



Case Study

BAD LAER BATHING

Lake Glockensee
Near Hanover
Germany

Bad Laer, a thermal spa at Lake Glockensee, is well known for helping rheumatic and degenerative disease of the spine and joints, as well as heart, circulatory and breathing disorders.

There were problems with algae and coli bacteria. The local authorities were searching for an alternative solution because of the high dosages of chlorine necessary to lower the bacterial pollution of the natural water. In 1974, began the first of many alternative approaches which included sweeping the lake regularly, removing tons of algae, adding grass carp, dredging, installing copper mats to reduce algal growth. Several well known companies were approached such as Bayer and Schering were approached, but failed to supply solutions.



Excerpt from the bathing attendant's diary, summer 1981:

"Brought in 30kg of chlorine granulate by hand and some acid to balance the high pH. In spite of this the sight depth is less than a metre. Growth of algae extending up to the surface."

In 1982, the health authorities closed the bath due to bacterial pollution.

In 1988, the Municipal Director approached Roland Plocher, asking whether he could provide a solution. Roland Plocher was allowed to implement his system after the authorities had tested the products to ensure that no chemicals or poisons were used.

Treatment

In November 1988, four Plocher Bio-cats were installed in Lake Glockensee, with two more in the headwaters. Bio-cats permanents prevent the growth of algae through the spring and summer.

In April 1989, observations demonstrated that more Bio-cats were required. 16 more were installed in the lake and an additional four were placed in the headwaters.

Result

The bath today



The algae “Zannichellia-balustris” no longer occurs. The bacterial pollution is reduced and lies far below the limit values. Algae only grows at the bottom of the lake and the sight depth is regularly 4.5 m - right down to the bottom.

The boat with a kind of big rake which was formerly used to remove the algae is not being used anymore. Expenditure saved: DM20 - 30.000 a year.