



Lanark Curling Club Information

www.lanarkcurlingclub.org

The Playing Surface

Some History

The game originated on the frozen lochs of Western Europe. There was a point in curling history where temporary enclosures were placed around the curling section of the frozen lake. This was done to protect the curlers from the elements.

Ice that is prepared by nature is known as "natural" ice. For natural ice to occur, obviously the temperature must be below 0C. This limited the growth of curling to the northern latitudes. When the sport finally came to North America (early 1800's), it was primarily played in Canada, where the winter temperatures were consistently below freezing.

In the early 1900's, refrigeration technology allowed ice to be prepared in regions where winter temperatures are often above freezing. This ice is known as "**artificial**" ice. Almost all curling facilities now have artificial ice, which allows curling to thrive in lower latitudes.

Artificial ice is produced using a process of compressing ammonia or Freon and then allowing it to expand and cool. This cooling process removes heat from the playing surface and creates ice. This is done by running pipes under the playing surface. The pipes are usually four inches apart, run the length of each sheet, and carry cold liquid chilled by the ammonia or Freon. A four-sheet club has approximately six miles of pipe under the ice.

The Ice

From a distance, curling ice appears perfectly smooth. After a closer look, you'll notice that the ice appears bumpy. The rocks ride on little frozen bumps called "**pebble**". The pebble is put on before each game with a machine that works like a flower sprinkler. Without the pebble, there would be too much friction between the ice and the rocks, and it would take enormous energy to throw the rocks the full distance.

The ice is maintained by sweeping up debris between games and **scraping** the surface two or three times a week. A special scraping machine is manufactured just for curling ice. The machine removes the build up of pebble and any frost that has settled before new pebble is applied.

Occasionally, due to the uneven freezing of the surface, the entire area is **flooded** and allowed to freeze slowly. This levels the ice and is done about once a week at Hamilton.

It is very difficult to prepare a perfectly level ice surface. Even though most imperfections can't be seen, the way the rocks behave while in motion may indicate mysterious ridges and troughs. This is part of the game. Skips must determine what the sheets are like as early as possible; similar to "reading" the green in golf.

The Air

The air temperature in some clubs is controlled. The ideal air temperature at chest level is around 5C. This is comfortable for the curlers and keeps the relative humidity lower so frost won't build up on the ice. Some clubs have dehumidification systems. This further decreases the relative humidity. Lower latitude clubs with no heating capabilities usually have frost problems. Higher latitude clubs with no heat are very cold. [Http://www.curlingschool.com/manual2007](http://www.curlingschool.com/manual2007)