Big Bass Lake News

Newsletter Produced by PLM Lake & Land Management Corp. Spring 2021



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Big Bass Lake 2021 Notice

The property owners in this area are planning to have the waters chemically treated to control lake weeds and/or algae. This notice is being circulated in accordance with Department of Environmental Quality (EGLE) procedures. Due to the uncertainty of weather, the treatment schedule is approximate. Please watch your shoreline for the posting of the 8.5 x 11 inch, yellow or green signs. The signs will indicate the date of the treatment, the products used, and any restrictions on the use of treated water for swimming, watering lawns, etc. One or more treatments involving water restrictive products may be applied. Please be aware that only products approved by the State of Michigan and the Federal government are being used. We have experienced no adverse effects on people, fish, wildlife or domestic pets since applying these products. We anticipate using one or more of the products listed. Please read the restrictions. Again, the restrictions that apply to the products actually used in a particular treatment will be found on the signs posted on the day of treatment.

2021 Tentative Treatment Schedule

Treatments will be occurring throughout the summer months. Please watch your shoreline for posting signs with specific restrictions. Please also note that you will see PLM on your lake many times this summer. We will not always be treating the lake, but performing many surveys, water quality testing, etc. Thank you for your understanding as we work to preserve and protect Big Bass Lake. The following weeks of have been tentatively set but may be adjusted as the season progresses due to many factors (permit restrictions, growth, weather, etc. Always watch for posting signs.)

April 19: Water Quality

May 24: Survey June 7: Weed Treatment

July 5: Survey, Water Quality July 12: Weed Treatment

August 9: Survey

August 16: Weed Treatment

September 13: AVAS Survey, Water Quality

Big Bass Lake Update

Thank you for choosing to work with PLM in 2020 on Big Bass Lake. It was a pleasure to work with your township and association in managing your beautiful waterbody. Overall, the EWM treatments were effective! In 2019, ~55 acres of EWM was treated throughout the season using a combination of systemic products (Renovate OTF, Renovate 3 and Sculpin) as well as minimal contact herbicides (Diquat). In 2020, ~34 acres, plus the use of DASH. The goal was to keep the lake navigable and open for recreation, while controlling exotic plants, which is being achieved with this program. Further, the program came in under budget again! The AVAS Survey found good native plant growth in Big Bass Lake. This is a very promising sign for Big Bass Lake and the greater the diversity moving forward, the better. Native plant diversity is key to promoting a healthy lake ecosystem, from promoting a healthy fishery to sediment stabilization. Native plants are vital to the overall health of the ecosystem but bombarding residents is not the goal either. At no time should all vegetation be removed from the lake. Residents are encouraged to rake their beaches and remove any floating weeds/debris and always practice healthy lakefront living practices. The 2020 water quality report showed some elevated nutrient (Total Phosphorus) levels and continuing the monitoring program is recemented.

WATER USE RESTRICTIONS

Navigate /2,4-D: Swimming or bathing: I day. Household use, irrigation, lawns and turf: 0 Days. Growing crops and non-crops "gardens": Indefinite unless assay indicates 100 ppb or less. Potable water: Indefinite unless assay indicates less than 70 ppb. Fish consumption: No restrictions.

Sculpin G/2,4-d amine: Swimming or bathing: I day. Household use, irrigation, lawns and turf: 0 Days. Non-crops "gardens": 2-14 Days depending on treatment conditions. Growing crops: assay of less than 100ppb. Livestock watering: See product label. Fish consumption: No restrictions. Renovate/Triclopyr: Swimming or bathing: I day. Irrigation of Established lawns and turf: 0 Days. Household use & Irrigation excluding grasses: 120 days or once assay determines product to be non-detectable. Fish consumption: No restrictions. Diquat dibromide: Swimming or bathing: Iday. Animal consumption of treated water: I day. Domestic water use and irrigation of turf & ornamentals: 3 days. Crop irrigation: 5 dayss. Florpyrauzifen-Benzyl/ProcellaCOR: Swimming or bathing: I day. Household use, irrigation, lawns and turf: 0 Days. Noncrops "gardens": 2-14 Days depending on treatment conditions. Growing crops: until assay indicates 1ppb or less. Livestock watering: N/A.

Stingray: Swimming or bathing: I day. Animal consumption of treated water: I day. Domestic water use and irrigation of turf & ornamentals: I4days. Crop irrigation: I4 days.

Hydrothol 191/Dimethylalkylamine salt of Endothall Aquathol K/Dipotassium salt of Endothall

Aquastrike salt of Endothall: Swimming or bathing: I day. Household uses, irrigation, livestock watering: 2 weeks.

Flumioxazin (Clipper/Schooner/Propeller): Swimming / bathing: I day. Domestic water use and irrigation of turf & ornamentals: 3 days. Crop irrigation: 5 days.

Nautique/copper carbonate, Komeen/copper as elemental: Swimming or bathing: I day.

PLM Blue, Cygnet Select: water dye (tracer), Copper Sulfate: copper sulfate, Cutrine Plus-Ultra, Captain-XTR, SeClear and SeClear G: chelated copper, Cygnet Plus, PolyAn: Adjuvant, AquaSticker, M.D. pellets: gram negative, naturally occurring bacteria. PLM Enzyme: enzymes, NO RESTRICTIONS!!

**Certified Applicators: Salvatore Adams, Jason Broekstra, Adam Cichon, Bill D'Amico, Jaimee Desjardins, William Ducham, Jeff Fischer, Christopher Garner, BreAnne Grabill, Dustin Grabill, Steve Hanson, Kyle Heath, Jake Hunt, Caleb Hutchinson, Jacob Irons, Shannon Leifker, Blake Mallory, Michael Pichla, Eric Reed, Colton Risner, Cameron Robinson, James Scherer, Alison Schermerhorn, Ben Schermerhorn, Casey Shoaff, Lucas Slagel, Keith terHorst, Jeff Tolan, Andy Tomaszewski, Dennis Vangessel, Andrew Weinberg

Got Muck?

PLM MD (Muck Digestion) Pellets are a combination of natural beneficial bacteria, enzymes, and vitamins that stim-

ulate the biological activity at your lake bottom. This stimulation allows the bacteria to feed on the organic sediment, therefore reducing the muck levels. PLM MD Pellets are easily applied by anyone once a month, when the water is above 55 degrees. I Olb., 30lb. and 50lb. Bags are available. Call our office to arrange free delivery! 800-382-4434



Impacts of Wake Boats and Best Practices:

The popularity of wake sports has been on the rise over the past several years and with it the number of "wake boats" operating on lakes. Whether wake boarding or wake surfing, these boats are designed to produce large waves. Hull shape, ballast tanks, adjustable plates, and horse power are some of the technologies used. These waves are often equal to or greater than most major storm events which can increase shoreline erosion. Unlike old school/

conventional "ski" boats which typically push thrust parallel to the waters surface, wake boats tend to push thrust at a downward angle and therefore have a greater potential to disrupt bottom sediments in addition to eroding shoreline.

PLM staff often field inquiries about impacts of wake boats on lakes. The honest answer is that there is a shortage of research on the subject but new studies currently being done suggest that larger waves may increase the potential for shoreline erosion and deeper thrust may disrupt/resuspend sediments at the lake bottom.

PLM would like to provide a few guidelines that can reduce the potential for adverse effects to your lake.

- Waves decrease in size the longer they travel. Therefore, PLM recommends operation of wake boats at least 500 ft from shore whenever possible.
- Studies conducted on different wake boat models suggest that thrust (depending on the trim angle) will typically reach a depth of ~12 feet. Therefore, PLM recommends that wake boats be operated in depths greater than 12 ft whenever possible.

As time goes on there is certain to be more research done in this area and/or regulation. For the time being, be aware of potential effects on your lake and adapt boating practices to minimize impacts.



Starry Stonewort— Exotic Plant WATCHLIST—New Invader!

Starry stonewort has been quickly spreading throughout Northern Michigan. Starry stonewort (Nitellopsis obtusa) looks like a rooted plant but it is actually an algae. The plant is native to Europe and Asia and was first discovered in the St. Lawrence River in 1978. In 1983, it was found in the Detroit River and has since infested many Michigan lakes. Starry stonewort resembles the native aquatic plant Chara. Unlike Chara, which is generally considered to be a beneficial plant, starry stonewort has a tendency to inhabit deeper portions of the lake and can form dense blankets several feet thick. These mats can severely impede navigation and limit growth of more beneficial plants. Starry stonewort anchors to the sediments through rhizoids (primitive root structures) which can also absorb nutrients. Like Chara, starry stonewort also absorbs nutrients from the water through its cell walls. Starry stonewort has tiny, star-shaped, tan colored reproductive structures called bulbils that are firm to the touch when compared to its soft branches. These reproductive bulbils have been shown to stay viable for several years in lake sediments. It is unclear what effects starry stonewort may have on a lake's fishery. However, the encroachment of starry stonewort into fish



spawning beds may be a cause for concern. Both algaecides and mechanical harvesting appear to be somewhat effective in controlling starry stonewort. However, given its propensity to produce massive amounts of growth, efforts to keep this invasive algae at bay will be difficult and potentially expensive. We are constantly on the lookout for new infestations of SSW for quick action. Please keep your eyes on the look out!