



AQUA - TALK

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**"Professionals Preserving Aquatic Environments Today...
for Tomorrow."**

The Report Cards Have Been Mailed!!

How good of a job is PLM doing managing your waterbody? Your answer to this questions is vital to how we improve and grow as a company. This year you will find a "Report Card" with your contract. This report card gives a brief evaluation of how we feel we did managing your lake or pond along with giving you the opportunity to grade our performance. We encourage you to please take the time and fill out the bottom half of the report card and send it back in with your contract or permit fee. All of the comments received will be reviewed with the entire PLM staff in an effort to improve customer/client relationships and better serve you as our customers. PLM is dedicated to providing the highest quality products and services available, please help by providing your feedback.

Governmental Affairs/Aquatic Politics

Good News! House Bill 4730 & House Bill 4729 are now officially law. These bills were modified from their original forms but essentially the guts (good stuff) of the bills have past. HB 4730 increases our ability to modify the dosage rates and application timing of whole lake treatments. We now have the ability to formulate a specific dosage rate that is established by scientific reasoning and evidence rather than strict DEQ statute. This measure will greatly improve management programs where Sonar A.S. is used because the "6 ppb with bump" restriction has been removed. The bill also establishes a new time frame in which the DEQ is required to respond to a permit application. The department must act on a permit or certificate of coverage application within 30 days or by May 1st of receipt of a complete application. If the application is denied, an explanation must be given in writing. If the DEQ fails to act within the specified time frame then a portion of the permit fee is refunded to the applicant. HB 4729 establishes reasonable penalties for persons who misuse or fail to meet permit conditions associated with the application of aquatic herbicides.

HYDRILLA— The New Threat to Michigan Waters



Hydrilla is an exotic (non-native) aquatic plant species commonly found in the Southern United States. Hydrilla was first introduced into Florida in the 1960's by the aquarium trade, and has since continued to flourish across the nation. This species spreads by fragmentation, similar to Eurasian Watermilfoil, but can also spread by seeds, tubers and turions (overwintering buds). Thus, making this species extremely prolific and capable of quickly taking over any waterbody. Hydrilla forms dense monoculture canopies at the waters surface, blocking out sunlight to native plant species. The plant itself will not overwinter in Michigan waters, but the tubers and turions will withstand substantial periods of ice cover. Hydrilla is quickly making its way up the East coast and north to Pennsylvania. Hydrilla has not been found in Michigan lakes at the present time, but an awareness campaign has begun to educate Michigan riparians of this potential threat.



The three main characteristics of Hydrilla are as follows: the leaves are arranged in whorls of 4 to 8 around the stem; leaf edges are saw-toothed (serrated), and the plant has tubers (potato like structures buried in the sediment). Hydrilla can be confused with the common aquatic plant Elodea however, Elodea only has 3 whorls around the stem and does not have serrated leaves or tubers. Please be on the look out for this new invasive species and contact our office immediately if you think you may have Hydrilla in your waterbody.

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Industry News and Updates

Professional Lake Management is always striving to improve, diversify and experiment with new technology. During the 2004 season we did just that!

Create Oxygen without Aeration??

Can you create oxygen without using aeration? Possibly by using a "Dissolved Oxygen Generator". PLM experimented with new state of the art equipment to accomplish this goal. This experiment was the first time this technology was used in the Mid-West. In conjunction with Clean Water Research & Technologies from Portland, Oregon, PLM implemented a "D.O. Generator" in Morrison Lake, Ionia County. The goal of this experiment was to increase oxygen levels at the bottom of the lake, which in turn would stop internal loading of nutrients from occurring. The increase in oxygen levels would also enable the lake to sustain healthy fisheries. The Generator has been in the lake for over a month, and the results are not as promising as we had hoped. We are still in the monitoring stages of this technology and making adjustments in hope of success. At this time we have not been able to verify direct benefit from this new tool. The D.O. generator works by emitting a low frequency throughout the water body knocking off loose-linked hydrogen atoms from the water molecule (H_2O). This essentially gives the water molecule a better ability to hold oxygen, similar to cold-water conditions. Once increased oxygen levels are achieved the fisheries will improve, natural microbes will begin to break down nutrients helping to reduce algae growth and stop nutrients from recycling in deep non-oxygenated water (internal loading). If we can find a way to improve the effectiveness of this new technology, it will change and greatly improve our management capabilities.



Results of First Sonar PR Treatment

Professional Lake Management was also the first in the State of Michigan to utilize a new formulation of the herbicide Sonar. Typically we have used a liquid formulation for all of our Sonar treatments (Sonar A.S.) This new formulation of fluridone (Sonar Precision Release) is a granular product that can be used in flowing water situations. PLM applied this product, according to a DEQ experimental permit, to Wixom Lake, Gladwin County. The first application took place in April of 2004. A second bump-up application was scheduled a few weeks later to ensure that the target dose rate was maintained. Unfortunately, due to record amounts of rainfall this spring for the initial treatment the product was diluted too much to control the target species Eurasian Watermilfoil. The second treatment was not performed due to continued high water levels. Nevertheless, PLM is planning on using Sonar PR in 2005 on an experimental basis.

Say "Goodbye" to Purple Loosestrife Infestations

Hopefully everyone is now familiar with the purple weed growing throughout Michigan, in roadside ditches, wetlands and possibly the shoreline of your lake or pond. This weed is an exotic species, which is out competing native vegetation, destroying valuable wetlands and animal habitat. In past years our options to manage this nuisance weed has been extremely limited to prevention,



Untreated

manual removal or broad spectrum herbicide treatments, that not only killed the Purple Loosestrife but also the native vegetation remaining in the treatment areas. During the 2004 season PLM has been **Successfully** experimenting with a selective herbicide "Renovate 3" to control Purple Loosestrife. Throughout the 2004 season we have performed several treatments to determine the appropriate dosage rate to control the Purple Loosestrife while having minimal impact to non-target native vegetation. The treatments are similar to controlling broadleaf weeds "dandelions" in your yard yet not killing the grass. This year we not only treated several lakes with Purple Loosestrife infestations, we also verified selective dosage rates with test plot treatments at our Michigan office. PLM will be offering Purple Loosestrife control throughout Michigan in the 2005 season. All permit applications for the DEQ will have Purple Loosestrife control requested. The picture on the right is a perfect illustration of controlling Purple Loosestrife yet sustaining native plant growth "Cattails". The goal is to allow native plant to re-establish to densities prior to the Purple Loosestrife infestation.



Treated using Renovate 3

We are now accepting credit cards and online statements for all payments. If you would like your invoices emailed or faxed to you, please email Suzanne at suzanne@prolakemgmt.com.

