

Case Study #1

■ MAINTENANCE

Clearing Up a Murky Matter

A multi-use lake required a clean-up effort of excessive algae and bottom sediment



Problem

The irrigation lake at Addison Reserve GC was overcome with algae and bottom sediment, causing a variety of problems from clogged irrigation heads to unpleasant odors.

Solution

A system to aerate and better circulate water from the lake's bottom, and a bioaugmentation product to destroy algae food sources.

Like a utility baseball player playing various positions, the irrigation lake at

Addison Reserve GC in Delray Beach, Fla., performs several functions related to the successful operation of the property.

For starters, the four-acre lake, part of an interconnected waterway system of about 27 lakes, is the irrigation lifeblood of the golf course. The lake, which averages a depth of 10 feet, also serves as an aesthetically pleasing natural background for a number of upscale houses on the property. It also has a sinister

side — it can be a distracting water hazard for golfers.

The lake is an integral part of the golf course. So when it began experiencing problems with excessive algae and bottom sediment, there was concern.

The problem

The problems started in early 1997, about a year after the course was built. George Elliott, director of golf course operations for Addison Reserve, noticed algae growing throughout the lake.

"It's a common problem down here," Elliott says, attributing the problem to southern Florida's constant heat and humidity, as well

Nutrients overloaded the lake, and excessive algae and bottom sediment affected the course's irrigation system.

as nutrient runoff into the lake's shallow water, which made for a perfect breeding ground for algae.

Eventually, nutrients overloaded the lake to the point where excessive algae and bottom sediment affected the course's systems. The algae and decomposing nutrients clogged the irrigation pump station intake valve and irrigation sprinkler heads, causing them to perform erratically at best.

Elliott says the nutrient masses "were the size of,

and looked like, hockey pucks.” The algae and organic nutrient mass formed layers on the pump station pipes and filters. If that weren’t enough, the lake no longer looked attractive.

Solution

Elliott’s goal was to reduce the lake’s nutrient load to alleviate the associated problems — clogged irrigation heads, pump station filter and piping, unwanted algae blooms, increasing

The solution reduced clogging in pump and irrigation heads, as well as sludge and organic sediment.

bottom sediment layer and unpleasant odors — while maintaining a natural lake setting. After speaking with crew members, he selected two products from Otterbine Barebo, an Emmaus, Pa.-based company that develops and markets natural methods of treating water quality problems.

Elliott used the company’s Air Flo diffused air aeration system and Otterclear Biological Water Treatment together to correct the problems. The Air Flo aerates and

circulates water, and Otterclear removes the primary food sources of algae, including nitrogen and phosphorus, causing algae to die. It also digests dead organic matter and eliminates odor caused by ammonia and hydrogen sulfide.

Outcome

With the Air Flo system, the lake water is aerated and circulated with minimal natural surrounding disturbance. The slow-moving “boil-type” current created by the upwelling water circulates the water and transfers oxygen from the atmosphere to the lake bottom. This stimulates the natural digestion process, which consumes organic nutrients in a quick, efficient manner.

The Otterclear bioaugmentation product complements the aeration system. The club applied the blend of bacteria and microbes at recommended dosages and it performed as expected, Elliott says. He began to see results after about three months.

The irrigation lake functioned normally and appeared healthy after about nine months, Elliott says. The water quality and clarity improved, and the lake surface remained algae-free. The natural solution reduced clogging in pump and irrigation heads, as well as sludge and organic sediment at the lake’s bottom. ■

Leaders

PEOPLE ON THE MOVE

Racine, Wisc.-based CNH announced that **Steven G. Lamb** was named president and chief operating officer. In addition, **Ted R. French** was appointed president of financial services and chief financial officer.

Brent Wadsworth will receive the Don A. Rossi Award for 2000 from the Chapel Hill, N.C.-based Golf Course Builders Association of America. Wadsworth is the first golf course builder to receive the award.

Mike Mongon is the new superintendent at Fairview CC in Greenwich, Conn. His previous position was as superintendent at Arcola CC in Paramus, N.J.

Sanctuary GC at Westworld in Scottsdale, Ariz., named **Jay Haffner** its director of golf.

Greensboro, N.C.-based G&S Turf Equipment Co., a Textron Turf Care And Specialty Products dealer, has two certified mechanics, **Bill Ledford** and **Freddy Proctor**, to provide after-the-sale service for all Cushman, Jacobsen, Ransomes and Ryan brand turf maintenance equipment sold in North Carolina and portions of South Carolina.

Blind Brook Club in Purchase, N.Y., named **Les Kennedy** as its new superintendent. Kennedy was previously superintendent at Country Club of Waterbury in Waterbury, Conn.

Scott Debolt is the new national marketing director for Post Falls, Idaho-based Jacklin Golf, a division of Jacklin Seed Co. The Philadelphia-based



Rohm and Haas Co. named **Gray C. Wirth** as strategic market manager for turf and ornamental products. Wirth is responsible for pricing, promotion and positioning strategies for all turf and ornamental products.



James Connolly formed Spokane, Wash.-based James Connolly Consulting, which will provide agronomic assistance and services for both existing and new golf course projects.

The Central Florida Golf Course Superintendents Association named **Ricky Craig** of Center Hill, Fla., with its \$1,500 Danny Burgess Memorial Scholarship. Craig will use the money to attend Lake City Community College.

Bob Alonzi is the new superintendent at Fenway GC in Scarsdale, N.Y. Alonzi comes to Fenway from Fairview CC in Greenwich, Conn.

Tyler Enterprises named **Robert L. Murphy** to its Indiana sales team. He will be responsible for sales of Tyler’s custom-blended fertilizer products and custom fertilizer application system in the golf course market.

Flowtronex PSI promoted **Mark Bartley** to lead its Carolina Regional sales effort.

Let us know about your people on the move. Send information/color photos to Golfdom’s Frank Andorka at 7500 Old Oak Blvd., Cleveland, 44130. Fax information to 440/891-2675 or e-mail to fandorka@advanstar.com.