



Fountain and Dissolved Oxygen in an Artificial Pond

A common feature of ponds are fountains and bubblers (underwater fountains).

The FRESH Org team was curious whether a bubbler had any effect on the quality of the water in a pond. They found this report written by scientists who investigated this question.

Report by Drs. Gray, Xavier, Logan, and Munroe on Fountains and Dissolved Oxygen

We set up a large above-ground pool that was similar to a real pond and installed a bubbler in the middle of this large pool.

We turned the bubbler on for three days and measured the dissolved oxygen in the pool on each day. Then we calculated an average of these measurements to show the daily average of dissolved oxygen in the pool when the bubbler was working.

We then repeated the experiment for three days but this time with the bubbler turned off. The graph below shows the daily average of dissolved oxygen in the pool in both conditions (bubbler on and bubbler off).

Dissolved Oxygen Levels in Pool

