

Minutes from 2012 LRIA Annual Meeting
Tuesday, April 17, 2012, 7 p.m.
Eden Prairie City Hall, Heritage Room III
8080 Mitchell Road, Eden Prairie, MN
Approx. 40 people in attendance

7:08 LRIA **President Mike Domke** brought meeting to order.

Motion was made, seconded and approved to accept last years minutes.

Introduction was made of LRIA Board members.

Pete Lillie gave the treasurers report, with a balance of \$6,800.82 in the general fund and \$1,600.00 in the fish stocking fund. Pete would like to move the LRIA bank account from Glen Lake to Klein Bank in Chanhassen, for the convenience. Motion was made, seconded and approved to let him make the bank change.

LRIA membership count was at 70 in 2011, up from 53 in 2010. Mike feels that a large mailing of the dues sheet to everyone helped.

With our every-other-year walleye stocking schedule, we did not stock fish in 2011. Mike will arrange for the stocking this fall, prices and available fish permitting. It was asked to have the fish stocking report published in the next Lake Riley Launch; Anne Florenzano agreed.

Ice-out on Lake Riley was on March 18 this spring, the 3rd earliest on record.

Mike had flyers on hand for classes available through Eden Prairie on Water-Smart Landscaping (April 19) and Living with Shoreland Workshop (April 26.) Also noted was the reimbursement available in Eden Prairie from the Landscaping for Water Quality rebate program. The maximum rebate for any single project is 50% of the direct project costs up to maximum of \$1000.

Data on Lake Riley water conditions monitored by David Florenzano and John Bushey were made available at the meeting.

Guest Speakers

Mike Casanova, Vice President of the Riley Purgatory Bluff Creek Watershed District.
Watershed District Overview

Zebra Mussels are of current concern, already infesting lakes surrounding Lake Riley (Minnetonka, Prior Lake.) We also need plans in place for future Aquatic Invasive Species (AIS) such as Quaga mussels, Asian carp and invasive plants. Mike feels that the Watershed board is very qualified to work on these problems because they are the most knowledgeable about water issues in our district. The board has given \$25,000 to each of the cities of Chanhassen and Eden Prairie. The watershed is also working on:

-Prevention: education on the problems, science to study issues & effects, regulations that might mitigate the infestations.

-Preparation - prepare for the worst case scenario. Important to restore lakes to as healthy condition as possible with a wide variety of native plants and fish, to better combat the effects of the AIS.

-Management - are currently seeking ways to manage the AIS when they come. One idea is with an intern in coordination with the U of M team, to study the lake during infestation, to seek solutions.

As well as AIS prevention, the watershed board has some very successful programs underway to reduce phosphorus in our lakes.

--RAP - Rapid Identification Program - identifying storm water ponds that are not working properly. We have a lot of lakes with excess phosphorous which the storm water ponds are intended to help mitigate. If identified as under-performing, there are several steps that can be taken to make them functional again. It is a simple and effective way to reduce phosphorus runoff to our lakes.

--IPAS - Ice Preserving Aeration System. They have been monitoring phosphorous levels year-round on some of our lakes, under the ice. They have noted a big phosphorus spike in winter which contributes to winter fish kill. They first tried aeration in Rice Marsh Lake, which seemed to work. Last year the system was put in Lake Lucy. It was very successful, removing 80 pounds of phosphorus from Lake Lucy. It is projected to cost \$160,000 for 10 years - very reasonable cost for reducing phosphorus.

--Rain garden program on Lotus lake. \$140,000 project to create rain gardens around Lotus Lake, with residents managing these gardens and keeping them functional for 7 years. Rain gardens trap phosphorus so that it doesn't leech into our lakes. It doesn't take a lot of phosphorus to degrade the quality of a lake, so every pound prevented from entering the lake can help.

Mike's personal observation is that many citizens would like the Watershed board to contribute more time, attention and resources to the prevention of the spread of zebra mussels. If you feel strongly about this issue you can 1) attend watershed meetings, 2) you can also tell the managers & staff of the watershed board how you feel, and 3) you can go to the county commissioner and discuss the appointment of managers who are committed to combatting the zebra mussel threat and strengthening water quality in our lakes.

Laurie Susla, Lotus Lake Conservation Alliance.

Aquatic Invasive Species (AIS) prevention efforts

The Watershed district has generously given Chanhassen and Eden Prairie each \$25,000 to combat AIS. With different city plans and many different lake associations, the question is, "What can we learn from each other? How can we help each other?" As lake associations we are limited, but there are some things we can do. Her Lotus Lake alliance has gotten volunteers who have been trained by the DNR to do boat inspections. These are simple, cursory inspections and can only be done if the boater agrees.

-the volunteers cannot deny access in case of violations

-they cannot close parks overnight, so there are many times of the day/week when no inspections are taking place.

But we CAN:

- ensure that lake homeowners are knowledgeable
- educate boaters about AIS and hope they care
- call police or DNR if we find/see violation
- try to inspect as many boats as possible

Last year they inspected 917 boats, 15% of which were boats coming from infected waters. 15% were arriving with some violations - water in bait bucket from other lakes, etc. So they felt that they did make a difference. Laurie reiterated that they appreciate the support from the watershed district. She hopes that the cities of Chanhassen and Eden Prairie will work together to make the AIS prevention funds go further. If our lake association has questions, we can contact her any time.

Dr. Peter Sorensen, University of Minnesota

Lake Riley Plant Restoration.

Problem: Poor water clarity and lack of plant life in Lake Riley

Goal: to understand if there is a relationship between low plant densities, herbicide treatments and poor water quality in Riley, and to find a course to restore the plants.

Before removing all the carp we had poor water quality in Riley; Lake Susan was even worse! A lot of carp were removed from both lakes. It was especially successful in Riley. Over 90% of carp were removed, and they feel they have fixed the carp problem.

Immediately after carp removal, Susan's water clarity dramatically improved; Riley's did not. We got more carp out of Riley, and it has lower phosphorus levels, but the clarity doesn't get better, whereas Susan's has consistently been getting better. This has been very disappointing and baffling. Why? What else is going on in Lake Riley?

- There is a crash of the filtering zooplankton (daphnia) population in June. The drop-off of daphnia coincides with poor water clarity, which doesn't happen in Susan. The crash of daphnia is likely caused by the lack of plants (shelter) and extensive bluegill predation.
- The plant community improved in Susan after carp removal, not in Riley. Riley has **half** the abundance of plants of most of the other area lakes.
- Riley has a huge population of small bluegills. They estimate there are probably around 300,000 small bluegills in Riley.
- Riley has a lot of milfoil because there are not enough of the weevils that eat the milfoil. Native milfoil weevil eat milfoil and are also good food for sunfish. Lake Susan's milfoil weevil population spikes very high and the the milfoil stays low. They hatch the eggs in the top of the plant, and the larvae burrows down in the stem and kills the plant. As a result, Susan has much greater diversity of plants than just milfoil.

Is the main problem the lack of plants? Are there too many bluegills? Is it both?

The DNR is hesitant to do a sunfish control program because they feel that restoring plant life is more immediately doable; if we restore plant growth in Riley they will consider managing the bluegills.

An intern with Dr. Sorensen explained how the plant life in a lake is akin to underwater prairies. These plants are vital to the health of a lake, acting as refuge for daphnia, refuge for fish, they help with uptake of phosphorus and nitrogen, compete with algae, and stabilize sediment in shallow water. Riley has half the plant *concentration* of lakes

Lucy, Ann and Susan as well as half the species *diversity*. Compared to Susan, Riley has:

- poor plant cover
 - poor diversity
 - a lot of milfoil and no milfoil weevils
 - low population of daphnia
 - poor spring clarity despite lower phosphorus levels
 - a lot of small sunfish
 - a lot of plant removal/herbicide treatments by lake residents - Susan has very little.
- Hypothesis: lack of plants may be due to excessive herbicide use.

The lack of plants has aggravated a series of ecological issues - too few daphnia, too many bluegills, poor clarity. Sean Sisler, an aquatic plant expert with the DNR, explained that when a lake gets into an algae-balanced state, as Riley is, it takes a lot to get it back to a plant-balanced state.

Dr. Sorensen wants to do 2 experiments this summer: he wants to see 1) what the effect on Riley plant life would be if homeowners eliminate or reduce the use of herbicides on the lake as a whole, 2) and he wants to exclude sunfish from an area of lake to test what the result will be on the plants in that area, especially if he can do it in a section of the lake that is herbicide free.

If herbicide use is eliminated or greatly reduced Dr. Sorensen hopes that the aquatic plants will recover, daphnia will increase and clarity will improve, but he stressed that he doesn't know for sure. Dr. Sorensen says that our poor water clarity is really puzzling and disturbing, especially when they compare it to what has happened in Lake Susan. There is nothing that can be done biologically to bring back plants in Riley, other than an effort by all of us to eliminate or reduce our use of herbicides. He would like us to think of this in a 2-year time frame. If we lakeshore owners agree to reduce as much as possible our use of herbicides - both spraying and pellets - and then do not see any improvement in plant richness or water quality in two years, then at least we know we've tried this hypothesis.

Beth Halvorson did some research with Lake Restoration, the company that sprays for weeds on our lake, who said that normally 30 - 32 homes have contracts with them to spray with herbicides. They are guided strictly by DNR; permits required, chemicals approved. They are limited to treating 15% of total lake area, and are currently treating only about 3 - 6%. There is supposed to only be a 10 ft. drift from the area treated, but homeowners in attendance feel that under certain conditions the sprayed herbicide might drift much further than that. It was brought up that although the DNR requires homeowners to get permits to use the herbicide pellets, there are few that have gotten the permits and MANY (by a show of hands) who have used pellets. When Dr. Sorensen asked how many of us have removed weeds, using herbicides and through cutting, nearly every single hand went up. When asked how many homeowners would be willing to eliminate or reduce their use of herbicides, again, nearly every hand went up. Manual cutting of weeds as needed to swim and use our boats would be fine with Dr. Sorensen in this experiment. The theory is to retain some vegetation along the shoreline. Dr. Sorensen asked that each homeowner keep records of what method of

weed removal they use, when they do it, and how much they remove. That information will help his research a lot. John Bushey said that his college-age son will be available this summer to work out an arrangement with homeowners to help with lake weed removal if they are interested.

Motion was made, seconded and passed that a large majority of LRIA members in attendance will eliminate or reduce their use of herbicides this summer and next, and ask that all lake residents do the same. We also will each document the dates and methods of our lake weed removal and how much we removed. A committee has been formed who will work out the details of collecting this documentation from lakeshore owners to pass on to the University team. The members of that committee are: Beth Halvorson, Shelly Manning, Dennis Mills, Laurie Hable and Sara Davis. The lakeshore owners also approved of Dr. Sorensen's plan to form an enclosure keeping bluegills out of an area of the lake (to be determined.)

For any of you who have already paid into a contract with Lake Restoration to spray for weeds, if you decide not to spray this year you will only be out \$50. Lakeshore does not charge you for the actual spraying until they do it. The board of the LRIA encourages those who have a contract to not spray for two years, and will pay back the \$50 loss to any lakeshore owners who want reimbursement. Contact Mike Domke at 612-860-3501. Some lakeshore owners who have sprayed in the past will not spray at all for 2 years. Some have decided to only spray once this summer, and not a second time. Contact John Bushey at 952-270-9206 if you are interested in working out an arrangement with his son to manually cut your lake weeds, or if you have questions on how to manually cut your lake weeds. Sean Sisler from the DNR wants to remind everyone that a permit is always needed to use pellet herbicide to treat your lakeshore. You can go to the [Minnesota DNR website](#), under "permits" and then "aquatic plant control permits" to find out more.

Submitted by Anne Florenzano
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