

# Aquatic Plant Management 2010

## The Good, The Bad & The Ugly

Factors in the 2010 plant management effort along with general factors.

1. A residential well study was conducted last winter that showed we could use systemic herbicides near shore in all but one area of the lake. (Systemic herbicides kill the entire plant including the root system – contact herbicides only kill the upper structure of the plant and the plant will grow back.) (There is no approved systemic herbicide that kills all forms of aquatic plants.)
2. Due to the clearer water resulting from the presence of zebra mussels, there is a greater amount of sunlight reaching the aquatic plants; which promotes more plant growth and different species appeared which were not experienced even 5 years ago.
3. There was a significant infestation of an invasive species called Starry Stonewort, which has been described as being like a Brillo Pad. Starry Stonewort is not an aquatic plant per se, but a form of algae. As it is not a plant, it can not be killed by systemic herbicides. Because of its very thick nature, chemicals used on algae do not penetrate below the top layer and therefore only kill the areas they touch and the rest of the structure is unaffected and continues to grow rapidly.
4. A new systemic herbicide approved during the winter by DNRE was recommended for a test this year. Two test areas were selected for near shore treatment, one along Crystal Beach and the other along Seven Springs from the boat launch to the point in Seven Springs. This herbicide proved to be ineffective and required follow up treatment at the chemical company's expense. This left both areas with poor plant control near shore most of the summer.
5. The warm weather arrived early in the spring and the summer has been hotter than normal. These conditions along with the clearer water promoted significant aquatic vegetative growth.
6. The lake care management special assessment was created in 1989 under the provisions of the LTPOA By-Laws. This assessment set a dollar amount and therefore is the same as being charged today. It also stated a purpose which was to keep the main body of the lake navigable and provide a passage for property owners from their docks to the main body. A new assessment would need to be established to change the assessment amount or purpose of the assessment. (The attached survey will determine if the membership wishes to change the purpose of the assessment)
7. Treatments used on the lake are controlled by the rules established by Michigan DNRE.

## 2010 Treatments and results

We were able to take advantage of a new DNRE rule that permitted treatment more than 300 feet off shore before June 15<sup>th</sup>. Significant areas more than 300 feet off shore were treated with systemic herbicides to improve navigability and reduce floating plants caused by boat traffic. This treatment occurred the second week in May and gave good results for most of the main body of the lake. At the same time there was a lot of near shore treatment with systemic herbicide and many near shore areas also experienced favorable results. The near shore conditions along Crystal Beach and areas in Seven Springs have been poor most of the boating season. As we got into the second half of the summer, other near shore areas started showing growth of plants.

We had four treatments this year. The first was the second week in May, the second was the second week in June, the third was the first week in July and the last was the first week in August. We spent about \$105,000 in total on the plant treatments. The revenue from the lake care management special assessment this year was about \$80,000. The short fall is being covered by reserves in the Association accounts. As the Aquatic Plant Management budget was over spent, we were unable to conduct any treatments after the August treatment.

**The Good** – With the exception of the center of the lake off of Crystal Beach, the main body of the lake has been in good shape this summer.

**The Bad** – Near shore growth along Crystal Beach and Seven Springs was bad all Summer and other areas saw growth later in the Summer.

**The Ugly** – Starry Stonewort, to date there is not a good treatment for controlling this invasive specie. We have engaged in research to identify ways to control Starry Stonewort and Glen Oaks Community College is also researching the issue.

DNRE will not permit very aggressive treatment that would eradicate aquatic plants from the lake nor should we want to take on such an endeavor as it would decimate the lake ECO system. As long as we have aquatic plants and boat traffic there will be floating plants.

**We have been given a tentative approval for a draw down this fall which will start Oct. 1<sup>st</sup>** and should help reduce near shore plant growth next year. Exposing Starry Stonewort to drying and freezing during the draw down may help control its near shore growth.