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*Toxic Waves*

The purpose of this project was to discover which fertilizer type, organic or inorganic, would potentially support aquatic life and possibly contribute to a simulated aquatic “dead zone.” Pond water was collected from a nearby urban park and then separated equally into three tanks. The water was mixed using magnetic stirring bars to mimic a fresh water environment. Wooden beams positioned over the tanks were used to mount light bulbs overhead to act as the daylight. After the initial set-up the tanks were allowed to germinate for a week before 3.75 grams of inorganic fertilizer were added to tank A. Next, water testing probes were used to regularly test the pH, nitrate concentration, dissolved oxygen (DO) and temperature every ten hours. Additionally, turbidity was tested every four to six hours. The same procedure was used to test Tank B in which 15mL of organic fertilizer was added to the water. The third tank, C, remained pond water to serve as the control. Using the water testing probes, data was collected every two hours with night/day cycles. The data supports the conclusion that out of the two fertilized tanks, the inorganic tank showed the least amount of algae growth, as shown by turbidity. On the other hand, the organic tank had much more algae growth, and would make it more deadly for any aquatic life and hence, a dead zone. Since dead zones are such an unexplored issue in the world, this could be applied on a larger scale.