

Late Season Ice Safety

Ice Out or Not?

What You Should Know About Late Season Ice

March is traditionally the second snowiest month of the year. It is a month that can tease you with the coming of spring and also remind you that winter is not quite ready to leave. We can still enjoy most of our favorite winter activities in during March, but when those activities take us to the frozen tundra of Lake Minnetonka and other area lakes there are facts you should know to help keep you safe.

The Excelsior Fire District along with other agency, that are involved in ice safety do not tell people when the ice is safe. They give the citizens guidelines and information about ice so they can make the informed decisions. The ice is never considered safe.

How Ice Melts

Ice forms like layered segments called candling. When ice melts it does not shrink, it hollows out. This is referred to as „honey comb“. As ice melts and hollows out the honey combs either remain hollow or they inconsistently fill with water and sometimes that water will freeze and sometimes it does not. This process is one of many that create the appearance of gray or black ice.

The Strength of Ice

When you think of the safety of ice you must think of at least two things, the thickness of the ice and the strength of the ice. They are not one of the same. The condition in which the ice was formed determines the strength of the ice. Ice can be strong and thick or weak and thick. The depth of the water, the air temperature, the time span of certain air and water temperatures and, snow cover are just few of the factors that play into ice formation.

Rotten Ice?

March is basically „rotten ice“ month. The surface of the ice can be deceiving and you must consider ice a product of Mother Nature and her reputation for being unpredictable. In general, several inches of directly frozen ice formed early in the season is stronger than even a foot or more of ice in place or formed at the end of the season. The ice we will start seeing on the lakes now is old „rotten“ ice. Because it has structurally been changed by the melting process, formed by melting snow, refrozen, or made by water bubbling up through cracks and freezing on the surface it is considered weak ice no matter how thick it becomes.

Signs That Can Help Identify Weak Ice.

Again, predicting Mother Nature is never a sure thing. If you absolutely must go on to the ice there are some signs you can look for to determine if ice is weak. Slush weakens ice and indicates that the ice in the area is no longer freezing from below. Gray or black ice indicates that the ice has been compromised by melting, water flow, or other movements.

Ice around organic object is weak. When organic object like dock post is decaying the process creates heat which

causes the ice to melt. The ice along the shoreline is weaker because the buckling action of a lake during the winter months breaks and refreezes the ice continually along the shore line. The water near the shore is constantly moving much as it does during the summer months. Ice formed over moving water is weaker and can be dangerous especially in areas above springs, in streams and rivers. The ice formed nears the mouths of streams and rivers is very weak.

Ice can be weakened in many unseen ways. The wind can force water against the edges of ice and rot the ice from below. Fluctuation water levels and water movements by the activity on the ice can weaken it. Schools of fish can create thin ice spots or even open water by congregating in one location while circulating the water with their fins. Think of this when the "fish are biting".

Declaring Lake Minnetonka Ice-Out

Ice-out is declared on Lake Minnetonka by the Commander of the Water Patrol.

Ice out is called when the commander can take a boat from Water Patrol Headquarters in Spring Park, through the Narrows and around Big Island without having to significantly alter course to avoid ice or ice floes.

- **Earliest Ice-Out: March 11, 1878**
- **Latest Ice-Out: May 8, 1856**
- **Earliest to Latest: 59 days**
- **Most Common Ice-Out: April 17 & 18 (9 times)**
- **Average Ice-Out: April 15th**

March is an unpredictable month and now that you have more knowledge about ice you can use better judgments and common sense when planning to venture on to the ice. Minnesota area lakes and the biggest winter playground in our area, Lake Minnetonka, can be fun and exciting as long as we all play it safe.

For more information contact the **Excelsior Fire District**, Hennepin County Water Patrol, or the **Minnesota Department of Natural Resources**.