Analysis of Pithophora Reduction Utilizing PondZilla Pro and Nature's Blend Probiotic

Introduction: A 1.5 acre, private pond located in Lake Forest, Illinois had dense Pithophora growth starting in mid-May. This region in northeastern Illinois has very hard water; therefore, copper treatments are less effective. For years, I have struggled to gain control of the algae with copper/diquat treatments. The algae would brown out and die but remain on the surface of the water, causing more algae growth, and the cycle would just continue month after month. This year, I was determined to have success.

By: Kayla Chancellor



Treatment: On June 22, I did a very aggressive algae treatment. I did a tank mix of Copper Sulfate, Diquat, and 2.5 gallons of PondZilla Pro. I did a subsurface treatment to allow for maximum algal penetration. I also added 4 pounds of Nature's Blend post treatment. 14 total pounds of Nature's Blend were applied throughout the course of 5 months (MaySeptember).

| 2023 Data Summary |  |  |  |
| :---: | :---: | :---: | :---: |
| Service Date | Submerged Weed (\%) | Pithophora Coverage (\%) | Water Temperature ( ${ }^{\circ}$ F) |
| 27-Apr | 25 | 2 | 58.0 |
| 11-May | 10 | 5 | 66.7 |
| 25-May | 1 | 15 | 65.7 |
| 8-Jun | 1 | 15 | 68.8 |
| 22-Jun | 5 | 15 | 71.9 |
| 29-Jun | 1 | 5 | 72.7 |
| 6-Jul | 1 | 1 | 74.6 |
| 20-Jul | 3 | 3 | 76.0 |
| 3-Aug | 3 | 5 | 72.0 |
| 17-Aug | 3 | 2 | 73.4 |
| 31-Aug | 3 | 3 | 68.9 |
| 28-Sep | 3 | 5 | 65.0 |
| 12-Oct | 1 | 5 | 58.6 |
|  | $\mathbf{4 . 6 2}$ | $\mathbf{6 . 2 3}$ |  |
| Average | $\mathbf{2 5}$ | $\mathbf{1 5 . 0}$ | $\mathbf{6 8 . 6 4}$ |
| High | $\mathbf{1}$ | $\mathbf{1 . 0}$ | $\mathbf{7 6 . 0}$ |
| Low |  | $\mathbf{5 8 . 0}$ |  |



Results: I checked back up on the pond 7 days post treatment. To my pleasant surprise I saw a major improvement. Algae levels had decreased by $10 \%$ in just one week. I serviced the pond 14 days post treatment, and the algae was almost completely gone. For the remainder of the season the algae levels remained low and very manageable.

Before


Conclusions: After months of unsuccessful algae treatments, the addition of PondZilla Pro and the monthly probiotics produced extraordinary results. The PondZilla Pro enhanced the copper treatments, allowing for ultimate success. It also aided in the decomposition of the dead plant matter; therefore, the dead floating algal mats were no longer an issue. This, in turn, reduced the algae regrowth rates and made future treatments much more manageable. The addition of Nature's Blend helped keep the nitrogen and phosphorus levels at bay, further reducing algae growth rates. Overall, the addition of PondZilla Pro and Nature's Blend resulted in a much healthier, wellbalanced ecosystem. Even more importantly, a very satisfied customer!

After


