

Historic trends should direct proactive pond maintenance programs

BY DAVID FRABOTTA

SENIOR EDITOR

t's not too early to think about pond maintenance. In fact, managing algae on a curative basis isn't as effective as programs that try to stave off algae bloom infestations while it's still cool.

"We recommend that you start in the spring using low rates of materials every two weeks, so it's preventive instead of curative," says Andy Moore, director of marketing and business development for Aquatrols Corp. of America. "Instead of fighting a fire, you're keeping it from sparking in the first place."

Although pond maintenance likely isn't a large part of superintendents' budgets, it can be done on the cheap if it's managed proactively.

"It only takes a few dollars an acre to stay ahead of it," says Greg Roman, account manager of the Southeast region for Novozymes Biologicals. "Once you have the algae, it not only becomes a nuisance and an eyesore, but it's a lot harder to get under control and more expensive to treat, so early spring is really a good time to be thinking about it."

Fortunately, superintendents probably know which ponds turn to pea soup in the heat of summer, which allows facility managers to focus on the most unsightly water areas based on what they looked like last year.

If you had a historical problem in a water area, then there's a good chance you'll be battling similar issues this year, sources say. And superintendents might not have the luxury of visual symptoms of a pond's health, either. Different algae can form below the surface.

"Filamentous algae will form at the bottom of the pond before floating to the top, but if you have a proactive management program, you can treat the algae with a chelated copper algaecide before it creates aesthetic problems," says Tyler J. Koschnick, Ph.D., aquatics research manager for SePRO Corp. "If the pond had submersed weed problems last year, consider doing some early season applications of some herbicide before the pond becomes filled with weeds again. If your weeds reach the surface in June, that means they were likely actively growing at least a month prior and at a level to be controlled."

While the general cause of algae blooms is nutrient runoff, especially phosphorous, water circulation and depth play important roles, as well as vegetation growth and aquatic wildlife.

"If you have some areas that are shallowing and silting in, then that makes it very hard to manage," Moore says. "Getting them dredged out and the shore lines cleaned up so they are not too gradual so the water gets down to that 3- to 4-foot level pretty quickly can help from a construction and design standpoint to keep algae from popping up."

Cleaning up the shoreline, knowing the pH levels and hardness of the water can help, too. Unfortunately, altering wetlands and some water bodies requires regulatory approval, so the process might not be entirely cut and dry. Weeding out the shoreline by hand might be the only option in regions or states with rigid regulations. Florida, for example, is very regimented because of its shallow water table.

"Partners include the local DNR (Department of Natural Resources) for environmental-quality resources; they are the first people to go to for compliance as well as licensing," says Joe Lara product manager for the horticulture specialties for Becker Underwood.

Local universities can identify the aquatic wildlife and determine what works best for the ecology of the system, Lara adds, and private applicators can be good resources either as consultants or independent contractors.

The regional differences make it important to consult professionals to determine a strategy for vegetation, fish, wildlife and appropriate algae levels.

"I like to get the biologists involved because there are certain things you are never going to get a handle on," says Gary Custis, research and development manager for PBI/Gordon.

The important takeaway is maintenance of water bodies requires a strategic plan instead of a knee-jerk treatment reaction.

"Think of your pond as a lawn," Koschnick says. "You don't mow the grass once a year and expect a nice healthy lawn. You fertilize, mow repeatedly, and do weed control throughout the year. Try going a couple of years with no weed control or only spraying one time late in the season. A pond needs similar attention as a lawn. Scouting for weed and algae problems and addressing them immediately are critical steps to successful maintenance."

Often, regional differences require professionals to determine the correct balance of fish, vegetation and algae levels.

