

Rearing Livelier Koi with Totally Eco-Friendly Solutions

With Better Water Quality and Reduction in Algae Growth.

Challenges for the Domestic Owner

Ornamental Koi are domesticated carp that are selectively bred for their colours and patterns. A Singaporean private owner who rears Koi in his home pond faced various challenges.



Schools of Koi swirling in a Singapore private owner's Koi pond.

Total Dissolved Oxygen (TDO) is consumed by the Koi fish and plants in respiration and utilized in chemical processes. Rise in oxygen consumption could be due to over-abundance of aquatic plants or algae or certain chemicals that removes oxygen directly from water. A key threat to the survival and health of Koi is bacteria. High bacteria count is likely to lead to high Koi mortality rate. Bacteria are likely to infect Koi that are stressed by

conditions, such as poor water quality or inadequate diet.

Solutions Implemented

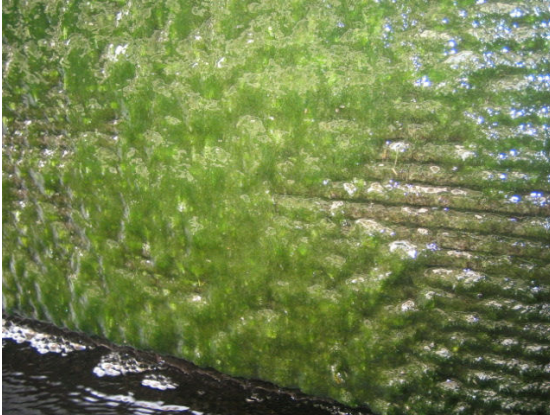


Commissioning of the DPA System on 20 June 2007

SIF Technologies recommended using the company's proprietary technology - DPA system to help improve the quality of water. DPA system is developed based on the principles of Cavitation, which does not require the use of chemicals nor consumes huge amount of electrical energy. Using the company's DPA microbial culture and DPA super mineral formulation, there was a suite of solutions that was totally eco-friendly. To monitor effectiveness of our solutions, rigorous and regular water samples were taken for testing.

Results Achieved

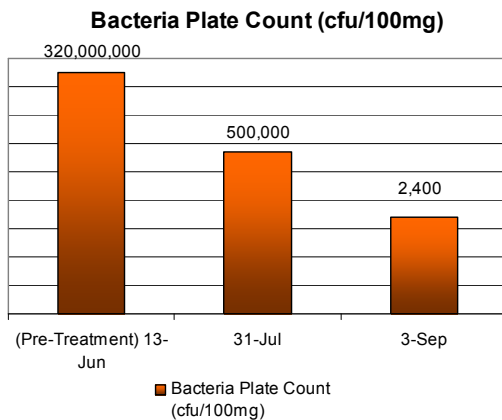
Reduction in Algae Growth Observed



Noticeable reduction in growth of algae on the water pond's wall after DPA system has been employed for an extended period.

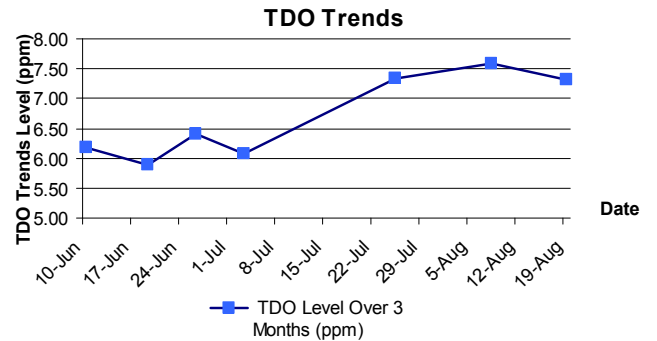
After deploying the DPA system in its existing circulation system, there was noticeable reduction in the algae growth, as algae begins to peel off.

Fall in Bacteria Level



The reduction in bacteria plate count displayed in the chart above (based on logarithmic scale) showed that there was a continuous and significant drop in the bacteria level over a period of 3 months, hence reducing the threat to the health of Koi fish.

Better Total Dissolved Oxygen Levels



Water tests taken with precise analytical instruments displayed improvements in the TDO of the Koi pond. Before deploying the DPA System, the TDO level was merely at 5.89 ppm on 19 June but subsequent measurements showed that the TDO has risen to a peak of 7.59 ppm on 8 August. DPA system was deployed on 20 June 2007.

The Client Says:

'The fishes were growing bigger in size and is more lively and healthier looking...'

'...Previously, bottom sludge is about 3" thick and now, 1" ...'

Note: Pictorial evidence and facts cited in this insert are supported by testimonials and documentation from programs that were implemented. Individual results are subjected to variations, depending on vital water parameters.