



MICROBE-LIFT® Technology Restores Health and Balance to a Pond Ecosystem at South Seas Resort

Location: South Seas Resort, Captiva Island, FL

Background: South Seas is a family resort and wildlife sanctuary that promotes adventure and relaxation. All amenities are designed to take full advantage of the beauty of the existing landscape.

Objective: When their 3/4-acre round pond had become increasingly unbalanced they needed a plan to return it to a healthy state. This 6-foot deep pond experienced heavy nutrient loading, low oxygen levels, and lack of beneficial bacteria that could break down organics. These conditions resulted in heavy bottom sludge accumulation, foul odors, and a lack of water clarity.

A bioaugmentation plan was developed based on **MICROBE-LIFT®** technology. In addition they added an AquaMaster surface spray type aerator to supply dissolved oxygen to the pond to support aerobic digestion by the bioaugmentation strains. The MasterClear Muck B Gone was added to accelerate sediment reduction.

On initial application 6 gallons of each product was introduced into the pond. For the next 6 weeks, 1 gallon of each product was applied each week. A monthly performance dosage was then to be determined. The pond was monitored twice a month.

After eight weeks of treatment, improvement was noted. Green water events were minimal. Water was clearer and there appeared to be less sludge. No foul odor was present.

Results Achieved: After 16 weeks improvement was dramatic. Water clarity had improved significantly and all odors were gone. Sludge Reduction was dramatic. Originally, 6 inches of sludge was noted at the shallow shoreline areas and up to 2 feet at the center of the pond. After 16 weeks of treatment, sludge was negligible at the shore and less than 6 inches in depth at the center of the pond.

Oxygen levels increased throughout the water column. The pond water BOD (Biochemical Oxygen Demand), the measure of organic loading, was decreased. This shows that the pond is effectively replenishing oxygen consumed by biological activity. The higher oxygen level supports beneficial microbes for faster degradation of organics to maintain water clarification and sludge reduction. This pond's health, balance, and aesthetic appeal have improved substantially. The synergistic use of aeration and beneficial bioaugmentation should be very effective in maintaining this healthy pond ecosystem.

For more information on **MICROBE-LIFT®** Technology contact
Ecological Laboratories Inc.
www.EcologicalLabs.com
CS17109