

Pond Maderna in Deutsch-Brodersdorf is an approx. 3.5 ha artificially created lake with a maximum depth of 3.5 m.

## The targeted aeration and planting of the water body, which is mainly used as a bathing lake, led to lasting stability.

The water body is fed exclusively by groundwater and is used as a bathing lake. The Drausy<sup>®</sup> aeration system with a stretch of 1,000 m has been used to improve the watercourse since 31 May 2008 - the system is still in use.

In addition, low-growing characeae are cultivated to avoid long-growing aquatic plants.

The area-wide micro-invasive oxygen supply at the bottom prevents algal blooms and the formation of cyanobacteria: Organic sludge was degraded and pollutants permanently bound to the sediment.



The lake invites you to swim: Maderna Pond in Austria



A possible cause of blue-green algae formation is excessive nutrient input in combination with increased temperature.

Cyano-bacteria are formed when:

- the water heats up
- the oxygen content decreases

Especially at night, the oxygen consumption in the water increases when algae and other organic material sink to the bottom of the water and consume oxygen instead of producing it.

In addition, the water's ability to absorb oxygen at elevated temperatures is limited - which is why the Drausy<sup>®</sup> system helps to keep the water in balance.



The Drausy<sup>®</sup> Professional aeration avoids blue-green algae



## Avoid algae and cyanobacteria

## The warmer the water, the less oxygen is available for the decomposition of organic matter.

The Drausy<sup>®</sup> system is ideal for urban stillwaters, park waters, bathing waters, fishing waters.

It keeps the sediment permanently aerobic without affecting the infrastructure. Resulting results:

## Degradation of organic matter

- Permanent binding of pollutants and nutrients to the sediment
- Avoidance of algae and cyanobacteria
- Enrichment with oxygen
- Reduction of harmful greenhouse gases

In the case of greater pollution, the Oxygen consumption by biology increases. The warmer the water, the fewer mg of oxygen are available for degradation.

