

## LAKE & POND AERATION

Natural ponds get much of their oxygen from the atmosphere. However, as often is the case with artificial ponds, this process - called atmospheric diffusion - is insufficient to achieve optimally desirable levels of oxygen. This often results in stagnation associated with algal blooms, unpleasant odors, low water quality and possible fish kills. By artificially introducing diffused air into a pond or lake, a number of benefits can be achieved. These include:

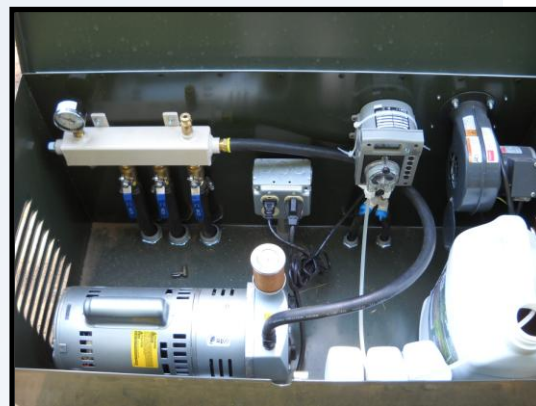
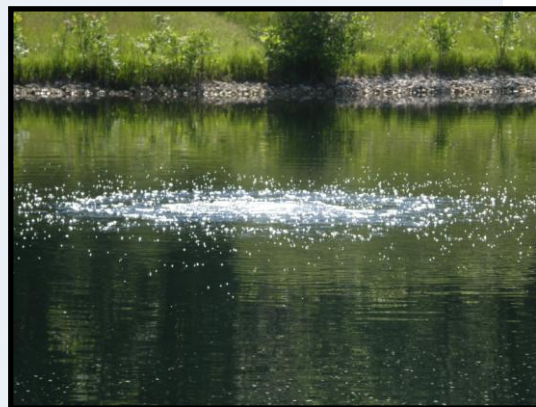
- ◆ **Improved water quality and clarity**
- ◆ **Reduced algae growth**
- ◆ **Prevention of fish kills**
- ◆ **Improved health of fish**
- ◆ **Elimination of foul tastes and odors**
- ◆ **Reduction of organic sediment**
- ◆ **Improved aesthetics**

### Diffused Air Aeration System

One of the most common and arguably the most effective ways to artificially introduce oxygen into a waterbody is through a **DIFFUSED-AIR AERATION SYSTEM**. In a system of this type, a compressor stationed on shore pumps air through hoses connected to diffusers placed near the bottom of the lake or pond. These diffusers are manufactured with permeable membranes which emit fine bubbles intended to maximize oxygen transfer. The rising air bubbles not only increase the diffusion of oxygen into the water, but also increase the rates of circulation, aerating large amounts of water. By evenly spacing the diffusers throughout the system, the entire lake or pond will become aerated within a short time period.

### Custom Designed Systems – Quality Components!

Wisconsin Lake & Pond Resource uses quality components consisting of Gast & Stratus Compressors, Aquamaster Diffusers, Powder Coated "quiet" cabinets, and aluminum manifold assemblies. Our staff will custom design a system fitted to your lake or pond based on oxygen and turnover requirements. We can provide professional installation or instruct you how to install the system yourself.



## Before Aeration System

## After Aeration System

Algae blooms  
blocks sunlight &  
excretes toxins

Only a thin layer of  
oxygenated water is  
suitable for fish life.

Dead matter settles  
to the bottom and  
decay forming a  
septic like sludge

Bottom water has no oxygen and  
is loaded with toxic gas solutions  
from decaying matter

Fish can  
only try  
to catch  
food on it's  
way to the  
bottom

Bottom  
water not  
able to  
support  
fish life

The air induced circulation removes  
toxic gasses from the bottom water.

Circulated oxygen  
enables benthic  
organisms and fish  
to live on bottom

Fish feed on  
benthic organisms

Benthic  
organisms  
feed on  
dead plants &  
fish droppings,  
animal matter.

Fish are healthier from natural  
foods, abundant oxygen, lack of  
toxin, lack of disease organisms

## Winter Aeration



## Installation Photos

