

# Bony Lake

## *Conserve & Restore*

“Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect.”  
~Chief Seattle, 1855



# Bony Lake, Wisconsin

## Understanding the natural dynamics of your lake will help preserve its water quality, habitat and land values now and for future generations.

What is it about this 191-acre lake that is so special? The crystal clear water and hundreds of feet of natural shoreline contribute to making it a most desirable place for a summer cabin or year-round home. Water sports on summer days are what some enjoy most about Bony Lake while others relish peaceful late afternoons kayaking or listening to the loons. Keeping Bony Lake special depends primarily on how carefully the ones who enjoy it most understand their impact on its survival.

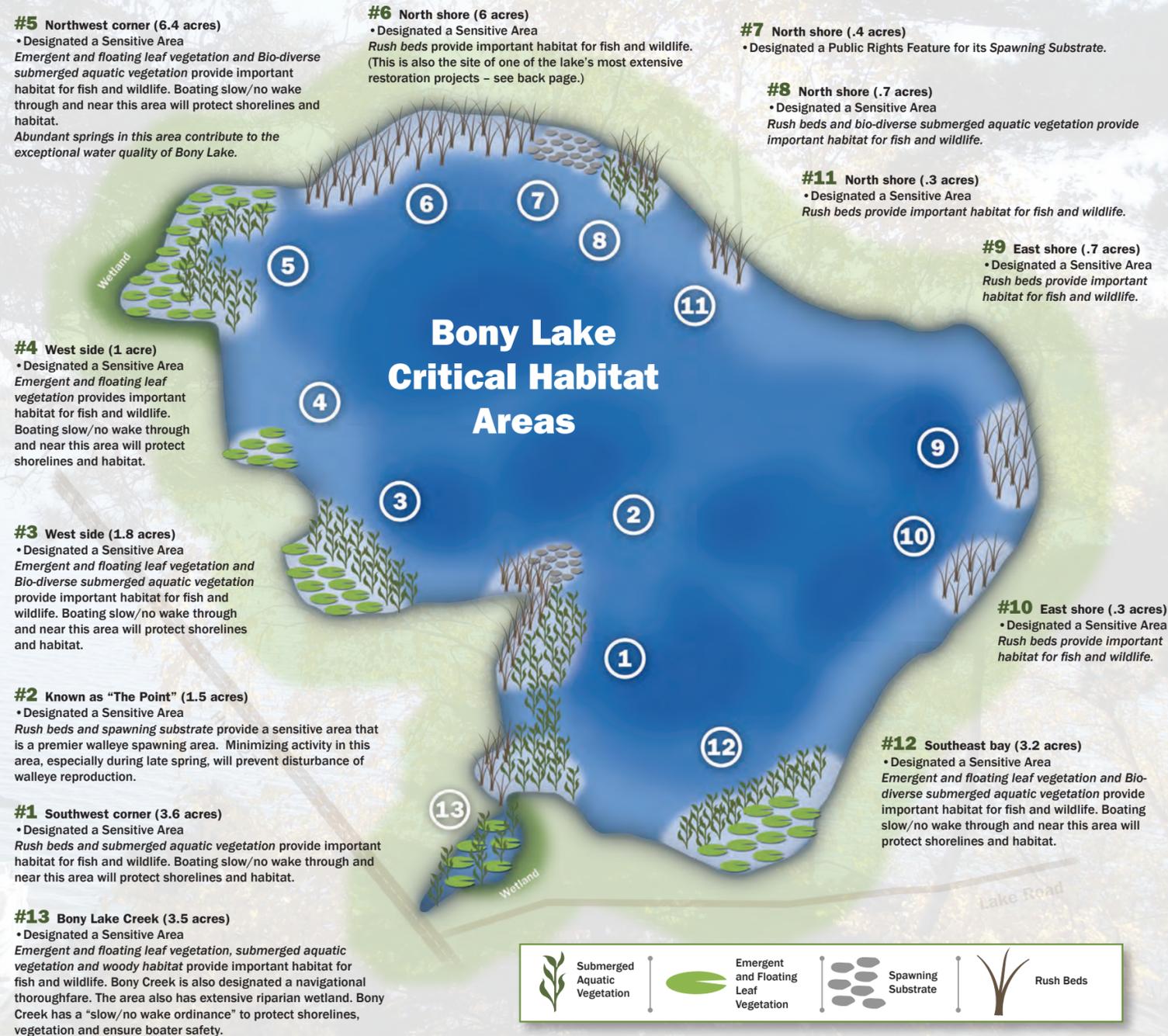
## The Critical Habitat Designation program on Bony Lake provides information that will help preserve its character and quality.

Wisconsin's Critical Habitat Designation is a program that includes formal designation of areas considered important to fish and wildlife. Designated Critical Habitats are classified into three categories; *Sensitive Areas*, *Public Rights Features & Resource Protection Areas*. In 2007 and 2008, the Wisconsin Department of Natural Resources conducted the Critical Habitat Designation program on Bony Lake. Bony Lake Critical Habitat Designations are primarily classified as Sensitive Areas.

## Designation of Sensitive Areas provides the opportunity for a holistic approach to the protection of the character and quality of Bony Lake. These fragile areas support wildlife and fish habitat and provide mechanisms that protect water quality.

- Submerged and floating leaf vegetation tie up nutrients in their tissues that would otherwise contribute to algae growth.
- Wetlands filter water entering the lake, enhancing water quality.
- Submerged vegetation helps prevent the re-suspension of sediments caused by wind action and boat traffic. It also helps minimize erosion from wave action.
- Shoreline vegetation traps soil and pollutants that would otherwise be washed into the lake.

Being aware of the critical habitat areas on Bony Lake will help residents to better understand the sensitive areas on the lake and the importance of preserving them. The quality of the lake, measured both aesthetically and in ecological integrity, cannot be taken for granted. Lakes can be damaged from misuse or overuse; sometimes irreversibly. Each of us tinkers with the lake every time we use it. Understanding the mechanics of a healthy lake enables us to enjoy Bony Lake in ways that will lessen our impact on its outstanding quality and native species.



## The water clarity and health of Bony Lake is very much in the hands of its property owners.

Bony Lake has a very small water shed – a term you will often hear when scientists discuss water quality. All property on the lake is privately owned, there is no public landing. The lake is fed by active springs, and there is no inlet. That means Bony Lake property owners have the primary impact on the future of the lake. Each of us can do small things that will make a big difference.

- Minimize run-off from your property – keep a buffer of natural vegetation along the shoreline.
- Do not pull natural aquatic vegetation beyond the minimum necessary for you to access the water.
- Do not use weed killers, such as Roundup on your shoreline – these products poison habitat for native species (90% of aquatic creatures depend on the adjacent shoreline for some phase of their life cycle – turtles lay eggs, frogs mate – don't spoil the love nests.)
- Do not use any products with phosphates on your soil or in household cleaners. One pound of phosphate will grow 500 pounds of algae.
  - Fertilizers for lawns or flower beds containing phosphates will leech through the sand and feed the lake. Use phosphate fertilizers only in your container plants.
  - Use phosphate-free dishwasher and laundry soap. Septic effluent feeds the groundwater, which in turn feeds our lake. Our sandy soil does not completely filter out phosphates or nitrates.
- Make sure your septic system is functioning properly.
- Boat slowly in shallow areas, taking care not to disturb the bottom sediment.

## Be proactive in keeping invasive species out of Bony Lake.

The threat of Eurasian Water Milfoil (EWM) and the damage it can do to Bony Lake is real. If you or your guests bring a watercraft, including jet skis, from another lake, please make sure there are no weeds on the boat or trailer. Be sure to drain water from live wells and empty bait buckets – do not put anything into the lake that was not harvested from the lake. In the case of jet boats and jet skies, 2 gallons of water remain in the craft after it has been shut off. Those 2 gallons of water could be transporting EWM or other invasives to our lake. Please take the following precaution: run the jet boat/jet ski on land for 10-15 seconds, turn it off then reach up into the craft and remove any weeds that are present in the outtake. The craft can then be safely launched. This is now the law in Wisconsin but we can only depend on each other to make sure we keep our lake free of EWM and other invasives.

## A critical component in controlling the spread of invasive species into our lakes is early detection.

Take the time to monitor the aquatic species on your lake front, looking especially for: **Eurasian Water Milfoil – Curlyleaf Pondweed – Purple Loosestrife – Zebra Mussels**

If you find one of these species, or are uncertain about the identity of a particular vegetation, place a small specimen in a plastic bag and take it to one of the CBCW monitors – they will be on duty every weekend throughout the summer at the Middle, Upper and Lower Eau Claire Lakes landings. Or you can take it directly to Lee Wiesner, the Barnes Invasive Species Rapid Response coordinator at 715-795-3156.



## Water-ski and jet ski ordinance

The Town of Barnes enforces a local ordinance that limits water skiing, towing tubes and use of jet skis to the hours between 10:00 am and 5:00 pm. The ordinance assures enjoyment of the lakes for people with diverse interests. The clear water is a joy to ski on and swim in; and the bays with submerged and floating vegetation are perfect for peaceful mornings or evenings of fishing or kayaking.

Wisconsin law requires all watercraft travelling at more than "slow-no-wake" speed to keep a minimum distance of 100' from any dock, floating raft, shoreline or other boat/swimmer; PWC/jet skis must keep a minimum distance of 200' from any shoreline.

In addition to providing a time for everyone to enjoy the lake, limiting high speed boat traffic may actually be helpful in maintaining water clarity. A boat's prop stirs up the lake bottom sediment up to 6 feet below the bottom of the prop. This action allows the phosphorus and other nutrients in the sediment to be released, contributing to algae growth. The minimum distance ordinance protects the safety of others using the water and helps control shoreline erosion and disturbance of lake bottom sediment.



Every effort to *Conserve and Restore* Bony Lake will make a difference. Some results will be immediate (like the Mans' big fish story the spring after they had fish sticks placed on their shoreline.) Some will take longer and future generations will be grateful.

"Haley caught this small mouth bass off the end of the dock, so perhaps the fish have already moved in." – Lori Mans

## Property owners commit to restoring private shoreland.

In 2007 Bony Lake property owners received a DNR Lake Protection ~ Shoreland Restoration Grant that provided \$100,000 over 3 years, with an additional \$45,000 in cash & in-kind matching funds, to accomplish a number of very important goals.

While shoreline restorations have historically been implemented on an individual parcel scale, the concept of lakewide, or whole-lake, restoration work is relatively new.

With 50% of the riparian owners indicating their interest in being involved, the Bony Lake project will be the largest undertaken on a single lake in Wisconsin.

At the time of this printing, 24 Bony Lake property owners have been involved in some way in the shoreland and near-shore restoration project.

### Sometimes doing nothing is everything!

These property owners stopped clearing and mowing their hillside in 1995. Nature reclaimed it with pine, oak, ferns, sedge and aster. In 2009 the owners began implementing a restoration plan supplied by the grant to further restore their shoreland. No-mow grasses and native plants have created a habitat fit for humans (low maintenance) and aquatic creatures.

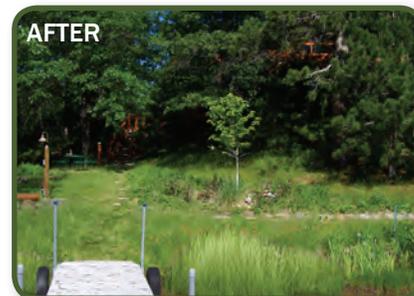
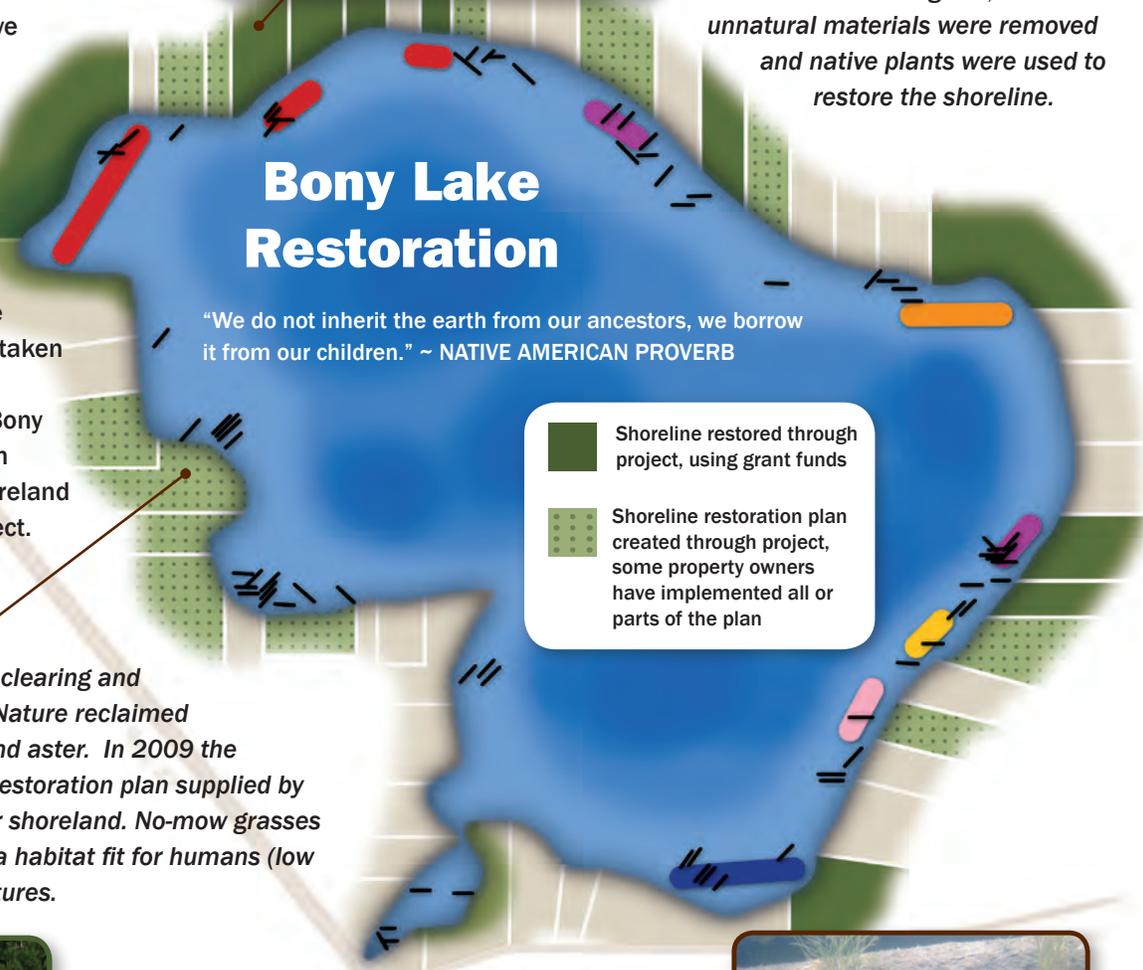


Under the grant, these property owners transformed their shoreline.

These environmentally-conscious owners became increasingly unhappy with the concrete and riprap seawall that defined the shoreline of the property they acquired in 1998.

Because Bony Lake is a small body of water, the shoreline does not need to be reinforced with riprap or concrete.

Under the restoration grant, the unnatural materials were removed and native plants were used to restore the shoreline.



## Woody habitat placements create natural cover for fish and other lake creatures.

As part of the restoration program on Bony Lake, the WI DNR collaborated with property owners to develop a program known as *Fish Sticks*, which replaces woody structure that is essential in maintaining healthy aquatic habitat. This near-shore habitat helps maintain healthy productive fisheries, protect native vegetation, and minimize shoreline erosion. With cooperation from riparian owners, large woody complexes were placed along a number of shorelines to proactively improve the habitat resource.



- Original Wood
- 121 Pieces
- 12 Pieces
- 90 Pieces
- 7 Pieces
- 13 Pieces
- 158 Pieces

## More information on topics presented in this brochure can be found at:

Bony Lake critical habitat DNR report:  
<http://dnr.wi.gov/lakes/criticalhabitat/Project.aspx?project=25645526>

Guide to Shoreland Restoration – Langlade County:  
<http://lrrd.co.langlade.wi.us/shoreland/index.asp>

Measuring Lake Health: Water Quality:  
[http://www.wisconsinlakes.org/water\\_quality.htm](http://www.wisconsinlakes.org/water_quality.htm)

Internal Phosphorus Loading: The Source from Within:  
[http://www.wisconsinlakes.org/publications/archive\\_lakeconn\\_articles/06fall\\_pinternalloading\(James\).pdf](http://www.wisconsinlakes.org/publications/archive_lakeconn_articles/06fall_pinternalloading(James).pdf)

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