

Pond Bed Aeration System

Low levels of dissolved oxygen and highly stratified waters can characterize degraded or eutrophic ponds and lakes, where warm, oxygen-rich water is suspended above cool, oxygen-depleted bottom waters.

As anaerobic conditions begin to develop in deeper water, naturally occurring aerobic bacteria can no longer perform beneficial tasks such as waste digestion and water purification. With time, water quality greatly decreases leading to unsightly blooms of algae, the accumulation of aquatic sludge and the build-up of gases such as methane and hydrogen sulfide (which are well known for their offensive odours). Low oxygen levels can also lead to fish death and water kill.

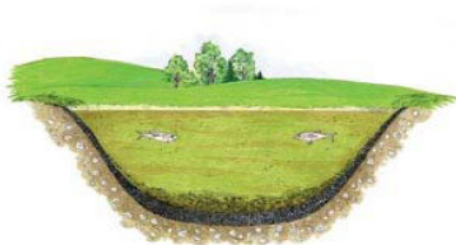
Luckily, degraded ponds and lakes can easily be enhanced with the addition of an aeration system which acts to increase dissolved oxygen levels while eliminating stratified waters. Aerobic bacteria begin to recolonise in deeper water, where they rapidly begin to digest accumulated sludge and improve water quality.



Aeration uses compressed air to oxygenate water.

How the Aeration Process Works

Pond bed aeration is the introduction of compressed air to a water body. When released at the bottom of a pond or lake, compressed air naturally begins to migrate towards the surface of the water. As air travels up the water column the pressure surrounding the bubbles slowly decreases causing the bubbles to increase in size -- a slight current begins to develop. The current draws oxygen-depleted water from the bottom, oxygenates it and transports it to the surface. This action protects fish, aquatic organisms and beneficial bacteria from suffocation by breaking down stratified waters while increasing dissolved oxygen levels.



No aeration means degraded quality of pond water with algae bloom and aquatic sludge buildup



Aeration literally breathes life into a pond or lake with improved water quality and clarity.

The aeration system will come with the following standard equipment:

- Energy Efficient, High Volume Air Compressors
- Attractive 100% Recycled Plastic Cabinet Equipped with Cooling and Sound Reduction Packages
- Programmable Digital Timer for night aeration
- Fully-Adjustable Manifold with Safety Relief Valve and Pressure Gauge
- Duraplate Self-Cleaning, Non-Clogging, Membrane Diffusers

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