

Happy New Year

FROM THE
FRIENDS OF BOLTON LAKES



We send you our very best wishes for a
Healthy and Happy New Year

As we look forward to the coming year, we would like to thank our members and friends for their continued interest and support.

Overall this past year was another year of “lake living” filled with swimming, boating, fishing, special events and general enjoyment of the lakes. Still, 2015 had its detractions and we’re looking forward to improvements in lake-water quality in the upcoming year.

The following is a three-part reflection on the past year:

- First, a review of the status of our lakes and watershed
- Second, a look forward toward 2016
- And, finally, a review of the Friends of Bolton Lakes 2015 activities

Status of the Bolton Lakes Watershed for 2015

Introduction

The Bolton Lakes are a manmade chain of lakes within an approximately 2,400 acre watershed with a flow of water and nutrients from north to south. Situated in the four towns of Bolton, Coventry, Tolland and Vernon, the three lakes in the watershed were first impounded by manmade dams in the 1800’s to provide water power to the mills in Willimantic.

Despite a 2015 summer of drought, the lake levels remained relatively normal. Residents and visitors were able to enjoy traditional seasonal activities with the exception of a stubborn algae bloom that disturbed the use of the Lower Lake from mid-August right through the end of the year.

The watershed consists of three unique lake regions each having distinct environmental and recreational characteristics.

Upper Bolton Lake

The Upper Lake remains the most rural of the three lakes. Surrounded and fed by 1,243 acres of watershed it continues to amaze those who venture up into it by its wilderness characteristics and natural beauty.



Populated by a distributed group of wood duck houses and at least one semi-active beaver hut, the lake was readily explored by many kayakers this spring, summer and fall due to the preservation of a higher than normal water level. Osprey, blue herons, geese, ducks and the occasional eagle made each visit a unique experience.

Of particular note is the large forest of Atlantic White Cedar trees that dominate the upper reaches of the lake. Considered to be rare in Connecticut, this grove is being considered for special preservation efforts by the four town Bolton Lakes Watershed Conservation Alliance.



Upper Lake kayaking

Middle Bolton Lake

Waters feed the Middle Lake from the Upper Lake via culverts under Hatch Hill road in Vernon as well from its own 532 acres of watershed. With much of the shoreline habited by year round homes, it still has a notable percentage of its shoreline occupied by woodlands and Camp Newhoca (seasonal public beach and children's day camp) owned by the town of Vernon.

In 2015 many kayakers, some of whom fished for its largemouth bass and pan fish populations, frequented it. A number of the shoreline residents own pontoon/party boats that could be seen circumnavigating the lake for fishing and sightseeing cruises.

Lake water quality was considered by shoreline residents to have been excellent and provided a perfect setting for sponsored long distance open water swim races in July that covered distances ranging from 1 to 3 miles in length. This is planned to become an annual event.



Middle Lake's "Pig Iron Swim Challenge" racecourse was marked with inflated rubber ducks for 1, 2 and 3 mile races



2015 marked the completion of the installation of the Bolton Lakes Sewer Project to service the residents of the watershed. In the final stage, homes around the Middle Lake were provided with grinder pumps and hookups to the pressurized sewer system that will ultimately protect the entire watershed and lakes' water quality for the future.

After a 2014 treatment for milfoil, the 2015 seasonal Friends of Bolton Lakes aquatic plant assessment found very little evidence of invasive milfoil and the (late in the season) establishment of some new beds of native plant species.

The fall brought on a colorful transformation of the shoreline and watershed surroundings with a notable and challenging "harvest" of oak acorns.



Middle Bolton Lake fall shoreline

One of Middle Lake's residents has created two very special YouTube seasonal expressions of life on the Lakes. Try them. We think you will enjoy them.

Send Off: <https://www.youtube.com/watch?v=6riq5bZH0PQ>

Six Months from August: <https://www.youtube.com/watch?v=xi2TJxNw7Tc>

Lower Bolton Lake

Waters primarily feed the Lower Lake from the Middle Lake as well as its own 258 acres of watershed. Surrounded primarily by year round residential properties it has significant wooded shoreline and the Town of Bolton's popular Indian Notch seasonal public beach.

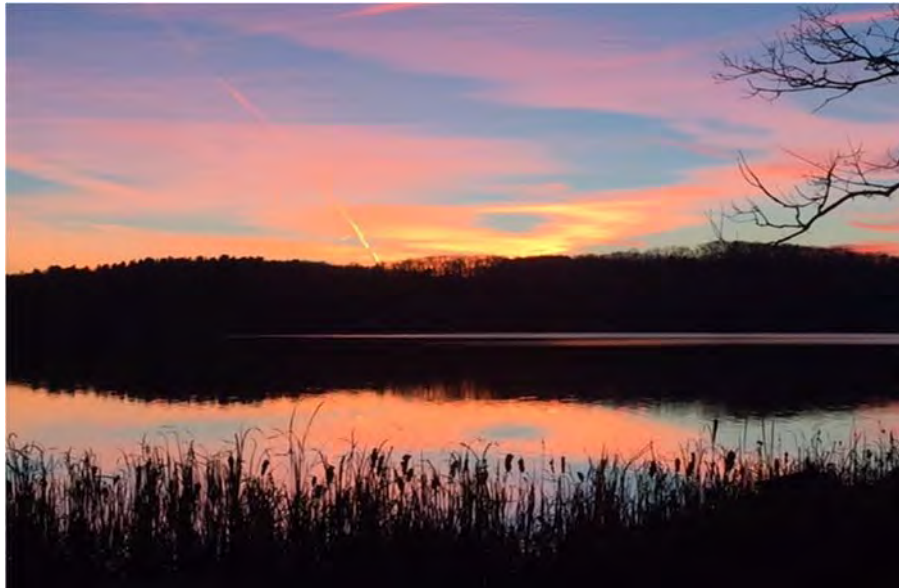
This lake is highly prized by sailors for its good winds and large oval shape and by fishermen for its healthy population of largemouth bass and pan fish. Numerous 5 lb. bass were caught as well as several large state stocked channel catfish.

The summer got underway with a colorful start via the 47th Annual Sunfish Sailboat Regatta of the Bolton Lake Sailing Club.



47th Annual Bolton Lake Sailing Club Regatta, May 17, 2015

Residents and visitors enjoyed good water quality for most of the recreational season. The opportunity to watch spectacular sunsets, highlighted by contrails across the sky, marked the end of the day.



Fall sunset over Lower Bolton Lake

Despite the presence of good recreational water quality for most of the year, a blue green algae bloom persisted in the Lower Lake from August through December confirming the need to continue the process of remediation and to understand and address the underlying presence of excess phosphorous in the lake.

The discovery of a new invasive aquatic plant, curly pond weed, growing in several areas demonstrated the need for vigilance and care to not spread this weed further into the watershed.

A Look Forward to 2016

2015-16 winter drawdowns (planned to be 1 ½ feet but varies to 2 ½ ft.) were initiated in early November. The Friends of Bolton Lakes in collaboration with the towns of Bolton and Vernon submitted formal letters in July and the requests were approved in October to occur in both the Middle and Lower lakes. The water level in the Upper Lake is being maintained by the Town of

Vernon to prevent the possibility of a “fish kill” as well as to insure protection of the Atlantic White Cedars.

The water levels in all three lakes will be co-monitored by FBL and the DEEP and water samples will be taken to document the concentrations of nutrients that are flowing through the watershed. The drawdowns are expected to continue until about April 15, 2016.

The drawdowns serve the objectives of

- Protecting the shoreline properties from winter ice damage
- Allowing capacity for winter and spring storm runoff
- Maintaining the watershed’s natural water flow to prevent stagnation and the buildup of excessive nutrients that support the outbreak of algae and aquatic plant growth.
- Controlling invasive aquatic plant growth, including milfoil

Friends of Bolton Lakes 2016 Activities will include the following:

- Provide email and web based public awareness of lake status, news and events;
- Hold the 3rd Annual Bolton Lakes Watershed Community Forum in October;
- Advocacy to town and state officials on behalf of the watershed;
- Observations and monitoring;
- Identify and define watershed management approaches that will proactively address the underlying causes of unwanted algae blooms and invasive aquatic plant growth.

Opportunities to Participate in Friends of Bolton Lakes Activities

While we have a dedicated core of volunteers, we are still in need of more help to meet our goals. In particular, we would like additional participants to:

- Help author our web based communications;
- Gathering, authoring and distributing educational information;
- Participate in the development of science based watershed management plans.

Membership Renewal

We rely on your membership to assure our ability to advocate and your financial support to fund equipment and chemical analysis collaboration. So, please renew your membership for 2016 using the form provided on our web site www.friendsofboltonlakes.org

Reflecting on 2015 Friends of Bolton Lakes Membership Sponsored Activities

The past year was marked by continuing activities to assure the health of the lakes and its surrounding watershed.

The FBL continues its activities of monitoring, communication & education, collaboration and advocacy that are coordinated by the Board of Directors that meet monthly on the third Wednesday. Activities this year included the following:

Monitoring

Volunteer monitoring of Upper, Middle and Lower Bolton Lakes continued. Equipment and water sample chemical data analysis were funded by the membership contributions to FBL

Data collection included:

- Water transparency via a Secchi disk depth measurement
- Depth profiles of temperature, dissolved oxygen and water alkalinity
- Depth profiles of water chemistry (primarily phosphorous and iron)
- Analysis and dissemination of data to experts including Northeast Aquatic Research

Annual aquatic plant assessments (noting the GPS location and density of aquatic plants in Lower and Middle Lakes) were conducted in late summer.

Analysis and dissemination of data to experts including Northeast Aquatic Research



FBL Science Committee Chairman, Peter VanDine measuring oxygen and temperature as a function of depth in Upper Bolton Lake—April 18, 2015

Communication and Education

Gave briefings and issue public awareness communications to ensure that citizens and public officials were aware of the status and activities in the watershed.

Provided information via the FBL web site, www.friendsofboltonlakes.org

Emailed alerts to a distribution of over 150 residents and members who are interested in preservation and the activities within the Bolton Lakes Watershed

Held the 2nd Annual Bolton Lakes Watershed Community Forum, Oct 22, 2015 at Bolton Town Hall. The Forum included the following:

- Historical perspective (beginning in the 1800's) of watershed development and management over the years
- Overview of the volunteer monitoring program

A summary and copies of forum presentations can be found at www.friendsofboltonlakes.org.

Provided briefings to the Vernon Town Council, Vernon Conservation Commission, Bolton Board of Selectmen, Bolton Lakes Watershed Conservation Alliance and town and state officials regarding the watershed

Collaboration

Teamed with town and state officials and other organizations to gain a shared understanding of how to insure the health of the Watershed and foster collaboration while addressing key issues.

Continued to develop an understanding with Bolton, Vernon and the state DEEP to gain approval for, and multi-lake coordination of, the annual drawdown of the watershed.

Collaborated with Bolton Lake Commissioner, Kim Welch, on a number of issues including the provision of a multi-lake aquatic plant identification service. Citizens who find a suspicious aquatic plant in the watershed are encouraged to contact Kim using a photograph and the protocol described on www.friendsofboltonlakes.org

Collaborated and met monthly with the Bolton Lakes Watershed Conservation Alliance, a four-town collaborative for the Conservation Commissions of Bolton, Coventry, Tolland and Vernon.

Main activities include:

- Focus on Upper Lake and Cedar Swamp
- Seek to assure preservation of the Atlantic White Cedar grove

Initiated collaboration with the Coventry Lake Advisory and Monitoring Committee (a sub committee of the Coventry Conservation Commission) to address common issues of watershed preservation and management

Advocacy

Advocate on behalf of FBL members, regarding issues that can affect watershed remediation and long-term environmental health.

Met with CT State Representative Gale Mulligan, Dept. of Fisheries and the town of Bolton to minimize any deleterious effects on the Lower Lake by the re-stocking of channel catfish. FBL continued its opposition to any further stocking until Lower Lake remediation has been successfully completed.

Advocated to the State DEEP that the culverts connecting the Upper Bolton Lake Watershed with Middle Lake should be "re-constructed" to control water level & flow and to prevent road flooding (in the event of major storm events) that would impede emergency vehicle response.

Based on water chemistry data, created and distributed "A Proposal for the Reduction of Phosphorous in Lower Bolton Lake" which advocates the use of a natural, low cost method of water withdrawal to reduce phosphorous nutrient load which supports algae growth.

Board of Directors

Leona Crosskey, David Forrest, Shelly Jewell, Connie Kolesko, Holly MacDonald,
Jeff Phelon, Karl Prewo, Paul Weisser, Peter VanDine.