HEALTHY AQUATIC HABITAT,

AQUATIC PLANT MANAGEMENT LAWS,

and WHAT YOU CAN DO



Major Threats to Lakes

- Lakeshore development
- Industrial & nonpoint discharge
- Invasive or exotic species



Why is Lakeshore Development a Threat to Lakes?



Development brings cumulative impacts on water quality, fish and wildlife habitat, and the biota of lake ecosystems.



Small cottages are steadily being replaced by year-round homes, even mansions, on most lakes.



Why do we care so much about plants?

Aquatic plants are the foundation for healthy, balanced lakes. They provide food, shelter and nurseries for fish, wildlife and insects. Aquatic plants also

- •Reduce the amount of algae clouding the water
- •Help dampen wave energy
- •Keep water cool
- Stabilize sediments



Aquatic Plant trends as a result of development





Loss of Woody Habitat



Fish grow ~3X faster in lakes with lots of woody habitat



Woody Habitat (no./km)

From Schindler et al. 2000

What can I do to control lake plants in front of my home, without harming lake habitat?



Plant management should be guided by a well-thought out plan.



LAKE RIPLEY IMPROVEMENT PLAN

A Condition Assessment and Strategy for Protection and Rehabilitation





See plan at lakeripley.org

A good Aquatic Plant Management (APM) Plan will meet the human need to moderate nuisance levels, without causing undo harm to the lake. A good plan considers the RISKS and BENEFITS of management methods...

Herbicidal control
Mechanical harvesting
Manual removal
Biological methods



...and plans for PROTECTION of the highest diversity and quality of plants possible.

Targeting exoticsProtecting natives



Herbicidal control



Photo by F.Koshere

- Regulated by Wisc Admin Code NR107
- Must do no harm (at least that we know of)
- Chemicals are not very selective (this is new info)
- Potential drift
- Possible use restrictions
- Can result in algae blooms & other unintended consequences

Mechanical Harvesting

- Large-scale, long term commitment
- Results immediate
- Water >3' deep
- Open areas



Photo by P. Dearlove

- Takes up small fish, turtles, etc.
- Can augment OR harm fish habitat
- Requires high plant density to be scale-appropriate and cost-effective!
- Plan and permit are required

Manual Removal

Permit required Waivers by rule Private ponds Riparian lakefront – under certain conditions* Purple loosestrife



*Conditions for Manual Removal Without a Permit

Removal of exotic species without harming natives Removal of dislodged plants that drift on-shore Native plants, as long as all the following TRUE NOT located within a designated Sensitive Area Single area of shoreline width less than 30' Only if that width is not new, + not in addition to other zones of treatment via other method Out into lake without limit

Always: All cut plants must be removed from lake

Aquatic Plant Protection Law Penalties

Establishes forfeitures for permit violations
 \$200 for first time violations
 \$700-2,000 or
 6-9 months prison

Gives the court ability to order abatement and restoration

To summarize, the area where aquatic plants grow, the littoral zone, is vital to the lake's health.



Photo from lake-link.com

A diverse native aquatic plant community provides many benefits, including providing habitat and maintaining water quality.



Lake Ripley has a very healthy aquatic plant community when compared to other lakes in southern Wisconsin.

It's up to us to protect this fragile lake!



J. Scherer

How can I help protect Lake Ripley?



Know and follow plant management laws. "Fallen tree...let it be" Respect Slow, No Wake zones



Maintain and restore native plant shorelines Support LRMD, stay informed & involved. Choose some activites from the What You Can Do handout to do with your family.

Take pride in helping protect this beautiful and fragile lake for future generations!



Protecting in Partnership...





OUR LEGACY OF LAKES

Thank You! Susan Graham Susan.graham@wisconsin.gov

