A BALANCING ACT

Chemicals or 

Superintendents discuss the merits of both when controlling unwanted aquatic weeds.

Ponds on golf courses represent different things to different people. For architects, it’s a feature that can add to the aesthetic beauty and design of a golf hole – turning an easy par 3 into a frightening experience, or on a short par 5, forcing a player to choose the risk/reward choice of laying up short of the water hazard, or going for the green in two. For superintendents, these bodies of water, while beautiful to behold, represent just another course component they need to manage. Pond management is a low-cost item in budget dollars, but it’s a line item that can’t be neglected.

“You have to invest in your ponds,” says Bernie Hertzman, president and owner of AMA Sales, a Toronto-based company that specializes in pond management for golf courses. “If you don’t, you are just masking your problems. The more ponds you have, the more potential problems,

By David McPherson
and the more maintenance that is required.”

Superintendents should not take a short-term view to their pond issues. As Hertzman says, you need to invest in this asset for the best long-term results. Nor does he recommend assigning this job to your summer seasonal help by telling them to throw on some hip waders and skim the pond; all that will result in is algae and a host of other problems coming back.

At Westhaven Golf Club, we have been using Tilapia for the past three years in any water feature that has algae or duckweed problems. I researched information first and then contacted a few local fish suppliers to take a look and place bids. The fish are the only cost involved and run about $250 per acre.

The fish suppliers deliver the fish in a truck, which we take to our lakes that are reachable, and then carry the rest in carts to the remaining water features. It takes the fish about three weeks to clean a pond completely, but you will see the amount of coverage on your lakes decrease week by week. Tilapia breed quickly and can easily double or triple the amount of fish you bought.

A word of warning: You must be careful if you have bass in your pond. The Tilapia are small and the bass will eat them. Also when the temperature drops down below 45 degrees, you will lose most of your fish and have a huge mess to clean up. To avoid this mess – and questions from members – we host a fishing tournament for our maintenance staff on a Monday when we are closed. This provides us another way to show our staff we appreciate them.

The tilapia have worked out great for us.

Josh Hastings is director of agronomy at Westhaven Golf Club, Franklin, Tenn.
Algae is the top problem when it comes to ponds, since everything pours into it, from soil to fertilizers to animal waste. So, where do superintendents begin? Should you go au naturel or use chemicals, or use a combination of both? These are the key questions superintendents must first answer. Some superintendents get away without having to worry about pond issues, since there aren’t any on their courses. But ponds are a pleasing aesthetic addition to any golf course, as well as a breeding ground for insects, algae and a host of other bacteria. It’s important to leave money in the budget for their maintenance. Depending on how many ponds you have, approximately $10,000 annually is a good, average estimate to maintain your ponds. Some superintendents keep the job in-house while others outsource this dirty work to someone like Hertzman. The avid golfer started AMA Sales several years back after noticing the globs of algae in the ponds at courses he frequently played and how unattractive it looked. Hertzman’s client list has grown each year to the point where today AMA Sales services nearly 40 courses in southern Ontario, including Hamilton Golf & Country Club, which is set to host the PGA TOUR’s Canadian Open later this summer. AMA Sales specializes in the elimination of algae and duckweed to improve the overall look of a golf course. Hertzman has developed his own, unique product that he says is environmentally safe and effective. Currently, he’s in the process of getting a patent for it. Like most maintenance and management practices, Hertzman takes a strategic approach to pond management - each course is different and each pond is different, so there is no umbrella solution.

Hertzman uses three ways to treat ponds. First, it’s about balancing the water. “You need to have balanced water, which means pH,” he explains. “That’s our scale of measurement and it needs to be balanced properly. If your ponds have a high pH level, you have a low level of oxygen and if you have low pH...
levels, your water will be more acidic.”

According to Hertzman, algae starts appearing when the pH levels creep up to 8.0 or 9.0 — that’s when you need to balance the water to where it should be by cleaning out the pond. Hertzman recently partnered with a colleague, which gives him access to two boats, equipped with algae-cutting grills to rebalance the pH levels in the water.

“That gives you instant, visual, positive results,” he says. “We clean it out, get rid of bulrushes and cut down the algae all the way to the bottom. After it’s cleaned out, you can see all that came out of pond.”

Once the dirt settles, Hertzman has a better view of what’s going on. At this point that he treats the pond with his chemical product. The final piece is to get more oxygen in the ponds, which is achieved by adding aerators. Hertzman says there are so many of these devices on the market now that some research should be done to find the correct aerator for the ponds in your course.

Ken Magnum, superintendent at The Atlanta Athletic Club, has 13 ponds on his property. As the home club of one of the most revered golfers in the history of the sport (Bobby Jones) and host of many major championships (last year’s PGA Championship being the latest), it’s crucial that these bodies of water look good on TV. All of them are in play in some form or fashion. Most have rock walls around the in-play areas, then use iris around edges to keep edges from showing because water levels fluctuate — these provide color and filter from anything running into the ponds. Members use the ponds to fish, so it’s important to be careful about what chemicals he puts into the water. Algae is Magnum’s biggest problem. He puts dye in the lakes to keep them dark and looking good for major championships, but he knows that this is only a short-term solution. Longer term, he says aerators have made the biggest impact.

“One of the best things we’ve done is added aeration and oxygen diffusers,” he says. “This cuts down significantly on the amount of chemicals we need to add to keep algae down. It’s amazing to see how much better the aerators make our ponds. Last year, we added aerators in three more lakes and it has taken what used to be a real problem lake and made it an occasional treatment lake.”

When chemicals are necessary, copper sulphate is the product of choice at the Atlantic Athletic Club, who hires a lake management company that performs these treatments once per month or more as needed.
At Atlanta Athletic Club, the addition of aerators have made the biggest impact on controlling algae and aquatic weeds.

Mangum has six lakes with aerators installed and he hopes to add an additional three or four this year if the budget permits. Aerators are also beneficial to the fish population in the club's lakes since they circulate more oxygen.

"Some of the ones that don't have aerators have fish that die of oxygen depletion," he reveals. "We have a lot of people that fish, so keeping up the fish population is important."

Robert Ackermann is new to the whole pond debate. The bodies of water at his course (Weston Golf & Country Club), in Toronto's west-end, are only three years old. The superintendent says, so far, he prefers to go au naturel – that is, when it comes to managing his ponds.

"My experience with ponds and keeping them clean is all natural," he says. "We use 15 hp pond aerators. One is placed in each of our two main ponds. This constant aeration, plus a three-meter depth, seems to work well."

In terms of other natural solutions, Ackermann hasn't stocked the ponds with any fish yet, but will look to add some this season. "Believe it or not there are already many that have found their way in," he says.

At the end of the day, Hertzman says it pays to hire a specialist like him who offers a pond management service that begins opening day and lasts for the whole season, continuously inspecting and maintaining the ponds as needed.

"I am specifically in the pond treatment business," he says. "I don't sell anything else, so as soon as a club hires me, I take responsibility for their pond problems. There is no question that a disgusting pond is a station for feeding every mosquito and bug there is, so in my option, there is no room for algae on golf courses." GCI

David McPherson is a Toronto-based freelance golf writer and regular GCI contributor.

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