

3. Recipe for a Successful Backyard Rink

Youngsters and the young at heart need look no further than their own backyard to participate in one of Canada's most popular winter activities—skating. Whether your climate allows 10 days or 10 weeks of “Back Yard Rink” experiences the precious family moments are worth the time and effort.

Backyard rinks offer:

- unlimited and convenient times to be physically active outdoors,
- an alternative to driving to an indoor arena or a distant location,
- fresh air, sunshine and natural surroundings
- an opportunity to learn about the art and science of ice making

Try out the following backyard rink recipe with reference to this website: <http://www.avalon.nf.ca/~howardp/byrinst.htm>

Select A Site

- Find a location that is: shaded, flat, close to a source of water and a source of light (for night skating is desired).
- A side of the house with a security light, shaded from exposure from the southern sun is ideal.

on your lawn . . .

- a) to prevent stress on your lawn, plan to alternate rink areas yearly.
- b) use plastic to help prevent ice damage to the grass.

on asphalt surfaces . . .

If you want to put a rink on an asphalt driveway, you might want to consider that:

- a) black surfaces absorb the sun's rays, minimizing the life of the ice and leaving ice soft in sunny weather;
- b) heaving and cracking of the asphalt surface may occur; and
- c) skate blades could break through the ice surface and damage the asphalt or the skates!

To remedy these problems spread a layer of gravel over the asphalt.

on concrete . . .

Concrete is the best surface to have under the ice. So if you have a concrete driveway, this could be a great spot.

The Basic Ingredients

- a cold day—between -7C and -18C
- snow
- people with snowshoes, skis or big boots
- water

The Options

Backyard rink kits are available which include sheets of polyethylene or a vapour barrier and step by step instructions. This web site is one place to look for a kit: <http://www.barint.on.ca/byrinks/>

In warmer climates with less snow and some rain during the season, using a vapour barrier over a base of flat packed snow is recommended. Advantages to using plastic are:

- a) it will help to protect grass from ice damage;
- b) some people find that they get a better, flatter rink in less time;
- c) polyethylene helps to contain the water when there is a substantial thaw or rain.

Instructions

- Prepare the base
- save on water and time and get a smoother surface by packing down a foundation of snow with a shovel, a rented roller, or better yet, get the kids in on the action with snowshoes or skis to pack down the base to a thickness of about 10 cm.
- fill the holes
- bank the area with snow at least 60 cm high to allow the sun's rays to deflect off the white edges—adding to the life of the rink especially when the temperature goes above freezing
- Bring on the water
- for a basic rink with no plastic underlay . . .



- apply a thin layer of water starting at one end of the rink spraying width wise along 1.5–2m wide strips progressively from one end to the other until the base becomes slushy. This should take about half an hour depending on how big the rink area is.
- **Note:** If you try applying water the lazy person's way, i.e., leaving the hose running to go in for a cup of coffee and read the paper, you will only have a big mud hole and/or layers of shell ice. If the temperature is very cold, below -17C, adding water, the lazy way, to prepare the base, may create a rippling effect. Rippling can be corrected by flooding the area after it has frozen, as you would under maintenance. Applying water in thin layers with a fine spray is key to having a successful base of ice and a great rink.
- Once this first layer has frozen you may begin with the next layer. If the temperature is below -15C you may not need to wait for the first layer to freeze. You may begin applying the next coat immediately.
- Each layer will require less water.
- Repeat this process until you have an ice thickness of about 6 - 10 cm.

when you have polyethylene . . .

- using a 20' x 40' sheet is ideal. For tips on preparing the vapour barrier see this website: <http://www.avalon.nf.ca/~howardp/byrinst.htm>. When using plastic, build up banks with snow as before, lay the vapour barrier over the banks and the prepared surface as described before, hold the plastic in place with two by four planks to prevent the plastic from blowing away and apply water as described for a basic rink with no underlay. When flooding to maintain the polyethylene base rink you must apply water with a fine mist to prevent thawing.

skated on often and care needs to be taken to prevent this area from building up into a ridge.

- Scrape the ice with a steel flat edge, like the back of a garden rake or a hoe or a shovel.

Flooding

- Apply water using the same technique as above but be sure to keep the edge of the layer wet so it will bond smoothly with its neighbouring layer.
- The warmer the temperature, the wider the strip of ice can be flooded. Experience will help you judge the best width and speed to flood the ice.

Tips:

1. Fill cracks with snow rather than water. Water will seep down through the cracks resulting in thawing the surface underneath, and creating shell ice.
2. Be careful not to drag the hose on the area that is being flooded. Keep it behind you.
3. If you flood when the weather is very cold, the ice will crack. However if you can spray the ice with hot water, it will melt the snow, flows better into the cracks and spreads over a greater distance. You use less water and less time this way, but you may want to compare it to the energy used with cold water.
4. If you have a "January thaw", fill the holes with snow and water as usual. If you have a thick base, your rink should withstand temporary thaws.
5. A general rule is that the warmer the weather, the finer the spray or the less water you should use. If you over-water especially in warm weather you will have shell ice (a thin layer of ice over water).

If you are fortunate enough to have sub-zero temperatures throughout the winter, perform daily maintenance, including shovelling and flooding the rink every day after it has been used. You could have a rink surface that is 30cm thick! To share your backyard rink "Tricks of the Trade" e-mail info @ goforgreen.com.

Maintenance

Cleaning

- scrape the surface of all snow, ice chips, and dirt before you begin to flood the rink.
- Sweep the ice around the perimeter with a corn broom. This area is not

