

7-28-2010



Northern Illinois Conservation Club Members,

Thank you for having me out to look at the pond. Your goal of having the pond accessible to fishing by young people is possible, but the age of the pond, shallow depth, and amount of leaves dropped in every fall will work against you. The aeration system is a necessary first step and I will list some additional options, costs, and the data I collected and how it effects these options below.

The surface area is approximately 1 acre with the maximum depth of 7 feet. The average depth is 4 feet and the volume is 4 acre feet or 1.3 million gallons. This volume can be used to dose the correct chemical amount to control the nuisance weed species that you have including coontail, duckweed, and possibly to control the watermeal. The chemical Sonar can be used effectively on all 3, but the watermeal is listed as a partial control meaning that it doesn't always work. The step of controlling the weeds will allow the water to circulate more effectively as the current mass of vegetation is only allowing circulation directly over the diffusers. My recommendation would be to apply 32 ounces of Sonar in May of 2011. this year's price is \$729.00. It can be poured in an empty 5 gallon bucket, diluted with about 3 gallons of water, and thrown out over the pond with a scoop and rubber glove. It will take up to 30 days. The reduction in the weeds will increase water movement from the current 2 diffusers, and I would consider adding a 3<sup>rd</sup> diffuser off of the compressor and place it in between the current two. The duckweed and watermeal are thriving in the high nutrient, stagnant water. Other options would be to increase the amount of wind that reaches the pond by removing several of the large trees around the pond. The trees are also contributing to the nutrient load by means of leaves and small branches.

As with the previous report, the oxygen levels were low and they were actually lower than before at the 3 foot depth and beyond. When the original report was done, the aerator wasn't even working. This backs up the importance of removing the vegetation and adding a third diffuser. I did see some small fry or a minnow species present. This along with the large amount of frogs, tadpoles, and aquatic insects reduces the need to stock minnows as a food base. If gamefish are stocked this fall, I would strongly suggest keeping one of the two diffusers running to help maintain the population. Ponds shallower than 8 feet are more likely to have winter kills than deeper ones at this latitude. For an extra layer of safety, I would recommend holding off on the stocking until next spring to eliminate the possibility of losing your investment.

Clearing off several areas around the pond edge and doing a little rehab on the dock will increase the ability of people to fish without becoming snagged in the trees and brush. Other projects to consider would be to repair the wood duck houses and possibly place some bluebird/swallow and bat houses up to help reduce the insect population. Having a sustainable fish population will do this as well.

Long term management options may include having a small hydraulic dredge come and suck the bottom muck out, or to apply a muck digesting bacteria like our Sludge Removing Pellets 2 times per year at a rate of 28 pounds per time. This is a slower process, but we have heard of some great results.

I have included with this report an estimate for gamefish for a fall stocking, but as mentioned above, you may want to wait until spring 2011. An updated estimate would have to be done early in 2011. I have also included an estimate to add to the current aeration system, which again could wait due to the amount of weeds present at this time. Please let me know if you have any further questions or if you need clarification on any of these issues.

Thank You,

  
Robert Burke