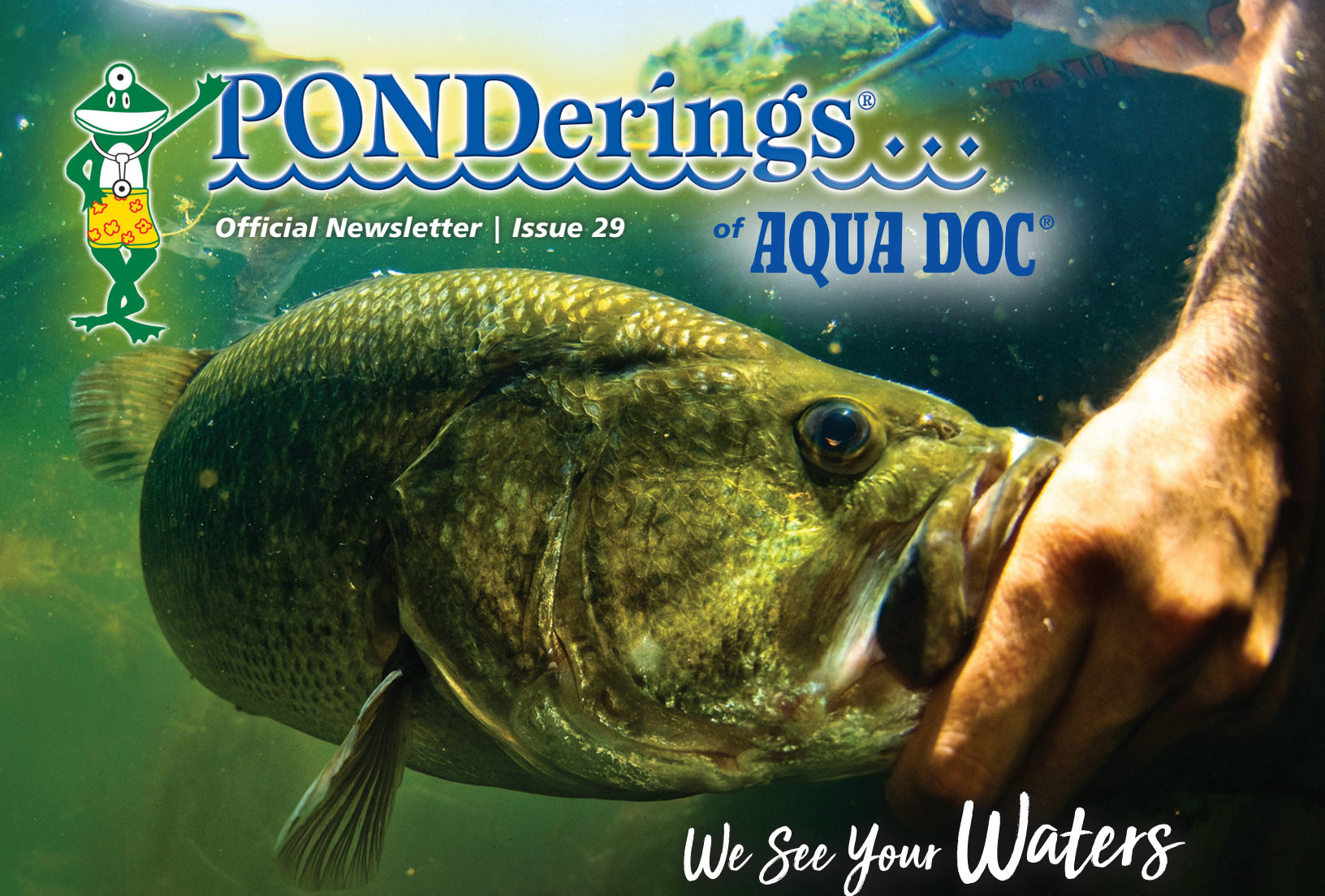
PONDerings®...
Official Newsletter | Issue 29
of AQUA DOC®



We See Your Waters from a Different Perspective

Sparkling Waters

Bob Lusk, Fisheries Biologist,
Bob Lusk Outdoors

From a window seat in the air, look down and see hundreds, maybe thousands of diamond-like sparkles dotting the landscape below. Ponds. Charming ecosystems teeming with life. Some are muddy, algae-covered puddles, while others are pristine-looking trophy fishing lakes. What's the difference between them? Some are managed, most are not. As landowners, we have choices. We are stewards of our land and water. Decisions we make today influence those parcels and puddles for years to come. You manage your checkbook. You manage your calendar. You manage your lives. You can manage your ponds, too. Is your favorite pond the best place to swim? Does it produce bragging-size fish? Late on a summer day, do you love to sidle up, sit in your chosen chair with a favorite beverage and just enjoy the pondside sunset? Or... is yours just another pond with too much of the wrong kinds of plants, fish that won't grow and a faint odor like a wet dog? Let me assure you... your pond can be much, much better.

(continued on page 2)

Sparkling Waters *(continued from page 1)*

Bob Lusk is known nationwide as the "Pond Boss." He has 30 years of professional pond and lake management under his belt, traveling the nation helping people design, build, stock and manage premier private recreational fishing lakes. He is also editor of the nation's leading pond management magazine, "Pond Boss." Reach Bob and subscribe to Pond Boss at www.pondboss.com

Managing your pond is an easy decision, too. Look at the value of well-managed ponds. Water is a natural resource we borrow. We don't own it, we don't keep it. We use it. When temporarily stored in a pond, water is ours to use and enjoy. Souls are soothed around water. Wildlife drinks it. The gurgling-stream sounds as it moves, the clarity, the mystery of plants and animals which live beneath give us a peace and serenity we are hard-pressed to find in our workaday worlds. Good water adds value to land as well. In my office, people ring our phones regularly, asking if we know of land for sale… with water on it. Well managed ponds often teem with healthy fish. Have you ever paid a fishing guide on a public lake or stream and watch him work hard for you to catch a limit? Your pond could provide as nice an experience… with better results and the inner satisfaction that it's yours. Better yet, how about those delectable grilled fish entrées at fine restaurants? Guess where those fish were before they hit the platter? Well managed ponds add value to land, surrounding wildlife, your menu… and, most of all, your soul.

It just makes good sense to manage ponds and lakes. They deserve it. Better yet, you deserve it. You change the oil in your car, you vacuum the carpets at home and you manicure the lawn. Manage your pond, too. There are a few fundamental things every pond owner can do. It doesn't have to cost a year's wages. First, learn as much as you can. Knowledge makes decisions much easier. Pond management starts with clean water. There are ways to keep it clean by what grows and accumulates in it. Or, you can literally move the water to keep it clean. That's a process called 'aeration.'

Next, think about the habitat under water and around pond's edges. Every pond is a living, breathing entity of its own. As goes its habitat, so goes what thrives within. You can influence habitat. Each and every pond develops its own food chain. Most ponds grow plants which feed insects which feed larger insects which feed small fish and so on… up the food web. You can improve the food chain.

Some aquatic plants are pleasant, some are not. Some are invasive, some live in harmony in the community below the surface.

Nature does what Nature does, until you come onto the scene to give it a humanly nudge. That's where your goals and wishes come into play. A pond is like a fresh palette, awaiting the brush strokes of the artist. You are the artist. Want a healthy ecosystem with native plants and clean water which attracts surrounding waterfowl… and maybe a few deer? How about a swimming hole like you dunked your little brother when you were kids? How about the best fishing hole in the county? You can do it.

Start with your goals, stir in some knowledge and then go to work. Need help? Call your favorite lake management experts like AQUA DOC and ask. That's why they are here… not only to teach, but to help nudge your waters to a healthier being. They'll raise the hood on your pond, check its oil, manicure its lawn or check the health of the fish that call it home.

Value? Absolutely. Managing your ponds adds to the value of life, extends a hand to Nature and brings value to the land… as you enjoy the fruits of these labors via the harmony you help create.

How to Use Nutrient Mitigation Strategies

Carter Bailey, Aquatic Biologist, AQUA DOC Lake & Pond Management Inc.

SeClear®

At AQUA DOC all of our management programs include the use of SeClear®, which is an algaecide combined with a water quality enhancer. We like this product because it strips phosphorus from the water column after every algae treatment. Without doing the proper water testing required for either a Recovery or Reset Solution with the use of Phoslock,® maintenance doses of SeClear® are a more sustainable option for your lake or pond. This product generally improves the efficiency of our algae treatments by also addressing elevated phosphorus levels within your lake or pond.

What is the right fit for me?

If you are willing to put the time and money into the water quality testing - Phoslock® can be a great long-term solution for your lake or pond. This type of strategy also generally comes with a higher price tag up front for the Recovery or Reset Solutions. SeClear® on the other hand offers greater performance as a maintenance product. These two options could be compared to your health in the form of dieting. SeClear® when used regularly is a constant improved change in your ponds diet, where as a one-time Phoslock® application is like fasting for a period of time and then having your pond go back to its regular diet. You can see why it is important to calculate properly when using Phoslock® in your lake or pond, whereas SeClear® rates can be adjusted throughout the growing season to hit targeted goals.

Phoslock®

Whole Lake or Pond Treatments:

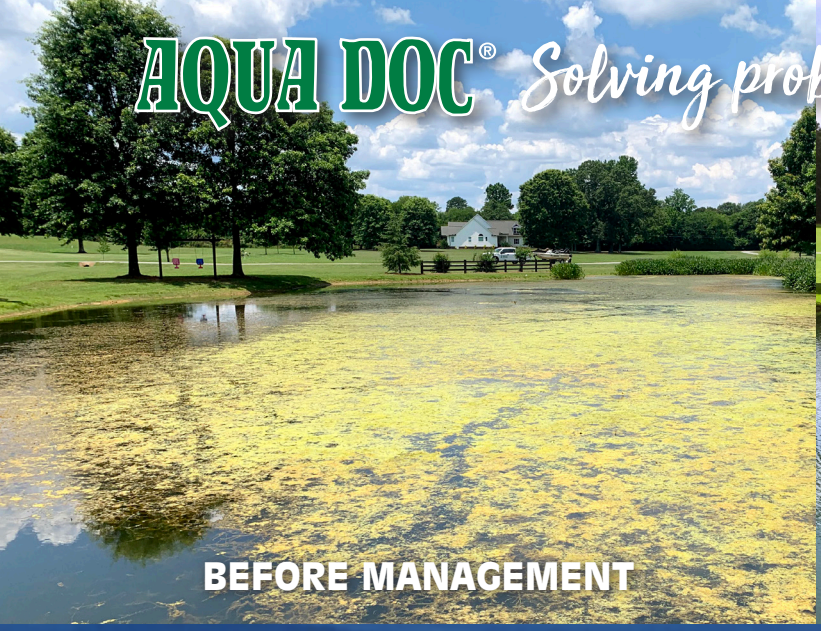
The best way to use Phoslock® is to do water quality testing to dose the product correctly. This involves testing the phosphorus concentration from your pond's water column and from its sediment. Once these numbers are determined an accurate dosage rate can be calculated. Typically, this sampling will lead to two dosage rates - a Recovery Solution and a Reset Solution.

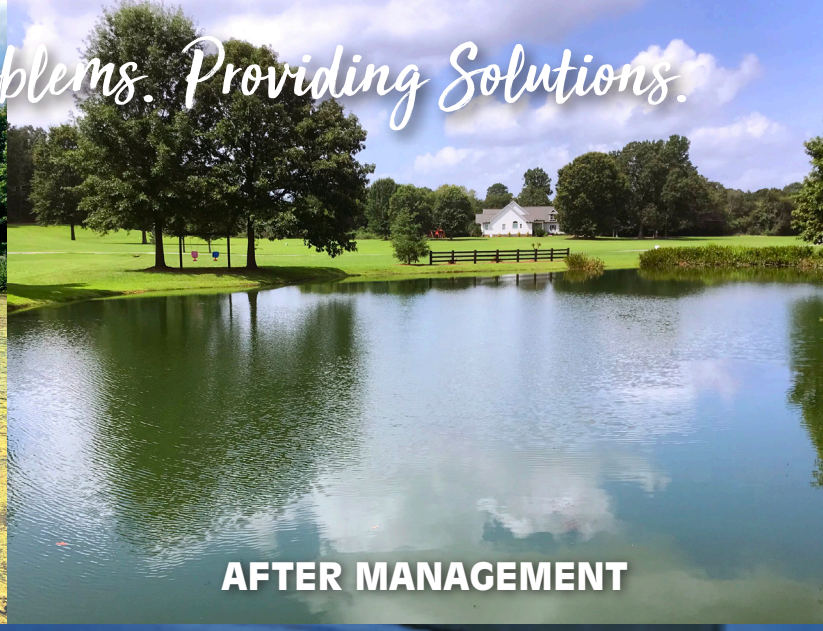
- The Recovery Solution is typically less product, at a dosage rate that is designed to mainly strip phosphorus from the water column.
- The Reset Solution is typically a higher dosage rate of Phoslock®, that will reset your pond to an earlier point in time at a lower trophic state. This solution will result in a significant increase in water quality and water clarity.

Shoreline Treatments:

Another treatment strategy with Phoslock® is known as the T.R.A.P. or Tactical Remediation Advantage Program, this is primarily used for combating shoreline filamentous algae by binding up phosphorus in shoreline sediments. The dosage rate is 2 bags (110 lbs) in a 1.0 acre pond, which treats about 10,000 ft² of shoreline area. This is typically applied to a shoreline band area in the springtime before nuisance algae growth becomes an issue or for newer customers, following the initial applications for algae control.

AQUA DOC® *Solving problems. Providing Solutions.*





Is Liming the Right Fit for Me?

Grant McDonald, B.S. Wildlife and Fisheries Management, Clemson University

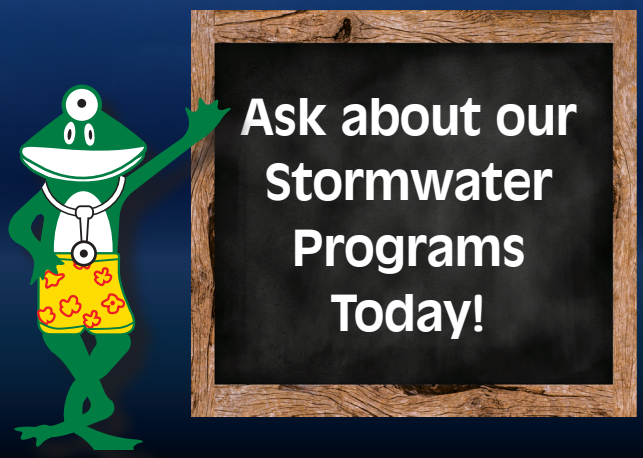
Many lake and pond owners often struggle with this question. There is an abundance of information on the internet about this topic, however many of the concepts surrounding the use of lime are often confusing and difficult to understand. The short answer is, "well it depends." The background water chemistry of your lake or pond will often indicate whether lime is an effective management tool or not. In many cases, adding lime can be used to improve the health and productivity of a lake or pond, but if the background water chemistry indicates a desirable pH and high buffering capacity than it may not be necessary.

Lime, sometimes known as agricultural lime, is crushed or pulverized limestone which is primarily comprised of calcium carbonate. It is commonly used in products such as plaster, mortar, concrete, chalk, and even in antacid heartburn medications. The ultimate goal of liming is to increase alkalinity. Alkalinity is the measure of dissolved carbonate, bicarbonate, and hydroxide ions- in the water. These are important because they stabilize the pH of your water, making the water chemistry less susceptible to shifts from basic to acidic or vice versa. This is commonly referred to as your water's buffering capacity. By maintaining elevated alkalinity levels and increasing your water's buffering capacity, lake managers are able to keep your lake or pond in balance eliminating detrimental pH fluctuations.

The natural plant processes of photosynthesis and respiration can cause dramatic changes in pH throughout the day and night cycles. Adding lime will reduce these large changes and create a more stable environment. A stable pH will also increase the availability of nutrients to phytoplankton, and make fertilization programs more effective. Phytoplankton make up the foundation of the aquatic food web, increasing their levels to a desirable range will improve both productivity and fish growth.

In lakes or ponds that are nutrient poor, this can be especially useful to increase fish growth and abundance for sport fish management.

To know if you need to add lime to your body of water, a water quality test should be conducted to determine alkalinity, hardness, and pH levels. Generally speaking, lime should be added to ponds when the alkalinity is below 20 parts per million (ppm). This is best done in the late fall or winter, well before fertilizing, to allow time for the lime to react with the pond bottom. In ponds with little water flow, the effects of liming should last several years; however, waterbodies with high flow rates may require annual liming to maintain alkalinity levels. Alkalinity, hardness, and pH levels should continue to be monitored to best determine future liming needs. Overall, liming is a good solution for waterbodies with low alkalinity. By increasing a pond's buffering capacity, we can improve the health and productivity of your waterbody including both increased fish production and growth rates.



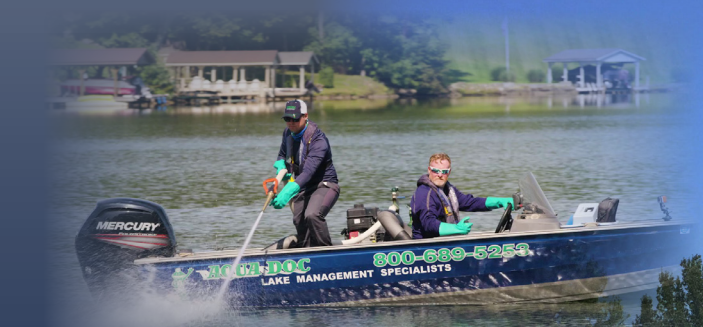
AQUA DOC®

LAKE & POND MANAGEMENT

Enjoy Your Lake or Pond... THIS Year!

PROVIDING THESE OUTSTANDING

AQUATIC SERVICES



Algae & Aquatic Weed Control

Bottom Diffused Aeration Maintenance

Fountain Installation & Repair

Shoreline Renovation

Watergarden Installation & Maintenance

Fish Stocking

Lake Studies

Dock Installation

New Construction

aquadocinc.com | 800.689.LAKE (5253) | info@aquadocinc.com