



# PONDerings®

Official Newsletter | Issue 36

of **AQUA DOC®**

## Technology Transforming Lake & Pond Management: Smarter Tools for Healthier Waters

### A DAY IN THE LIFE OF AN AQUATIC SPECIALIST WHAT'S NEW?



Original article by Allison Schultz, Regional Manager, with additional technology commentary by Jeanine Wilson, Owner, both from AQUA DOC Lake & Pond Management

As an Aquatic Specialist at AQUA DOC, one of the questions I hear most often is: "What do you do every day?" The simple answer is that we protect, manage, and restore freshwater resources — but there is much more to the work than meets the eye.

#### TRAINING & DEVELOPMENT

Whether new to aquatics or coming in with a background in biology or environmental science, every team member begins with AQUA DOC University (ADU). ADU provides training in limnology, aquatic ecology, product use, and customer service. In the field, our two-person team model ensures safety and helps technicians learn quickly while collaborating with Aquatic Biologists and management to create effective solutions.

#### DUTIES & RESPONSIBILITIES

Managing nuisance algae and aquatic plant growth is a core responsibility. Aquatic Specialists identify plant and algae species, select appropriate products, apply treatments safely, and monitor lake and pond conditions throughout the season. We also provide guidance on fountains, aeration, nutrient mitigation, fisheries management, and stormwater maintenance, helping customers understand the best practices for long-term water health.

#### TEAMWORK & GROWTH

One of AQUA DOC's greatest strengths is its diverse team. People from different backgrounds, experiences, and interests all share a common goal: protecting freshwater ecosystems. This shared mission fosters strong teamwork and professional growth.

#### WHAT'S CHANGING — AND WHAT'S NOT

Some things remain the same — our commitment to excellence, safety, teamwork, and environmental stewardship. But the tools we use have evolved.

*(Continued on page 2)*

 **Let's Talk Water**

Enjoy your lake or pond this year! **800.689.LAKE (5253)** [aquadocinc.com](http://aquadocinc.com)

Today's Aquatic Specialists utilize state-of-the-art technology, including:

- Remote-control brush hogs for safe and efficient shoreline and embankment clearing.
- Real-time water quality monitoring equipment using cellular technology to track key parameters 24/7.
- Drones for mapping, monitoring, and targeted applications, providing precise aerial imagery, faster assessments, and the ability to apply select treatments with unmatched accuracy.

These innovations help us work more safely, efficiently, and proactively than ever before.

### THE BIG PICTURE

Every season brings new challenges — invasive species, water quality concerns, and harmful algal blooms. But watching a waterbody transform over time and seeing customers' goals realized is incredibly rewarding. AQUA DOC's dedication to innovation and environmental care ensures we continue leading the way in conserving freshwater resources, one lake and pond at a time.

**We work full time on Lake and Pond Management, so you don't have to!  
Call Today 800.689.LAKE (5253)**

## Nutrient Mitigation for Cyanobacteria Control

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

Cyanobacteria are a diverse group of microscopic bacteria that live in water and photosynthesize like plants or other algae. They are often referred to as "blue-green algae" because dense growth can turn your water an unsightly blue-green color. They are technically not a "true algae" but rather a form of bacteria, and as if this couldn't get any worse, many of these cyanobacteria can produce cyanotoxins that are harmful to humans and wildlife. There are many things we don't know about cyanobacteria, but one thing we do know is that they tend to thrive in high-nutrient waters.

By preventing or, in many cases, fixing nutrient issues, we can stop the formation of toxic blue-green algae blooms, also known as Harmful Algal Blooms (HABs). The collection of basic water-quality tests allows AQUA DOC to calculate an appropriate nutrient budget for your lake or pond and to provide a reset dosage to restore it to a previous state of functionality. Nutrient mitigation can take many forms, basically any technique that prevents either internal or external phosphorus loading, but for this article, we are mainly going to focus on using in-lake flocculants to restore your water quality.

In recent years, many treatment technologies have entered the market to help water resource managers adopt this more comprehensive (nutrient mitigation) approach toward fighting HABs. These products include MetaFloc<sup>®</sup>, EutroSORB<sup>®</sup> Technologies, and Phoslock<sup>®</sup>, among others. By using a nutrient mitigation strategy, you can deprive cyanobacteria of their food source and prevent their growth by starving them out. This typically leads to other beneficial algal types and to an overall better-functioning, well-balanced ecosystem. A reset dosage by AQUA DOC can be used on both large and small bodies of water and provides up to 10 years of nutrient mitigation, ensuring long-lasting results. Be sure to talk to your Aquatic Specialist about a more diagnostic approach to cyanobacteria control.



*Learn more*  
about lakes and ponds  
on our website!



**AQUA DOC**® *Solving problems. Providing Solutions.*



**BEFORE MANAGEMENT**

**AFTER MANAGEMENT**

## Telemetric Water Quality Sensing Equipment Helps Monitor Lakes

Edward Kwietniewski, Limnologist, AQUA DOC Lake & Pond Management

The collection and analysis of water quality information is essential to the success of long-term lake and pond management. Just as a doctor collects information on your health to guide decisions regarding your body, water monitoring allows pond and lake experts to create informed decisions on a proper management plan for your waterbody. Traditional water quality monitoring typically involves a visit from a specialist to your waterbody to collect relevant information and analyze it later. This unfortunately leaves gaps in our understanding of your waterbody since collected data is only relevant to the time it was collected. Additionally, repeated visits to fill these gaps could become problematic when the costs for these visits stress the available budget for lake and pond management. Unfortunately, lake and pond health insurance does not exist to help alleviate these costs.

AQUA DOC is excited to partner with a company leading the way in live water quality monitoring technology cutting-edge software programming conjoined with small-scale telemetric buoy systems. Although telemetric water quality monitoring has been around for a while (especially on large bodies of water like the Great Lakes), the technology has traditionally been under-utilized for smaller inland lakes or larger ponds. However, with modern improvements to this technology's hardware, we now can offer 24-hour monitoring of our lake clients' most important health indicators. Deploying a buoy into your waterbody can allow us to remotely monitor an incredible amount of data through a wide array of different sensors that can be customized to individual water quality needs. Information is telemetrically sent directly to a computer-hub without the need for trips out to the lake to sample. This game-changing technology allows for a live stream of data sent directly to us and allows us to gauge your lake or pond's health in real time.

The platform, along with the availability of expert biologists and limnologists at AQUA DOC to help analyze incoming data, is a perfect match. As a limnologist and Certified Lake Manager (CLM) myself, I am personally excited to be able to use a platform that allows me to set real-time management thresholds with my clients while also being able to take a proactive approach to ensuring their lake remains safe all year long. It is an exciting time to be able to utilize technology like this with our clients at AQUA DOC.



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY MAIL**

FIRST-CLASS MAIL PERMIT NO. 174 CHESTERLAND OH

POSTAGE WILL BE PAID BY ADDRESSEE

AQUA DOC LAKE & POND MANAGEMENT  
PO BOX 625  
CHESTERLAND OH 44026-9905





# AQUA DOC®

LAKE & POND MANAGEMENT

10779 Mayfield Road  
Chardon, Ohio 44024

800.689.LAKE (5253)

PRSR STD  
U.S. POSTAGE  
**PAID**  
CLEVELAND, OH  
PERMIT 362

OHIO | GEORGIA | ILLINOIS | INDIANA | KENTUCKY | MICHIGAN | NORTH CAROLINA  
PENNSYLVANIA | SOUTH CAROLINA | TENNESSEE | VIRGINIA | WEST VIRGINIA

## PROVIDING THESE OUTSTANDING AQUATIC SERVICES



Algae & Aquatic  
Weed Control



Fountain  
Installation  
& Repair



Bottom  
Diffused  
Aeration



Dock  
Installation



Fish Stocking



New  
Construction



Water Garden  
Installation &  
Maintenance

Stormwater  
Maintenance

Lake Studies

If you have a Lake or Pond **PROBLEM**, .AQUA DOC has the **SOLUTION!**



### FREE ASSESSMENT/CONSULTATION!

Please schedule my **FREE** consultation!

- |  |  |
|--|--|
| <input type="checkbox"/> Algae or Aquatic Weed Control     | <input type="checkbox"/> Fish Stocking/Fish Survey                             |
| <input type="checkbox"/> Floating Fountains                | <input type="checkbox"/> Docks   |
| <input type="checkbox"/> Diffused Aeration System          | <input type="checkbox"/> Water Quality Analysis                                |
| <input type="checkbox"/> Cattail or Emergent Plant Control | <input type="checkbox"/> Lake Study  |
| <input type="checkbox"/> Stormwater Maintenance            | <input type="checkbox"/> Please send me a <b>FREE</b> catalog of Pond Supplies |



Maddie and Johnny Wilson Update

Johnny Wilson III:  
AQUA DOC Lake & Pond Management,  
Sales & Business Development

John M. Wilson Jr.:  
President of AQUA DOC Lake & Pond Management

Maddie Wilson:  
Head Coach Hiram Women's Lacrosse

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_ Date: \_\_\_\_\_

1-800-689-LAKE (5253)  
aquadocinc.com

