

Winter Campsites

The following general information needs to be supplemented with the actual rules in place at the camping facility. Remember, National Parks, Historical Sites, State & County sites, and private facilities will generally have specific rules that **MUST** be followed. Incorporate their requirements into your campsite set up.

Campsites should be set up so that the rear of the tents is toward the prevailing wind or a windbreak. The prevailing wind can be determined by observing snow, leaves, moss, etc. If the campsite is in a hilly or mountainous area, the rear of the tent should be uphill because this is the region where the cold blasts will come from after sunset. Natural windbreaks (bushes, hedgerows, tree lines) as well as man made (snow walls, piled brush, etc.) should be used when possible. Caution should be exercised, when using a tree line for a windbreak. Avoid the temptation to camp under those trees. The results of a snow-laden bough breaking loose could be the crushing or impaling of your tent or YOU. The extra cover provided is not worth the risk.

In addition to facing the rear of the tent toward the wind, your tents should be set closer together than normal "fair weather" camping for two reasons:

1. The tents themselves form a windbreak.
2. It allows you to readily summon assistance from your neighbor when necessary.

Camping in snowy cold weather brings a vast array of difficulties – not the least of which is mud control. The constant walking on snow as well as the sun will turn snow to water and the ground to a muddy mess. Heavily used areas such as for cooking, campfire and in front of the tents are most likely to turn to mud. To control the mud, clear away the snow and cover the area with one of the following:

1. Pine boughs, grass, straw/hay, leaves
2. Corduroy of logs (see description below)
3. Pallets (recommend roofing/shingle pallets because slats are closer together).

A corduroy is simply a series of small logs, no thicker than your wrist and about four to eight feet long for a fireplace, or as long as needed for other applications (tents/trails/latrines/etc.). Lash these poles together (similar to a raft) as wide as needed for the area to be covered. A corduroy around the fire will make camp cleaner, cooking and other gatherings a bit more mud free, and reduce the number of mess kits/silverware/other objects that traditionally go "missing" around the fire.

Food and Water:

Certain precautions must be taken when storing food and water in cold weather. Food can freeze at temperatures of 32 degrees F or below. Non-perishable foods in glass and plastic containers are susceptible to freezing. Glass containers should not be taken on cold weather camping trips. Plastic and metal containers when taken should be stored in an insulated container (old cooler, Army melamite can) because even the plastic and metal containers will explode when the temperature goes below 0 degrees F.

Sometimes, it is assumed that because it is cold outside, refrigeration for perishable items is not important. Milk, orange juice, & eggs will freeze making them hard, if not impossible, to use. A cooler (insulated container) for perishable with minimal ice is needed to keep items from freezing. In the case of eggs, it is recommended they be broken and placed in a plastic container because the cooks have

difficulty breaking eggs with gloves on, and if they use their bare hands they become very susceptible to frost bite.

Water storage can have its problems. Water starts to freeze at 32 degrees F and as temperatures drop becomes more viscous. If the campfire area allows, water in metal or plastic containers can be placed near, NEAR the fire to insure pourability. When doing this, much care needs to be given to how close plastic containers get to the fire. Another method is to store water in insulated water jugs (Coleman, Rubbermaid, etc.). The valves on these containers will freeze at low temperatures. Usually, even if the valve is frozen the water remains pourable if the top is removed.

Shelter:

What should be used for shelter? For personnel, the shelter can be tents, igloos, snow caves, etc. Here we will talk about tents. The modern nylon tent has breathable panels, but in cold weather even these are not enough to remove the moisture caused by breathing. The front and rear window/door should be opened about 4 inches to allow the wind to remove the moisture-laden air. Today's nylon tents have two types of floors, nylon and polypropylene. The nylon floors need to be protected from the elements (snow, moisture, etc.) by something. Later in this section we will discuss protection for floors. Nylon tents are easy to set up and lightweight. The canvas tent is a better retainer of heat than the nylon tent but it is much heavier and harder to transport making it not well suited for cold weather use. Also, most canvas tents do not have a floor.

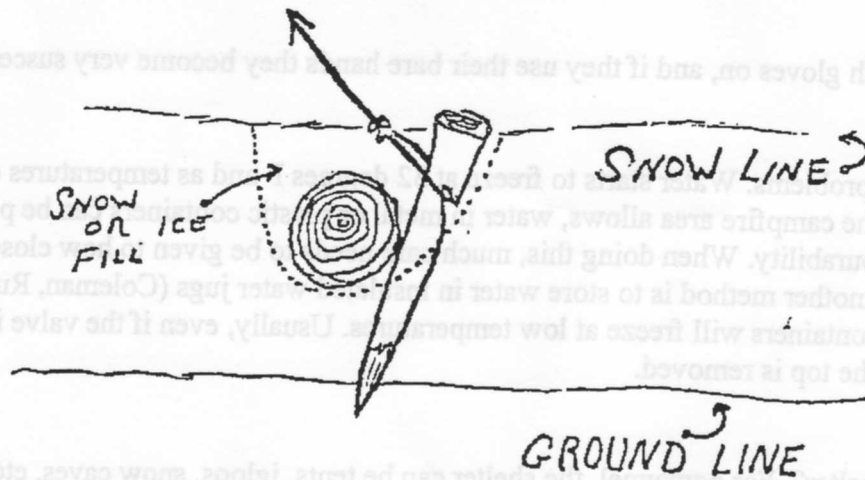
To protect the occupants of a canvas tent or nylon tent with nylon floor from the elements, some barrier needs to be used. Some barriers are biodegradable; they include straw/hay, leaves and paper. The non-biodegradable barriers include polypropylene tarps and plastic. Probably the best barrier is _____ plastic sheeting (preferably 6 or 8 mil thick) because it is virtually impervious to the elements and to mold and mildew. Caution must be taken to insure the plastic is completely under the tent so as not to let moisture run on the plastic and under the tent.

Snow is an excellent insulator as shown by the igloo and snow cave. It can also be used around the base of a tent to stop air infiltration. If the tent is canvas the snow can be loosely placed on the skirt. If the tent is nylon do not put snow against the side as the heat from inside will cause the snow to melt and water to penetrate the tent. On a nylon tent an 8" to 12" wall of snow 6" from the base will act as a windbreak.

If a cooking shelter is used and has four walls, one corner should be left unsecured to allow carbon monoxide to exit. If you secure a tarp to a peg by rope in cold weather (snow or not) your rope will work better if the taut line hitch is at the upper end not near the ground, where water or snow could cause it to freeze and not be adjustable.

Driving tent stakes into frozen ground can prove to be an interesting experience, especially if you are trying to drive one of the newer aluminum-alloy pegs, plastic or even better, one of the old style wood type. They will bend, curve, or break. Long (8 inch or longer) NAILS, from the local hardware store, can be used in place of the pegs. They do not bend as easily as the aluminum-alloy.

If the ground is too hard to drive a stake in and has a light covering of snow, remove a 12" x 12" square, place your stake vertically in the square, attach your rope (double half hitch) and cover with water. This should securely freeze your stake to the soil and at least give you an attachment point.



If you are fortunate enough to be camping in deep snow and wish to rig a tarp, but cannot drive the peg deep enough, use the "Snow Anchor Alternate" method shown below:

Simply custom-cut a peg of desired length, and a log about 6 inches in diameter and 18 inches long. Dig a trench, bury the log and drive the peg behind it. Fill the trench with snow (wet the snow if possible) refill the trench, tamp down the wet snow and allow to freeze. (It is not MANDATORY to use wet snow, only for increased strength should wet snow be used!) A good thing to remember is that pegs should not be driven into the ground so far as to make it impossible to remove because of BSA Leave No Trace policy.

Fires:

If a fire is built for the people to keep warm by, great care needs to be given that as each person nears the fire they open or remove appropriate layers of clothing. This keeps them from becoming overheated. If they do not adjust the clothing, when they walk away from the fire they will be extremely cold.

If a fire is built for the people to keep warm, great care needs to be given that as each person nears the fire they open or remove appropriate layers of clothing. This keeps them from becoming overheated. If they do not adjust the clothing, when they walk away from the fire they will be extremely cold.

In order to prepare meals some sort of fuel has to be used. One fuel is white gas (Coleman fuel). This fuel offers reasonable heat. Its bad point is the storage requirements for the spare fuel and the possibility of spills while fueling. Propane is another fuel that is commonly used. Its storage and refueling is good but due to the use of copper and brass fittings, sometimes the lines/tanks freeze. The last fuel we will look at is charcoal. Charcoal is the best fuel in cold weather. It is easily stored and gives good heat and is not affected by the cold. When using charcoal, an off-the-ground container is recommended (less ground thaw). These containers can be purchased or homemade.

Equipment Transport:

We now know some of the equipment we need but, how do we get it from the vehicle to the site? If there is snow, a sled is a good choice. It can be your Klondike sled, a store bought sled, a toboggan or a snow disk. Another method would be to use some kind of cart (if snow is not too deep); these also could be commercial or homemade.

In many National Parks/Historical Sites, state, county, local or private parks, there are "off limit" areas and the appropriate persons should be contacted to find out what these limitations are.