

GETTING STARTED ON WILD ICE

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This is a living document that aims to represent community consensus and current thinking regarding skating on wild ice in the northeast. It is intended to warmly welcome you, help you get started with a general introduction to this great sport, and provide information about additional resources. It is by no means comprehensive, and we welcome feedback, suggestions, and questions. The authors of these documents are active on the Nordic skating google groups (listservs) referenced in the Resources section and can be reached by posting to those listservs.

INTRODUCTION TO WILD ICE AND NORDIC SKATING

You are likely reading this document because you are interested in skating on wild ice and have asked “How do I get started?” We intend this document to help provide you with basic information to get started.

Find the skating community in your region

There are both listservs (at groups.google.com) and Facebook pages. The listservs tend to have more comprehensive information about current ice conditions and discussion about the sport and equipment. You will find links to these in the Resources section.

Start reading the posts and get familiar with some of the basic terminology. If you have questions, ask. These are active communities of skaters both new and experienced who are happy to point you in the right direction. We love talking about this stuff!

If you are the first person in your group of friends diving into the sport, not to worry! We encourage you to put yourself out there and find skating buddies and/or mentors in your local community. There may be a natural leader or ambassador in or near your community who is experienced and generous in leading classes and tours and sharing information.

Make sure you are prepared

This is a joyous sport but it is not without risk. We prepare for just about everything so that we can mitigate risk.

PROPER SAFETY EQUIPMENT

You'll hear the expression, “All The Gear All The Time (ATGATT),” meaning to always carry the necessary safety gear when skating. That's super important to help keep yourself and others safe on the ice. (Informally it can also mean, carry your gear with you in case you are lucky enough to come across skating opportunities unexpectedly!).

READ AND WATCH VIDEOS ABOUT UNDERSTANDING ICE AND WHAT TO DO IN CASE YOU FALL IN

While we don't want to fall in (aka swim, aka “plurr” in Swedish), it's important to have already learned what to do before you are in icy water so you don't waste precious time or energy. (see link to Dr. Gordon Giesbrecht's videos in the Resources section).

PREPARE FOR OTHER RISKS SUCH AS FALLING ON THE ICE

Falling on the ice with subsequent skeletal or muscular damage is also a risk we face. Being prepared with a plan on how to evacuate the ice and first responder training can help mitigate that risk.

PACK THE ESSENTIALS FOR YOUR SKATE

Even if you're going for a short skate, prepare for accidents, changes in weather and comfort.

Nordic skating vs wild ice skating

Wild ice skating refers to skating on naturally frozen bodies of water while Nordic skating specifically refers to wearing a Nordic skate set-up comprised of specialized boots and blades with bindings and carrying poles to test the ice.

In the beginning you may wish to try wild ice skating with gear that you already have such as hockey or figure skates. Even on thick ice that is monitored (like Lake Morey), minimum basic safety gear is important (at a bare minimum bring ice claws and a helmet).

Since so many people have questions about what equipment they need for skating on wild ice and for Nordic skating we have compiled an Equipment section later in the document.

Trying Nordic skates

If you live in New England or Northern New York and want to rent Nordic skates before committing to buying, the following places rent gear:

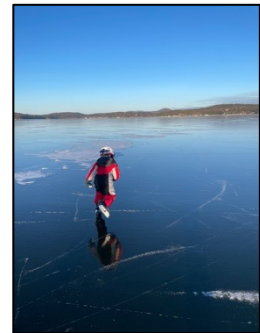
- Human Powered Planet in Saranac Lake, NY
- Hero's Welcome in North Hero, VT
- Lake Morey Resort in Fairlee, VT

You may also find someone on your local listserv who is willing to lend out a pair if you ask nicely.

Basic skating skills

Basic skating skills are important to having a safe and fun time on wild ice. If you want help learning how to skate, or to improve your skating we suggest:

- Take lessons at your local rink on figure or hockey skates to get the basics
- Ask on the listservs or Facebook pages if someone might be willing to meet you to give pointers, ask skaters whose speed or style you admire for tips
- Take up transferable-skill sports (eg skate skiing, in-line skating)

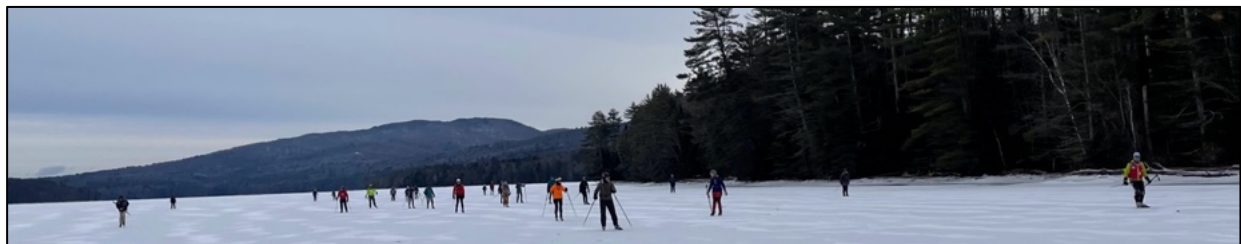


Going out for the first time

If you're new to skating on wild ice, start on well-tested ice. There are several maintained wild ice venues where people regularly check ice thickness. This is a great way to build comfort and your ice reading skills. If venturing out on more challenging ice, go with someone more experienced who knows their way around that particular body of water. At least two of the websites listed in the Resources section have info on maintained skating sites.

Finding an experienced group or mentor

Signing up for an Introductory Nordic skating clinic or joining a tour, typically advertised on one of the listservs or Facebook sites, will do wonders for your knowledge and comfort on the ice. They'll also connect you with some fantastic people and skating buddies!



ATTITUDE AND EXPECTATIONS: SELF-SUFFICIENCY AND COMMUNITY

Wild ice skating, just like paddling, backpacking or climbing, is a pursuit that resists hierarchy and authority in the U.S. and is best enjoyed by those who are able to take care of themselves, offer help to others and generally be prepared to both learn from and teach peers. The right expectations and attitude will ensure you enjoy the activity and that you are not a burden on others. As with these other sports, you are engaging in the activity at your own risk, but that risk can be greatly lowered when you follow the suggested safety guidelines.

Know your limits

There are people of all abilities out on the ice. Some will be more experienced than you, some will be less experienced. It is important to know when participating in a group if it will be a good fit for you. Don't hesitate to ask the leader, if there is one, and communicate with other group members. Advocate for yourself and don't be afraid to choose alternate plans if a group is planning more than you think you can handle. Communicate intentions clearly before meeting up or setting out. It's good to align expectations at the beginning of an outing on distance, duration, speed, gear and comfort on thinner ice.

Know others' limits

There are people of all abilities out on the ice. It is important to know when you are proposing a plan that will be too much for people you have agreed to skate with. Be flexible, understanding and creative to ensure that those with less experience and ability are able to enjoy the day and be safe. Sometimes this can mean splitting into groups, and sometimes this can mean redirecting someone who doesn't quite know their limits.

Be welcoming

There are not many people who choose to leave a warm house to go skate a frozen lake. Greeting and exchanging information is highly valuable. Nordic skaters seem to be drawn together in a way that doesn't always happen in other sports and that creates enjoyable camaraderie. Maintain that spirit of collaboration and community!

Be willing to learn

Ice is incredibly complex and is never the same from year to year, day to day or even hour to hour. Being willing to gather new information and use it to improve and revise your plans will keep you and your group safer and better able to have a fun day out.

Be willing to teach

Again: ice is incredibly complex and is never the same from year to year, day to day or even hour to hour. Being willing to share information with others will keep them safe on the ice and helps others to have a fun day out.

Be willing to give back

The skating community is stronger and more vibrant when information is shared. Since ice is constantly changing, timely sharing of information is key! Just as you will benefit from others' reporting what they found, others benefit from you reporting your experiences, descriptions, pictures, and questions. New skaters are sometimes intimidated to share information, but everyone was a beginner once and it will help you learn as well as meet other skaters.

Reporting ice conditions is not complex, just share what you see or experience; usually others will ask clarifying questions if you have not covered everything in your report, so don't worry about getting every little detail into your first post! It can be intimidating to find the "right" words or descriptions but others will appreciate you sharing as soon as you're able (bonus points for sharing directly from the ice!), even if the description is not perfect!

A few other points:

- Pictures are helpful but not necessary.
 - Reporting on ice that is not skateable can be just as helpful as reporting what is skateable.
 - Reporting on snow accumulation or general weather during/after a storm also helps those in another area determine whether it's worthwhile to make a longer trip to skate.
-

Be willing to help

Problems come up on the ice, they can be big problems or small ones, but either way, having others who are willing to pitch in to help makes everyone safer and happier. Self-sufficiency does NOT mean doing everything alone. It means being responsible for yourself, and aiding others who are in need.

Be flexible

Ice conditions change, the weather changes, people get tired or hurt. When things change, be ready to adapt and change plans to respond to the changes.

THE BASICS OF SKATING ON WILD ICE

Your first time skating on wild ice may be intimidating, so take it easy. If you have never skated before, consider learning in a controlled environment like a rink or maintained skate trail/area. If you are comfortable on a rink then you may be ready for wild ice.

What is wild ice?

Generally ice that hasn't been made, cleared or tended by people, is to some degree wild. This can be as simple and accessible as a local pond or as wild as a remote lake in Alaska.

Wild ice skating does not automatically mean you need Nordic skates. Many people use hockey and figure skates with good results. Getting out there is more important than waiting to have the exact equipment that you see others wearing. That said, always bring the essentials (helmet, ice claws, testing poles, throw rope, flotation and partner).

Why get Nordic skates?

Nordic skates are not essential, but they do offer a few advantages over hockey or figure skates:

- They glide much further for the same amount of effort
- They can be put on without taking off your boots
- They typically do not need to be laced, which means your hands will stay warmer
- They are long and stable, giving you better ability to deal with the bumps, cracks, ripples and obstacles often found on wild ice
- They can be easily removed in situations where it is necessary to bypass unskateable conditions by walking on shore

Make sure that the boots you use have adequate ankle support for your ability level. Nordic skaters use cross country ski boots, either dedicated skate ski boots or backcountry ski boots. Boots must match the bindings on the skate blades. See the Equipment section for more information.

Identifying and assessing skateable ice

When you are just starting off, it is wise to focus on small bodies of water (no more than, say, 1-2 miles across) without a current. Leave large lakes and rivers for later. There are many resources that explain the reasons for this in detail, but in short, as the body of water gets larger, the ice is more likely to move, break and change in ways that are challenging and potentially hazardous for a newer skater. Similarly, rivers are much less predictable than lakes due to current which can undermine ice in unexpected spots.

Preparing to skate

Check to make sure you and your skating partners have and are wearing your gear correctly (examples: your ice claws are outside your clothing and not pinned by your pack's sternum strap, and drysuit zippers are fully zipped).

It's smart to have your skate partners' cell phone numbers in case of separation (intended or not), and emergency contact information in case of accident or injury. Do you know where their car and car keys are in case of emergency? For extended wilderness skates, you may consider leaving your phone number and an emergency contact number on your dashboard should you not return when expected.

Assessing ice

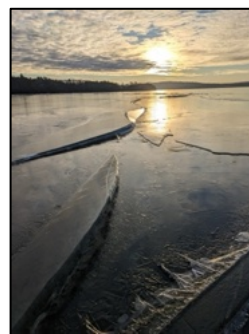
A common statement about ice is that there is no such thing as "safe" ice. This may sound surprising at first, but all ice presents hazards that can be mitigated with appropriate testing, planning and gear. For skating, we seek ice that is "supportable," meaning it will hold the combined weight of ourselves and our gear. Given the many factors that affect ice, it's important to continually assess both the ice itself and your own comfort level, as the ice may have changed since others were on it, or from earlier in the day when you headed out.

Many factors go into assessing whether ice will support you or not. While this topic is far beyond the scope of this document, you will find a wealth of information following the links in the Resource section for learning how to evaluate supportable ice and helping you predict which skating venues you might consider assessing for readiness.

Especially as our winters get shorter and warmer, we are seeing more and greater changes in ice development, stability and longevity. For this reason among others, it is especially important to test ice you hope to skate for both its thickness and its strength (eg gray "snow" ice is less strong and bears less weight than new black ice even when the same thickness). This is most easily done with a skating-specific ice testing pole or pike.

Here are *just a few* of the many variables that may affect ice development, thickness and quality:

- Time of year
- Temperature
- Wind
- Cloud cover or sun
- Precipitation
- Water body characteristics: depth, current, inlets/outlets, narrows, size, elevation, vegetation
- Snow cover
- Underwater gasses or other features

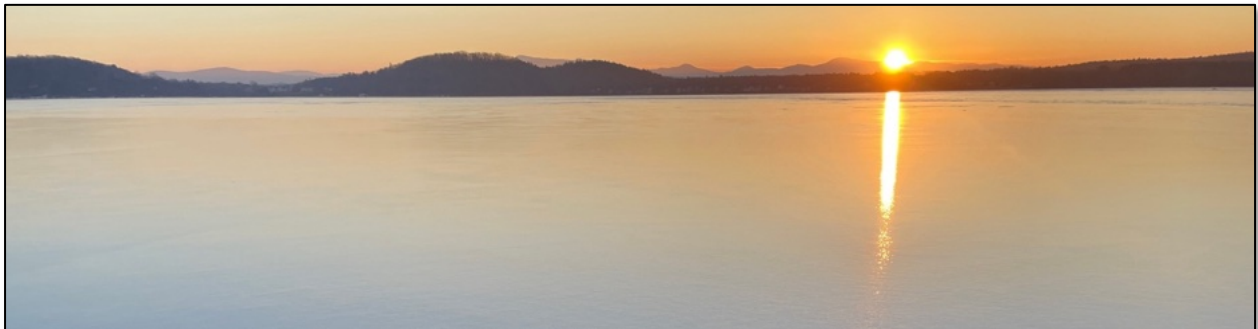


IN GENERAL, IF YOU ARE NEW TO WILD ICE, GO WITH MORE EXPERIENCED INDIVIDUALS WHO CAN PROVIDE IN-PERSON INSIGHTS FOR THE PARTICULAR SITUATION. IF YOU NEED AN EXPERIENCED PARTNER, YOUR BEST RESOURCES ARE THE ONLINE COMMUNITIES THAT FOCUS ON YOUR LOCAL AREA, BE WILLING TO ASK FOR HELP AND, AS YOU GAIN EXPERIENCE, TO GIVE HELP.

RESOURCES

This guide is meant to be a starting point, not a complete how-to guide. The New England community has many great resources. Here are some specific to our area:

- [Bob Dill's Lake Ice](#) – Essential reading for any aspiring wild ice skater
- [Chris Boone's Catamount Hardware](#) – Valuable resource that includes [atlas](#) of known skating areas
- [Jaime Hess's guide to Nordic skating](#) – detailed information on all things Nordic skating
- [Dan Spada's youtube channel](#) – lots of great information and inspiring skating videos; excellent gear video [here](#)
- Gordon Giesbrecht's [ice rescue video](#)
- Google groups for [Adirondacks](#), [Vermont](#), [New Hampshire](#), [Maine](#)
- Facebook pages for [Quebec](#), [Vermont](#), [New England](#), [Maine](#)



NORDIC SKATING ESSENTIALS: NOT JUST GEAR

A partner

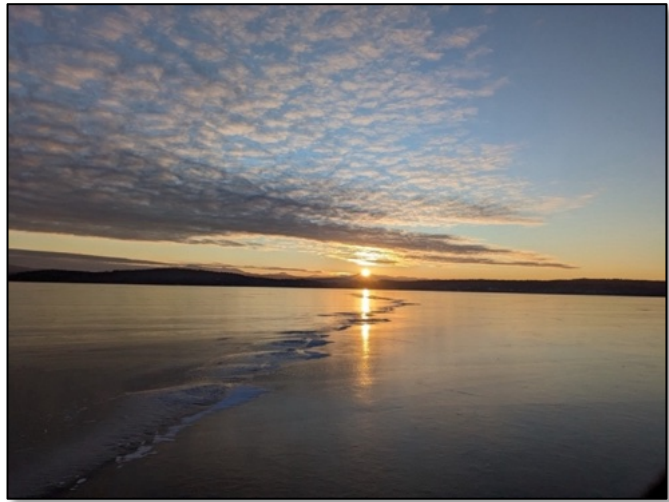
If things go wrong, a second person on the ice with you is invaluable. Whether to call for help, rescue you or simply carry your gear, having a buddy keeps you safer than going alone. In general, a group of three skaters is optimal, but two should be treated as the minimum.

A clear plan

Separate and distinct from a partner, letting someone who will not be joining you on the ice know where you are going is an important safety step.

If something goes wrong, you want someone to know you are missing so that they can call for help and tell rescuers where to go. Make sure to check in with them after you safely return.

If you want to take it one step further, leaving your contact information, destination, time of departure and planned time of return on your car's dashboard represents valuable information for rescuers if something goes wrong out on the ice.



NORDIC SKATING EQUIPMENT



Images of items are for informational purposes and do not represent recommended brands/versions of items. They are intended only to illustrate the category of item that is being discussed.

For gear reviews and other resources, some of the linked websites will be up-to-date and provide well-informed recommendations.

Ice Claws

These are an essential piece of equipment, the single most important safety item to carry. Any time you are on wild ice (any ice other than a skating rink), you should be wearing them. Their purpose is to enable self-rescue by digging/stabbing into the ice so you can pull yourself out of the water and back onto supportable ice. They are widely available from any store that caters to ice fishing, or from shops that specialize in Nordic skating.



More information [here](#), [here](#), and [here](#):

Helmet

A properly fitted and adjusted helmet should be worn any time you are skating on wild ice (and is a good idea for any ice, including rinks). Ice is hard and unpredictable, and head injuries are very serious business that can do irreparable harm. Do not take that risk.

Helmets for active sports such as skiing or biking are the best option. They are designed to protect from a fall. Helmets such as those for rock climbing are not ideal as they are designed to protect from something falling on you. A ski helmet is the warmest and most protective choice, but any kind of helmet is better than none. Don't be afraid to start with a bike or other helmet if that is what you have!



Consider a helmet that is [MIPS certified](#). They may be a bit more expensive but are designed to provide additional protection in a fall and can further reduce the risk of serious head injury.

Flotation

Flotation is a general term referring to a variety of ways to increase buoyancy in the case of immersion in the water, helping you stay upright and get out.

Some forms relevant to skating are:

- Drysuit
- Waterproof (roll-top) backpack or an ordinary backpack with a dry bag inserted. Consider one with a crotch strap, or make your own, to help the bag stay balanced on your body and prevent the bag or pack from floating upwards when immersed, possibly impeding your self-rescue efforts.
- PFD: standard foam. Generally the best choice for most skaters as, in addition to providing flotation, it is warm and protects in case of falls. *See additional information on this item below.*
- PFD (self-inflating): please note that this style of PFD can have problems deploying in the low temperatures associated with Nordic skating and is generally NOT recommended

Microspikes

It can sometimes seem silly to carry specialized equipment to get to your destination, but given that Nordic skating happens on ice, slipping on your way to a destination is an unpleasant possibility that can cause significant injury. Nordic skate boots are notorious for their poor grip and microspikes that fit over your ski boots are a useful way to protect from this. Should you unexpectedly need to portage, cross unskateable ice conditions (eg a large field of pack ice), or have an equipment failure, microspikes will allow you to travel faster and more safely to your next destination. If you wear backcountry boots an alternative to microspikes is to insert traction screws in your skate boot soles and heels outside of the area of your binding.



Personal Flotation Device (PFD)

See above for additional information about flotation options, in addition to a standard foam PFD.

A standard foam PFD is a valuable piece of equipment for flotation, warmth, and the padding it provides if you fall. Even the best skaters fall on wild ice: skates go through ice, or catch in wind-blown snow, etc, and PFDs are an important barrier between you and a broken rib. Additionally, a handy pocket for your phone and keys can be quite helpful on the ice



Boots and Bindings

These two items must be considered in combination. Together, they represent the connection between your skates and your feet. Boots and bindings come in two main styles, either a standard NNN version or an NNN backcountry (NNN-BC) version. Both of these styles are commonly used, and the choice is often driven by which gear you already have.

Beyond NNN and NNN-BC, there are also universal/strap skates that can be strapped directly to boots or more niche systems such as Rottefella Xplore.



Additional consideration for boots

If you choose NNN bindings on your skates (or one of the other versions interchangeable with NNN as of this writing, including Turnamic and Prolink), make sure to get combi or skate ski boots for the stronger ankle support. Of the two, skate ski boots provide greater support.



Skates/Blades

There are a wide variety of blades available to people who want to skate on wild ice. Generally, hockey and figure skates are where people start. These are good, but do have limitations, such as:

- They generally have to be put on while on the ice. This can lead to cold hands and feet
- They are made for maneuverability rather than endurance
- They are susceptible to problems caused by bumps, divots and cracks found on wild ice
- They can't be removed and put back on quickly or easily in case you need to portage around bad ice



Nordic skates are a better choice for people who want to go long distances on wild ice, and on ice that is not completely smooth.

The most common lengths are 40, 45 and 50 cm. Longer means more stability on bumps, but potentially less maneuverability.

Throw rope

A throw rope's purpose is to help someone who has fallen through the ice. This should be worn on your body in an easily-accessible place so a skater may rapidly deploy it if needed in the event of another skater falling through the ice. It should NOT be inside a pack and especially NOT back in your car. In the event that an immersed skater has a rope and a potential rescuer does not, the skater may be able to throw the rope to the rescuer if the rope is sufficiently accessible.

There are multiple options available, including whitewater and Nordic skating-specific options. Nordic skating-specific throw bags are strongly preferred due to being weighted and generally having longer reach.

More information [here](#)



Warm clothing

Layers are your friend when exerting yourself outside in the cold. You do not want to generate excessive sweat, so wearing enough to be warm but not sweat is the goal. This may mean wearing less clothing than is comfortable when you are just standing still. Shed and add layers as needed.

Clothing should be made of materials that breathe and do not retain water: wool, synthetics and hard shell layers are best. Down can be used as an underlayer but if it gets wet, it will become a liability. Cotton is universally a poor choice when exercising in the cold; the cliché, "cotton kills," exists for a reason.

Ice testing poles



It is hard to gauge thickness and strength of ice with just your eye. A

testing pole is essential to be able to determine whether ice is sufficiently strong to hold your weight and the poles offer additional security when crossing uneven ice.

Nordic ice testing poles are not the same as ski poles, they are heavier and equipped with very sharp tips to facilitate breaking small holes in the ice to test thickness. Ski poles will not accomplish this and really cannot be used for this purpose.

More information [here](#) and [here](#).

Warm change of clothes

This one is hugely important for those who do not wear drysuits. If you go in the water you will need a way to get warm and dry ASAP. These clothes should be in a waterproof bag (dry bag or plastic bags). The pictured bag is heavy-duty and closed with two separate rubber bands. This sits inside of a dry backpack, but is waterproof on its own.

Clothes to include (examples only, customize for your needs):

- Warm socks
- Winter Hat
- Winter gloves/mittens (on longer outings, these must be sufficient to keep skating)
- Underwear
- Top layers of clothing, ideally including a non-absorbent (synthetic) layer (e.g. fleece and a shell)
- Bottom layer(s) of clothing, ideally including a non-absorbent (synthetic) layer (e.g. long underwear)
- Cotton towel for drying yourself and equipment



Additional items to include:

- Plastic bags to put between your new dry socks and your wet boots. Ideally two layers (your feet may perspire and become damp, but will be kept warm and much less wet);
- Neoprene square or foam pad to stand on while changing clothing
- Inner and outer layers sufficient to allow you to keep skating unless you are in a location where you plan to, and can, access a house or car quickly and leave.

It can be helpful to pack your dry clothes with the last items you will wear going into the bag first, and the first layers you will put on going into the bag last, so you pull them out in the order in which you will don them.



While you are changing into dry clothes, your outer layers should be dried as much as possible. This is where the rain shell and polartech fleece really shine.

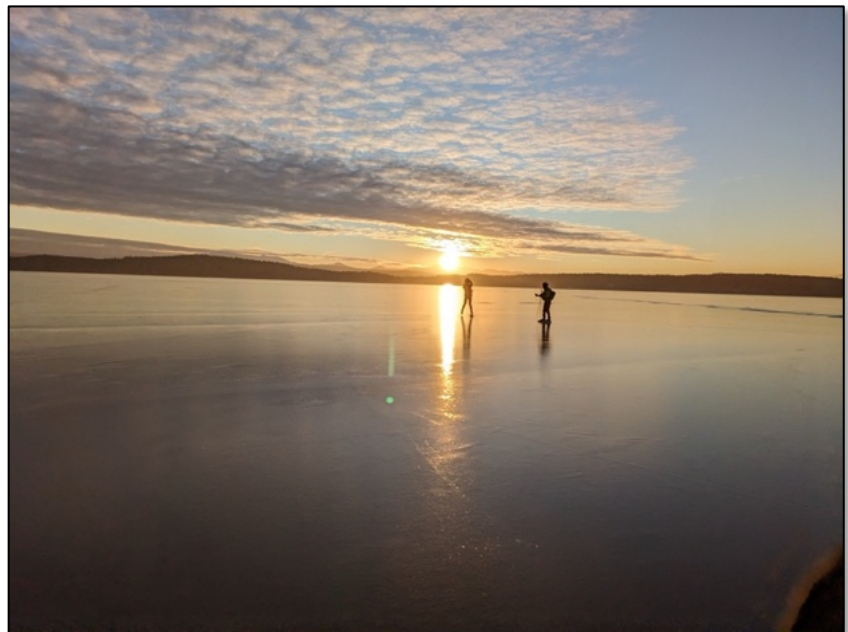
Cell phone

Probably your greatest asset in an emergency if you have reception. You should have a backup plan if it cannot be used.

Do not rely exclusively on a phone for mapping, texting or calling. Batteries can freeze or die.

Have emergency contact information easily available, and the cell numbers of your skate partners should the group become separated.

Make sure it stays dry if immersed: put it in a waterproof container, if only a zip lock bag.



Water and food

Cold weather exercise is demanding, and often the fun of being out in the ice and snow can distract from personal needs until it is too late to easily address. Eat before you are hungry and drink before you are thirsty.

FOOD

High energy snacks that will be enjoyable below freezing are worth really thinking through. A snickers bar tastes and feels very different at -20 than it does at room temperature. Some snacks that work well in any temperature include:

- Nuts/trail mix
- Cookies
- Dried fruit

WATER

The water in your pack is just as capable of freezing as the water you are skating on. Water bladder tubes are common places for problems to occur, as are metal water bottles kept outside of a pack.

Ways to deal with water freezing:

- Use an insulated waterbottle
- Add electrolytes to your water
- Bury your water in your pack
- Start with warm water
- Turn your water bottle upside down (make sure it doesn't leak!)



Water and nutrition are essential to enjoying a day on the ice! Proper nutrition boosts energy and mood, so pay attention to your intake!



Drysuit

Drysuits are optional, but they are an incredibly useful piece of safety gear. If they did not cost nearly \$1000, everyone would likely use one.

Fundamentally, a drysuit uses waterproof material to isolate you from the cold water. Seals at the wrist and neck, plus integrated booties, keep water out of the suit when submerged. These seals are generally latex, but in the case of a “semi-dry” suit the neck seal is neoprene which can be more comfortable than latex and works well in applications where the neck area is not expected to be exposed to water, such as skating while wearing additional flotation (such as a PFD).

Drysuits tend to be very warm, as they provide a large, windproof garment over the majority of the body. Generally few layers are worn under the drysuit, with a helmet, PFD and gloves providing additional warmth. Some people wear jackets over the drysuit, which enables shedding a layer without having to remove the drysuit.



There is no doubt about it, this is an expensive piece of gear, but there are a few different options that impact the price:

- Drysuit vs semi-drysuit
- Goretex vs other, usually proprietary, fabrics
- Booties/no booties
- Relief zipper (sex specific for male and female models), or no relief zipper. Females may want to consider a male relief zipper with an accompanying female urinary device (inexpensive) to reduce exposure to the cold with less need to find a private location for relief.

The cost becomes more tolerable if there is a second activity that you can use it for (for example paddling in the shoulder seasons, in which case you would want a full drysuit). If you do buy one, make sure you read up on taking care of the seals and zippers. A good dry suit will last years, making the initial investment less painful.

Finally, if you get a drysuit with booties, don't be surprised if you find yourself also having to purchase larger boots. Booties are generally oversized, so while the material may be thin, the booties take up a lot of space in your boots and may make your current skate boots feel very tight. If you do size up, it should generally be 1-2 EU sizes (e.g. EU 44 → EU 45 or 46).

If you are interested in getting a drysuit for Nordic skating, consult your local forums for recommendations and reviews.

Pads and protective gear

Pads are an item that many good skaters feel like they can skip. On wild ice, even the best skater will eventually fall, and the results can be a problem when you are miles from safety. Even if a bone doesn't break, a serious bruise can slow you down. Pads do not always prevent injury, but they really can help.

PADS TO CONSIDER:

- Knee pads: can be worn under or over a drysuit or pants. Over keeps snow and ice off of your clothes and can help protect the drysuit
- Hip pads: protect both hips and tailbone. Annoying if you need to pee, especially in a drysuit, though some may have a front opening
- Elbow and wrist pads: extra protection in a fall. Wrist pads can interfere with holding ice poles, you may need to try several styles. Those made to relieve carpal tunnel syndrome tend to be less bulky, with less interference. Make sure they have stiff protection on both sides of the wrist
- A foam PFD also serves as wonderful padding and a warmer extra layer
- Mouthguard. Consider a thin, close-fitting guard such as the Sisu Aero, which does not interfere with talking or drinking



First Aid Kit

Useful for minor cuts and scrapes, a SAM splint and ace bandage are highly beneficial in the event of a more serious break or sprain.

Sunglasses/goggles

Ice and snow can be very bright,, to the point that it can [damage the eye](#) Something to cut down on glare can be very beneficial. Ski goggles also work nicely with a ski helmet to keep your face warm.

Head Lamp

You don't need a head lamp until suddenly you do. They are lightweight and invaluable if you are delayed until after the sun goes down. You will not regret bringing one, even if you do not use it.

Hand and toe warmers

Not essential, but nice in a pinch. There are a few options: disposable, lighter fluid and electric. Disposable are easy to keep in a pack, electric is a less smelly option than lighter fluid and far easier to start. Sometimes placing the toe warmers *on top* of your toes is more comfortable than underneath.

2-way radios

Purely optional, but a way to keep in touch with separate groups or an observer on shore.

A pad to stand on

If you fall in the water, having a dry, warm place to stand while you change will be valuable. Foam is cheap, light and easy to come by. 2 x 2 should be large enough. This could also be used as a seat during lunch.

Bucket or crate to sit on

The best way to become everyone's hero is by leaving it at the entry point to the ice. Having a dry, elevated place to sit when putting on skates is very helpful. Can be used to carry/hold your gear on the way to/from the car.

On a windy day an empty 5 gallon bucket can easily be blown away, so use your judgment: add weight or simply use a milk crate instead.

Duct tape

This one may be surprising, but you never know when you will need it. Wrap it around an item you will carry anyway. Good options include a water bottle or testing poles.



Waterproof backpack or backpack with a dry bag

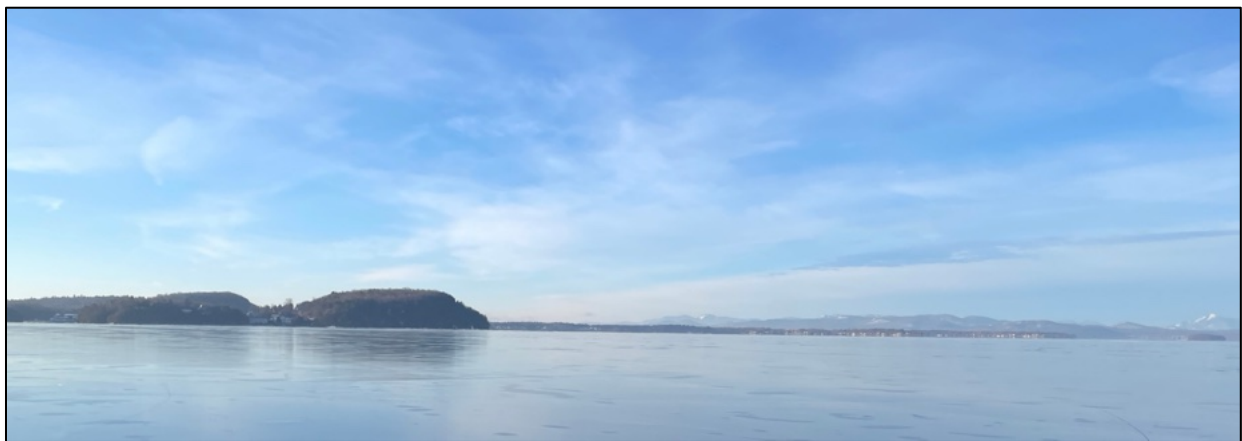
A waterproof backpack provides storage, flotation and protection of gear from the water. Cheap polyurethane coated nylon like the pictured bag work, but become stiff in the cold. One option is to store essentials that only get used in case of immersion inside the pack, while water, snacks and safety gear hang outside.

The flotation of the bag can be a double-edged sword: while it is good, in some situations the pack can ride up in the water and make it hard to maneuver, or even push one's head forward towards the water. Some people suggest a pack with crotch straps to prevent this, or you can make your own crotch strap. [Here's a video of a crotch strap in action.](#)

If you do not wear a waterproof backpack, your pack can fill with water. A moderately sized 20L day pack full of water could weigh as much as 44 lbs (20 l of water = 20 kg = 44 lbs) if it completely filled with water. Be prepared for that and be ready and able to remove it if needed.

If you are using a regular, non-waterproof backpack, plan for what will happen if it gets wet: this usually means having a dry bag or sturdy plastic bag inside to hold emergency essentials such as a change of clothes.

More information [here](#)



MINIMAL CHECKLIST FOR WILD PONDS

(ASSUMES HOUSE, CAR OR OTHER PEOPLE NEARBY)

Getting started can be intimidating. For longer trips there is lots of specialized gear to think about. With that in mind, this list represents the bare minimum to bring with you your first time out on a small pond when you will be close to your car or house.

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Ice claws |
| <input type="checkbox"/> | Helmet (Ski or bike helmet) |
| <input type="checkbox"/> | Flotation |
| <input type="checkbox"/> | Partner |
| <input type="checkbox"/> | Change of clothes (kept in car or house) |
| <input type="checkbox"/> | Clear plan, shared with someone NOT on the ice |
| <input type="checkbox"/> | Skates/Boots |
| <input type="checkbox"/> | Throw rope |
| <input type="checkbox"/> | Testing poles |

SAFETY CHECKLIST FOR WILD ICE

For longer trips, further away from immediate support, you will need to have more gear. Descriptions of why each item listed is important can be found in the Equipment section.

ESSENTIAL ITEMS: DO NOT GET ON THE ICE WITHOUT

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Ice claws |
| <input type="checkbox"/> | Helmet (Ski or bike helmet) |
| <input type="checkbox"/> | Flotation |
| <input type="checkbox"/> | Partner |
| <input type="checkbox"/> | Clear plan, shared with someone NOT on the ice |
| <input type="checkbox"/> | Boots |
| <input type="checkbox"/> | Skates |
| <input type="checkbox"/> | Throw rope |
| <input type="checkbox"/> | Testing poles |

IMPORTANT ITEMS: BRING EVERY TIME

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Microspikes |
| <input type="checkbox"/> | Change of clothes or drysuit |
| <input type="checkbox"/> | Additional warm layer(s) in case of injury or long stops (eg lunch) |
| <input type="checkbox"/> | Warm outerwear |
| <input type="checkbox"/> | Cell phone and back-up battery |
| <input type="checkbox"/> | Water and food |
| <input type="checkbox"/> | Plastic bags (bread bags or similar) for wet boots or clothing |
| <input type="checkbox"/> | Map of venue (do not just rely on a cellphone) |

OPTIONAL ITEMS: CONSIDER BRINGING

<input type="checkbox"/>	Drysuit
<input type="checkbox"/>	Protective pads (eg knee, hip, elbow, wrist)
<input type="checkbox"/>	Mouth guard
<input type="checkbox"/>	Sunglasses/goggles
<input type="checkbox"/>	Headlamp
<input type="checkbox"/>	Hand warmer
<input type="checkbox"/>	2-way Radios
<input type="checkbox"/>	Pad to stand on
<input type="checkbox"/>	Bucket or crate to sit on while taking on/off skates
<input type="checkbox"/>	Backpack or dry bag
<input type="checkbox"/>	Duct tape and zip ties, for on-site repairs
<input type="checkbox"/>	First aid kit