires are EXTREMELY hard to come by
- ❑ You must conserve energy
 - Make shelter—without shelter you cannot survive
 - Ensure that you only expose a minimum of skin surface area and have well insulated boots and clothes
 - Ensure that your core body temperature is maintained
- ❑ You burn many more calories than normal while winter camping—you must bring high quality, energy laden food

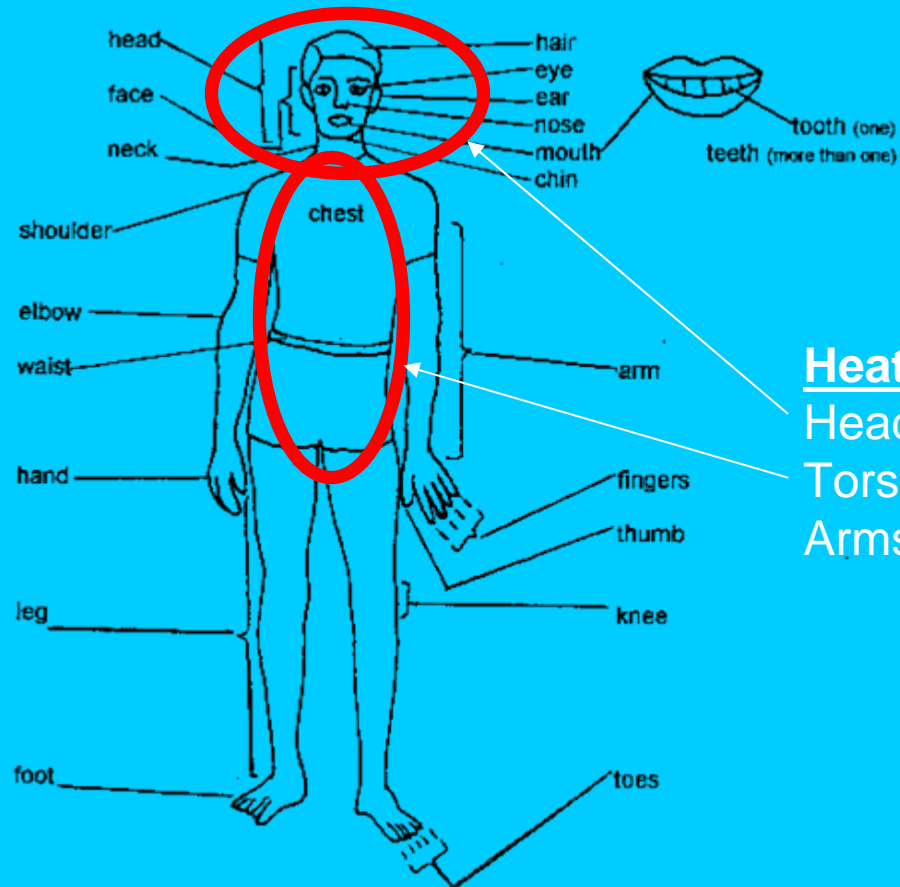
- ❑ Drink lot's of water. 2 – 3 quarts a day
- ❑ Your layered clothing is essential, your tent and your sleeping bag are essential
- ❑ Everything freezes quickly unless it is well protected
- ❑ Do not get wet!



Some Don'ts

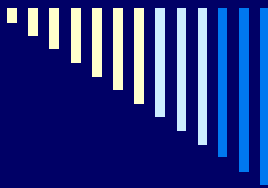
- ❑ No COTTON (Cotton Kills!)
- ❑ No Down Sleeping Bags
- ❑ No Plastic Air Mattresses

Where does the heat go?



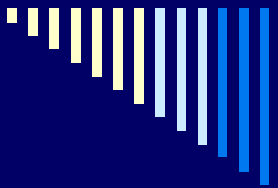
Keep those feet warm by
insulating them and keeping them
dry





More insulation with a moisture wick layer. Layer as needed.





Fleece or thermal underwear and a shell. Always brush off the snow to keep dry.



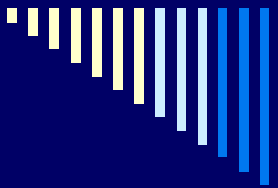


Poly wicking layer and a fleece shirt or thermal underwear.



Fleece jacket and a waterproof shell with hood for rain and wind.



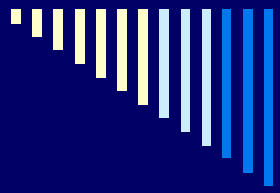


Wool hat and a balaclava mask.
Great for day and night.



Fleece liners inside gloves. Wool finger access.
Mittens are the best. Chemical gloves for snow
cave digging.





Gators keep the snow off and out of your boots.



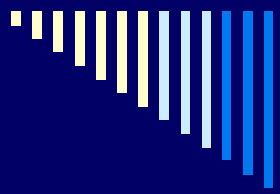
Insulating pads. Really need two.
Butt pad for sitting and standing
on during the day.





Shovel and saw to build tables,
caves and your creations.





A compression sack squeezes out the air, then bag all clothes to keep them dry.



Some Fun





Expedition Sleds

- Lighten your load



Snow Shoes and Poles. Rent at REI.





Sleeping bags

<http://www.rei.com/outlet/learn/camp/chsleepbag.html>

- ❑ **Synthetic Insulation** -- Insulates more effectively than down when wet. Dries more quickly than down. Costs less. Comparatively easy to clean.
- ❑ **Mummies**—These bags start narrow at the feet, widen toward the shoulder, then taper to an insulated hood.
- ❑ **Hood**—You can lose up to 50% of your body heat through your head. A hood traps this warmth and holds it in.
- ❑ **Collar**—A big neck gasket (located at shoulder level inside the sleeping bag) that helps hold heat inside the bag.
- ❑ **Draft Tubes**—An insulation-filled tube that runs alongside the main sleeping bag zipper to keep warmth from escaping. Usually found on moderate to cold - weather bags.
- ❑ Use a line insert to make a summer bag warm for winter.

Preparing your personal items

- Insulated cup to keep your drinks warm. You will likely be very cold and need the extra help
- *Winter is a thief!*
Tie small items to large items



Preparing your personal items

1. Make sure that you insulate your canteen—otherwise your drinking water will freeze.
2. Make sure you have another container to relieve yourself at night—you do not want to leave your sleeping bag for nature calls.



Water- Input and output

Insulate your water bottle to keep it from freezing.

Make a Pee bottle so you do not need to leave the tent at night.



Your choice: tent stakes or deadmen

1. Prepare your tent stakes or deadmen.
2. The snow will crystallize and harden around these anchors—you will use the cord to find them and remove them from the snow.



Pack it out? Yes.

1. Put a little kitty litter in brown paper bags
2. Place them inside two layers of ziploc bags
3. This is required in some locations.



Hiking with a sled



**Required: Rope
tied to back of sled
for control on slopes**

Preparing a site for your tent

- Ensure that you have chosen a safe location to set up your tent.
- Level the site with your snow shovel.
- Tamp it down with your snow shoes and follow-up with boots if needed.
- Smooth the surface—you will be sleeping on it



Compacting the snow

1. Tamp it down with your snow shoes and follow-up with boots if needed
Smooth the surface—you will be sleeping on it.
2. You will also tamp down the top of your snow cave to make the roof structure stronger.



Home sweet home





Choosing a place for your snow cave

Find a location with a snow depth of at least 8 feet. 10 feet or more is even better

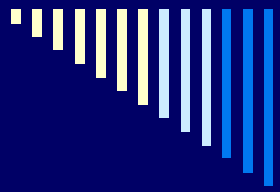


Dig a main trench



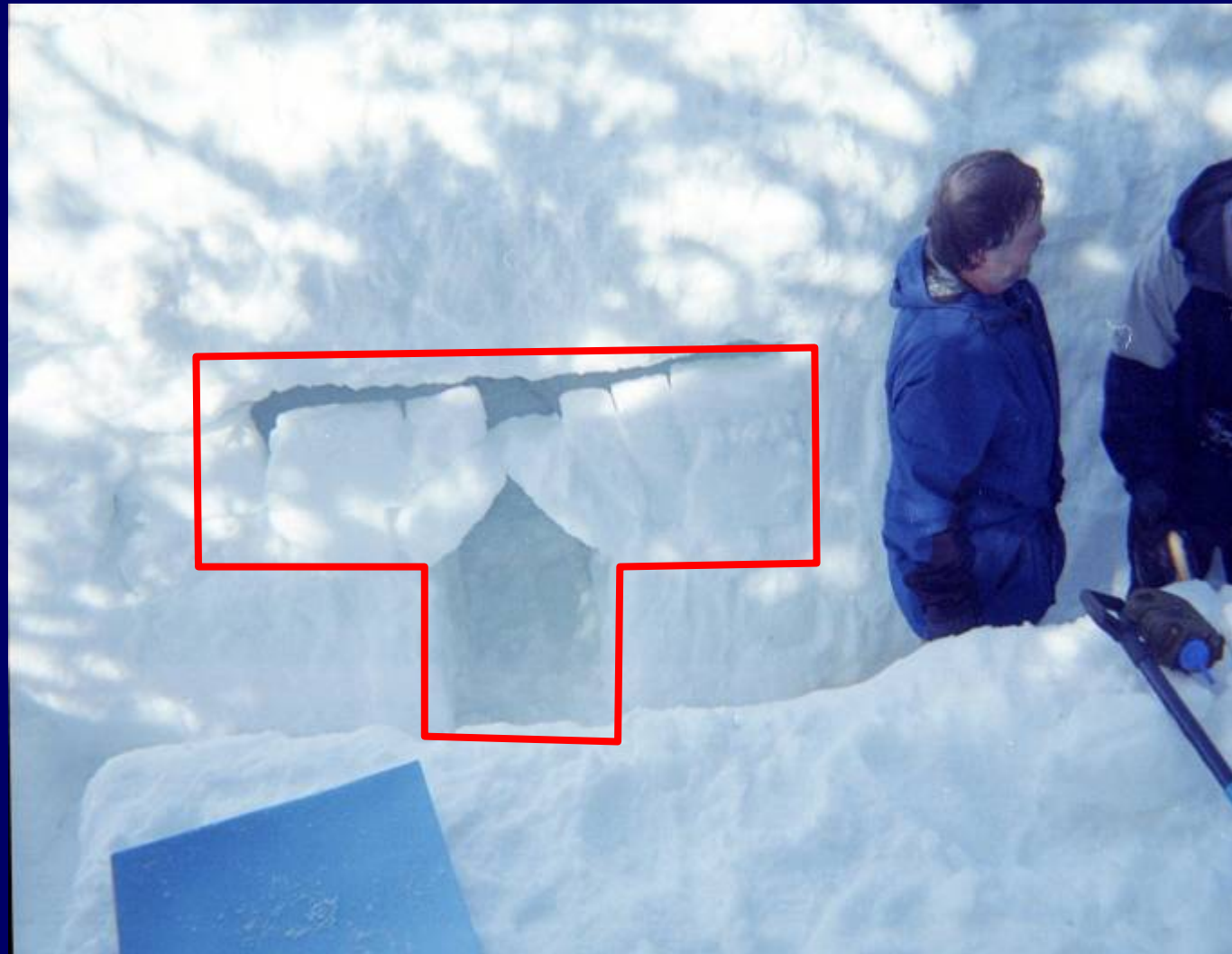
Keep digging— more main trench





The Snow Cave is “T” shaped The “T” is made into a doorway

After the blocks are placed, they are mortared in with soft snow that is compacted by hand.



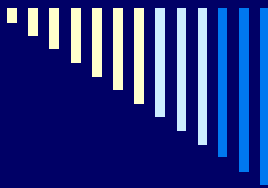
Smoothing the top of the cave

The roof of the cave is smoothed to prevent drips from the ceiling.

If the cave is built correctly, water runs down the sides of the cave and refreezes

Notice the “T” shape of the cave opening.





Getting blocks from the snow quarry Mr. Baumgartner, his saw, and Mr. Hine





Mr. Hine is a happy man after a full night of sleep

Notice the deep walkway which is next to the sleeping platform—this is the cold well.





After a very restful night

**Mr. Fischer
and Mr. Tella
are ready for a
new day.**





Other types of snow structures

An igloo



Build your own custom snow kitchen

The kitchen is dug into the snow and is lower than the surrounding area to provide shelter. If it is snowing then you will put a tarp over the kitchen.

Build a seating area near your cooking area. Bring closed-cell foam pads to sit and stand on.



A close-up of the kitchen

Bring a piece of plywood to place your stove on. This is for stability and to prevent the stove from melting into the snow.

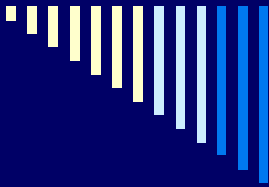
You will want covers for your pots to conserve fuel



READY for a hike!

After building a snow cave, it's time for some sightseeing





Returning the site to a safe condition





Where to learn more

- Boy Scout book
- Field book
- Troop 30 website
 - The website has several documents and pointers to more information
- Take the Winter Camping Training class.



TROOP 30

LOS ALTOS, CA