



# Maine Lakes Monthly

The Ice Edition

-for students

Don't end up a popsicle, check ice thickness!

Forget hook-handed psychos, blood-thirsty zombies craving human flesh, or a huge shark with serious attitude, I fear thin ice, water-filled lungs, and frozen body parts.

Since I'm not saying we should all avoid water this winter, let's replace fear with the word respect and think about how we can safely walk on water (compliments of our climate).

Safe winter use of water demands respect and understanding. If you go through the ice and don't get out immediately, you may have as little as 15 minutes before you die from heat loss (cold water chills your body 32 times faster than the air).

Now, if you do get back onto land, you're wet and very cold. You may be OK if you're right near shelter and warmth (such as a house or warm car). If, however, you're miles from the nearest warm place, then you're in big trouble. Despite what you may see on TV, being soaking wet and outside in the winter is a life threatening situation. DO YOUR BEST TO AVOID THIS! Look at the chart above, it is a guide for how much ice is needed to safely enjoy our lakes this winter. Share this chart with your parents and use your brain - save the swimming for summer!

*(Author's note: technical information obtained from United States Search and Rescue Task Force.*

[http://www.ussartf.org/cold\\_water\\_survival.htm](http://www.ussartf.org/cold_water_survival.htm))

**Don't Get on Thin Ice**

**Safe Ice Thickness**

- 4 inches for people on foot
- 5 inches for snowmobiles
- 10-12 inches for small to average-sized vehicles
- 12-16 inches for pickups and vans

■ No ice is completely safe  
 ■ Watch out for thin, white or cloudy ice  
 ■ Don't venture onto the ice alone

NDSU Ag Communication

More Reasons You're Probably Not a Frog.



Do you spend your winter months buried in the mud at the bottom of a pond? Right now, is your body temperature very close to the temperature of the environment around you? How about your appetite - have you not been eating at all since the weather turned cold? Since you're reading this, you're not hibernating. All in all, the evidence seems to show that you are most certainly not a frog in Maine (or anywhere else for that matter).

Lake and pond bottoms are popular places for amphibians to spend winter. One frog, the wood frog, spends winter out of the water. Wood frogs freeze nearly solid! They survive this feat by protecting their fragile cells with frog-produced natural "anti-freeze" (the ice forms outside the cells). Come spring, they "thaw" and become active for mating season.

**What is the Students Portal and how does it give you a chance to have your voice heard?**

The Students' Portal is an online link connecting your learning with your community and the world. Did you research a way to make your lake healthier or observe something cool while out on the Melinda Ann (our floating classroom pontoon boat)? Talk to your teacher about posting images, writing, or other digital information on your school's portion of the Students' Portal. Are you curious about what other kids around the state have learned or think about their lakes? Check out other schools' postings to see what they've been up to.

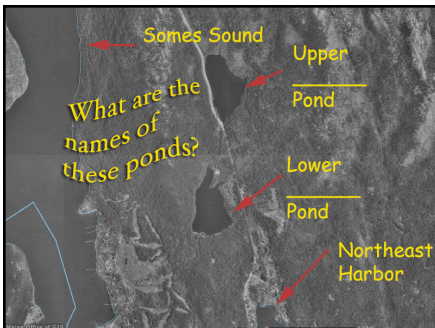


<http://www.mlci.org/Students/default.aspx>

**THINK ABOUT THIS!**

If you leave a bucket of water out and the temperature drops well below freezing, you'll probably have a bucket of ice in the morning. Why, then, doesn't a lake freeze over with inches and inches of ice during a cold night? Well, first, lakes are much bigger, and cool slower because there is so much water in them. Next, wind can keep lakes from skimming over. It's on cold, still nights that

lakes first grow a thin skin of ice. Then, consistently cold weather adds thickness to the ice.



**Can you identify these ponds?**

Hints:

- The two ponds straddle the boundary of Acadia National Park.
- The lower pond once had a sluiceway (think slide) for ice. Harvested ice was sluiced to Northeast Harbor.
- The ponds are very close to Somes Sound - considered to be a fjord, though fjord may be more true (see <http://www.state.me.us/doc/nrimc/mgs/explore/marine/sites/nov98.htm>)
- The upper pond's elevation is 228' above sea level. The lower pond is 188' high.

**Something Smells Punny:**

Q: What do you call ten snowshoe hares hopping backwards together across the frozen lake?



A: A receding hare line.

**Last month's mystery lake?  
Flagstaff Lake**

**PEARL DATA -from the unidentified pond (upper)**

Date	Secchi disk reading (m)
7/23/1992	6.3
7/24/1993	7
6/16/1994	5.4
7/24/1995	5
7/18/1996	5.1
7/8/1997	6
7/7/2004	4.88



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