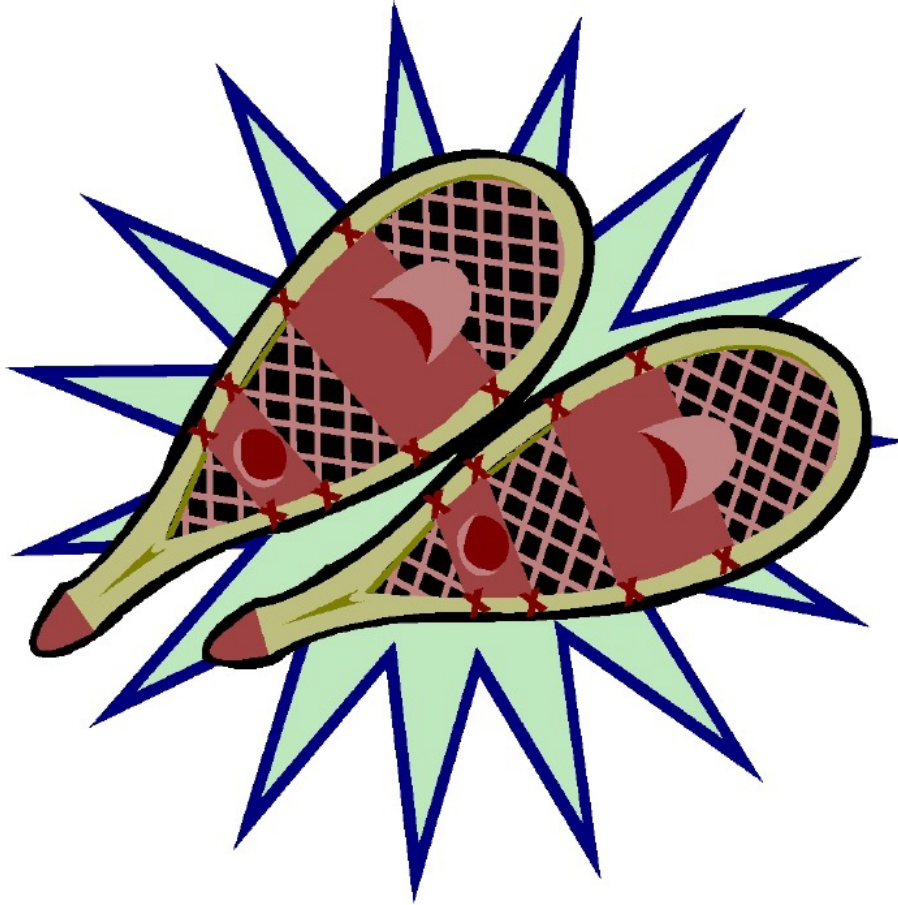


Winter Travel



Let it snow, let it snow, let it snow!

The history of North American winter travel

Since people have inhabited the boreal forest, they've had to live together with their surrounding environment. This means that they have had to adapt to seasonal climatic changes, relying on their skills, the forest's abundance, and their animal neighbors.

Traveling in the winter can be very challenging, but can also be a great way to explore an environment that many people don't get to appreciate.

The native people, the Penobscot, Passamaquody, and Maliseet tribes, had to develop equipment and clothing over long periods of time in order to protect themselves from the harsh elements and bitter cold. They needed to become self-reliant to find ways to stay warm, be able to go out and find food, or perform daily chores even in the depths of a snowy winter.

The primary mode of transportation for the native nations in the winter is by snowshoe. Snowshoes have been traditionally constructed of white birch, ash, or larch trees. The lacing systems are usually made of caribou or deer rawhide. Today high quality snowshoes made in the traditional manner are becoming more and more rare. Skills, refined over centuries, were once passed down from generation to generation. With the advent of the snow machine and the commercial snowshoe (cheaper and easier), the artistry and artists of snowshoes are becoming a thing of the past.



We can tell a lot about a snowshoe from just looking at it. Often an experienced winter traveler can tell a snowshoe's use, region, maker, quality, and age just by looking at it. Garrett Conover writes, "A good snowshoe is a great achievement. The designs they wove into the lacing give thanks; they praise the snow and weather, the trees and animals that gave the component parts, and acknowledge a spiritual world beyond our reckoning."

Additionally, among some people, the designs reveal with a leaf pattern that the shoe is for a woman, or with a ptarmigan track that it is used for a man. With each impression of an Indian craftman's masterpiece a prayer falls upon the snow."

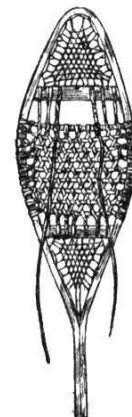
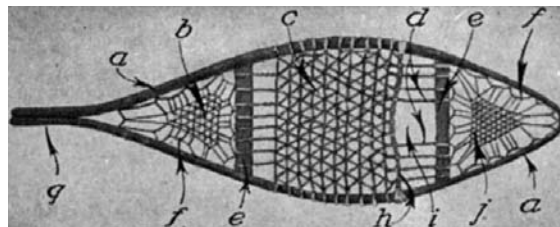
How do snowshoes work?

Snowshoes are such a great tool, because they are so simple. Essentially snowshoes work because they make your feet larger. When the snow is deep, it is very easy to sink or break through the top layer of hardened crust. Snowshoes give your feet more surface area (generally referred to as "float") and distribute your weight more evenly on the surface so you're less likely to sink into the deep snow.

Snowshoes come in all different shapes and sizes, but they all work on the same principal. The design of snowshoes is far from accidental and is usually specifically catered to their intended use and region of use. In the boreal forest, snowshoes are longer and more narrow which allow the walker to get through dense forest. In the Arctic, where there aren't as many trees to navigate through and the snow is deeper, round snowshoes have been developed. Look at the snowshoes below and guess where they were made and what they are used for.



Forest Snowshoes,



Snowshoe

Toboggans

As a rule of thumb, true simplicity is the result of complicated thought. Traveling in cold conditions require one to be as efficient as possible. Over long periods of time, even though the general use of toboggans has changed, the design of a toboggan hasn't changed a bit.



Today the first thought of a toboggan conjures up images of riding a toboggan down a snowy slope, hanging on tightly as you build up speed.

But traditionally, toboggans have served a different purpose than sledding. Toboggans are the primary way we carry our gear into the wilderness. Everything we carry can be fit onto two toboggans, or sleds. We pack all of our food, clothing, and camping equipment. Skis and snowshoes (when not in use), as well as, items we frequently need, like an axe, change of clothes, and snacks can be lashed on top.



Toboggans were once made from birch or larch in the northern boreal forest, or maple or ash when made further south. Toboggans work well because they evenly distribute even the heaviest of loads along the surface, whether its ice or snow. As long as most of the travel is done over waterways, toboggans are very simple to use and amazingly effective.

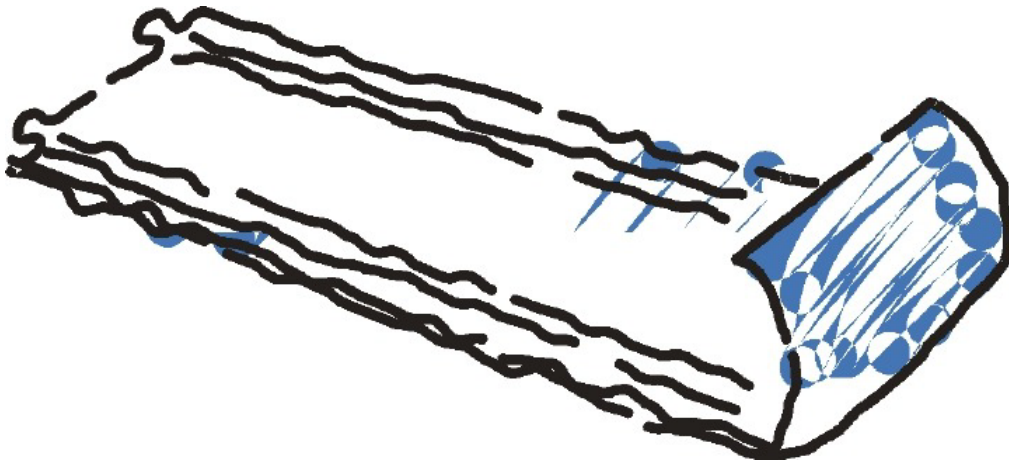
In the morning, we pack up all of our gear and fit it on top of the toboggan. The tarp that wraps all of the equipment is then tightened down, so items don't shift while traveling. The tarp is then lashed to the toboggan's lines that run down the length of the sled.

Garret and Alexandra Conover write about the toboggan that it is the "most primitive and basic of sled types. Yet, it is ideally suited to its habitat and, the snow walked, can be a tool of consummate function."

Toboggans work better than backpacks or any other way of transporting equipment, because they follow you wherever you go without adding any weight to your snowshoes. This means that you won't sink into the deep snow. And since the toboggan carries the weight, you expend less energy pulling a sled than you would if you were to carry the weight.

What type of toboggans does the Wilderness Classroom use?

Garrett and Alexandra pull wooded Cree-style sleds. They are made of thin wooden strips which give them the strength to be pulled over long distances. They are also flexible enough to contour to the landscape, even when obstacles like rocks, ridges, and hills stand in the way of progress.



How do you pull them?

Throughout the day we are constantly changing the way we haul our gear. Conditions change and there are always a new set of obstacles to get through. The best winter campers adapt the way they haul their gear based on the surrounding environment. If there is deep snow, pulling a toboggan is more difficult, but when there is little snow on a wind-swept lake, pulling becomes almost effortless.

What do you wear to stay warm?

Staying warm determines whether or not your winter adventure is going to be pleasant or extremely hard. Staying warm isn't always easy to do, but there are some good ways to prepare your body, and make sure that your body functions well in the cold.

A good way of preparing yourself for the winter cold is to dress in layers. Since the amount of activity spent is always changing, we need to be able to take off or put on additional layers throughout the day. Even if the temperature is cold, when we're working we get warm. But when we stop for lunch, our bodies quickly cool off and we need to put on more clothes.

The base layer is long underwear tops and bottoms with wool socks. Our long underwear is made of Merino wool or a synthetic poly-propylene. Wool tends to smell better after a few weeks without a washing. Both fibers work very well at trapping body heat, while also wicking away any sweat that develops. The key to staying warm is staying dry.

Above the base layer we put on a light fleece top. These function in the same way as the long underwear: insulating as well as wicking perspiration away from the body. On our legs we wear wind-proof pants. The outside layer needs to always be wind-proof to keep the bitter cold winter wind from making us cold.

After that we put on wind-proof parkas, sometimes with a heavier weight fleece jacket underneath.

We wear a combination of hats, neck gators, and balaclavas to keep our heads warm. The hats cover our ears and the back of necks. Balaclavas are like ski-masks. They cover the whole face and leave a little hole for breathing and seeing. Keeping your head warm will keep the rest of your body warm. And should we begin to overheat, removing a hat is the quickest and easiest way to cool your body down.

For our footwear, we find that the traditional mukluks work best at keeping our feet warm. They work better than other large winter boots because they allow our feet to breathe and keep any sweat from becoming ice. They are made of moosehide and canvas. A wool felt liner and insole are added to the mukluk to insulate our feet. They're very light and comfortable.

For our hands, we prefer using mittens rather than gloves. Why do you think that mittens might be warmer than gloves?

We also carry down jackets to wrap ourselves up in during lunch or camp chores.

Why So Many Snowshoes?

Native people survived extremely well under the harshest of environments. In the northern boreal forest, winters last for almost half the year, and snow conditions are always changing. To cope with their ever-changing and diverse environments, people developed new ways of snow walking.

Snowshoes come in a variety of shapes and sizes for different areas, climates, conditions, and activities.

Visit the following website:

<http://www.glencoe.com/cgi-bin/splitwindow.cgi?top=http://www.glencoe.com/sec/science/top2.html&link=http://www.lakesuperior.com/online/205/205snowshoes.html>

Let Sparky show you the snowshoe options and guide you through choosing the right snowshoe for your climate and region using the following process:

1. What are the winters like where you live?
2. How much snow, on average, do you receive?
3. What type of everyday tasks would you have to rely on your snowshoes for? Garrett and Alexandra need their snowshoes to gather firewood in the dense forest, travel quickly on flat surfaces, walk through deep snow. What would your snowshoes have to do for you?
4. Which type of snowshoe would work best for you? Why did you choose that type?

Now, develop your own snowshoe according to your climate and region. If you live in a region that doesn't receive much snow, pick a place that does (anywhere in the world!). What shape would you choose for your snowshoes? Why did that shape fit your needs? What would your snowshoes be made out of according to the trees available to you? What would you use for lacing your snowshoes? Remember that you have to construct your own snowshoes, so you won't be able to make aluminum framed snowshoes.

Draw a picture of your new snowshoes on the back, and give them a name!