

May 21, 2015

I met with Paul Hausler from Progressive Engineering on May 20. Hardwood lake was treated with Fluridone (the Sonar treatment) on May 4. He was taking water samples to determine how many parts per billion (PPB) of Fluridone were in the water. After the samples are analyzed the lake will be bumped up to the target level of 6 PPB which is the ideal to kill the Milfoil. This should be done in the next seven to ten days.

He was also doing the annual spring weed survey.

I had noticed a large amount of filamentous algae May 7 and sent Paul a note and photos advising him. There were large globs along the north shore, near the outlet tubes and along the park. Paul ordered an algae treatment which was done May 18. The Lake Board had requested 4 algae treatments in 2015 - before Memorial Day, before July 4, August 1 and before Labor Day. In my opinion the lake looked much better on May 20, only a few days after the treatment.

During the lake inspection I asked Paul a lot of questions and he offered many observations. In no particular order or priority:

- Under new state guidelines / laws only 100' of any given property can be treated. If a property owner has 150' of frontage, only 100' can be treated.
- The Richland Township campground is considered one property so only 100' can be treated.
- The swampy inlet area looks like an algae "nursery". The algae grows from the bottom and clings to plants, etc. It eventually breaks off and floats. This is the large, ugly globs, of floating material we see.
- Paul took a water sample in this swampy area to check for nutrients. Last fall Paul identified four cattle operation in the lake drainage basin, to the north east. The lake drains about 4,000 acres and this is the water input into the lake. After he completed the lake survey he was heading to the northeast of the lake to check for nutrients in the run off.
- The swampy area has basically two property owners, one being McGregor's. Progressive is still only allowed to treat 100' of shoreline. McGregor's is developed, the other side is not developed. There is a abundance of algae in this area.
- Paul is concerned about what is causing the algae. He believes something external has changed in the past few years in the watershed. He said he is seeing more algae around the state this year. I started noticing the wetlands and ditches around my home in Saginaw and there seems to be more of this "globby" algae than I remember in the past. Paul said the treatment methodology hasn't changed which make him believe there are other factors involved. One environmental change is the loss of most of the Ash trees because of the Emerald Ash Borer. A logger I talked to said he has taken down many Ash in the past year. Most of the Ash in the Campground have been removed. Perhaps more sunlight and less filtration by the trees is contributing to the algae issue.
- Peroxide is another chemical that can be used to treat algae. Paul said it is about three times as expensive as the current copper treatment and feels it is not as effective. It is used primarily when the property owner doesn't want to use the copper for environment reasons.
- Property owners can help by removing the algae from their waterfront. Anything removed helps. Lakefront owners need to take care of their lake the same as they have to take care of their lawn.

- String trimming along the shore and allowing the grass to go into the lake increases the nutrient load.
- Seven to ten days after the sample the Sonar bump up should take place. The applicator will be directed to treat algae areas again. He is still limited to 100' per property but can treat areas missed in the first treatment. That is, treat the other 50' of the 150' property.
- The swampy west end of the lake, by the drain tubes, can't be treated because it is not developed.
- Paul is starting to see some milfoil growth in the lake this year. The Sonar treatment will reduce it.
- There is a lot of large leaf pondweed, which is a good weed. There have been complaints at the west end of the lake about this and it has been harvested in past years. There is also a considerable amount of the pondweed in the bay to the west of the inlet swampy area.
- He said there aren't many other treatment options. One lake in the south of Michigan actually had a water filtration plant built. As I understand it, water is removed from the lake, treated and returned to the lake. Cost was about \$1.1 million with annual operating cost of about \$100,000.

**David Sommers**  
**President**