

Why keep track of ice cover?

People are now realizing how the planet's climate is changing in response to greenhouse gases in the atmosphere. How will our climate react in southwestern Nova Scotia and how will our environment be impacted? Changes in ice cover on our lakes and rivers can change migration patterns and breeding seasons of birds, food supplies for all kinds of wildlife, and water temperature and chemistry. They can also affect human activities such as trade, transportation, recreation, and tourism. One way to measure how climate change is affecting our region is to record freezing and thawing of our lakes and rivers.

The Mersey Tobeatic Research Institute (MTRI) with the help of community volunteers is launching a monitoring program that will look into changes in ice cover in our region. Volunteers that live on watersides or that drive by a lake or river every day will keep track over the winter of “ice-on” and “ice-off” events.

How to watch ice?

- ☀ Choose a freshwater lake or river: Almost any lake or river is suitable except fast flowing waters and water bodies that are heavily controlled by dams.
- ☀ Select an observation point:
 - For small lakes allow an almost entire view of the lake.
 - For large lakes or lakes with convoluted shorelines allow a view of a readily identifiable portion of the lake.
 - For rivers allow a view of a relatively straight, gently flowing portion of the river that is free of restrictions.
- ☀ Watch for first freeze-up and last thaw:
 - Daily observations should be recorded during freeze-up and break-up periods.
 - Record ice-on and ice-off from your observation point.
 - Ice-on: ice completely covers the area being observed.
 - Ice-off: ice cover disappears completely from the area being observed.
 - Record ice-on and ice-off every time the ice covers or melts again from the observed area.
- ☀ Record data and send it to the MTRI:
 - 9 Mount Merritt Road, PO Box 215, Kempt, Nova Scotia, B0T 1B0, phone (902) 682-2371, fax 682-2760, info@merseytobeatic.ca.
 - All data will be shared with the Ecological Monitoring and Assessment Network (EMAN) to be included in the national database for IceWatch (www.icewatch.ca).



Ice Tracking Form



Mersey Tobeatic
Research Institute

Waterbody name: _____

Observation point name and description (including coordinates if available): _____

Observer name(s): _____

Observer address: _____

Phone number: _____

Instructions: In the appropriate square in the calendar, record “**on**” each time ice completely covers the area observed and “**off**” each time the ice completely melts from the area observed.

Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
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November 2010

	1	2	3	4	5	6	7	8	9	10	11	12	13
14	15	16	17	18	19	20	21	22	23	24	25	26	27
28	29	30											

December 2010

			1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31								

Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
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January 2011

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2	3	4	5	6	7	8	9	10	11	12	13	14	15
16/30	17/31	18	19	20	21	22	23	24	25	26	27	28	29

February 2011

		1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24	25	26
27	28												

March 2011

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13	14	15	16	17	18	19	20	21	22	23	24	25	26
27	28	29	30	31									

April 2011

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10	11	12	13	14	15	16	17	18	19	20	21	22	23
24	25	26	27	28	29	30							