## POND MANAGEMENT

BY KATIE MORRIS

## **Outsourcing aquatic needs**

## A superintendent contracts pond maintenance because it's cost effective

Superintendents generally perform pond maintenance in house, but it's more beneficial for Todd Pippin, superintendent of the Club at Longview in Weddington, N.C., to outsource pond maintenance to Garner, N.C.-based Foster Lake & Pond Management.

"We're in a unique situation in which we have a service contract with a company that handles 95 percent of our needs," Pippin says.

Pippin's relationship with Foster Lake & Pond Management developed during his previous job as lead assistant superintendent at the Governors Club in Chapel Hill, N.C. Longview has eight ponds that vary in size from a quarter of an acre to 7.8 acres – a total of 14 acres of surface area. Some ponds are used as the water supply for course irrigation, one is used as a sediment control pond, and others are scenic features.

"With the volume of water we use and the number of water systems we have, contracting is cheaper," Pippin says.

He spends about \$11,400 a year for Foster Lake's services.

Specific tools and products are needed for pond management, and using a service that has access to such tools is easier for Pippin. It's also more cost effective to have certified professionals apply the aquatic pesticides rather than his crew.

"My guys are certified in turf and ornamental pesticide applications," Pippin says. "They would have to go back and take another test to become certified in aquatic pesticides."

Pippin signed a 12-month contract with Foster Lake to have one of its technicians perform the following tasks monthly:

- Pick up trash around the ponds;
  - · Inspect for pests such as muskrats;
- Check pH levels in the ponds;

• Apply pesticides such as diquat dibromide and copper compounds if needed;

• Add dyes if needed (dyes keep temperatures down and prevent algae from bloom-

> Superintendent Todd Pippin spends about \$11,400 a year for a contractor to take care of all his pond management needs. Photo: Club at Longview



Longview has eight ponds that vary in size from a quarter of an acre to 7.8 acres – a total of 14 acres of surface area. Photo: Club at Longview



ing by limiting light penetration); and

• Sample fish population (if one is dominate over the other, it can be harmful to a pond's health).

Pippin, who views each maintenance task as "a spoke in a wheel representing a sound management system," also has been experimenting with barley as a way to control algae. Research shows barley releases a natural toxin in the water that suppresses algae, he says.

"We put 8-inch-diameter tubes of barley into the ponds, and the results have been intermittent," he says. "Sometimes it works, and sometimes it doesn't."

The technician that's assigned to Longview checks each pond and picks up trash once a month. The inspection can last between four to eight hours, depending if the technician has to apply aquatic herbicides or other pond treatments.

"The same person comes out every month, so a relationship has formed between us," Pippin says. "It also gives him the opportunity to become familiar with the property and know it inside and out."

The preventive measures are for aesthetics, the health of the ponds and the entire club because Pippin uses pond water to irrigate the property's turf. Everything from the clubhouse surrounds to landscaped areas to the golf course is irrigated with water pumped from the ponds.

"Typically, during the growing season, we pump from most of the ponds every night and replenish the water supply with well and storm runoff water," he says.

Even through Foster Lake handles pond maintenance and treatment, Pippin purchases the aerators that run 24 hours a day. On average, one large professional-grade aerator costs between \$12,000 and \$15,000. He spends \$100,000 of the more-than-\$1million annual maintenance budget for 13 5-hp aerators and one extra motor.

"Before purchasing, we had to calculate how much water to circulate to get the oxygen levels we needed," he says. Aerators are a necessary component of pond maintenance because they circulate water to maintain oxygen levels and reduce algae and odor, keeping a pond clean and healthy. With larger ponds, Pippin uses several aerators to circulate water, and depending on the size of the pond, adds or takes away aerators as needed.

Pippin purchases his aerators from a local distributor that sells Otterbine Barebo products. He's been using Otterbine since 2002, partly because of the company's service.

"It's a family-owned, service-orientated business that follows through with the process from sales to service," Pippin says.

For those considering outsourcing their pond maintenance, Pippin suggests looking for contractors, asking for client referrals, talking to others who use them and picking their brains for ideas and information.

"You want to find someone who's on a preventive curve and wants to head-off problems, not someone with a reactive approach," he says. **GCI**  BY KATIE MORRIS

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## Combining natural and purchased resources

Virginia Beach golf course coordinator depends on Mother Nature and a distributor to maintain ponds

P ond maintenance plays an important role in the overall look and feel of a golf course, but being in charge of three courses and keeping up with maintaining them can be challenging. Kevin Bennington, golf course coordinator for the city of Virginia Beach relies mainly on natural resources to maintain the health and beauty of the ponds on the city's courses.

Bennington oversees the budgets, staffs and equipment maintenance for three 18-hole municipal golf courses: Red Wing Lake, Kempsville Greens and Bow Creek. Previously, he was the golf course superintendent at Red Wing. In July, he was promoted to his current position.

Bennington is responsible for maintaining multiple ponds on each course. The ponds occupy 44 acres: two at Bow Creek, 12 at Kempsville and 30 at Red Wing. The number of ponds on the courses total 24: two at Bow Creek, eight at Kempsville and 14 at Red Wing. The ponds at Red Wing range in size from 8,000 square feet to 15 acres.

Even with this many ponds to maintain, Bennington relies mainly on nature to help keep them looking aesthetically pleasing and healthy.

"We leave a lot of it to nature," he says. "We don't use aerators

because we get decent current flow from the wind."

The three courses are located near larger bodies of water including the Atlantic Ocean and Back Bay. The wind and ocean breezes drive the ponds' tides, which circulate the oxygen in the water, Bennington says. The natural system seems to work because he says he hasn't had a problem with algae and other unwanted vegetation.

The courses are irrigated with fresh water from storm runoff or supplemental wells. Red Wing has been redesigned to collect everything on site for reuse as part of a more environmentally friendly



Kevin Bennington relies mainly on Mother Nature to maintain the 14 ponds at Red Wing Lake Golf Course. He doesn't use aerators because of current flow from the wind. The course is near the Atlantic Ocean. Photo: city of Virginia Beach



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approach to irrigation.

Even with nature's help, Bennington still is required to take some preventive measures throughout the year to make sure the ponds remain healthy. They're inspected daily for any abnormalities, water tests are conducted once a year, and a flail mower is used along the banks of each pond semiannually.

"We purchase flail mowers with a 20-foot extension to get down off the side of the banks," he says. "We spend two hours a month during the summer doing this kind of maintenance."

But nature can't help Bennington with chemical applications. There's a stagnant pond at Bow Creek that requires chemical treatments. For this application, Bennington turns to Turf & Garden to provide him with Aquashade, a dye containing copper sulfate that prevents algae growth. He says a gallon of Aquashade or a case of dry packs can last between two to three years.

Each course has about a \$500,000 annual maintenance budget of which \$110,000 is spent on chemicals and fertilizers. Only \$300 of the chemical spending is for treating the pond at Bow Creek.

The city of Virginia Beach has a contract with Turf & Garden and has been purchasing its aquatic products and other chemicals and

fertilizers from the distributor for more than 10 years.

"Who does the purchasing depends on the cost," Bennington says. "We can handle as much as \$5,000, but anything higher has to go through the city's purchasing department."

With noncontract vendors, Bennington writes specifications and has to generate at least three quotes from companies who meet them. From there, he's required to go with the lowest bidder or justify the difference.

The city's and Bennington's loyalty to Turf & Garden has much to do with the location of the company. Bennington's sales representative is located in a neighboring city and can get him anything he needs within two hours, which has been helpful when Bennington needs a product or part immediately.

Bennington likes the service he receives from Turf & Garden because the company's prices are fair, it's easy to work with and its representative is always available. Turf & Garden's biggest selling point for Bennington is its warehousing option.

"Not only do I enjoy its pricing and location, but it also warehouses all of our chemicals so I don't have to maintain inventory on site," he says. **GCI** 

To help maintain stagnant ponds, Bennington applies a dye containing copper sulfate to help prevent algae growth. A gallon of the product, Aquashade, can last as long as three years. Photo: Allen Rockwell

