

# The Lake Iroquois Monitor

*Research, education and action for a healthy lake*

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<http://www.lakeiroquois.org/>

## Shoreland Erosion Protection

by Bob Donnis

### Information source:

*Amy Picotte – VT Dept of Environmental Conservation  
Watershed Management Division  
Lakeshore Management*

*Kevin Burke - VT Dept of Environmental Conservation  
Watershed Management Division*

## Lake Encroachment Permit Program

Many residents on Lake Iroquois have begun to take steps to protect the lake from shoreline erosion. Eroded materials entering the lake after every storm provide nutrients that feed the abundance of aquatic plants (milfoil is one) and algae in the lake. Collectively, we can significantly reduce that erosion and nutrient source to the lake, while

improving the natural stability of shorelines.

This update presents ideas for preventing erosion and for fixing erosion that is under way now.

### Preventing Erosion

1) Create a buffer zone on the bank. The zone should be an area, ideally 15 feet or greater in width, stretching back from the lake and planted with native vegetation. Another name for this area is a “no mow” zone, which will allow native plants to take root and grow. Grass does not provide the same benefits as native plants because it does not slow or absorb stormwater runoff. A buffer zone of native plants will help filter and absorb stormwater runoff while stabilizing the bank with good root structure. (See Link 1 below).

2) What are the recommended plants? In general, they are plants that are native to the area. They can

## Blueberry Bushes

On August 15, Judy Davis of the Federation of Vermont Lakes and Ponds (FOVLAP) brought 40 blueberry bushes to Lake Iroquois to distribute to Lake Iroquois property owners. Each participating property owner received 4 blueberry bushes for a contribution of \$25.00 with the rest matched from the LIA Beer for Buffers fundraiser. Native blueberry bushes are recommended for planting along the shoreline as their strong roots help to stabilize the shoreline, prevent erosion, and absorb more runoff from entering the lake than plain grass. There is the added benefit of having fresh organic blueberries in your yard. For more information on creating shoreline buffers, check out the DEC web site at: [http://www.anr.state.vt.us/dec/waterq/lakes/htm/lp\\_shorevegand-buffers.htm](http://www.anr.state.vt.us/dec/waterq/lakes/htm/lp_shorevegand-buffers.htm)

*continued on page 2*



*Blueberry bushes for Lake Iroquois.*



*Judy Davis explains the benefits of lake buffers.*

be found by looking at what grows on the shore in undeveloped parts of the lake. The Agency of Natural Resources has developed a list of native trees, shrubs, and groundcover plants that are recommended (see link 2 below).

Blueberries are one of many plants on the list. Others include dogwoods, ferns, asters, a variety of trees and many more. It is helpful to use the Latin names that are given on the recommended list to make sure the plants selected are native to this area. The right plantings will stem the run-off of nutrients into the lake, add native beauty to the shoreline, and provide essential habitat for song birds, fish and other wildlife.

### Fixing Erosion

Restoring a shoreline may be necessary in some cases. The steepness of the bank may be a factor, but must be considered on a case by case basis. Fabric cloth may be necessary,

but should be considered only to the extent necessary so as not to inhibit vegetation grown along the shoreline. Each situation is different. See link 3 for an example.

It is important to know that any work that occurs at the lake below the mean lake level requires a Lake Encroachment Permit. Under the new Shoreland Protection Act, a shoreline stabilization project that involves new clearing or the creation of impervious surfaces (e.g. walls, decks, mortared stone) even if located above mean water level, may need a permit or shoreland registration. Check with the Lakes and Ponds Permit Programs to learn more about whether or not your project would need a permit (link 4).

### Links to Agency of Natural Resources recommendations:

1) Establishing No-Mow Zones:  
<http://www.watershedmanage->

[ment.vt.gov/lakes/docs/LP\\_BMP-SHOREEstablishingNoMowZones.pdf#zoom=100](http://www.watershedmanagement.vt.gov/lakes/docs/LP_BMP-SHOREEstablishingNoMowZones.pdf#zoom=100)

2) Planting & Maintaining Vegetated Areas – Choosing the Right Plants – ANR Lakewise Program

Note: includes a list of native Shrubs, Groundcovers, and Trees

[http://www.watershedmanagement.vt.gov/lakes/docs/LP\\_BMPPlantingandMaintainingVegetatedAreas.pdf#zoom=100](http://www.watershedmanagement.vt.gov/lakes/docs/LP_BMPPlantingandMaintainingVegetatedAreas.pdf#zoom=100)

3) Resloping, Rock Toe and Rip Rap – Lakewise Program

Note: For eroded banks

[http://www.watershedmanagement.vt.gov/lakes/docs/LP\\_BMPReslopingRockToeRiprap.pdf#zoom=100](http://www.watershedmanagement.vt.gov/lakes/docs/LP_BMPReslopingRockToeRiprap.pdf#zoom=100)

4) Vermont Watershed Management Division, Lakes and Ponds Permit Programs

[http://www.watershedmanagement.vt.gov/lakes/html/lp\\_permitoverview.htm](http://www.watershedmanagement.vt.gov/lakes/html/lp_permitoverview.htm)

## Milfoil Update

by Dick Phillips

Lake users who have been around Lake Iroquois for over 30 years are calling this past year the worst ever for weeds in the lake. And last year many thought that 2013 was the worst ever. Most people complain about the weeds because they affect their ability to enjoy swimming and boating on the lake. Eventually an overabundance of weeds could alter the lake ecosystem, degrading water quality and creating further problems that occur as a result of reduced water quality.

With water quality in mind, the Lake Iroquois Association decided to contract with Northeast Aquatic Research to perform an Aquatic Plant Survey of the lake to determine the extent and seriousness of the problem and evaluate the potential effectiveness of different control methods. Aquatic plants found in lakes include both native and non-native grasses and weeds. For purposes of this survey, the primary target species is the invasive Eurasian Watermilfoil.

The plant survey was completed on September 11, 2014. Data including species type, growth form and density,

along with water depth and clarity, were recorded at waypoints around the perimeter of the lake and its islands at approximately 200 foot intervals in the plant growth zone. An evaluation of this sort is a required prerequisite for state approval for most lake-wide control methods, including the use of harvest machines or chemical treatments.

The next step will be an assessment and evaluation by Northeast Aquatic Research of the data collected along with recommendations for effective management or control of the weeds. The written report will be completed in November, so look for more information in our next newsletter.

## Lake Iroquois – State of the Lake 2014 Published

by Dan Sharpe

At the end of the 2014 summer season, the Lake Iroquois Association published a report and booklet entitled Lake Iroquois – State of the Lake 2014. This publication brings together information on:

- Lake history and geology
- Criteria for measuring water quality
- Data from the Lay Monitoring Program (1979 – 2013)

- Data from the Lake Iroquois Tributary Monitoring Program (2011 –13)
- Lake Iroquois Recreation District beach water monitoring
- The Lake Scorecard (Department of Environmental Conservation)
- Biodiversity surveys and conditions
- Blue – Green algae observation and reporting

The booklet includes many photographs of the lake and its uses, charts and maps of the lake and graphs of the data that has been developed.

The purpose of the publication is to increase community awareness of the lake in general and its current condition. The Lake Iroquois Association will use this to bring the information to the towns in the lake watershed to support requests for water quality projects. Grant applications require information about the lake, and the booklet presents a comprehensive picture of what we know about the lake, its watershed and the quality of water in the lake and its tributaries.

The booklet is nicely bound and is in full color. It can be obtained by LIA members for \$10 and by non-members for \$20. A copy will be sent to you after receipt of your check at P.O. Box 569; Hinesburg, VT 05461.



## Greeter Information

by Kathy Hudson & Andrea Dotolo

Here is a summary of the 2014 LIA Greeter Program:

**Total Boats Greeted:** 1,189; this includes 463 motorboats, 473 kayaks, 185 canoes, 47 paddle boards, and 21 “other” (sailboats, rowboats, pontoons, trailers); Total Inspections Performed: 927.

**Total Plant Material Intercepts:** 109; includes 96 eurasian milfoil, 2 curly leaf pondweed, 1 eurasian milfoil and water star grass, 2 eurasian milfoil and waterweed, 2 eurasian milfoil and curly leaf pondweed, 1 eurasian milfoil and mussel, 5 unknowns (non-invasive).

**Boats Greeted by Each Greeter:** 191 by Andrea, 288 by Katie, 419 by Bill, 252 by Katie and 14 by Kathy.

### More Data:

-772 people reported that they were familiar with aquatic invasive species and 52 said that they were not.

- We saw boaters coming from 49 different waterbodies.

-492 people were returning Iroquois boaters, 106 coming from Lake Champlain, and 118 were first timers (either a new boat or first of the season)

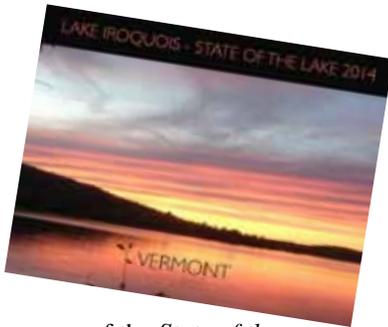
There were 25 people who decided to drive by our friendly greeters! Many people thanked us for doing this work. This is a good sign that there are a lot of people out there who really do care. This kind of work is often frustrating because controlling the spread of invasive species is extremely hard unless there is 24 hour supervision of boaters entering and exiting the lake. Being there and helping people realize their impact on the environment, however, is one of the most important things we can be doing at the public access.

At summer’s end, one of our greeters participated in the NYC Climate March with 310,000 other people who realize how valuable our natural environment is. We live in a time of change in our environment and in the development of the community around us. LIA success in improving water quality will help preserve the lake we love.

Help the LIA be green: save some trees and some \$\$ by receiving the newsletter via email.

We never share your address with anyone else and we promise not to overload your inbox with junk. To receive the e-newsletter send us your email address: lakeiroquoisassociation@gmail.com

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Get your copy of the *State of the Lake 2014* Report. See page 3.

