Lakes Association Answers Your Questions

In an effort to promote a better understanding of the Big Chetac and Birch Lakes Association, what it does, and what it hopes to do, here are the answers to some frequently asked questions.

1. What is the Big Chetac and Birch Lakes Association?

The Big Chetac and Birch Lakes Association is a not-for-profit volunteer organization that was formed in 1995 to maintain, protect and enhance the water quality of Big Chetac and Birch Lakes. We have worked on many things, including:

- Purchasing, placing and maintaining buoys
- Building and placing fish cribs and raising funds to stock the lake with walleye
- Reviewing rezoning requests to make sure they will not harm the lake
- Water clarity testing and sponsoring water quality research
- Working with the DNR and with other Lake Associations

For the last eight years the Association has raised and spent more than $100,000 in grants and donations to determine why the lakes' water quality is worsening and if there is anything that can be done about it. With funds from the DNR and Association members, we have begun to take action in hopes of improving the water quality.

2. Who are the members of the Lakes Association?

The members include full-time local residents who live on and off the lake, part-time residents of the area, and people who have lived in or visited the area in the past and still visit regularly. Anyone can join the Lakes Association. Annual memberships are $20 for an individual or $35 for a family. New members are always welcome.

3. Does the Lakes Association have a website?

Yes. You can find out about all the things the Lakes Association is doing by visiting the website at www.bcabla.com

4. Can anyone attend a Lakes Association meeting?

Yes! Monthly public meeting are held at 9 a.m. in the Birchwood Village Hall one Saturday a month from April through September. Meeting dates are posted on the website. Everyone is welcome at the meetings, whether they are members or not.

5. Is it true that the Association is trying to get rid of the "Green" in the lake?

Absolutely not. In 2007, a poor choice was made in naming our research project "Getting Rid of the Green." We hired Short Elliott Hendrickson (SEH), a natural resource and environmental consulting firm, to determine why the lake was excessively green and why we had toxic blue/green algae blooms in the heat of the summer. It was not our intent then, nor is it now, to eliminate the green. The SEH study reads, "The study was designed to determine the causes of nutrient enrichment in the system." See report at: http://bcabla.com/lake-management-plan-and-related-studies.html .

6. *Why was SEH hired?*

SEH was hired to find out what was causing the lakes' water quality to decline and whether there was something the Association could do to help. The fear that the lakes' water quality was getting worse was one shared by Association members, area residents, and visitors to the area. Many expressed concern that continued decline in the water quality could result in fewer tourists returning year after year, and a corresponding decline in our local economy. Hiring SEH was a response to those concerns. Per Dale Olson, Sawyer County Zoning and Conservation, generally the water in Big Chetac reaches toxic levels every year. That means that generally there are times each year that people should not be swimming in the lake and animals should not be drinking from it.

7. *Why is the lake green?*

Big Chetac has too much phosphorous (a nutrient), which feeds the algae. The more phosphorous, the more algae, and consequently the greener the lake is.

8. *Where does the Phosphorous come from?*

69% Existing sediment on the lake bottom
15% Curly Leaf Pondweed (an Aquatic Invasive Species) annual die-off
6% Tributaries feeding into Big Chetac
4% Groundwater
4% Atmosphere
1% Failing septic systems
1% Un-motorized watershed and near-shore (from shoreline back 200 feet)

See Page 10 of the SEH Nutrient Loading Report: http://bcabla.com/lake-management-plan-and-related-studies.html. Read the full report for a complete description.

9. *The lake has been green for many years. Why is it a problem?*

The lake has been green as far back as records go. The green alga is not a problem. However, the Blue/Green Algae blooms that appear in the heat of summer are toxic. Blue/Green Algae is dangerous. The Association's goal is to minimize or even perhaps eliminate Blue/Green Algae blooms, making the lake healthier and more appealing for everyone.

10. *What can be done to reduce the amount of phosphorous in the Lake?*

The two largest contributors to phosphorous release in the lake are existing sediment and Curly Leaf Pondweed (CLP) die-off. CLP die-off adds to that sediment layer every year. To reduce the phosphorous levels in the lake we can:

a. Reduce the amount of phosphorous being released from the sediment already in the lake or trap it so it cannot release phosphorous into the water.
b. Reduce the CLP in the lake, which will also reduce what gets added to the sediment.

11. How will the Lakes Association use the information from the SEH study and the money it has received from grants?

The Lakes Association's approach is to address the two primary factors contributing to the excess phosphorous in the lake (sediment phosphorous release and CLP die-off) by doing the following:

Sediment Phosphorous Release

- A study on the effectiveness, duration of benefit and cost of using ALUM to lock the phosphorous in the existing sediment at the North end of Big Chetac (42% of the phosphorous release comes from the North end of the Lake).

Curly Leaf Pondweed (CLP) Management

- Use of Aquathol K (an aquatic Herbicide) to treat CLP in selected areas
- Pre and Post Testing of treatment areas
- 300 Hours per year of manual hand-pulling of CLP (manually weeding)
- Plant native plants in areas where CLP is eliminated (starting 2014)
- Monitoring the lakes for new aquatic invasive species (AIS) infestations and reporting results
- Educating lakeshore property owners and lake users on the nature of the problem and how their actions can hurt or help the lake
- Clean Boat Clean Waters program to educate boaters on the importance of cleaning boats and trailers before putting their boats in any body of water. Cleaning boats and trailers prevents aquatic invasive species (such as CLP, Eurasian Milfoil, and Zebra Mussels) from "hitchhiking" their way into our waters. This program is a joint venture between the Lakes Association, Birchwood Schools and Edgewater Township.

12. What has the Lakes Association been doing since SEH completed its study in 2010?

Based on what was learned from the SEH study, the Association, with the help of the DNR, developed a formal lake management plan. We applied for and were awarded three DNR grants. It took several years to accumulate the funds needed to implement SEH's recommendations. We are now in the implementation phase.

13. Is it safe to use Aquathol K to treat Curly Leaf Pondweed?

Yes. Aquathol and Aquathol K (granular and liquid Aquathol) are the DNR-approved products for treating CLP. The DNR controls the concentration of the chemical and when and how it is applied. In 2012 the DNR issued more than 460 permits for the treatment of AIS's in Wisconsin lakes. This chemical is used throughout the country for the safe and effective treatment of CLP and other aquatic plants. The full product label for Aquathol K can be found: http://www.cdms.net/LDat/ld195009.pdf . See page two of product label for use restrictions.

14. Are there any restrictions on swimming in the water or catching or eating fish after treatment?

No. Immediately after Aquathol K is applied, you can swim, ski, or anything else you want to do in the water (not that many people swim or ski in 50 to 60 degree water, but they certainly can). There are no restrictions on catching or eating fish immediately after treatment: none what so ever.

15. What restrictions are there for Aquathol K?

Per the product labeling (see page 2 of label) : The only restriction is on the water *in the treatment area*. At the dosage used on Big Chetac, the treatment area restriction is on drinking the lake water or taking water from the lake to water your lawn, plants or crops for 7 days. Again, the restriction is *only* for the area being treated. Approximately 90 acres of the north part of the lake (in front of 25 property owners' land) were treated in May 2013 with an Aquathol concentration of 1.5 parts per million.

As soon as the Aquathol is applied, it begins to dilute as it mixes with the lake water. Water movement causes it to dilute faster. The seven day waiting period is to insure the dilution has dropped below the .5 parts per million. When using a 1.5 parts per million application, the actual time it takes to dilute to below .5 parts per million can be less than the 7 days. Again, the restriction is only for those properties *directly adjacent* to the treatment area and only on drinking the lake water and watering plants/crops and lawns with it. There are no restrictions on swimming or catching and eating fish at all. See page 2 of the Product Label: http://www.cdms.net/LDat/ld195009.pdf .

16. Are other lakes using Aquathol K to treat CLP and other invasive plants?

Yes. According to Scott Van Egeren, the Lake and Reservoir Ecologist for the Wisconsin Department of Natural Resources, the DNR issued 462 plant-control permits for herbicide treatment in Lakes (plus another 600 for use in private ponds) in 2012. As of June 5, 2013, the DNR has issued another 372 permits to be used in Wisconsin lakes in 2013. In our immediate area, it is being used to treat CLP in the Red Cedar Lakes Chain, Long Lake and Rice Lake.

17. Why not use mechanical harvesting instead of chemicals to treat CLP?

The Lakes Association initially considered harvesting, but determined it was much more costly and less effective than Aquathol K and could potentially cause more problems. As explained by the DNR: *Mechanical harvesting is very expensive and requires purchase or rental of a harvester. Renting a harvester is difficult since other lake groups are also harvesting CLP. Harvesters are hard to clean and can transfer aquatic invasive species from one lake to another. A harvester removes only the top part of the plant, allowing the plant to form turions where new plants can grow below the harvested area. Chemical treatment kills the entire plant before it can form turions. Manual removal/raking also removes the entire plant.*

18. How are the activities of the Lakes Association being paid for?

The grants received from the DNR cover between 65% and 75% of the costs. Lakes Association members are covering the rest of the costs through cash donations and volunteer time. The AIS treatment grant and clean-boats-clean-waters grant run for three years. At the end of that time the Lakes Association will apply for additional grants and members will continue to make up the difference.

The Lakes Association asked Edgewater Township to for a portion of the township's Power Line Settlement funds that the township is required to use for environmental issues. The Township committed $8,000 to the Association as long as the funds were *not* used to pay for Aquathol K treatment of CLP. The monies will be used to fund scholarships for the Birchwood Schools volunteers who monitor boat landings as part of the Clean Boats Clean Waters program.

19. Who should I contact if I have questions about what the Lakes Association is doing?

Please feel free to call or email any of the board members or officers of the Lakes Association. We would all be happy to hear from you. Here are the names and contact information for each of the board members:

Bill Miller, President - 715-254-9559 or bcabla@hotmail.com
Terry Olson, Vice President - 920-650-1993 or olsonterry65@gmail.com
Sandy Raby, Secretary/Treasurer - 715-354-7013 or protectthelake@skcable.com
Ron Adamski, Director – 715-354-7013
Bill Duffack, Director – 715-354-7133
Robert Reynolds, Director - 715-354-3822 or Careynolds@skcable.com
Mark Robinson, Director - 920-729-8181 or markl.robinson@gapac.com