

Filamentous Algae Control Demo on Spring Fed Pond

Ponds in Northwest Arkansas are important to owners for a variety of reasons. Some enjoy recreational fishing in their ponds and view it as a source of family bonding as well as a supplemental food source. Some rely on them for water sources for livestock. Still others just like the aesthetics of a pond. Whatever use of the pond they value most, one troublesome plant that reduces the enjoyment all of those receive from their pond is filamentous algae. And it's always worse on clearwater ponds such as spring fed ponds.

Filamentous algae is actually single algae cells that form long visible chains, threads, or filaments. These filaments intertwine forming a mat that resembles wet wool. Filamentous algae starts growing along the bottom in shallow water or attached to structures in the water (like rocks or other aquatic plants). Often, filamentous algae floats to the surface forming large mats, which are commonly referred to as "Pond scums." There are many species of filamentous algae and often more than one species will be present at the same time in the pond..

Identification

Proper weed control is important in any control program. Filamentous algae is one of a number of plants that can increase in density and severity to completely cover a surface of a water body. It is important to distinguish this plant from water meal and duckweed before a control program is implemented.



Filamentous algae can be picked up by the handful off the surface of a water body. Sometimes a large enough mass can be picked up that it could be compared in volume and weight to a wet towel.

This is very different from duckweed and watermeal which are both very small plants.

Oliphant Pond Project

The Oliphant pond was built several years ago west of Gravette. The pond was constructed after forming a concrete channel which collects water from a large spring and directs it into a 2-part pond. The first larger portion of the pond actually was constructed with an island in the middle. There is a walkway from the bank to the island. The pond has been a major source of entertainment for the family over the years. There are some really nice bass in the pond and it is just a nice feature in their home landscape.

Until it became covered with filamentous algae.

Treatment

Dye was first tried on the pond to see if the water could be dyed to a point which would limit the light reaching the bottom of the pond and thereby limit or eliminate algae growth. Dyes are very safe from a fish safety standpoint and it was hoped that this method could offer some control. After three attempts, it was clear that the rate of water exchange in the pond due to the spring was too great to get any sustained coloring of the water. This method was completely unsuccessful.

Citrine Plus was then selected to use as a control. After measuring the pond and assuming a depth of 3-4 feet average, it was determined that approximately 2 gallons of Citrine Plus would be required to get the concentration of copper up to 0.8 PPM which is recommended on the label for control of High Density Filamentous algae.

Method

Citrine Plus was mixed at a rate of 1 gallon of Citrine Plus with 2 gallons of water in a battery powered backpack sprayer. Spray was applied by walking around the edge of the pond and spraying as far as possible out into the pond. In the shallow area of the pond, waders were used so applications would reach out farther from the shore.

Results



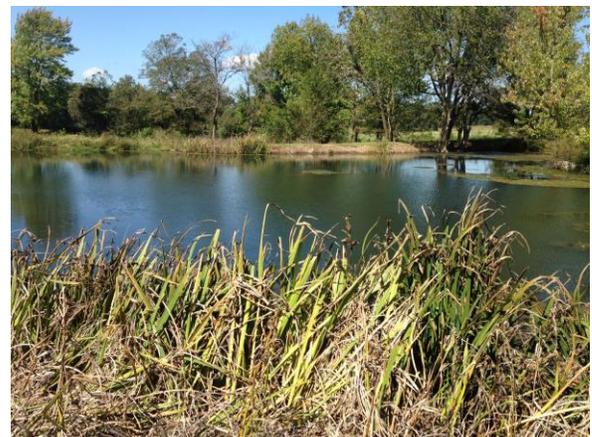
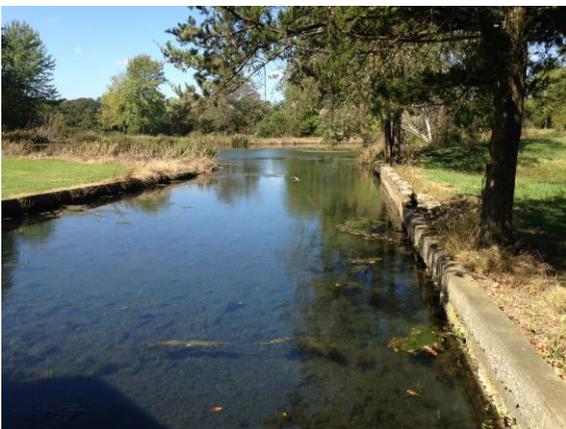
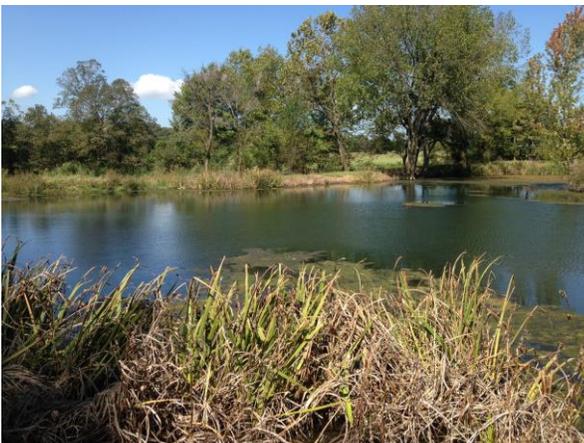
At the start of summer 2019, the pond was nearly totally covered with filamentous algae.





Cutrine Plus was applied using a 3 gallon backpack sprayer from the shore.

After Treatment:



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Discussion:

Although not 100% control after one treatment, it was estimated at over 75%. All label directions should be followed to prevent unintended consequences. Excessive plant die off can result in an oxygen shortage in the body of water which can result in a fish kill.

Proper application volume is also necessary. Pond measurement and area determination is critical to using this product effectively.

A boat or sprayer which would reach farther out into the water body would most likely improve results also.

Treatment cost for this pond was approximately \$75.

Additional treatments would likely be required through the summer to maintain the look of the pond. Fewer subsequent treatments would be required in a pond that had less continuous water flow into the body.

The family was once again able to enjoy fishing from their pond for the summer.