

PLM NEWS

PLM Lake & Land Management Corp.
Great Lakes Division

We've Changed Our Name...

We would like to take this opportunity to thank all of our customers for your ongoing loyalty and your support over the past years.

As a result of our growing range of services, **Professional Lake Management** has changed its name to:

PLM Lake & Land Management Corp.

PLM will continue to offer the highest rated aquatic invasive plant management services in the United States, with thirty years of satisfied customers. And we have expanded our service offerings over the past several years to include ecological assessments, terrestrial invasive plant management, forestry management and a variety of property management options. Call us anytime to find out more!

PLM is continually seeking ways to improve our customer service. We are streamlining our business processes to become more efficient and responsive to your needs. As a result, we have implemented a **Single-Point-Of-Contact** philosophy whereby customers have the option to direct ALL of their communications directly to our office. Your call will be documented and time stamped so we can track the progression and resolution of your inquiries. This will improve our response time and quality of service. We encourage you to contact our Great Lakes Division office at **(800) 382-4434** for all of your lake and land management needs. Please let us know how we can better serve you.

Our customers are our #1 priority...

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*...Thirty years of invasive
plant management*



Great Lakes Division Happenings

Jason Broekstra, Vice president of Operations, Great Lakes Division, was honored with the "Preferred Applicator of the year Award" from the SePRO Corporation at their national conference in December. This award is given to one Applicator throughout the nation that is dedicated to serving the aquatics industry and the environment utilizing the latest advances in training, technology, and products. Congratulations on a great job well done!!



Jason Broekstra receiving well deserved recognition as President of MAPMS

Jason was also the President of the Midwest Aquatic Plant Management Society in 2008. He has been actively involved in the society for several years and was honored to lead such an important organization in the aquatic industry



Steve Hanson, Eastern Michigan lakes Manager, was nominated to a three year term as Editor for the Midwest Aquatic Plant Management Society in 2008. His main responsibility is to compile and publish the *Northern Lakes Manager* newsletter that goes out to all members of the society. This position is a vital part in the society's ability to share exciting advances and scientific studies from the aquatic industry. Congratulations Steve!!

Jaimee Conroy, Manager of technical Services, is pleased to announce the birth of her second child on March 17, 2009. Rylan Patrick, 8lbs 4 ounces, 21 inches will be at home with mommy until May. Congratulations to the entire Conroy family and we look forward to Jaimee's return!

Lucas Slagel, Certified Applicator, is recently engaged! The big day is scheduled for October 10th, 2009. Congratulations to Lucas and Missy!!

New Products for the Tool Chest

Phragmites Control

In 2008, PLM began use of a new herbicide for Phragmites control known as Habitat® (Imazapyr). Habitat® is a liquid systemic herbicide that is translocated from the plant into the root system for control over both the green "visible" vegetation and the underlying root system of the plant. PLM used this product throughout 2008 on small and large scale applications and had very good results for the control of Phragmites. In 2009, Clearcast® (Imazamox), another registered herbicide through the State of Michigan, will be used for emergent treatments as well. Clearcast® acts the same as Habitat® (a systemic herbicide) but has increased selectivity, not impacting hardwood species. Both products will be utilized for Phragmites control pending site conditions. In the seasons to come, these products may open up opportunities for controlling Phragmites statewide.

Edge Effect: Why treatment Size and Shape are Important

Some of the most important aspects to ensure an effective treatment when applying any herbicide is to have the correct herbicide, in the correct area for the required time.

Seems simple enough. However, unlike a terrestrial application environment, the world of aquatics requires applicators to think in 3-dimensions.

When a farmer applies a pesticide to a crop, the herbicide is applied directly to the target plants, or pests, based on the size of treatment area.

In aquatics, applicators have to apply herbicides to the water, taking into account the size, depth and potential for the herbicide to move out or disperse from the treatment area.

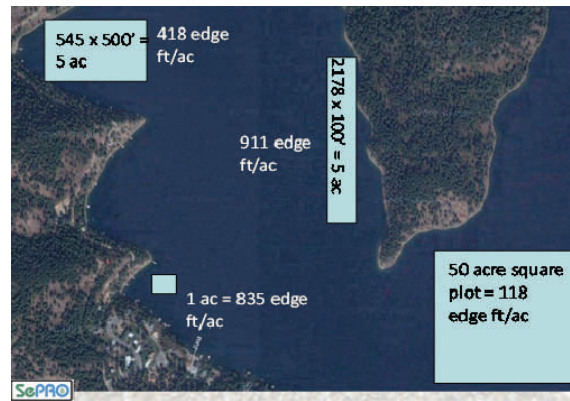
Obviously, as the herbicide disperses out from the target area its concentration is reduced as it becomes more dilute.

This reality of aquatics can make delivering the correct concentration of an herbicide for the required contact time difficult. Especially, when trying to treat

small areas in open water.

Edge Effect, or the area of edge of the treatment area in relation to the total area of treatment is something that we applicators need to consider.

For example, as this diagram shows, if we treat a 1 acre square area there is approximately 835 ft of edge in which the herbicide can disperse out of the treatment area.



If we increase the treatment area to 5 acres, we reduce the feet of edge per acre of treatment by half. This means by

increasing the treatment area we are more likely to keep the product in that area for a longer period of time, hence more effective treatments.

It is not only the size, but also the shape of treatment area that plays a significant role in the “Edge Effect”. As an example, if we again treat 5 acres but instead of a square we treat a long band that is 2178 ft x 100 ft we increase the amount of edge to 911 ft per acre. Again, increasing the area for the herbicide to move out of the treatment area.

As you can see, there is much more involved in aquatic plant management than simply squirting chemicals in a lake. Many times, although not obvious to our customers, there are reasons for the way we approach management decisions. “Edge Effect” is a good example of one of the usually unspoken, but crucial components to our decision making process to provide our customers the best service and results possible.



New Approach Using Sonar® A.S. for Control of Eurasian Watermilfoil

This season PLM continues to try new and innovative approaches to aquatic plant management. We pride ourselves on being one of the only companies in the state to receive approval from the Department of Environmental Quality (DEQ) for evaluation treatments. This year we will work closely with the DEQ and the SePRO Corporation, manufacturer of Sonar® A S, to develop a new treatment strategy for controlling Eurasian watermilfoil (EWM).

Currently, the most reliable and effective way to control lake wide infestations of EWM is through the use of the liquid herbicide Sonar® A S, which is applied to the entire lake based on the volume of water within the 0-10’ depth contour. The product is slow acting, therefore gentle on the aquatic environment. It is also a systemic herbicide, meaning it has the ability to kill the root system of the plant generally results in several years of EWM control.

The traditional treatment strategy is to treat

a lake at a concentration of 6 parts per billion based on an assumed thermocline depth of 10 feet. The “thermocline” is the section of a water body that separates the cooler waters at the bottom of a lake from the warmer upper regions. The reason for treating a lake with Sonar® A S once a thermocline is established is to ensure that the product remains in the warmer upper sections of the lake. Although the current protocol has worked on numerous lakes, there is potential to modify this approach to obtain the best results possible.

Over the years PLM has found that many times the thermocline of a lake to be much deeper (15 - 20 feet) therefore, product is diluted to a deeper thermocline and the target rate is not obtained.

Based on these findings PLM is proposing an evaluation treatment on Big Whitefish Lake in Montcalm County to modify the standard Sonar® A S protocol. This evaluation treatment on Big Whitefish Lake would use the actual thermocline depth at

the time of treatment to calculate accurate Fluridone amounts. The goal of this treatment will be to get even better control of the EWM by reaching and holding the target concentration.

PLM believes that this approach will be not only be more effective at controlling the plants for longer periods of time but will also be more cost effective to our customers. We are very excited that this new approach may someday be the standard for effectively managing lake wide infestations of EWM.

PLM continues to exhaust all efforts in bringing new technologies, application methods and standards into practice to give your waterbody the best measure of control, while using the most eco-friendly herbicides available. PLM has been involved with numerous evaluation treatments over the years and will continue to evaluate all products to determine the best management tools and application practices.