

CELOS INFORMATION BULLETIN: CITY OUTDOOR ICE RINKS, MARCH 2008

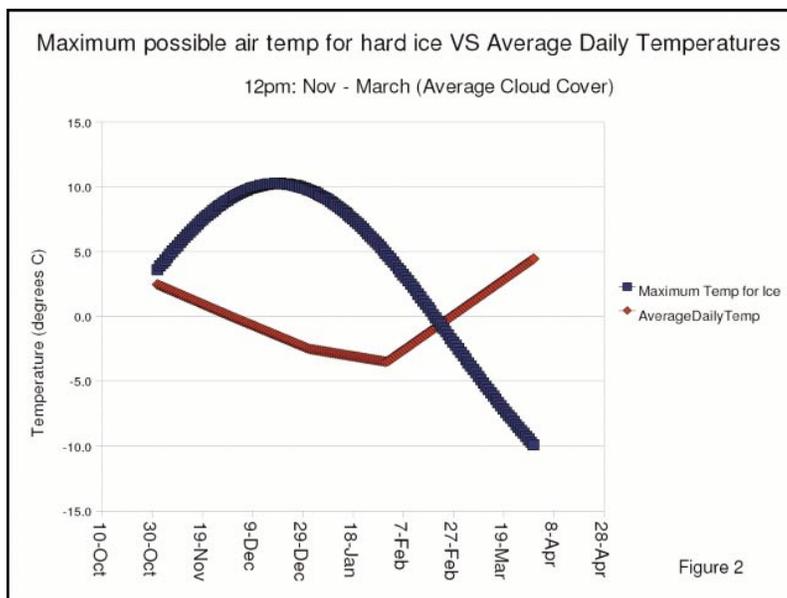
How was the ice quality?

The angle of the sun in March is already high enough that it fights the ice, very successfully. March temperatures are seldom cold enough to make up for the power of that sun.

In 2008, eight outdoor rinks were scheduled to remain open for two extra weeks after the first Sunday in March (the traditional rink closing time). Taking Dufferin Rink as an example: **it had to be shut down for part of the day on 11 of the 14 extra days.** 23 hours were lost because of snow. 55 hours were lost because of slushy or melting ice. Even though the temperature was above zero on only four days, the rink lost 40% of its skating time.*



West Mall Rink March 12 -2C



CELOS researcher Corey Chivers made a graph to show why it's so hard to keep the rinks open when the sun gets stronger in late winter.

The red line shows that the average temperature rises in March. But the blue line shows the problem with the angle of the sun. In December, the ice will stay hard at 10 degrees above 0. But by the end of March, the temperature has to be 10 degrees below zero, to get the same hard ice.



Rennie Rink January 7, 2008

+15C



Dufferin Rink March 16, 2008

-2C

* Source: www.cityrinks.ca, Rink Diaries
See also *Toronto's Outdoor Artificial Ice Rinks*, Second Edition, CELOS 2008

How was the rink usage?

Even when the ice was in good shape, during March the usage at the eight rinks was less than half of normal except for Nathan Philips Square. At Rennie Rink the kids said: “hockey season’s over!” At Dufferin Rink the skaters said they were coming less because they knew the ice might be bad.



Mel Lastman Square March 2008 low usage

What were the operating costs?

When these rinks were built, they had a fixed season: November 15 to the end of February. After amalgamation, City Council began to shrink the season, so that in 2001 most rinks didn’t open until December 22. Then the season was increased again at some city rinks, but at the wrong end. By now the season at those rinks is only one week short of the original rink season (106) days. But because the extra is in March, the ice is often bad and rink usage is low.



What was the bill?

Utility cost,¹ double-pad or extra-large single rink like City Hall: about \$500/day.

Utility cost, normal-size single-pad rink like Mel Lastman or Kew: \$288/day.

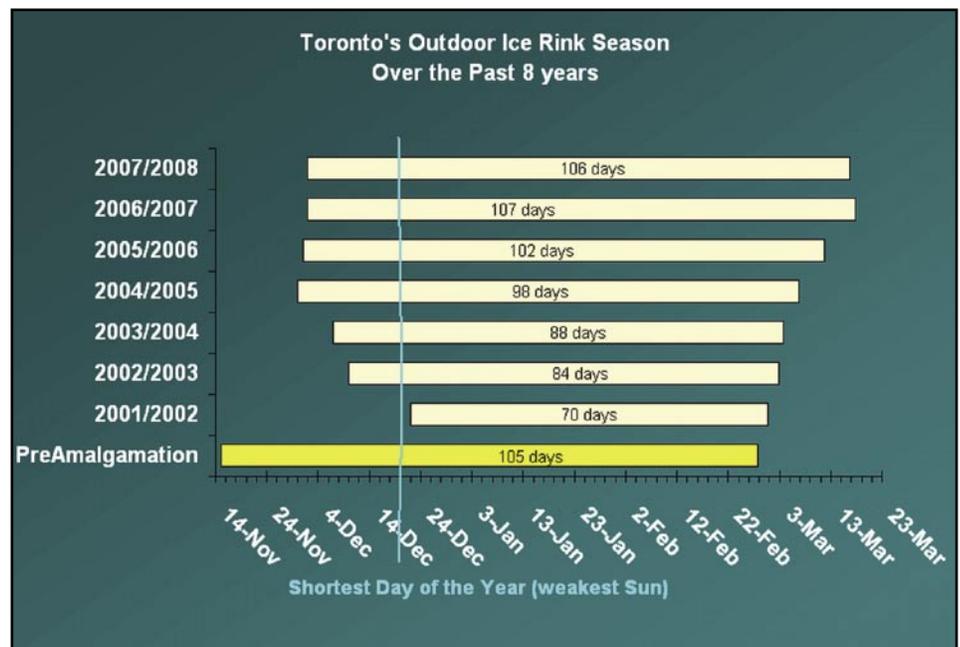
Zamboni operators’ wages² per rink in March: about \$340 a day. **One rink guard** for 12 hours: \$138

Cost to run one **double-pad** rink (e.g. Dufferin or Rennie) per day \$978

Single pad (e.g. Kew or Mel Lastman) per day: \$766

Cost for **8 rinks** to run two weeks in March (conservatively) **\$100,704**.

Some of the smaller rinks are cheaper to run. Even so: additional cost if the city had kept all 49 outdoor rinks open to the end of March break = **\$514,668**. If lots of people could skate, that would be okay. But not if the March sun makes the outdoor rinks unusable 40% of the time!



1. based on *City of Toronto: Energy Efficiency Retrofits List*. Energy & Waste Management Office; see also City of Toronto Freedom of Information request, November 7, 2007

2. www.local416.org 2007/2008 winter work selection