

The Lake Riley Launch

September 2012

*An email newsletter for
Lake Riley Improvement Association Members*

Lake Dates. The Lake Riley Improvement Association (LRIA) is again looking to stock Lake Riley with fish this fall, but it probably won't be with walleye. President Mike Domke is looking into the kinds of fish available to us and will coordinate his decision with the University research team. Please contact him at mike.domke@donaldson.com if you have interest in this issue. As always, we will send out an announcement of when the stocking will take place so that anyone who wants to can come and help.

Lake Riley Report From Sorensen, Newman and Bajer, Aug 31, 2012.

The Sorensen and Newman labs are continuing to monitor plants, water clarity and quality in Lake Riley while conducting an experiment that uses exclosures to test the effects of the large numbers of small bluegill sunfish found in Lake Riley on its water quality. These data are still being analyzed but some preliminary results are available. While water clarity was good at the beginning of this year, it once again deteriorated by mid-summer. As most lake residents are aware, there was voluntary agreement to reduce, and then document, herbicide treatments this year. This led to an increase in aquatic plant cover in Lake Riley by July, thereby demonstrating that the almost complete lack of plants in previous years had in fact been caused by herbicide treatment. Unfortunately, most plants are invasives (Eurasian milfoil and curlyleaf pondweed) although a moderate number of submerged natives are present in a few locations. With the increase in plants, individuals apparently started using herbicides and plant cover decreased again. We now look forward to reviewing the records on these treatments as they will allow to make recommendations on when/ where and how to treat for invasive plants and manage them in the future in sensible manner (good quality fisheries and water clarity require at least modest plant cover). A plant management plan will be needed in Lake Riley and we are already planning on how to work with residents, the DNR and the new coordinator for the Watershed to make one happen – stay tuned. We have learned a great deal about how your lake works (and doesn't) and thank everyone for helping with this experiment.

We are also continuing our exclosure experiment in Lake Riley and collecting water quality samples in the lake every two weeks. This experiment is designed to test the possibility that the large number (about 400,000) of bluegill sunfish in the lake are adversely affecting water quality because they remove the zooplankton (Daphnia) that eat the algae and the weevils that eat the milfoil. Preliminary results show that water clarity in the exclosures is dramatically better (clear to the bottom) than in the lake despite phosphorus levels being essentially the same, if not higher. This suggests that water quality in the lake might improve, too, if fish and plant communities were more balanced, particularly if densities of small bluegills were reduced. Weevil densities are also high in the exclosures where they presently appear to be controlling the milfoil. (Native plants outside the exclosures are now poor because of poor water clarity). This information is invaluable as it will allow us to go the DNR to argue for adaptive fish management to improve both the fisheries and water quality. We look forward to completing these datasets and reporting them.

Thanks For Your Participation. Thanks again to all who have participated in the survey about herbicide use on Lake Riley. As you can see from Dr. Sorenson's report above, the information from the survey is important to our future lake plant management plan. The committee that conducted the survey is compiling the results, which will be shared with Dr. Sorenson and published in the December issue of this newsletter.

And The Winner Is...? Fall predictions ABOUND - on the weather (NOAA says a developing el nino portends a warmer-than-normal winter for the upper midwest,) on football winners and losers, TV and movie box office hits, economic ups (or downs,) on ancient Mayan doom, and of course, outcomes of the presidential election. I'll take Casey Stengel's advice: "Never make predictions, especially about the future."

*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 612-730-9470 or anneflorenzano@gmail.com*