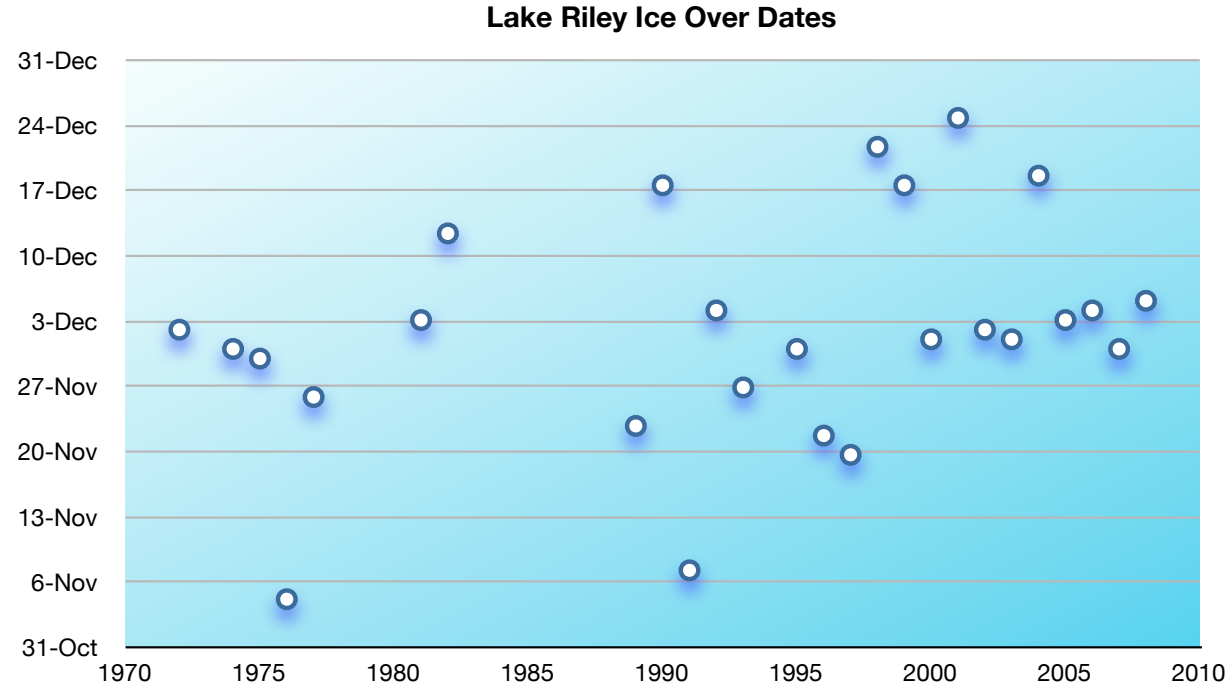
The Lake Riley Launch

December 2010

An email newsletter for
Lake Riley Improvement Association Members

Lake Dates. Last year we had the first snow-free November in 46 years for most of Minnesota; this November was one of the snowiest! It looked like the lake would freeze over during our arctic Thanksgiving weekend, but the northwest wind has delayed it for now. Whatever this winter brings - either good ice for the ice boaters and ice skaters, or snow for the skiers and snowmobilers - get out and enjoy it! You will have a healthier and happier season.



Evening with the Watershed. Last night was another great evening put on by our Watershed district. Perry Forster, president of the watershed board and Lake Riley resident, listed the many accomplishments of the board over the past year. He said that after last year's meeting many people come up to him and asked, "What can I do to help?" Last night's meeting was an answer to that question. There were 3 speakers who had expertise and ideas for how "Citizens can make a difference."

John Barton, Water Resources Manager of the Three Rivers Park District spoke about how we can reduce runoff from our lawns. He said that lawns make up 62% of residential land surface. That theoretically should be good for runoff, but in fact, is not. Because of how compacted the soil becomes from grading and construction, most organic matter is lost before sodding, and lawns have less than 3" of penetrable soil underneath. Water can barely penetrate, most rainfall runs off, and it is so compacted even roots can barely grow. Golf courses actually provide a model for turf management. Less than 6% of rainfall ran off of 4 monitored local courses, or only 1.7" total annual runoff. Why? They don't compact the soil before laying the turf. What can we do to achieve better lawn conditions for absorbing water?

1. Aerate regularly - at least annually, if not more. Core aeration works well. At first you'll notice that the hard pellets will take 2 weeks to break down, but over time, aerating often and regularly, those cores will disappear in 2 days.
2. Mulch your lawn clippings and fall leaves right onto the lawn. Mowing and leaving builds up the organic matter of the lawn and is very healthy for it.
3. If you have the opportunity to re-do any lawn, till and add compost before seeding or sodding.

4. Gradually (over a couple of summers) increase your lawn mower height to 3". Most people cut their grass to 2" or less, which is WAY too short. It takes about 2 seasons for the grass to grow strong enough to support the 3" height.

If you are aerating and mulching, your longer, healthier grass will make a lawn that is stronger, needs less watering and weeding, will absorb rain better and create less runoff.

Next, Julie Westerlund of the DNR spoke about how land use is linked to water quality. She explained that a natural watershed is an area of land that drains to a common body of water. Any activity on land affects the water. In a natural setting after it rains, about 40% of the water evaporates, about half infiltrates the soil, and 0-10% runs off into the streams, rivers, lakes and wetlands. In suburbia - with increased hard surfaces - about 55% of rain runs off. The runoff often goes through our gutters filled with leaves and gunk, taking oils and pollutants with it. How can we make our landscape function better? We can choose carefully where we develop; minimize hard surfaces; keep soils healthy; use plants to treat storm water at the source; and make improvements when we have the chance. The Blue Thumb program encourages people to prevent pollution from getting into water by:

- Designing native gardens - the more diverse plants are more resilient.
- Creating rain gardens - shallow area of plants that collects & holds water, lets it soak in and evaporate.
- Stabilizing shorelines - plant barrier between land and water

The third speaker was Cheri Nehl from the Mitchell Lake Shoreland Association. They formed in 2006, wanting to improve Mitchell Lake water quality. In June of 2007 they went to a shoreline restoration workshop that inspired them. They applied for and received a $33,000 DNR Shoreland Restoration grant to be used on 7 Mitchell Lake projects. Their first project was Timberlake Commons. They took 160 ft of blank shoreline (lawn to lake) and working with Fortin Consulting, developed a plan. 18 volunteers from the community worked to kill the grass, spread mulch, and plant over 2000 plants. In the water they installed 6 biodegradable "biologs" to provide a stable environment for 108 aquatic plants. The area needed weeding and upkeep in the first 2 years but is now thriving! They've now completed four other projects on the lake, including more shoreline restoration, a rain garden, and replacing buckthorn and crown vetch with native vegetation. They have received great support from the city of Eden Prairie, from the DNR and the community to get these projects done, and although it's hard to measure the success quantitatively, they definitely feel they've made improvements.

At the end of the evening we got a quick update from Peter Sorensen about the carp study.

- The best news is that in the lakes where the carp have been removed, they have detected no young carp. They feel that the carp are under control, and that this carp reduction program is sustainable.
- They are in the 2nd year of research in Lake Lucy. Last year they worked to find out how many carp were there, and put in 10 radio-tagged fish. All those fish survived and they will help show where the carp aggregate (should start in about a month.) The team will net and remove them this winter.
- They started studying Staring Lake this year, and have found a lot of carp there. Will start sampling to determine how many carp there are, and will also measure water quality, which is very bad right now. They have put in fish with radio tags, and will hopefully be removing the fish from Staring next winter.
- The key water barriers will be kept in Rice Marsh lake to make sure it doesn't function as a nursery to young carp, and because they are still learning from the barriers. They are letting all the game fish move between lakes, as they're getting a lot of good information about that movement. For example, the northern pike move extensively between Lakes Susan, Rice Marsh and Riley. Rice Marsh is a key nursery for them. Aeration in Rice Marsh will keep the native fish population alive during the winter so they will continue to eat any young carp in the spring.

Winter Hazards. We have already had freezing rain, sleet and snow, and this is only the beginning! Check out the Winter Hazard Awareness Info site from the State of MN for all kinds of information about winter safety, inside and out. And remember, THERE IS NO SUCH THING AS 100% SAFE ICE. Refer again to the Ice Safety page from the DNR website.

Winter. Winter is the time for comfort, for good food and warmth, for the touch of a friendly hand and for a talk beside the fire: it is the time for home. ~Edith Sitwell

This e-newsletter is published in March, June, September and December.
If you have questions, comments or ideas - or if you need to add or update an email address - please contact Anne Florenzano at 952-937-5354 or anneflorenzano@gmail.com