



A North Carolina Non-Profit, 501c3, Volunteer organization advocating for the treatment and control of algae and the revitalization of Badin Lake.

- We ***clean*** by killing and removing the algae
- We ***restore*** by planting native grasses
- We ***preserve*** by educating and encouraging community conservation

Treatment Methods

- All water and shoreline treatments must be licensed and approved by numerous state and federal agencies and those charged with maintaining the lake and shoreline.
- We have actively pursued various methods of controlling algae with regulators and found:
 - Algaecides and pesticides – **Approved**
 - Mechanical harvesting – **Not approved**
 - Grass carp – **Approved, but does not eat lyngbya**
 - Nano Bubble Oxygen Technology (NBOT) – **Not approved**
 - Ultrasonic Wave Frequency – **Not Approved**

ALGAECIDES ARE THE ONLY APPROVED OPTION

Findings of N.C. State Labs

- NC State University Labs and the NC Department of Environmental Quality have been piloting various algaecides on Lake Gaston for over 5 years.
- Similar algaecide programs have been conducted on Badin Lake and Lake Norman for the past 3 years.
- Conclusion: A specifically engineered chemical, Captain XTR + AMP, has the best results in killing the algae and protecting the eco-environment after 6 treatments a year for 4 years during the spring and summer months.

Facts About Copper

- Copper is in our bodies and is essential to overall good health
- Foods with highest copper levels are oyster, beef liver and shitake mushrooms
- Copper sulfate has been used effectively since 1904
- Excess levels of copper sulfate can be dangerous, like any overused chemical.
- Due to its strength, alternative products to copper sulfate have been developed and are proven safe and effective

Captain XTR + AMP

- Chelated copper is copper that is coated. Similar to the covering of an M&M candy.
- When applied to the water, the chelated copper adheres to the algae and allows the copper to penetrate. This permits longer contact with the algae and reduces the amount of copper needed to kill the algae.

Comments about Captain XTR + AMP and Current Treatment Programs Managed by NCSU

- "When used in accordance with the manufacturer's guidelines, there are no restrictions on waters treated with Captain XRT. Waterbodies receiving this treatment may be used for fishing, swimming, and irrigation both during and after application." *Estate Management Services, a Water Science Company*
- "This formulation treatment is especially impactful when targeting tough-to-control mat-forming, colonial, and mucilaginous species." *Cygnets Enterprises, a Water Management Company.*
- "When comparing efficacy of the combined features of Captain XTR + AMP, it had a greater reduction in overall filament health." *From a published paper of the NCSU Aquatic Plant Management Program, December 2023.*
- "Lyngbya within Lake Gaston is currently being successfully managed under a chemical treatment program." *From a published paper of the NCSU Aquatic Plant Management Program, December 2022.*

Comments about Captain XTR + AMP and Current Treatment Programs Managed by NCSU

- “These results indicate that similar chemical control programs can be implemented at Badin Lake and Tuckertown Reservoir and work equally well to reduce the viability of *lyngbya* in these systems.” *From a published paper by the NCSU Aqua Plant Management Program, December 2022.*

How Will This Work?

- Our first phase will treat up to 14 acres of water surface area starting in June of 2025.
- Treatments will last 3-4 years.
- There will be 6 treatments each year from April to September
- A small John boat will use a hose to apply the formula into the water
- The formula is Captain XTR with an additive, AMP, which adheres to the algae, allowing the Captain XTR better penetration and uses less algaecide.
- There are no time restrictions on people or animals entering the water after an application.
- Safe for all aquatic life, people, and pets
- Safe for those who use the lake to water their grass.

How Will We Fund This Program?

- Because of the time constraints of introducing RBL to the Badin Lake community, the lake residents of Uwharrie Point and Heron Bay will carry most of the burden until other donations can be secured.
- Grants or government money are only given to approved projects. 2026 is the earliest we can expect to apply for those funds.
- We will communicate with the HOAs, have newspaper articles, and use other methods to attract funds from the greater community of residents, businesses, and government.

Is This a One-Time Donation?

- No. This is a multi-year program, with annual donation support needed.
- While we expect positive results, NCSU has concluded that 6 treatments per year for 4 years are needed.
- Phase I will cover 14 acres, but 25+ acres will need coverage in future years, just in Heron Bay and Uwharrie Point.
- Treatment areas will be phased in as money is raised.

Treated Areas - Heron Bay 4.57 Acres



Treated Areas - Uwharrie Point 9.35 Acres



Donation Request- Heron Bay

- | | |
|--------------------------------------|---------------------|
| • Waterfront, when treated | \$750 annually |
| • Waterfront when not treated | \$200 annually |
| • Non-Waterfront lots | \$200 annually |
| • Community boat slips | \$200, when treated |
| **Waterfront lots with private docks | No boat fee |

Donation Requests- Uwharrie Point

- | | |
|--------------------------------------|---------------------|
| • Waterfront, when treated | \$750 annually |
| • Waterfront when not treated | \$200 annually |
| • Non-Waterfront lots | \$200 annually |
| • Community boat slips | \$200 when treated. |
| **Waterfront lots with private docks | No boat fee |

What We Know

- This is the only approved option.
- Left untreated, our shorelines and coves will die.
 - Mats will continue to grow, adding more toxins to the water.
 - Algae smother the grass that produces the oxygen for fish and all aquatic life.
 - Without fish and birds, wildlife will leave the area.
- Every year, 2-3 lakes in NC are closed by the Health Department because of too much toxic algae. Signs are posted DO NOT ENTER.

DON'T LET THIS HAPPEN TO BADIN LAKE

Next Steps

- Donations are open NOW.
 - Please indicate your commitment today on the form.
 - We need to know how much product to order for June.
- Announce the program to the community (meetings, newspapers, radio, etc.) and collect donations.
- Everyone needs to spread the word to support and donate.
- Not everyone will give, so those who want to support above the recommended amount are greatly appreciated.

YOU CAN MAKE THIS HAPPEN!

How To Give

- Give Online at www.restorebadinlake.org
- Mail check to: Ed Quinlivan c/o Restore Badin Lake, 301 Millingport Lane, New London, NC 28127
- Drop off your checks at the Guardhouse at Uwharrie Point.