

Aquatic Plant Management -- Questions and Answers

Q. Are aquatic herbicides regulated in the State of Michigan?

A. Yes. All herbicides used in aquatic environments have been tested and registered with the EPA, and have been approved by the State for use in Michigan. Michigan is one of the most restrictive states when it comes to aquatic herbicide use. All treatments with aquatic herbicides require a permitting and reporting process that insures that products are used in a manner that has been tested to produce no unintended adverse affects on non target species or the environment.

Q. Are aquatic herbicides safe?

A. Extensive testing has not identified significant human health risks associated with the proper use of herbicides. Though no testing program can absolutely rule out unexpected effects, it is important to recognize that at tested and approved concentrations for aquatic use, theses herbicides have been deemed to not have adverse effects on humans and aquatic wildlife either by submergence in treated water or by ingestion. Aquatic herbicides have very specific modes of action that target processes in aquatic plants that are not present in vertebrates and other life forms. For more information about how aquatic herbicides work and their safety please visit the following website for a short video produced by Purdue University: https://ag.purdue.edu/btny/Extension/PublishingImages/Aquatic Herbicides.m4v

Q. Will aquatic plant control eliminate all aquatic vegetation?

A. No. Nearly all available aquatic herbicides are SELECTIVE (i.e., they control some plants but not others). Responsible aquatic plant managers use this selectivity to remove particularly problematic plants while leaving others unaffected. This approach minimizes interference with recreation while leaving desirable vegetation that provides BENEFITS to the lake. Proper aquatic plant management removes the most problematic aquatic plants, which are typically exotic species, while preserving desirable native vegetation that provides habitat for fish and other aquatic organisms.

Q. Can we get rid of ALL the weeds in our lake?

A. No. Even if you could, you shouldn't. Trying to keep a lake that has good growing conditions free of plant growth would be like trying to keep all plant life from growing in your front lawn. Aquatic plants are an important component of the lake ecosystem. They provide many benefits, including stabilizing sediments, oxygenating the water, providing habitat for fish and invertebrates...

Q. Can we swim after a weed treatment?

A. The State of Michigan imposes a 24 hour swimming restriction within 100 feet of any treatment area of the lake, except for copper applications. Some of the most commonly used herbicides that we use do not have a swimming restriction on the product label. However, the DEQ does not want you in the water during treatment for your safety and ours. Treatment notices will be posted on the day of treatment along the shoreline of all treated areas. Therefore, if your area does <u>not</u> have a notice (sign in yard) then you do not have a swimming restriction.

Q. Can we irrigate our lawn and flowers after a weed treatment?

A. Yes and no. Several of the herbicides that will be applied to the water do have turf and ornamental flower irrigation restrictions. The restrictions can range from 3 days to 14 days. If you pull water from the lake to irrigate, please read posted sign carefully to determine your irrigation restriction for that treatment.

Q. Will my dog get sick if he drinks the treated water?

A. No. A dog would have to drink several <u>thousand</u> gallons of treated water to observe any noticeable effect. However, we do not want your dog in the water during or right after a treatment. Some of the herbicides we use become inactive if the sediment is stirred up in the water column. Therefore, keep the pets out of the lake for 24 hours!

Q. Are the fish still safe to eat?

A. Yes! There are no fishing restrictions with any of our herbicide treatments. The herbicides used do not accumulate in the fish.

Q. We don't want to use CHEMICALS in our lake... isn't harvesting a more environmentally responsible aquatic plant control technique?

A. Not necessarily. The most environmentally responsible control technique depends on the goals of the management program and the type(s) of plants to be controlled. In some cases, harvesting is the best choice. In other cases, harvesting can exacerbate aquatic plant problems. For example, we would not recommend harvesting a lake with an uncontrolled Eurasian watermilfoil population because harvesting will speed the spread of this aggressive exotic plant and hasten the replacement of native plants.

Q. Why do you keep telling us not to eliminate all the weeds from our lake?

A. Aquatic plants provide many benefits to a lake. Aquatic plants stabilize sediments, which promotes greater water clarity, they help oxygenate the water, and they provide valuable cover and habitat for fish and other organisms (many of which are important fish-food). Trying to completely eliminate aquatic plants from a lake that has good conditions for plant growth is a frustrating, expensive and counterproductive management approach. It may succeed for while, but in the long run it will lead to increasing problems, as the lake accumulates the toughest, hardest-to-control weeds and algae. Fighting nature this way is also DRAMATICALLY more expensive than reducing problem species while encouraging the growth of less troublesome plants.

Q. Aquatic plant control just addresses the SYMPTOMS of the problem—shouldn't we be addressing the CAUSES of the problems, such as nutrient enrichment?

A. Yes, BUT... This statement is a confusing half-truth. There is little doubt that nutrient enrichment leads to conditions that support lots of plant growth; however, this doesn't mean that you can reverse the process and prevent rooted plant growth. Nutrient controls have been successfully used to reduce the growth of planktonic algae, but it has not been proven that nutrient controls have reduced an existing rooted plant problem. In fact, reductions in planktonic algae typically result in an INCREASE in rooted plant growth, as the water becomes clearer and plants can grow at greater depths. In addition, exotic plant species cause the greatest problems in lakes. These exotic plants are a CAUSE of many problems, and removing them is addressing one of the causes of lake problems. Nutrient controls can be an important PREVENTATIVE measure, which can help to keep the lake from developing worse problems in the future.