

BY MARGARET HEPP

Wild blue yonder

In a green-obsessed industry, estate manager Scott Resetich has learned there's no green without blue

Pond management is a chore for many golf course superintendents, but for Scott Resetich, estate manager at Rich Harvest Farms in Sugar Grove, Ill., it's become a passion.

Resetich was in charge of all aspects of course maintenance when he started at ground zero at the 18-hole, 1,820-acre course 20 years ago. Since then, the facility has hired two turf managers, Jason Funderburg and Jeff VerCautren, allowing Resetich, who officially oversees horticulture and grounds activity, to make water quality his priority.

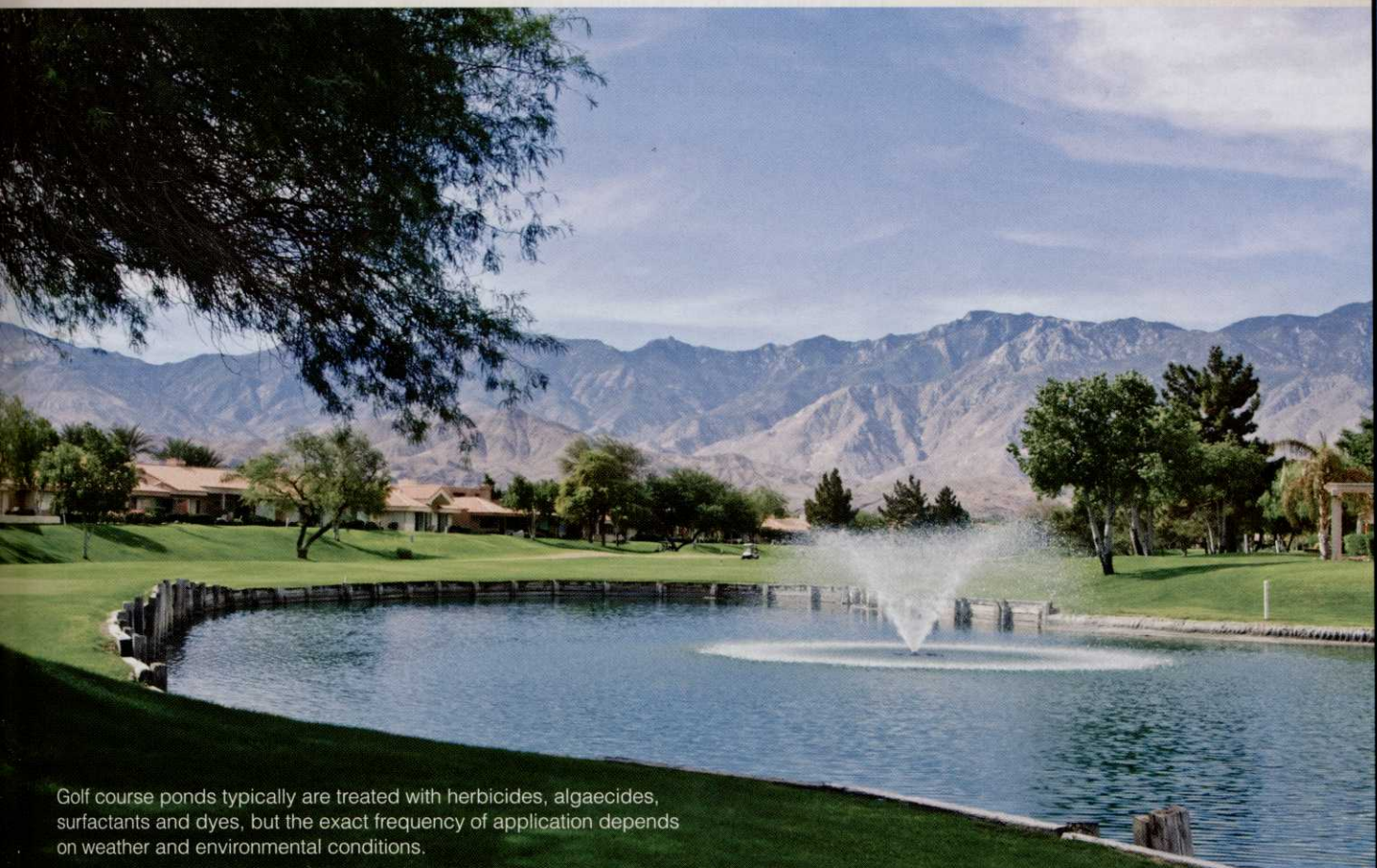
When you're new to pond management, practice makes perfect – and with 7 acres of on-course water under his care, Resetich gets plenty of practice. The course has three treatable lakes: Clyde, Katherine and the course's irrigation source, Rainbow. Resetich treats them about every 10 to 14

days with herbicides, algaecides, surfactants and dye. The exact frequency of application depends on the weather and environmental conditions.

"In 2007, we did quite a few applications throughout the season – the most ever," Resetich says. "It was rainy, and we didn't adjust water levels on two of our lakes."

Resetich sprays approximately equivalent concentrations to the 3.75-acre Lake Clyde and 1-acre Lake Katherine, but the 1.5-acre irrigation lake receives special treatment. For pesticide applications to Lake Rainbow, he reduces the concentration of Reward (diquat dibromide) and restricts other herbicides.

You have to be attentive to maintain a delicate balance, Resetich says, and you can't overdo it with pesticides, es-



Golf course ponds typically are treated with herbicides, algaecides, surfactants and dyes, but the exact frequency of application depends on weather and environmental conditions.

pecially when you're committed to Audubon standards. He stocks a thriving fish population in each pond, including large-mouth bass and trout in Lake Rainbow, plus hybrid bluegill, catfish, walleye, northern pike and muskie, so fish populations are another consideration when it comes to pesticide applications.

Consequently, Resetich has reduced aquatic pesticide quantities, using about 2 pints of the surfactant Aqua-Prep and between 48 and 64 ounces of Reward per lake application.

"Reward is a little more effective from a contact standpoint, and it works well on rooted vegetation," he says.

Curly leaf pondweed mainly affects the waters at Rich Harvest Farms, as do algae varieties hydrodictyone, photophora and spirogyra. Cutrine Plus (elemental copper) is systemic and works well to keep algae at bay, Resetich says. He uses an average of 3 gallons of the algicide per lake application.

After each pesticide application, Resetich sprays Precision Laboratories' True Blue, a dye he switched to from Aqua Shade (acid blue 9, acid yellow 23) almost seven years ago. Resetich was happy with the Aqua Shade dye but wanted to build on his relationship with his water management product distributor, Scott Armstrong of agriculture cooperative Conserv

FS in Tinley Park, Ill.

"Scott carries all the other pesticide products, so it was really a matter of convenience," he says. "I can call right now and place an order, and they'll drop it off this afternoon. It's service oriented. I can't beat that."

Precision recommends applying at least a gallon of dye per 4 acre/feet. Resetich applies as much as 2 gallons to Lake Rainbow and another 2 gallons to Lake Katherine. Lake Clyde receives 3 to 4 gallons of dye.

"Sometimes, I have to consider how high the water level is," he says. "I want as much of the shade as possible to ward off that algae growth."

Fluctuating water levels can affect the amount of algae in a lake at any given time, causing it to produce at even double the rate, Resetich says. Usually he can keep up with water management on his own, but when rapid growth requires more time than he can commit, he's able to reach out to a local aquatic management contractor, Marine Biochemists. Based in nearby Elburn, the company has sent a marine biochemist out to the facility for two treatments the past month.

"I can actually do my own in-house applications," Resetich says. "I've been handling pond management pretty much on my own for the last 20 years, but with all my priorities, I've had

contractors fill in for me periodically."

With such large lakes, water treatment can be quite an elaborate set-up, Resetich says. He goes out with another crewman in a 14-foot john boat with an 8-horsepower Johnson motor and a 4-horsepower chemical injector.

"It's a good four to six hours by the time you get your logging done and your cleanup finished," he says.

Maintaining the lakes on property is almost a full-time job, so in addition to Resetich and the two turf managers on staff, the facility keeps a 38-man, on-season staff during growing season. Labor is included in the facility's maintenance budget, which is about \$1 million.

Water management products also are part of the maintenance budget. The price of Reward increased recently to \$136 per gallon. Cutrine Plus costs about \$30 per gallon and True Blue is about \$39 per gallon.

"I get a small discount on aquatic products," he says. "But service is what's important to me. If I've got to pay a little more to have service at my fingertips, so be it."

Quality, not quantity, then, is Resetich's primary concern about pond management, and it's a mantra that's propelled the course through the Audubon certification process. The facility has one more project to complete before it's a Certified Sanctuary. The estate manager says he'll focus on this during the winter and then prepare for his next big project: hosting the PGA Solheim Cup in August 2009.

"During tournament prep, aesthetics become so important from a management standpoint," he says. "Medinah Country Club practically had a management team on site waiting to stay on top of algae in lakes, just for appearance, during the PGA Championship in 2006. We might be at the same point just to stay on top of it. Frequency will vary a little bit then. It'll probably stay about the same up until two weeks before, and then we'll watch it a little closer."

Resetich estimates 95 percent of golf courses with any kind of algae problems or vegetation will hire water-quality control out to contractors, and with the amount of effort involved, it's easy to see why. But Resetich only wishes he had more time to devote to his passion.

"If it was my choice, as a grounds manager, I'd prefer to do water quality – from stocking to algae control to overall aeration – over any of the other specialties, turf management or horticulture," he says. **GCI**



Many golf courses with an algae problem or vegetation will hire water-quality control out to contractors.

BY MARGARET HEPP

In limbo on the lakes

Two superintendents at Purgatory Golf Course suffer through scorching heat to keep on-course lakes under control

During the past year, golf course superintendent James Brown and his assistant Larry Wilk have been through hell at Purgatory Golf Course.

Opened in 2000 on 218 acres of land in Noblesville, Ind., the 18-hole facility has 16 total acres of water divided into five lakes. Last July, pond management jumped to the top of their priority list during a serious drought when one of the four major lakes on the course dried up. The trouble wasn't only the lack of water. As the lake depth plummeted, the algae population, thriving in the summer heat and shallow water, multiplied.

"The algae got to be about 8 inches thick," Brown says. "It wasn't pretty, and it smelled like a dead animal."

Fortunately, the lake was built on top of a pipe system. A pump was installed, and Brown

and Wilk were able to pump fresh water into the lake at several hundred gallons a minute.

"Without that fresh water supply, it was just a festering wound," Brown says. "But once we put another well in, the lake took care of itself."

This past spring, though, the lake couldn't manage itself. Brown and his crew usually take the month of January off, and when they returned to the course this February, they found one of their lakes entirely overgrown with aquatic weeds, mostly free-floating duckweed and watermilfoil.

"It was just a mess," Brown says. "We were unaware you could even get growth in the winter, but I guess it never stops."

Brown and Wilk consulted with local SePro representatives for crisis management. The course opens around St. Patrick's Day every



This winter, James Brown, left, and his assistant Larry Wilk, dealt with a lake overgrown with aquatic weeds, mostly free-floating duckweed and watermilfoil. Photo: Purgatory Golf Course

year, so with no way of knowing how long it would take to get the weeds under control, there was no time to lose. They purchased aquatic herbicide K-Tea from Advanced Turf Solutions and sprayed it right away.

"We put 5 gallons of K-Tea down, and it knocked the plants down immediately," Brown says. "Two days later, everything was gone. It was impressive."

Luckily for Brown and his crew, this past spring was a wet one, which kept plant growth at bay – but Brown and Wilk feel confident K-Tea will handle any aquatic plant growth. To apply the K-Tea, a two-person crew – one sprayer, one driver – uses a 13-gallon sprayer, which shoots about 8 feet, to target growth spots.

"I'd like to get a boat to be more deliberate," he says. "When you just go around the edges, you don't quite get everything."

Nonetheless, he says, his method of applying the herbicide is more effective than his prior technique.

"We used to get straight copper sulfate in bags and drive around on a Jet Ski to spread it in the water," he says. "There are all kinds of things

on the market for lakes, but the K-Tea works best for me."

The crew applies K-Tea as needed, and last summer's drought-afflicted lake – Brown calls it his problem child – is the most frequent recipient, with 2 gallons of herbicide per treatment.

Brown hopes to be able to devote more time and money to his pond management regimen. Purgatory's lakes cost about as much as one fairway to maintain.

"I like the idea of biological chemicals to control water," he says. "It's just a little pricey. I thought it was doable with our budget, but we spent about \$20,000 on the pump last summer."

So, for now, the crew applies Pond Champs black onyx dye every few weeks. Brown prefers the natural look of black water to bright blue, he says – plus, it's an effective way to control plant growth.

"If you can see a golf ball in the water, there's not enough dye," he says.

Aside from regular dye and as-needed herbicide applications, the crew's only other water treatment is an annual early spring application

of Sonar (fluridone) to the main and irrigation lakes. The crew applies slightly less of the systemic herbicide to the irrigation pond because of its "Caution" label, which is the lowest toxicity category from the U.S. Environmental Protection Agency. It's safe to irrigate with the herbicide in the water, but Brown and Wilk prefer not to.

Thanks to the wet weather, Brown anticipates they'll finish the season without any significant water management issues. The drought last summer was his biggest challenge in his 10 years at Purgatory.

"It was stressful for a lot of people in the area," he says. "Water was in short supply. I wasn't watering the driving range at all, and I had to let the greens on the driving range go."

This year, rounds are fewer than average, not just at Purgatory but throughout the Midwest. It's hard to catch up on what you lose in the spring, Brown says, but he strives to maintain the entire course under budget. With pond management, that means he has to forego some of the methods and applications he'd like to try.

"We're a high-end course with a relatively small budget," he says. "But there's lots of ways to skin the cat." **GCI**

Striving to maintain an entire course under budget, superintendents sometimes have to forego certain pond management applications, such as an herbicide or dye.

