

2009 Hardwood Lake weed control update

October 2009

A few residents had concerns about lake weeds late in the season of 2009.

This is an overview of the weed control project and some information on the 2009 season.

It needs to be noted that weed control issues and water quality is not an instantaneous fix. If there are issues residents MUST contact me, David Sommers. I am the Lake Board Representative and Hardwood Lake Property Owners Association President. I need the information to coordinate treatment through Progressive Engineering, our oversight engineering firm.

The weed control project on Hardwood Lake was established under the Lake Improvement Act in 1994 and uses tax dollars to pay for the project. The scope of the project is to control non-native invasive aquatic plants such as Eurasian Milfoil and Curlyleaf Pondweed.

Hardwood Lake will never be a crystal clear lake. It is an eutrophic lake with a deep mucky bottom. Eutrophic lakes are "rich in nutrients and so supporting a dense plant population, the decomposition of which kills animal life by depriving it of oxygen." It has a mean depth of only 8.7 feet. We were told this by the state of Michigan when the project was started. There is little dissolved oxygen below 10 feet, which is bad for fish. In 2006 the deepest spot which measured at 33 feet, dissolved oxygen was actually zero.

The weed control plan is on a four-year cycle. Progressive Engineering, who is paid to do this, monitors the lake, obtains the state permits and directs the contractors as needed.

In 2008 an entire lake chemical treatment for Eurasian Milfoil was done. The goal was to treat the lake with Fluridone at 3 parts per billion. The lake was monitored to ensure the correct amount of chemical was in the lake. More was added to maintain the correct level for the season. Because of the entire lake treatment there was no need for mechanical harvesting. This is an expensive treatment, in excess of \$20,000.

In 2010 there will likely be some spot treatment of the non-native weeds and harvesting to remove some of the lake biomass. Chemical treat-

ment is highly regulated. One reason is because of the numerous shallow wells on the properties and a need to stay a certain distance from them. It is extremely difficult to determine where the wells are located and their depth. Progressive has to take all of this into account when they schedule treatment. Treatments such as chemicals or harvesting will depend on what is found based on the surveys.

Because the lake and weather constantly changes, it is an ongoing challenge to control the non-native weeds.

Pam Tynning of Progressive Engineering conducted a weed survey on July 22, 2009. Here is what she reports:

"I didn't see any milfoil, so the treatment seems to be working well. The major plants I saw were flatstem pondweed, largeleaf pondweed, and sago pondweed. Sago can occasionally be a problem, but overall, the pondweeds are beneficial. I did see a spot in the southwest corner that was fairly dense, as were a few other spots around the lake. All in all, plant growth was a lot less than many lakes I visit. In my opinion, there is not a nuisance density of plant growth, and the types of plants that you have are not very problematic."

Paul Hausler conducted a lake survey on August 19, 2009.

He reported no milfoil and a little curlyleaf pondweed. There is a fair amount of native weeds in the southwest corner of the lake, which is good fish habitat. It will be marked for harvesting next year.

Both reports were posted on the website www.hardwoodlake.org

During the summer of 2009 I received one complaint. Over Labor Day weekend I received one phone call and one email complaint about the lake water conditions, specifically the algae issue. I also received one email following Labor Day.

I spoke with Pam Tynning of Progressive after receiving the complaints. She seemed to think the algae seen over the Labor Day weekend was a recent bloom possibly caused by a recent heavy rain. She thought it washed a lot of nutrients into the lake causing the bloom.

The green scum is planktonic algae which is fairly common at the end of summer or during extremely hot days. Over the few days leading up to Labor Day the weather had been very calm and warm. The planktonic algae floats to the surface and then accumulates in areas with a slight breeze. It is usually prevalent on calm days, especially in the morning. What I saw when I checked the lake on September 6, 2009 was minor compared to previous years. It dissipated once there was some wind and boat action.

I noticed some filamentous algae around the lake. There were a few bad spots in the northwest corner of the lake. Special attention will be paid to this area.

I also saw some dark "detritus" on the lake bottom that washed up on the beach in front of my property. I have seen this many times in the fall. By the way, the entire lake bottom is covered with this.

Pam from Progressive offered to call for an algae treatment after Labor Day. It would take about a week to get the contractor, which would have put us in mid-September. She and I both felt this was not cost effective this late in the season. Pam also pointed out that the treatments are good for only a few days. A treatment this late in the season would not be of any benefit for next year. It would not give an advance jump on algae next year.

The algae control is copper sulfite. It sinks to the bottom of the lake and is then no longer a benefit. It also accumulates and can become toxic. They try not to over use it. It is also regulated by the state.

Pam also said our primary mission is the control of non-native invasive weeds such as the Eurasian Milfoil. Algae control is something that can be done, but is not the primary mission.

Records show the lake was treated for algae twice in 2007 and 2008. It was treated once in 2009. It had been a cool summer up until the last few days before Labor Day of 2009.

As I have mentioned many times at our meetings and emphasize in both the newsletter and on the website please contact me if there are issues. As I receive them, I forward them to Progressive. Over the summer of 2009 I received one verbal complaint about the native weeds in the lake. I discussed this with the person. It was after the

fact, when we can do nothing, that I received the three complaints during the 2009 Labor Day weekend.

I take every complaint seriously. Every resident of the lake needs to assume some responsibility of educating themselves about the lake. Simple things like adding fertilizer to your yard contributes greatly to the weed and algae growth on the lake. It may help your lawn but has a negative effect on the lake. Owners over the years need to take some responsibility for maintaining their lakefront. The weed control project is not intended to remove every weed from every lakefront property. As I mentioned earlier it is an eutrophic lake and will remain much as it is. We do our best to help control the non-native weeds in the lake.

At the public hearing in 2008 only a couple of residents attended. It was at this meeting that we had a representative from Progressive to discuss the project and answer your questions. All of the property owners in the special assessment district were notified of the meeting by first class mail. During the 2009 Lake Association meeting again, only a couple of residents attended. This is pretty sad. Meetings are announced far in advance and published in both the newsletter and on the website.

Property owners need to educate themselves about the project. A lot of information is available on our website and at our meetings. I often hear people making inaccurate comments about the project which are then passed on to others. As property owners you need to educate yourself and attend the annual meetings.

I hope this helps explain the project.



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