Chippewa Lake News

Newsletter Produced by PLM Lake & Land Management Corp. Spring 2018

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NOTICE

Chippewa Lake 2018 Treatment Program

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 (DEQ) 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.

2018 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 Chippewa 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 23: Spring Water Quality
May 21: Survey
June 1, 2018: 7pm Lake Update Meeting
June 4: Weed & Algae Treatment
June 25: Survey, Weed & Algae Treatment
July 2: Water Quality
July 16: Survey, Weed & Algae Treatment
August 13: Survey, Weed & Algae Treatment
August 27: Survey, Weed & Algae Treatment,
September 10: AVAS Survey, Water Quality

WATER USE RESTRICTIONS

Navigate /2,4-D: Swimming or bathing: 1 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: 1 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: 1 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.

Renovate MaxG/Triclopyr & 2,4-d amine: Swimming or bathing: 1 day. Household use, irrigation, lawns and turf: 0 Days. Non-crops "gardens": 2-14 Days depending on treatment conditions. Growing crops: 120 days or until assay indicates 1ppb or less Triclopyr and 100ppb or less of 2,4-D. Livestock watering: See product label. Fish consumption: No restrictions.

Diquat dibromide: Swimming or bathing: 1day. Animal consumption of treated water: 1 day. Domestic water use and irrigation of turf & ornamentals: 3 days. Crop irrigation: 5 days.

Stingray: Swimming or bathing: 1day. Animal consumption of treated water: 1 day. Domestic water use and irrigation of turf & ornamentals: 14days. Crop irrigation: 14 days.

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

Aquastrike salt of Endothall : Swimming or bathing: 1 day. Household uses, irrigation, livestock watering: 2 weeks.

Flumioxazin (Clipper/Schooner): Swimming /bathing: 1day. Domestic water use and irrigation of turf & ornamentals: 3 days. Crop irrigation: 5 days.

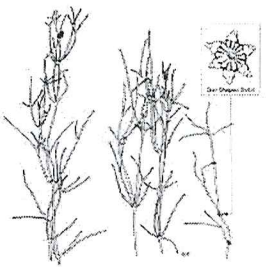
Nautique/copper carbonate, Komeen/copper as elemental: Swimming or bathing: 1 day.

Habitat, Aquapier/Imazapyr: Swimming or bathing: 1 day. Irrigation: 120 days unless assay indicated a level of 1ppb or less.

PLM Blue, Cygnet Select: water dye (tracer), **Copper Sulfate Alonglife**: copper sulfate, **Cutrine Plus-Ultra, Captain-XTR, Algimycin, Earthtec, SeClear and SeClear G, Formula F-30, K-Tea**: chelated copper, **Cygnet Plus, PolyAn**: Adjuvant, Pak 27, **AquaSticker, Green Clean L and Green Clean 5.0**: oxidizer, **AquaPrep**: enzymes & non-ionic surfactants, **Nutrisorb,, M.D. pellets**: gram negative, naturally occurring bacteria. **PLM Enzyme**: enzymes, Phoslock: phosphorus locking technology. **NO RESTRICTIONS!!**

****Certified Applicators:** Salvatore Adams, Jason Broekstra, Charles Cilek, David Comeau, Jaimee Conroy, Bill D'Amico, Jeff Fischer, BreAnne Grabill, Dustin Grabill, Steve Hanson, Kyle Heath, Jake Hunt, Jacob Jabaay, Nate Karsten, Justin Krueger, Shannon Leifker, Blake Mallory, Michael Pichla, James Scherer, Ben Schermerhorn, Casey Shoaff, Lucas Slagel, Matthew Teitsma, Jeff Tolan, Andy Tomaszewski, Dennis Vangessel

Starry Stonewort— Exotic Plant WATCHLIST & INVADER OF Mecosta County



Starry stonewort has been quickly spreading throughout Mecosta County on its way 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!

A Lake Resident's KEY TO SURVIVAL

PLM Lake & Land Management Corp. appreciates the opportunity to a part of your lake management program. Your lake is a diverse ecosystem which requires the use of multiple management tools. In addition to the services we provide, we still need your help! You can directly improve your lake frontage by taking a few small steps that can have widespread impacts on the entire lake. Everyone's actions play a role in the health of your lake and as you own property on the lake, you have a large investment in the overall health of the lake. Therefore, everyone needs to take action for the overall health of the lake. It is not just the land touching the lake that impacts the health of the lake, but all the land in the area that makes up the watershed. Everyone's actions on and off the lake plays a role in the condition of the lake. Do your part and help get your neighbors involved in caring for the lake. The following suggestions are just a few actions that can be taken to help create a healthy lake and beach frontage.

Do not feed the ducks and geese. Remove dog, geese and duck droppings from lawns, docks, etc. Excess feces will increase nutrients within the lake. Please, do not sweep it into the lake!

Create a natural buffer close to the water's edge and remove grass/turf touching the water's edge. A natural setting will filter excess nutrients from entering the water and help decrease erosion. The greenbelt should consist of native plant varieties of shrubs, flowers or trees that do not shed their foliage into the water. Natural buffers are also an excellent way to deter geese from making a stop on your beach front. Geese do not like areas where they cannot see the predators coming towards them.

If you do fertilize make sure you are using Phosphorus free fertilizer. Talk with your neighbors and develop a Phosphorus Free program which uses no phosphates and slow release nitrogen. One pound of phosphorous may produce over 775 pounds of algae-"The slimy green stuff". If you must fertilize, apply nitrogen fertilizer when the grass is actively growing to minimize loss of nutrients to nearby waters. Begin fertilizing in the spring when temperatures are warm and discontinue before the grass ceases to grow in the fall. Avoid application of fertilizer prior to rainy days.

Perforate lawn periodically and seed and mulch exposed soil (to prevent erosion).

Remove aquatic plants, leaves/branches and other debris that washes up along the lakeshore so less decomposition occurs in or near the lake.

Always use silt fences when building a new home or doing any yard-work that would cause erosion.

Keep all burn piles and debris piles away from lake. Do not burn near the water. The ash is concentrated nutrients!

Encourage the use of stone, brick and similar porous materials when building a landscape to minimize urban water collection.

It's time to Clean, Drain, Dry and Dispose!

MICHIGAN STATE UNIVERSITY EXTENSION

Four easy steps can protect Michigan lakes and rivers from invasive species.

Posted on April 6, 2018 by Bindu Bhakta, Michigan State University Extension

Boating season is right around the corner. Michigan is a water wonderland and you may be one of the millions of people who are looking forward to taking to the water to fish, paddle or cruise our lakes and rivers this summer. If you are a boater, you likely already know that aquatic invasive species have severely altered many of our waterways. For example, non-native zebra mussels encrust solid surfaces (including boat hulls and motors) below the waterline and their sharp shells make walking barefoot on some beaches out of the question. The invasive Eurasian water milfoil is one of many non-native plants that have choked out favorite fishing spots and swimming holes because of the damage these invaders cause. It is illegal in Michigan to launch a watercraft or place a trailer in the water if it has aquatic plants, zebra mussels or other prohibited species attached.

Here's the good news, stopping aquatic invasive species can be easy! Boaters should make a habit of taking these three simple steps:

- **Clean**: Remove all visible mud, plants and animals from boats, trailers and gear. This can be done by hand or, better yet, by washing with hot water (140-160 degrees F).
- **Drain**: Empty all water from bait buckets, live wells, bilges and any other container that may contain lake or river water.
- **Dry**: Allow boats, trailers and gear to dry thoroughly before moving to another lake or river location. Even if you are unable to clean with hot water, several days of drying will destroy most invasive species.
- **Dispose:** of plant material and unused bait properly. They can be placed in trash receptacles.