

Snowshoeing



Winneshiek County Conservation Equipment and Recommendations:

- **Who:** 5th grade and up
- **What:** 15 pairs of snowshoes
- **Where:** School yards, parks, trails, Lake Meyer Park. Call 563.534.7145 for more information.

Introduction

Snowshoeing is starting to become more popular with people who are looking to increase their outdoor activities in the winter season. Many people hike trails throughout the spring, summer, and fall, and then back off because of the snow. Snowshoeing allows you to experience one of the most overlooked and under-appreciated seasons of the outdoors with little investment. Snowshoeing can be relatively inexpensive, is easy to learn, and is a great cardiovascular workout.

Some of the benefits of snowshoeing are that you do not need a trail or to pay a user fee to enjoy an hour or a day of outdoor activity. Any area with public access that is covered with snow is great for a snowshoe adventure.

Snowshoers are able to traverse areas that would be all but impossible to traverse during other seasons as snow depth and frozen water provide the floatation necessary for the snowshoes.

If you are looking for a wonderful solo adventure or an entertaining social activity, snowshoeing may be your answer. Snowshoeing is a great activity by itself or combined with other outdoor pursuits like winter camping, snowboarding, sledding, or running. Snowshoeing is a great excuse for getting out and enjoying winter.

A Brief History

Snowshoeing is known to have been practiced in present-day central Asia about 6,000 years ago. People needed to eat during the winter and relied upon their hunting skills to feed their families. These hunters observed the feet of animals, like snowshoe hares, that were able to travel easily in the deep snow and tried to mimic those feet to gain an advantage for themselves. The first snowshoes were nothing more than bent twigs with rawhide lacing. It is believed that as ancestors of the Inuit and Native Americans migrated from Asia to North America, they brought snowshoes with them, which were modified slabs of wood. Along the way, changes were made for different types of snow conditions. Eventually, snowshoes evolved into skis in Scandinavia.

Until the 1970's, snowshoes were used primarily for employment and survival rather than recreation. The primary materials utilized in the construction were wood (white ash) and rawhide. Wooden snowshoes are generally categorized in three different styles or shapes. The

oval shaped *bear paw* was designed for use in forested conditions where maneuverability was most important. The truly long (46+ inches) *Yukon snowshoe* was developed for traversing deep, powder-covered open areas, common in the Northwest. The *beavertail* takes advantage of the best features of both the bear paw and the Yukon, and has been utilized in all types of snow conditions.

The 1970s began a new evolution in snowshoes. Old wooden frames were replaced with lighter aluminum ones and neoprene lacing replaced rawhide. The base of the shoe became neoprene, followed by polypropylene and then hypolon. Today's snowshoes are light, durable, and designed for specific uses.

Snowshoeing has become enormously popular in recent years. It is inexpensive, terrific exercise, and easy to do. If you can walk, you can snowshoe. Beginners can master basic skills in a few minutes and get great winter exercise.

Equipment & Supplies

boots – sturdy, warm, waterproof winter hiking boots; a good heel ridge helps keep the boot in the snowshoe.

foot wear – warm, breathable, wicking socks (wool, polypropylene), preferably layered

hat and gloves – include a light pair of gloves when actively snowshoeing to protect your hands if equipment adjustments are needed

winter layers – remember to dress in layers, and to cover extremities with hats, gloves, and warm socks

snowshoes – choose your style!

Optional Equipment

gaiters – fit over the top of your boots and go roughly halfway up your calves; prevent snow from getting entering boots and cold and moisture from building up around ankles

poles – help you balance and give an additional upper body workout; no special snowshoeing poles required, but it helps to have poles with baskets to help stay on top of the snow.

Forearms should be at right angle to body (cross-country ski poles are generally too long).

Poles will also help you crawl out of the snow if you lose your balance!

extras – hand and foot warmers, a small thermos of hot tea or other liquid, snacks, a compass and map, waterproof matches, first aid kit, headlamp, and sunglasses

Choosing Equipment

Snowshoes range from traditional wood and leather to high tech modern ones. Most are made out of durable plastics, aluminum, and synthetic rubber, or even titanium. There is an endless variety of designs to choose from. You first need to decide how you will use them. Snowshoes are used in wide-open areas, deep woods, on groomed trails, or bushwhacking. Some are designed for winter camping where you will be carrying a lot of gear or for snow jogging for the runners who want to stay in shape over the winter.



Snow conditions also make a difference. On fluffy dry powder, you need more float than on wetter, hard-packed snow. While all snowshoe manufacturers state the maximum weight a snowshoe is designed to carry, only some specify whether this applies to powder or hard-packed

snow. If the manufacturer doesn't rate a snowshoe for the type of snow, you should ask before you buy.

As a rule, rounder snowshoes require you to walk a bit awkwardly with your feet spread farther apart. Narrower snowshoes track through deep snow better and allow you to walk with something close to a natural gait. With all these choices, it is good rule to try renting before you make a purchase!

Fitting bindings

Put the ball of your foot between the hinge rivets, over the hinge. Your toes should be hanging over the front of the foot bed. Tighten the front strap first, followed by the heel strap and finish by tightening the strap over your instep. The straps don't need to be overly tight; just make sure they are snug.

Terms & Definitions

binding – made of leather, neoprene, or step-in systems to keep the snowshoes attached to your boots

crampons or claws – traction devices on the bottom of snowshoes to aid in going up or down hills and to give better traction on ice

decking – the large flat surface that comes in contact with the snow and determines how much “float” a shoe will have; most modern snowshoes have a solid decking of nylon or plastic; wooden snowshoes usually have a woven surface

frame – made out of wood, aluminum, or other metal to help you float on snow

float – the tendency for a snowshoe to stay on top of the snow rather than sinking to the ground; rated on most snowshoes in terms of total pounds the shoes can carry

post-holing – sinking down into the snow

Regulations

Always be aware of where you are snowshoeing and get permission if it is private property. There may be a fee charged on groomed snowshoe trails.

Skills & Strategies

The Basics

The most important thing to remember is keep it natural. Don't try to modify your natural gait. There are really only two ways to use snowshoes: walking or running. Most often the terrain will dictate what your stride will be. On open and flat terrain you might want to try jogging. The steeper and deeper the terrain gets, the shorter your stride will become.

Initially, walking in snowshoes will feel a lot like walking in sand on a beach. Since the snow gives a little underneath you, you will need to raise your legs a little higher than when you walk. You'll also need to widen and lengthen your stride a bit to keep the snowshoes from hitting each other. Using hiking poles will help maintain balance and keep an easy pace. Avoid hitting your snowshoes against each other as they pass in mid stride, and avoid overlapping snowshoes as you step forward with your other foot. Concentrate on spreading your feet a bit further apart throughout your stride using a slightly higher knee lift and/or a wider stance. Avoid dragging and shuffling your feet to prevent the claws from catching on firm snow.

Despite their clunky appearance, snowshoes actually allow you to walk in a normal gait. The only thing you can't do is walk backward, because the heel will stick in the snow and flip you over. To reverse direction, pivot the fronts of the snowshoes around in a circle.

Going Up Hill

Many snowshoes have metal teeth (crampons) on their bottoms that dig into snow or ice and give you better traction when going up and down hills. When snowshoeing uphill, you want to press down on the front of your boots and snowshoes to help the crampons under your toes grip the snow ahead of you. When you do this, the back of your snowshoes may be suspended in air. Bend your knees and take smaller strides to walk up the hill. The best way to go is straight up or straight down (use poles to balance and add traction if needed.) Walking along an incline can be very difficult in snowshoes with gravity constantly pulling you downward. Avoid crossing hills and move with the terrain.

Going Downhill

When going downhill, you'll want to lean slightly forward on your snowshoes. Gradually slide down the hill while maintaining control of your descent. Bend your knees and take short steps. You'll feel the snow give way underneath you. If you start to descend too quickly, fall backwards to stop yourself. On downhills, avoid leaning back whenever possible. Keep your weight forward and be aggressive in engaging the crampons located under the ball of your foot.

Uneven Ground

Walking on uneven ground and over rocks and other obstacles is a little tricky. You may want to use poles to help maintain your balance. To get over an obstacle like a log, you can walk around it or step sideways over it. Stepping over rocks takes a bit more practice. Keep in mind that snow cushions rocks, and snowshoes spread your weight over a larger surface area. This can actually increase your stability if you're walking across many smaller rocks because the snowshoes will span the gaps between them.

Safety

Snowshoeing is an extremely safe sport. It is also one of the few winter-specific sports that does not depend upon sliding or speed. The manageable and maneuverable nature of modern aluminum framed snowshoes, and the soft forgiving nature of snow, combines to make the risk of injury while snowshoeing very low. The chance of muscle, tendon and joint injuries among snowshoers is also quite low. Snowshoeing involves a natural motion similar to walking, to which the body is accustomed, and is very low impact due to the cushioning of snow.

- Watch out for dehydration, hypothermia, and frost bite
- It is generally easy to follow tracks out before becoming lost, but beware of storms and wind that can cover or obliterate tracks.
- Beware hidden obstacles like barbed-wire fences, holes, or uneven terrain under snow.
- Do not walk over frozen water unless you are sure of its safety. Stationary and moving water should be avoided until the ice depth is at least 4" deep.
- **Watch for changes in weather**

Environmental Notes

Snowshoeing actually provides a welcome relief to non-hibernating animals. The snowshoe trails will harden overnight, making it easier for animals to travel the following day. The slow speed of snowshoers does not seem to startle wildlife in the same way as cross-country skiing and snowmobiling. It is still a good idea to keep your distance from wildlife and respect the environment. Be sure to pack out any thing you pack in!

Extensions

Science: seasons, winter solstice, types of snow, winter ecology, wind patterns, weather

Resources

- Beginners guide. <http://sectionhiker.com/2009/01/16/a-beginners-guide-to-snowshoeing/>
- Basics. <http://www.lasvegasmassageservice.com/snowshoeing-basics.htm>
- Snowshoe racing information. <http://www.snowshoeracing.com/history.htm>
- History and basic information. <http://www.anchorage.net/1283.cfm>
- Basic information and tips. <http://www.employees.org/~scottf/snow/shoe.html>
- Types and snow conditions. <http://www.scoutingmagazine.org/issues/0401/d-outs.html>
- Pennsylvania Department of Conservation and Natural Resources: Lesson Plans. <http://www.nrgoutdoors.org/teach.html>