

Winter Camp Awareness Tents and Terrain

The Objective:

To Provide you with information in selecting the proper tent for snow camping and how to construct safe snow shelters



4 major types of Tents

- > All Season
- > Summer
- Winter/ Mountaineering
- > Three Season

All Season Tents

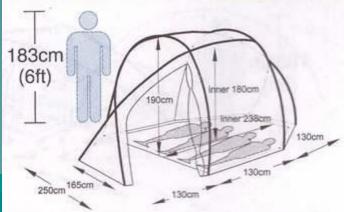
- Can be used year round
- Weigh 5 to 10 pounds
- 4 Aluminum poles
- Removable vestibule
- Rain fly can be set up by itself



Summer Tents

- Designed for hot weather/ climate
- Weigh 4 to 8 pounds
- Light weight 2 pole construction
- Lots of ventilation
- Lots of mesh





Winter/Mountaineering Tents

- For winter camping under extreme conditions
- Very strong!
- 5 to 10 pounds
- 4 to 5 aluminum poles
- Optional free standing construction
- Full rain fly coverage
- Two doors and steep sides



Three Season Tent

- Built to withstand light snow, warm climates and conditions in between
- Weighs 4 to 10 pounds
- Designed for versatility
- 3 pole high strength
- Full rain fly coverage
- Large vestibule to accommodate gear



Qualities of a Winter Tent

- "Bath tub" floor extends up side walls
- 2. Aluminum poles
- 3. Double wall
- 4. Two Exits
- 5. Shape Sheds snow load
- 6. Extra poles for greater snow loading
- 7. More stake lines and cross lines

When Choosing a Tent Qualities to Consider

- 1. Tent components
- 2. Types of tents
- 3. Materials
- 4. Ventilation
- 5. Size and weight
- 6. Other key features (Gear loops, one piece floors, collapsible tent poles...)

Preparations and Modifications of Tents for Winter Camp

- Use of snow walls as wind breakers
- Floor covering to help insulate your body
- Reinforce, if necessary, for snow load
- Silicon lube zippers and poles so they don't stick
- Build snow stakes

Tips for Tents

- ◆ DO NOT COOK IN A TENT
- Bring <u>Extra</u> poles
- Bring a ground tarp for your tent
- ◆ Always stake down your tent
- Bring a Wisk broom to brush the snow off your clothes and boots,
 <u>before</u> getting in your tent

Snow Shelters



Types of Snow Shelters

- Snow Dome
- Snow Cave
- ◆ Igloo
- ◆ Tree Pit
- Snow Pit or Snow Trench
- Snow Frame

Snow Dome

Takes 15- 20 man hours

- Take Snow and pile it up 8' high and 12' diameter
- Dig and hollow it out after 2 hours, or snow freezes
- ◆ Poke ventilation hole<u>s</u> (1" diameter)
- Close the entrance to seal in warm air if needed



Advantages of a Snow Dome

Provides more permanent, long term shelter. Shelter should be tall enough to stand inside. A single candle will provides plenty of heat, if the entrance is kept closed. Don't light a big fire inside, else you will get wet from melting snow drops.

Precautions of a Snow Dome

Stay as dry as possible. Avoid overheating while building the shelter. Keep digging tools and packs inside in case of collapse. Make several small ventilation holes in case one gets closed/clogged. Do not build fire or use stove inside because of CO2 emissions.

Snow Cave

Takes 3-4 man hours

- Tunnel into drift with T-shaped entrance
- Pack down snow to make a T shape
- Put a tarp down on snow to sleep on and the other side of the T is for your packs



Advantages of a Snow Cave

 Has many of the same advantages of a snow dome with the added advantage that you don't have to create a large snow pile before beginning

Igloo



Takes 4 to 6 man hours

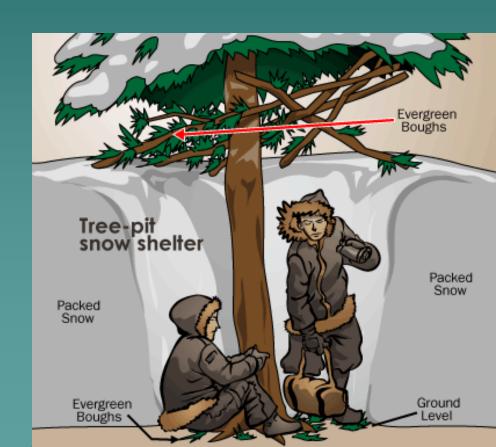
- The igloo consists of blocks of hard dry snow that are 3' long and 15" high and 8" thick
- Form a circle with the blocks that form a spiral
- Warning: you need at least one air hole to prevent suffocation



Tree pit

Takes ¼ man hours

- Find a large evergreen tree with a large spread of branches
- Dig around the trunk until you reach the ground, pack down the snow to make a floor
- Put a tarp on the ground to sit and sleep on



Advantages of a Tree Pit

- The area around the base of the trunk usually has a thick be of pine needles which provide excellent insulation for a ground bed
- Tree pits require very little energy to build and can fit several people
- The trunk can be a comfortable and (somewhat) dry place to sit and lean against

Precautions for a tree pit

Tree branches will sometimes break when snow piles up on top of them, be careful of these falling branches

Snow Pit or Snow Trench

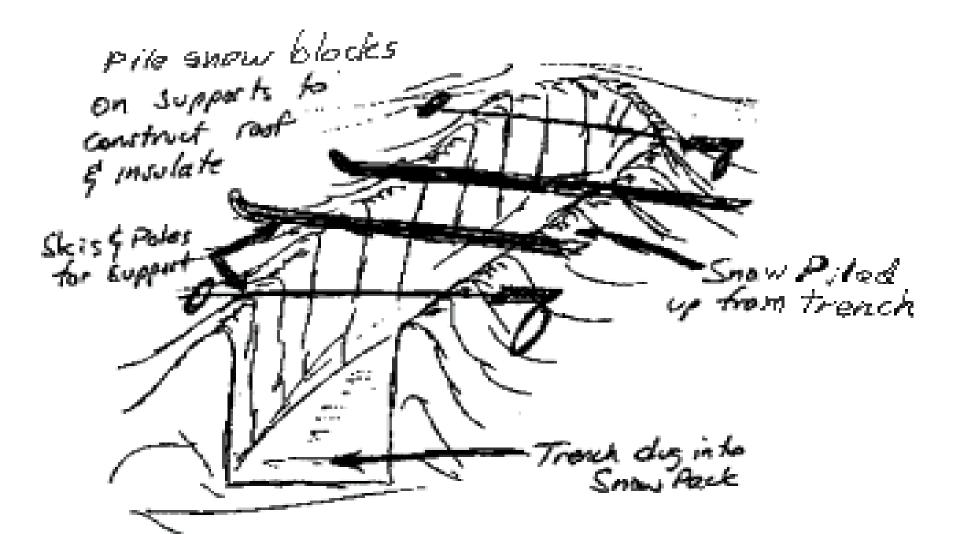
Takes 1/2 man Hours (Deep snow required)

- Dig out a large pit/trench long enough for you to lay down in
- If you have a tarp or other large piece of material, place it over the top
- Weigh down the edges with branches and cover with snow
- Tunnel in to one end of the shelter for access and then cover once inside to keep you warm

Advantage: easy to build and fast to get out of wind

(Photo on next slide)

SNOW TRENCH

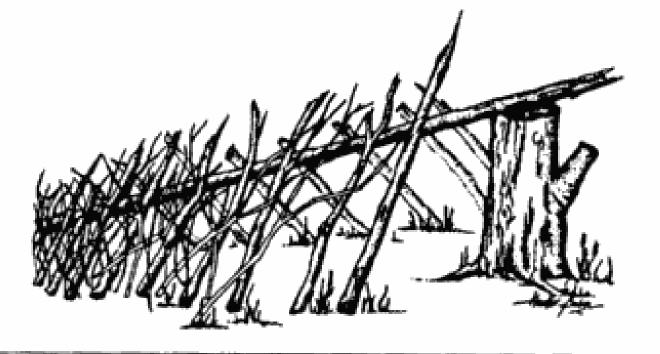




Snow Frame

- Not practical unless the log is at lest 6 inches tall
- Lay another sturdy log across the stump and brace so it wont roll off
- Lay branches against the log and use branches or a tarp to keep snow out
- Pack the sides with snow to keep heat in
- Do not cook inside <Next frame has photo>







What should you consider When choosing your Campsite?

Consider the fallowing when selecting a campsite:

- 1. Sun and exposure to wind
- 2. Wind direction
- 3. Slope and avalanche paths
- 4. Drainage...What is under snow pack?
- 5. Low places where air is still and coldest
- 6. Dead branches hanging from trees
- 7. Tramp/pack down the area for your ten

Questions?