

# New Cures for Pond Algae

## A look at the lineup

by Marcia Passos Duffy

One of the most troublesome problems with golf course ponds is algae. While algae is natural and occurs even in healthy ponds, an algae bloom that takes over a pond means the ecosystem is out of balance; the algae has outcompeted all other life forms in the pond.

Too much algae means that the oxygen supply in the pond is too low and the nutrients in the water are too high. Excess nutrients in golf course ponds are usually in the form of sediments and organic matter (fish feces, grass clippings, fish food, fertilizer runoff, leaves and other debris). This debris suffocates and blocks light from the oxygen-emitting, bottom-dwelling plants. The death of these plants leads to murky, "pea soup" water that is rich in nutrients (which algae thrive in).

### Tackling algae problems

There are many options for tackling algae in golf course ponds. Chemicals such as copper sulfate have traditionally been the way to get rid of an algae problem. While copper sulfate, which is a heavy metal and a registered algaecide, may be initially effective, it can have other consequences that lead to bigger problems, such as killing off other life forms in the pond. Copper also has the tendency to layer at the bottom of the pond along with the dead algae, causing more silt and inhibiting the growth of bottom vegetation, which can cause more severe algae problems in the long run.

New cures for algae problems are always on the horizon. There is no product that can be labeled a "natural algaecide" because of the EPA's restriction on the term, which means to "kill algae," says John Olson, chief executive officer of Graystone Industries, Inc., a Georgia-based nationwide distributor of garden pond and water

supplies and treatment ([www.graystoneindustries.com](http://www.graystoneindustries.com)). The company sells retail on the Web, but offers wholesale discounts and bulk quantities for landscapers and golf course superintendents who need larger applications.

Natural products, which are usually labeled as "clear pond applications," do not kill algae, but either change the chemical composition of the water to make it more difficult for algae to thrive or are a form of bacteria that eats the same decaying matter as algae and outcompetes the algae for food, explains Olson.

This year's new products range from a chemical algaecide that is less toxic than copper sulfate, new strains of bacterial controls, sonic treatments (using sound waves) and a way to physically remove algae from the surface of the water. Even an old-fashioned way of clearing water of algae is making a comeback: barley.

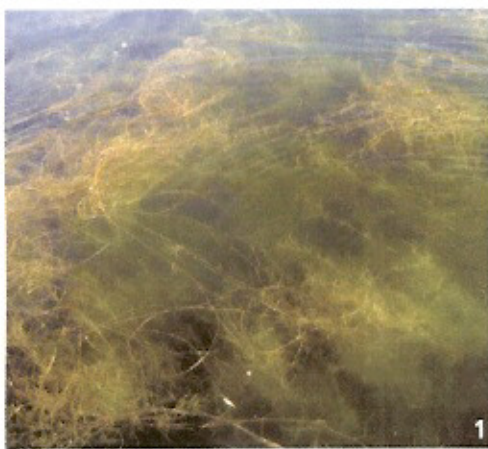
### The lineup

Sodium percarbonate is a chemical product that has recently undergone EPA certification as an algaecide under the name of PAK 27 ([www.peroxygensolutions.com/PAK27/PAK27.html](http://www.peroxygensolutions.com/PAK27/PAK27.html)). Sodium percarbonate is essentially an oxygenator, and the active ingredient in many household products, such as stain remover OxiClean. "It was previously sold as a rock and debris cleaner for many years," says Olson. "It is extremely safe, and dissolves and turns into oxygen," he says. The algae are killed and will float to the surface to be collected or netted off. Olson's company will be selling PAK 27 under the American Pond brand name; there will be other private labels for the chemical as well, including Green Clean. "This is truly a new use for a great product that will help golf courses rid ponds of algae," says Olson.

The IonGen Electronic Clarifier from Aquascape, Inc. has been in the testing

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PHOTOS COURTESY OF PRO-ACT BIOTECH



1. The pond before treatment.
2. Treating a pond with All Clear, which uses a blend of microbes to outcompete algae.
3. Three weeks after treatment.

## New Cures for Pond Algae

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phase for three years and was introduced January 2010. The system works with an existing pond filtration system to eliminate algae buildup. There is a microprocessor inside the IonGen that slowly releases a replaceable, self-cleaning metal probe that works to clarify the water, according to the company Web site. The IonGen Probe can treat up to a 25,000-gallon pond. The IonGen is safe for fish and plants and is not toxic to animals. For more information about the IonGen System, visit [www.aquascapeinc.com/](http://www.aquascapeinc.com/).

SonicSolutions' Algae Control device uses ultrasonic waves to control algae, says Kirk Whatley, national sales manager. While the product itself is not new, the company has upgraded the product to emit 79 different frequencies to eliminate more types of algae. "Some algae respond to some frequencies and not others," says Whatley. "The new product has an effect on a broader range of algae."

The device works by disrupting the algae's system to maintain buoyancy and float to the surface. "They starve to death," says Whatley. Other sonic frequencies work on other types of algae to disrupt the chemical bond that attaches to the cell of the algae, which, again, cannot eat or eliminate. The device has no

impact on other marine life in the pond, including beneficial plants and koi. The device can be powered by 10 watts of power; a solar power generator can be installed. It is registered with the EPA. Depending on the model, the SonicSolutions Algae Control device can provide coverage to up to 3 acres. The company offers free site plan assistance. Go to [www.sonicolutionsllc.com](http://www.sonicolutionsllc.com) to learn more.

An old-fashioned way  
of clearing water  
of algae is making  
a comeback.

All Clear, by Pro-Act BioTech, is a biological treatment that uses a blend of selected strains of microbes to compete with the algae. The company has designed a "bioblend" called All Clear specifically for golf course ponds

and began selling it in the summer of 2009. "Green water is a big problem with golf course ponds," says Bill Campion, president of Pro-Act BioTech. "Our [bioblend] feeds on the same nutrients that the green stuff uses. We don't kill it, but reduce its food supply. That limits [algae's] growth," he says. For more information, visit [www.proactbiotech.com](http://www.proactbiotech.com).

Pure Bacteria comes from OrganicPond.com, the makers of Clean, Clear and Blue (beneficial bacteria and pond dye) to help control algae. This spring the company launched Pure Bacteria, a blend of beneficial bacteria. According to a company press release, the company's customers have requested a bacteria-only product. A 1-gallon bottle can treat 326,000 gallons of water or a typical .25-acre pond. The company says its products are safe for people, pets, plants and the environment. To find out more, go to [www.organicpond.com](http://www.organicpond.com) online.

Aqua-T Biological Pond Treatment from Spindler Enterprises is distributed through Ecologel Solutions LLC. According to the Ecologel Solutions Web site, a new formula of Aqua-T contains a megadose (1.4 trillion per pound) of cultures that will reduce sludge, control odors and digest excess nutrients from the water. These cultures help boost beneficial soil bacterial populations. It is not an algicide and is ideal for recreation and irrigation ponds, including ponds receiving effluent

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water. It also reduces the level of turf-harming contaminants, such as ammonia, carbon dioxide, hydrogen sulfites and methane in the water. Call 800-988-8257 for more details.

Dubbed a "push broom for the water," the Parachute Skimmer is the brainchild of inventor Scot Weiss of Orlando, Fla. The skimmer, says Weiss, will clean the surface of a pond in a fraction of the time it would take with a traditional skimmer. The skimmer is pulled through the water and captures algae as it glides on the surface. "The Parachute Skimmer can be used in conjunction with other traditional methods of eradicating algae," says Weiss. For example, many biological and chemical control devices take time to take effect. In the meantime, you can clean up the pond with the Parachute Skimmer while you wait for the products to work. The product is already being used in several golf courses through Lakemasters, Inc., a firm that manages golf course ponds and water hazards for 400 Florida golf courses. A specially designed, 5-foot-wide, commercial-grade model specific for pond algae sells for \$150. For more details, visit [www.parachuteskimmer.com](http://www.parachuteskimmer.com).

Barley has been used by farmers for hundreds of years throughout Europe and the U.S. as a natural way to prevent algae growth. It works by changing the pH of the water, which makes an environment that is difficult



PHOTO COURTESY OF PARACHUTE SKIMMER

The Parachute Skimmer being used on algae in a pond.

for algae to grow. American Pond has the first pharmaceutical liquid extract-grade barley designed for algae control, Pond Liquid Barley Straw Extract, and 128 ounces treats 128,000 gallons of water. To find out more, go to [www.graystonecreations.com](http://www.graystonecreations.com) and click on "Pond Care."

One final addition is POWER Sludge Digester by Alumin-Nu Corp. This biological

solution accelerates the decomposition of leaves, scum and other organic ingredients. It is safe for fish, invertebrates and desirable aquatic plants. While it removes organic sludge, it will not remove inorganic solids, such as sand, clay or soils. Visit [www.aluminu.com](http://www.aluminu.com) to learn more.

*The author is a freelance writer from Keene, N.H.*

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Most country clubs have the luxury and budget to afford installing sophisticated bunker drainage systems for hundreds of thousands of dollars and, in most cases, spread out the project over two to three years before all bunkers are complete. After time, bunkers with drainage systems need very expensive maintenance and tweaking to perform at the level of their original installation.

In most cases, the bunker needs to be completely renovated after a 36 to 48-month period due to nature and gravity eventually coming into play with silt and soil buildup.

Up until three years ago (introduction of the BunkerBLASTER), the industry had few solutions to remedy this inevitable and constant problem course superintendents face throughout the year.

The most common and manual solution is a trash pump purchased at a Home Depot, Lowe's or Menards.

Unfortunately, the trash pump is not mobile and needs to be operated by two or three crew members.



This exercise often takes 1.5 to 2 hours per bunker.

Often crew members will carry the heavy trash pump into the flooded bunker in order for the trash pump to operate effectively.

Very cold and time consuming for the super's crew, but more importantly over the course of a full golf season very taxing on overall employee morale.



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BLASTER's virtual website will provide course superintendents' testimonials, product specifications and facts relating to performance and mobility.

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