



Volume 2

Our Song Lake Watershed

Issues on Song Lake

In nature, phosphorus usually exists as a phosphate molecule. It can be organic or inorganic. Although it is necessary for plant growth, an imbalance in either too much or too little phosphorus is usually the determining factor in a plant's ability to thrive.

Even a small amount of excess phosphorus can greatly impact the equilibrium of a water-body. In excess amounts, it stimulates plant growth and algae blooms. The decomposition of these plants then reduces the available oxygen needed by fish and other aquatic life, causing stress, disease, suffocation and death. Excess plant growth and algae can impair the look of the lake as well as creating unpleasant odors and taste.

What are the Sources of Phosphorus?

Phosphorus is naturally occurring in our waterways; however human activity contributes a significant amount. Runoff from yard waste, erosion, septic, pet and livestock waste, detergents, cleaners, and fertilizers can all contribute excess phosphorus.

What can we do?

- Read labels carefully and avoid products containing phosphates. Not all products labeled biodegradable are free of phosphates.
- Fertilize responsibly and use only zero-phosphate fertilizer, unless a soil test shows the need. Fertilize in fall and never during wet weather. Never fertilize near drains or waterways.
- Create healthy lawns and buffer zones. Plant the correct grass mixes and Dutch clover. A low maintenance lawn will stabilize soils, reduce erosion, and slow runoff while filtering pollution. (See *Lawn Care Tips*) Consider a natural landscape that will prevent erosion using native plants along your shoreline.
- Maintain your septic system. Wastewater contains not only phosphorus but bacteria. Septic systems that are not properly inspected, pumped and maintained, can seriously contaminate our lake.
- Manage yard and pet wastes. Compost leaves, and allow grass clippings to remain in the lawn to provide a natural fertilizer.

This information is from, *The P Project: Reducing Phosphorus in the Finger Lakes* www.co.cayuga.ny.us/wqma/pproject/

Song Lake Watershed Working Group
1900 Rittenhouse Square
Tully, New York 13159

Our Song Lake Watershed

Song Lake, located in the Town of Preble in northern Cortland County, is described by natural resource professionals and those who live around the lake as 'a little gem.' The lake is one of several kettlehole lakes which were formed during the last glacial period. It is approximately one mile in length with a maximum depth of around 30 feet. About 100 privately owned sites surround Song Lake, many of which are year-round homes. The Girl Scouts of America have Camp Hoover on the south eastern shore which operates summer youth programs. There is no public access on the lake.

REMEMBER!



**STOP AQUATIC
HITCHHIKERS!**

Prevent the transport of nuisance species.
Clean all recreational equipment.
www.ProtectYourWaters.net

As a member of the New York State Federation of Lakes, a five year study of Song Lake water conditions is underway. The Song Lake Property Owners' Association and the Song Lake Watershed Project, with support from Cortland County Soil and Water Conservation, are working on a watershed plan that will include the surface and subsurface watershed regions. The subsurface area is based on the U.S. Geological Survey which explains Song Lake's interaction with the watershed that surrounds it. In an effort to protect the water quality of the lake, the fish and game, and the land around the lake, many programs and activities are being planned.

Individuals and students interested in more information about Song Lake watershed planning are welcome to contact the Song Lake Watershed Project members:

Deb Brock- 696-5549, Tony George -696-8045, Tarki Heath- 696-5262, or Marjie Grillo-696-5963.

LAWN CARE TIPS

“Well-managed lawns are an environmental asset. They can help protect, or even improve, water quality. Poorly maintained lawns, whether by neglect or through the overuse of fertilizers and pesticides, can be an environmental liability.”¹

The American mania for the perfect lawn is both expensive and dangerous. According to the U.S. Environmental Protection Agency most homeowners apply up to 10 times more chemicals per acre than farmers do. They estimate that about 80 million U.S. households dump nearly 90 million pounds of herbicides and pesticides on lawns in a year.

Along with the dangers that common lawn pesticides and fertilizers pose for our lake, they are also the leading cause of accidental pet poisoning. Many of the compounds have also been linked to various types of cancer, neurological damage, and Parkinson's disease. These chemicals are easily brought indoors on shoes where the toxic residues can settle into carpets and floors. Even at very low doses, one popular weed killer, atrazine, causes sexual mutations in frogs.

The good news is that we can reduce exposure of dangerous chemicals to our loved ones and the environment, while also reducing our lawn care, work load.

CHOOSE THE RIGHT GRASS MIX

The use of appropriate turf mixtures or *cultivars* has been demonstrated to prevent weed growth. These newer cultivars have performed well in New York.

- Chewing's fescue cultivars: Intrigue, Wilma and Sandpiper
- Hard fescue cultivars: Oxford, Rescue 911 and Reliant II

These cultivars tend to establish quickly in late spring after fall planting. They form a dense and attractive turf while suppressing weeds. Once established, you should see more than 90% weed suppression.

ADD DUTCH CLOVER

Clover is drought-tolerant, virtually immune to diseases, and distasteful to common turf insects. This lovely plant generates its own food by fixing nitrogen in the soil.



MOW HIGH AND LEAVE THE CLIPPINGS

And mow less often!

Mowing too short will weaken the root system making the grass more susceptible to stress and disease during drought. When grass is allowed to grow to a taller height, it is better able to out-compete the weeds. And leave the clippings! Clippings do not smother the grass or create thatch, but they do recycle nutrients into the soil.

- Set the blades on your mower to a height of about 3 to 4 inches
- Mow when the grass is five to six inches tall
- Don't rake up the clippings.

SHARPEN YOUR MOWER BLADES

Dull blades create wounds by tearing the plants instead of cutting them. This allows disease and pathogens to enter the plants and require them use more water to survive.

FILL IN WEAK SPOTS

Weedy or bare areas can generally be improved by gently working the soil (raking) and reseeding with carefully selected grass varieties. (*Choose the Right Grass Mix*)

FERTILIZE CORRECTLY, OR NOT AT ALL

Turf grasses do not need much nitrogen. It is better to use a less concentrated nitrogen source that lasts longer. Some sources recommend organic lawn-food blends, such as Concern or Espoma, which contain mainly water-insoluble nitrogen; it stays put and is released over a month or more, providing nutrition to the plant in small doses.

Wait until fall to fertilize, and only then if a soil analysis indicates the need. Grass fertilized in the spring will become stressed in the long term. If you have recycled nutrients back into the soil by leaving the clippings, you may not need to fertilize at all.

SOIL TEST IN THE FALL

Take soil samples from turf areas and plant beds to determine the appropriate fertilizer recommendations. If your soil has enough phosphorus but needs nitrogen; find a fertilizer with zero phosphorus. You might try organic nitrogen, such as corn gluten. Soil test kits and further information are available from Cornell Cooperative Extension. Although organic fertilizers are recommended, remember that they tend to have high levels of phosphorus.

Yard waste compost is generally lower in phosphorus than those that are manure based.

Never apply fertilizer to frozen or saturated ground as this is a sure way to have it wash into our waterways.

You can eliminate the need to fertilize by mixing a legume, such as clover, that will remove nitrogen from the atmosphere and fix it in the soil.

WATER WITH CARE

Wet grass invites disease, so don't over-water. Recommendations for the best times to water are between 4AM and 8AM as the leaves will dry more quickly in the morning.

It is best to let grass go dormant during an extended drought.

DON'T SPRAY

Before using any herbicide or insecticide, be sure you understand the dangers. According to Cornell Cooperative Extension, "75% of lawn insecticide applications in New York are unnecessary or ineffective."

- If your grass is properly cared for and has a healthy root system, it can tolerate some insect damage.
- If you have managed a lawn that is healthy and lush, it will out-compete the weeds, and have no need for herbicides.

RESEARCH & LEARN MORE ABOUT THE TOXIC EFFECTS OF HERBICIDES AND PESTICIDES.



These great sites were used for this article. Check them out.

~ Cornell gardening resources; *Lawn* at www.gardening.cornell.edu/lawn/index.
~ U.S. Environmental Protection Agency, *GreenScaping* at www.epa.gov/epaoswer/non-hw/green/owners.
~ *Organic Gardening online* at www.organicgardening.com/feature/0,7518,s1-4-77-1698,00.html1.

¹*Finger Lakes Landscapes; Landscaping for Water Quality in the Finger Lakes Region*, Cornell University, Cooperative Extension, Onondaga County.

SURVEY NOTICE

The Song Lake Watershed Working Group will be conducting a survey. Please help us by welcoming the survey volunteer to your door and responding to the questions as best you can. Although most surveys will be conducted in person, we may need to contact some folks by phone. Thank you in advance for your cooperation.

WE WOULD LIKE YOUR OPINIONS ~ WE NEED YOUR SUPPORT

The production of these newsletters has been possible through the support of private sponsors and the Song Lake Property Owners Association. To continue, we need your support. To help sponsor our next issue, please contact Tarki Heath at 696-5262. Please let us know what you think of our newsletter. You can email your comments to Tarki at SongLakeIssues@aol.com.

WATER TESTING STARTS SOON! ~ PLEASE WATCH FOR OUR BUOY!

Working with the Citizen Statewide Lake Assessment Program; a cooperative effort between the NYS Department of Environmental Conservation and the NYS Federation of Lakes Association, volunteers have been testing Song Lake waters. The program is paid for by the Song Lake Neighborhood Association. Testing will begin in June, on the second Saturday of each month at 8:30am. The testing program will continue until

