

WINTER Visitor Information



Superior Wildlands *On-Line*

Chapel area - Lars Jensen photo

So - How Much Snow Do You Get?

From late November through mid-April, the Upper Peninsula is blanket with several inches - and feet of snow. You'll hear all sorts of predictions. "Munising gets 200 inches of snow a winter!" "The Annual snowfall in Grand Marais is 300 inches!" Fact is, the Lakeshore doesn't receive as much snow as it did a few decades ago. According to the National Weather Service in Marquette, the current average for Munising is somewhere between 140 and 144 inches while the average for Grand Marais is similar. Out near Melstrand in the middle of the park, their average is probably higher - possibly due to that area not being as protected by Grand Island from northwesterly driven lake effect snowfall. Speaking of averages, the National Weather Service uses a 30 year average when they use that term. In some locations, snowfall is measured by citizen weather observers and records are incomplete for all of the years. Residents of Munising often note significant differences between in town and up on the hills outside of town. Snowfall often depends on the track of the storm and local conditions. So, when people ask how much snow the Lakeshore receives, we usually say "a lot" and leave it at that. But thanks for asking!

Your Safety Comes First!

As you can imagine, winter is one of the best times to be completely prepared! An unexpected slip into a creek, the loss of a tarp in a blizzard, a broken ski binding can quickly spell disaster. The old scout adage of "*Be Prepared*" is the best medicine. The Lakeshore staff encourage you to carefully plan your winter day excursion or overnight trip into the park. Here are a few helpful suggestions:

- Before you leave home, let someone know where you are going, how long you plan to be out, a description of your vehicle, where it will be parked, and when you plan to return. Write It Down!
- Take plenty of liquids and snacks or food along with you...maybe a little to spare in case something should happen.
- Take repair materials for skis, snowshoes, or your snowmobile.



Chapel Falls - Lars Jensen photo

Your Safety Continued...

- Don't expect your cell phone to work in the park. Many areas do not receive reception due to a lack of towers, cloudy conditions, hilly topography and heavy forest cover.
- If you are camping overnight, be sure to obtain a backpacking permit at the Interagency Visitor Center in Munising.
- Know the local weather forecast and watch the weather. A southeast or northeast wind will often proceed impending heavy snowfall.
- Take a compass and map and know how to use them. It is easy to get turned around in portions of the Lakeshore when the days are short and the clouds block the sun.
- Realize that the Park Ranger staff is reduced in winter and response times are extended due to winter conditions.



Logslide - Gregg Bruff photo

Having considered all of this, remember that winter is one of the most incredible seasons at the Lakeshore. You will likely see very few people, a lot of animal tracks, and will be able to enjoy a type of solitude unknown at other times of the year. Happy trekking!

Ice Climbing

Snow and ice generally are present by the second or third week in December and remain until late March. While ice frequently forms along the Pictured Rocks cliffs above Lake Superior, these areas are not recommended for climbing due to hazardous exposure to the lake. Other popular areas for climbing are on Grand Island National Recreation Area, which is administered by the Hiawatha National Forest. Always call for ice conditions as it changes from year to year.



Ed Lasich photo

The most accessible ice columns are found along the Pictured Rocks escarpment between Munising Falls and Sand Point along Sand Point Road. Additional columns are located at Miners Falls and on the east side of the Miners Basin. Please note that Munising Falls is closed to ice climbing.

- Miners Falls is a 40 foot column. Access requires a three mile ski or snowshoe trek in from the end of the plowed road at the junction of Carmody and Miners Castle Roads.
- Miners basin falls is located 1.2 miles north of Miners Falls on the east side of the escarpment. Travel to this column is over land.
- Sand Point columns and blue ice curtains from 20-50 feet high are found along Sand Point Road between Munising Falls and the Lakeshore's headquarters. Parking for the Sand Point curtains and columns is located at Sand Point Beach or at Munising Falls. The Sand Point Road is narrow with no shoulder. Parking is prohibited along Sand Point Road.
- Grand Island ice curtains are accessed from Grand Island Landing off M-28. Travel between Sand Point and the thumb portion of Grand Island is not recommended due to frequent hazardous ice conditions caused by lake currents.

CAUTION: When setting belay points from above remember it is your responsibility to preserve and protect vegetation and other natural features. Secure belay ropes to trees with a diameter larger than 8 inches and growing well back from the edge.

Winter Camping

A backcountry permit is required. The fee is \$4 per person, per night (\$15 reservation fee).

- A snow depth of 6 inches or more is required for these rules to take effect.
- Winter camping is permitted in drive-in campgrounds without charge.
- Winter camping is permitted off park roads beyond a distance of 100 feet.
- Use of stoves is required - campfires are not permitted unless you build them in firerings in developed front or backcountry sites.
- Winter camping is permitted beyond 100 feet of a creek, river or lake.
- Overnight camping in parking lots is not permitted.



Icicle Cave - Lars Jensen photo

1. Sand Point area: All that portion of Sand Point described as the area below the top of the bluff in Sections 19 and 30, T47N, R18W, and that area situated within the corporate limits of the City of Munising, including the Sand Point Road.

2. Developed public use areas:

The area within 150 yards of the Miners Castle overlooks, paved walkways, and vehicle parking lot. Also 100 feet from the centerline of the paved Miners Castle Road, and the area within 100 feet of Miners Falls parking lot, trail, and associated platforms.

The area within 100 feet of the Chapel Falls parking lot.

The area within 100 feet of the Little Beaver back-packer parking lot.

The area within 100 feet of the Twelvemile Beach picnic area parking lot.

The area within 150 yards of any structure at the Au Sable Light Station, and within 100 feet of the trail between the lower Hurricane River Campground and the Light Station.

The area within 100 feet of the Log Slide parking lot, platforms, and walkways.

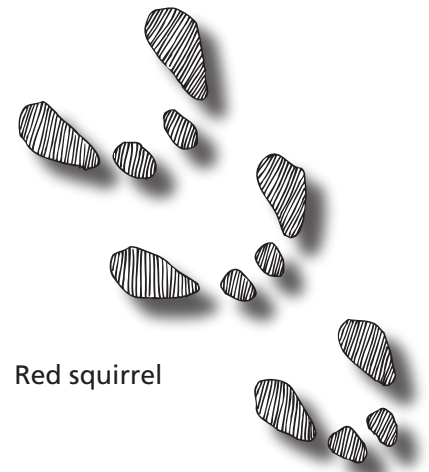
The area within 100 feet of the Grand Sable Lake picnic area and parking lot, the Grand Sable Lake boat launch and parking lot, and the Grand Sable Lake overlook parking lot.

The area within 150 yards of the Sable Falls parking lot and building, to include the viewing platforms and associated walkway system to the mouth of Sable Creek. Also included is the area 100 feet from the centerline of the paved Sable Falls Road.

The area within 150 yards of the Grand Sable Visitor Center parking lot and barn.

The area within 150 yards of the structures comprising the Grand Marais quarters and maintenance facility.

The 8.6 acre tract comprising structures and lands administered by the National Park Service on Coast Guard Point in Grand Marais.



Red squirrel

What About Grand Island?

Immediately west of the Lakeshore, Grand Island is steeped in natural and human history. It was once the site of a private preserve, owned by William G. Mather, cousin of the first National Park Service Director, Stephen T. Mather.

Visitors often ask park staff if it is safe to ski or snowshoe to Grand Island. A National Recreation Area administered by the Hiawatha National Forest, Grand Island lies enticingly across Munising Bay or Sand Point.

The East Channel that separates the mainland from Grand Island has strong currents that exist year-round. For this reason, Pictured Rocks National Lakeshore does not recommend skiing, snowshoeing, or snowmobiling from Sand Point to Grand Island.

Snowmobiling

Snowmobiling is a popular pastime in and around the Lakeshore. A number of unplowed roads lead to major points of interest. Log Slide at the east end of the park, and Miners Castle are possibly the two most popular.

Snowmobiles are permitted on designated portions of roadways and lakes in Pictured Rocks National Lakeshore. The designated routes for snowmobiles are the frozen waters of Lake Superior and Grand Sable Lake, and the major Lakeshore roads used by motorists in the summer. These unplowed roads and the shoulders of plowed park roads are open to snowmobiling in conformance with state law. With the exception of the trails listed above, snowmobiles are not permitted where vehicles are not allowed in summer.

The following snowmobile trails are designated within the park:

- A. Sand Point Road from the park boundary to Lake Superior.
- B. From the park boundary off City Limits Road southwest to the Becker Farm, and down to Sand Point Road.
- C. Miners Falls Road, Miners Castle Road and parking area, and the Miners Beach Road.
- D. From the park boundary in Section 32, T48N, RI 7W, to the Chapel Falls parking area.
- E. Road from H-58 at the park boundary to the Little Beaver Lake Campground.
- F. Road from H-58 at the park boundary to the Twelvemile Beach Campground.
- G. Road from H-58 to the Hurricane River Campground.
- H. Road from H-58 to the Log Slide parking lot.
- I. Michigan Dimension Road from the park boundary to the Log Slide parking area.
- J. The frozen waters of Lake Superior and Grand Sable Lake.



Miners Road - Ed Lasich photo

Winter Lumberjacks

Who would think of going out in the most severe season of the year to fell huge trees? Lumberjacks of the Upper Peninsula in the 1870's through the early 1900's did, and their stories are the tales of history.

By 1840, much of the timberlands east of the Great Lakes had been cut over. The nation continued to boom after the Civil War, the the large stands of red and white pine answered the call.

Winter was the preferred time to fell the trees as it was much easier to move them around at that time of the year. Ice roads were constructed for the sleighs or drays to run on. "Jacks" even sprinkled water on these ice roads at night to make the next day's work easier. At least there weren't many mosquitos or black flies to bother them!

Pine was popular with the loggers because it floated easily and thus could be driven down rivers and streams to the mills, or assembled into rafts and transported over the open lakes. Denser hardwoods like maple could not easily be felled and rapidly dulled the saws in the mills.

The first logging activity in Alger County occurred in 1877 when Joseph Weller began logging operations in the western area of Pictured Rocks. The logs were rafted to Munising Bay and Au Train Bay where they were assembled into booms and towed to Garden Island, Ontario. The logs were then squared and shipped to Liverpool, England. In 1879, Weller, operating on the mainland opposite Grand Island, was expected to ship 150,000 cubic feet of lumber, much of it squared. For a more complete overview, see our Logging site bulletin.



Alger County Historical Society photo

Cross Country Skiing



The Lakeshore offers two groomed and tracked cross-country ski trails near Munising and Grand Marais. Over 20 miles of trails meander through a variety of topography from level to steep, cedar swamp to old fields. Park staff groom these trails and park rangers and volunteers patrol them on a regular basis.

Trail maps are available at trailheads and at trail intersections. Skiing is free at the Lakeshore; however, the park will be installing donation boxes for those who wish to assist us in the cost of maintaining these beautiful trails.

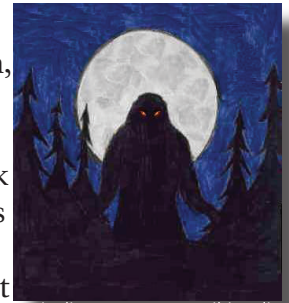
As always, be sure to let someone know you where are skiing and when you expect to return. Watch for other skiers on downhill runs.

The Munising trails (C and D) feature several interpretive waysides on the natural and human history of the area. Be sure to stop at these for a brief overview of some interesting topics.

Have a great ski!

Windigo Legends

As the snows of winter deepen, we are reminded of the many tales told historically around Anishinabe campfires and in bark lodges. Indeed, the only time it is appropriate to tell these stories is in winter, when the great ice giant - WINDIGO- stirs about, terrorizing *the people*. A Canadian dictionary defines it as, “spirit ... that takes possession of vulnerable persons and causes them to engage in various antisocial behaviours, most notably cannibalism.”



Windigo, courtesy Wikipedia

For centuries, Windigos have stalked those who have not had enough to eat all winter. Sometimes one knows when a Windigo is present because sometimes the pots shake on the stove or fire. Windigo is huge, hairy, and often covered in icicles. His tracks are left in the snow after he snatches up people. Or you could go crazy or “go Windigo” from hunger, disappearing without a trace in the winter night. They say the only way to rid your family or village of the Windigo is to pour boiling fat or lard down its throat. There are many books written on Windigo. Search for them on the web - and beware if the pots rattle on the stove.

Snowshoeing



The Lakeshore consists of some 73,000 acres along 42 miles of Lake Superior shoreline. Of that 73,000 acres, 33,000 acres are owned in perpetuity by YOU, the American public. Of that 33,000 acres, the only places you cannot snowshoe are probably obvious - on roads open the vehicular traffic, and on the park’s 21 miles of ski groomed trails.

The entire remainder of the Lakeshore is there for you to enjoy via snowshoeing or skiing. The park does not mark any specific snowshoe trails. One good thing about snowshoes is once you have gone about half way, turn around and follow your tracks back to the car! Barring a blizzard, your record of tracks is pretty easy to follow home.

What are the benefits of snowshoeing you might ask? There are many, including the opportunity for solitude in a relatively deserted environment. If you strike out in the park on an old road or logging trail, the only sound you may hear is the beating of your own heart and the wind in the pines. Though wildlife is pretty scarce in winter, tracks of otter, red squirrel, marten, fisher, deer, grouse, raven and snowshoe hare are often seen. Grouse feet (above) have small appendages along each toe margin that provides more flotation in snow.



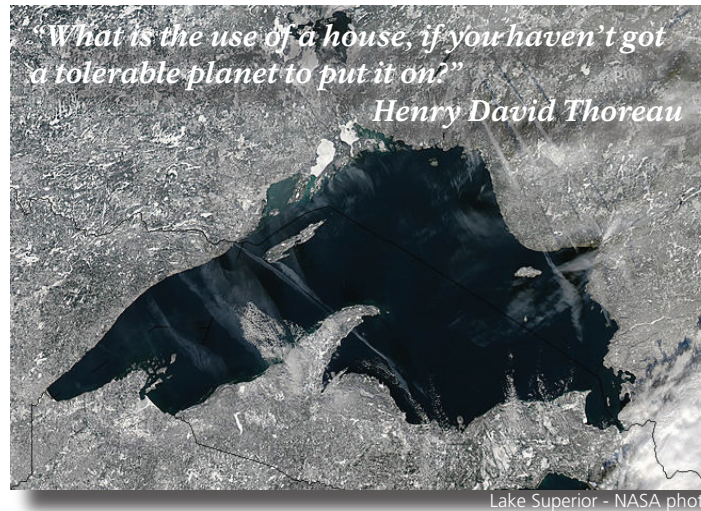
Sand Point Snowshoes - Gregg Bruff photo

What's All The Fuss About Climate Change?

O.K., so you are resting from an invigorating snowshoe in the woods or sitting in your easy chair with the dog wrapped around your feet. You notice the television seems to feature more and more stories on climate change. Your mind wanders to next summer's trip to the Lakeshore or Lake Superior, or one of the other beautiful places in the Upper Midwest. What if the two are connected?

What if one of these decades - brook trout no longer live in Michigan waters? What if you or your kids or grandkids one day have to visit Canada to see a white pine tree? What if the water level of Lake Superior dropped three feet (or twice that much) and stayed there? What if the trill of migrating warblers or spring peepers was something you mentioned as a memory

from "the good old days?" These questions and minds of scientists, polititese days. The effects already being felt in places where glaciers are melting than in the past. Measuring of migrations and ing are being recorded. Service is undertaking quantify what coastal jeopardy due to flooding if or accelerate.



many more are on the cians, and park managers of climate change are like Glacier National Park at a much quicker rate able differences in the flowers and trees bloom- And the National Park studies nationwide to (ocean) parks will be in current trends continue

What about climate change in Michigan? One science based resource predicts:

- A 5-10 degree (F) rise in winter and a 7-13 degree rise in summer temperatures by the end of the century is projected.
- Although average annual precipitation may not change much, an overall drier climate is expected because rainfall cannot compensate for the increase in evaporation resulting from greater temperatures. Thus Michigan may see drier soils and more droughts. Seasonally, winter precipitation is expected to increase by 5-25% while summer precipitation is expected to remain the same.
- Extreme heat will be more common, and the frequency of heavy rainstorms will increase and could be 50-100% higher than today.
- The growing season could be 8-10 weeks longer.
- Declines in ice cover on the Great Lakes and inland lakes have been recorded over the past 100-150 years and are expected to continue.

For more in-depth discussions of these issues, both on a local and national level, see these articles elsewhere on our website:

[National Park Service Climate Change Brochure](#)
[Climate Change and the Great Lakes](#)

For our national parks to thrive and for us to continue enjoying them, it seems appropriate now to do what we can to reduce climate change impacts and adapt to their consequences. Fortunately, we have the tools, knowledge, and ingenuity to better understand these changes and make informed choices for coping with them. Prominent scientists are saying that our own survival may be at stake.



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Black Bear Hibernation



Winter bear research - NPS Photo

A number of animals settle down each fall to sleep and for all practical purposes do not arise again until the snow leaves in spring. In Michigan's Upper Peninsula, the American black bear is our largest hibernating animal. Black bears typically enter their dens during mid- to late-October and often do not emerge until sometime in April. The timing of den entry depends on a number of factors, including whether the bear is male or female, if the female has cubs, and the availability of food during fall. In total, black bears in the Upper Peninsula can spend almost half the year in their den. Hibernation is simply a mechanism of seasonal reduction in metabolism concurrent with seasonal periods of food shortages and low temperatures. It allows animals to conserve energy by decreasing their daily energy needs.

Not all black bears spend this much time in their den. With a geographic range that extends from north of the Arctic Circle to northern Mexico, black bears in the southern part of their range hibernate for much shorter periods of time. In fact, some southern male bears may not hibernate at all during some winters.

Black bears begin preparing for hibernation during the summer when food is highly available. During summer and into fall, black bears gorge on whatever food sources are available. This eating binge is referred to as hyperphagia, loosely translated as over-eating. During hyperphagia, black bears consume large amounts of berries, fruits, or nuts such as beechnuts. Eating these large amounts of foods allows bears to accumulate large stores of fat that they will use as their energy reserves during hibernation.

Bears make their dens in a variety of locations, using rock cavities, hollow trees, or even excavating their own den. In areas where logging occurs, black bears will sometimes create dens in the slash piles that remain. Bears generally will create a new den each year; in this part of the Upper Peninsula, bears reuse dens less than 5% of the time.

When bears enter hibernation, several physiological changes occur. Their heart rate which may be 40 or 50 beats per minute in fall may drop as low as 8 to 10 beats per minute in December. Breathing rates also are reduced in response to decreased metabolic rates. In contrast to other hibernating animals such as chipmunks and ground squirrels whose body temperatures may drop to 40F, the body temperature of black bears may only decrease to about 88F. This higher body temperature allows bears to awaken more rapidly than many other hibernators.

Their thick fur and layers of fat provide insulation that reduces heat loss. Bear fur doubles in insulative value during winter, with the thickest fur occurring on the back, sides, and neck. Bears also have a small surface area relative to their body size which further reduces heat loss. Finally, bears often sleep curled up with their head between their front paws and their backs to the den entrance, to minimize exposure to the cold.

Bears have a unique reproductive cycle, which includes delayed implantation. Bears generally breed during June or early July. The fertilized eggs grow to become a small cluster of cells called a blastocyst. These blastocysts do not implant in the placenta until months later until finally, in the middle of winter, pregnant female bears wake up long enough to give birth to one or more cubs. The cubs are very small, weighing only about 10-12 ounces and stay active during the remainder of winter and may grow to weigh 6-8 pounds when they leave the den the following spring.

Bears generally do not leave their dens during winter but on occasion, particularly on warm sunny days, bears may exit dens for short periods of time. They rarely travel far, often only a few yards, before reentering their dens and settling back to sleep.

Because of the long denning period, the large amount of time spent feeding the previous summer and fall is critical. The fat that was accumulated is metabolized to create energy which allows bears to survive the long winter. Male bears often lose between 15 and 30% of their body weight during hibernation. Because more energy is required to care for dependent young, lactating females can lose up to 40% of their body weight. Even though this weight loss is extreme, survival of black bears during hibernation is very high.

Mapping Language

Those who travel recognize a variety of local terms used only in that region. These special words form a sort of road map, telling us where we are, who emigrated into the region, what is special about the weather there, etc. The following is a list of words used in the Lakeshore area. Do you know what they all mean? Can you add to this list?

sweetgrass breeches buoy mishepeshieu **seiche**
 ice foot **tombolo** **DRUMLIN** **LOG DOG** MUKWA
SWEDE HOLE **PASTY** **SWAMPERS** *avant*
big wheels **fresnel** Cambrian **UNCONFORMITY**
kame arctic disjunct erratic spirit house *black robe*
chook **pig iron** mud time *two track* *trilobite*