



The Acton-Shapleigh Youth Conservation Corps

2011 Season Report

www.asycc.com

Executive Summary

The Acton-Shapleigh Youth Conservation Corps (ASYCC) is completing its eleventh season of serving the towns of Acton and Shapleigh, Maine. The ASYCC “is committed to protecting the waterways within the Mousam Lake and Square Pond Watershed. This is achieved by providing education, community outreach, courtesy boat inspections, technical assistance, and the installation of effective erosion control practices to the communities of Acton and Shapleigh. The ASYCC continues to work to sustain and protect the valuable waterways of Goose Pond, Loon Pond, Mousam Lake, and Square Pond for the enjoyment of the community and its visitors.”¹ Since it was founded in 2001 ASYCC programs have successfully raised awareness and improved the watershed’s health. The ASYCC consists of two overarching programs, the Erosion Control Crew (ECC) and Courtesy Boat Inspections (CBI).

The ECC implements conservation projects on waterfront or near-water front properties to reduce erosion and prevent run-off from entering our water bodies. This year, the ECC completed a record number of projects, 27, an increase of three over the 2010 season. Each project successfully addressed the erosion and run-off problems within the affected property by implementing a variety of the EPA’s Best Management Practices (BMPs). Each BMP is a low-impact, environmentally friendly solution to non-point source pollution.

Efficiency of the ECC program continues to improve. Although the total number of conservation projects completed in one season is not necessarily the most important indicator of the overall impact of the program because of the variability of time and energy needed to effectively stop run-off from individual properties, which number demonstrates that the ECC’s work rate and level of expertise improved in 2011. The crew leader was an experienced three-year veteran of the ASYCC’s ECC program. This had a positive impact on the quality and execution of work. Furthermore, last year’s assistant technical director became this year’s technical director and he was able to use his prior experience to run a successful and efficient program.

A property owner who believes he or she has an erosion and run-off problem within our watershed and requests the ASYCC’s assistance in addressing it receives a visit from our technical director. At the request of the property owner that visit will produce a technical report, also known as a remediation plan. This plan addresses the property’s erosion problems and recommends BMPs to fix the problems. This year, a total of 43 technical visits were completed, and 26 technical reports were produced. Last year, a total of 34 technical visits were completed, with 21 technical reports. For the 2012 season, there are already 10 homeowners who hope to be a project host of the ECC, with another eight who are still deciding. Since the ASYCC’s inception the numbers of technical visits and technical reports have increased.

The ASYCC’s second overarching program, Courtesy Boat Inspections, had another very successful season. The goal of the CBI program is to prevent the introduction of invasive aquatic plants from entering local water bodies. This is more important today than ever before because of the increase in invasive plants that have been introduced in neighboring lakes. If Mousam Lake and Square Pond were to be invaded by such plants the economic impact on the towns of Acton and Shapleigh, and local property owners would be catastrophic. Mousam Lake and Square Pond provide a significant percentage of each town’s tax revenue. If a lake were to be invaded by invasive plant species, there would be enormous and potentially irreversible degradation not only to the lake but also to property values, and therefore the tax revenue. The CBI program is the best way to counter the threats of aquatic invasive plants

¹ Asycc.com, 2011.

CBIs inspect each boat, trailer, fishing line, and any other visible gear before the boat enters the public launch. They are instructed to educate each boat owner on the importance of not transplanting plants and marine species from one lake to the next. This year, CBIs covered the Mousam Lake boat launch 98 hours a week during the peak season, 36 hours a week during the pre-season, and 46 hours per week during the post-season. Square Pond’s boat launch was covered 60 hours during the peak season and 12 hours a week during the pre-season and post-season. CBI coverage once again increased from the previous year. During the peak season, coverage at the Mousam Lake boat launch has increased each year: in 2008, Mousam Lake was covered 62 hours per week, 90 hours in 2009, and 98 hours in 2010. Coverage at the Square Pond boat launch has also increased. In 2008 Square Pond was coverage 12 hours per week, 21 hours per week in 2009, and 60 hours per week in 2010. Further, the ASYCC intends to increase CBI coverage in 2012 to monitor the annual Mousam bass tournaments in early May that bring in hundreds of uninspected boats into the lakes.



1- A picture of most of the ECC crew at a job site

The Acton-Shapleigh Youth Conservation Corps

Introduction

The ASYCC is a non-profit organization founded in 2001, working to protect the watersheds of Mousam Lake, Square Pond, Goose Pond, and Loon Pond. The ASYCC is committed to providing education, community outreach, technical assistance, courtesy boat inspections, and the installation of erosion control practices in the towns of Acton and Shapleigh. The goal of the ASYCC is to sustain and protect the valuable water resources for the enjoyment of the local community, businesses, and its visitors.

Each year the ASYCC strives to improve upon its previous success. The ASYCC hires local residents who have a vested interest in protecting the local waterways and works with them to improve the reputation of the program. ASYCC employees staff the ECC and CBI programs. Both programs continue to play a significant role in the successful restoration of Mousam Lake from its once EPA declared “impaired condition” to its current revitalized state. The ECC and CBI programs also work to protect Square Pond and Loon Pond from the dangers of invasive plants, shoreline erosion and run-off.

A brief historical overview:

Goose Pond, Loon Pond, Square Pond, and Mousam Lake are located in the towns of Acton and Shapleigh, in York County, Maine. The towns of Acton and Shapleigh have significantly changed since being established in 1772 and 1830 respectively. The shores along the Shapleigh side of Mousam Lake were first developed for industrial use by the sawmill, merchant and service businesses, and a few residential homes. Over time, Mousam Lake became a more populated residential community, resulting in the loss of naturally forested areas, the addition of dirt and paved roads, lawns, and un-vegetated properties resulting in decreased water quality. When residential developers used phosphorus, nitrate, nitrite, fertilizers, and rapid clear-cutting of natural buffers for residential development the water quality suffered dramatically. These factors have led to a decrease in dissolved oxygen (DO), clarity of water, and an increase in turbidity. Indicator species such as frogs, salmon, cranes, loons, and other native birds and wildlife left the area due to both the poor water quality and the loss of their native habitat and breeding ground to residential development.

It was not until the early 1990’s that the Maine Department of Environmental Protection noticed a decrease in water quality of Mousam Lake and placed it on Maine’s Impaired Waters List. Due to Mousam Lake being classified as an “Impaired Water Body”, Mousam Lake received funding and special attention from the state and local governments to help fix the poor water quality. After many years and significant resources, Mousam Lake has been taken off the Impaired Water Bodies List. In turn, indicator species such as loon, salmon, and other native species have started to return back to the area. Mousam Lake being taken off the list cannot be taken for granted. Without proper management and further protection from invasive species and harmful elements such as phosphorus, Mousam Lake will relapse to its previous impaired state.

Similar to Mousam Lake, Square Pond has experienced extensive residential growth along its shore banks. Although Square Pond is not an impaired water body, without proper management by the Square Pond Improvement Association and the ASYCC it too can become an impaired water body. It costs less to prevent damage to a water body than to fix one that is already damaged.

Geography of Mousam Lake Watershed:

Mousam Lake stretches 926 acres, with over 700¹ residences inhabiting its shorelines. Square Pond covers 896 acres, with over 400 residences inhabiting its shoreline. The watershed of Mousam Lake, Square Pond, Loon Pond, and Goose Pond known as the Mousam Lake Watershed, covers 22 square miles and is home to over 2,200 seasonal and full time residents.²



Figure 1. Courtesy of EPA's National Lakes Assessment: a Collaborative Survey of the Nation's Lakes

² Mousam Lake Water Quality Improvement Project, #2000R-40-WIFAP. Viewed on August 13, 2011, retrieved from http://www.maine.gov/dep/blwq/docgrant/319_files/reports/2004pg34_43.pdf.

Problems affecting the Mousam Lake & Square Pond Watershed

The Mousam Lake watershed is a valuable resource not only to the residents of the water bodies but also to the livelihood of economic and social development for the area. The Mousam Lake Watershed and its valuable resources are threatened every year by erosion and invasive aquatic plants.

Erosion is a natural process in which the elements breakdown the earth's materials, usually rock and soil, over time. Erosion creates run-off, carrying the earth's eroded material from one location to another. The result of erosion in waterfront properties such as those found in the watershed boundaries of the ASYCC can be: sedimentation deposits, excessive nutrient loading, algal blooms, loss of native marine life, the creation of gullies, changes in the landscape slope gradient, and a decrease in shoreline property. The ECC's conservation projects are designed to reduce harmful erosion and prevent run-off from entering the watershed.

The second major issue threatening the watershed, as well as all watersheds, is the introduction of invasive species. Invasive species can be plants or marine animals, both of which greatly threaten the biodiversity of an ecosystem. These species are native to far away regions of the world: Asia, Europe, and Africa. They have been unintentionally transported to local waterways, usually through industry shipping methods; however, it is also common for non-native species to be dumped out of fish tanks into nearby water bodies. Once brought into a region, boats are the most likely source of transporting them from water body to water body. When plant fragments attach themselves to a boat or any type of boating equipment, they are known as "hitch hikers".

These invasive plants grow at abnormally high rates and are extremely difficult to control, often times being impossible to completely eradicate from the lake. Invasive plants have the ability to take over the entire littoral zone of a water body. This is due to their inherit trait of being from a foreign ecosystem where they are a part of the natural system of checks in balances that occur in a well-functioning ecosystem. When introduced into foreign lands, they do not have any predators, enabling them to reproduce at rapid rates, taking over the local flora and fauna that must compete amongst each other. Furthermore, when erosion and run off occurs along shoreline properties, this brings in excess nutrients, especially with the illegal use of fertilizer, and accelerates growth.

The CBI program is dedicated to inspecting all boating equipment entering in and out of the boat launches of Mousam Lake and Square Pond to prevent the introduction of the aggressive invasive plant and animal species. The invasive species that pose the largest threat to the Mousam Lake watershed are: Hydrilla, European Naiad, Curly Leaf Pond Weed, Eurasian Water Milfoil, Hybrid Milfoil, and Variable Leaf Milfoil. Many lakes in New Hampshire and Maine have contracted these invasive plant species, which further increase the threat of them entering the watershed that we, the ASYCC protects. If an invasive were to enter, it would grow rapidly and reach the point where the lake could no longer be used recreationally. Once a lake has no recreational benefits and is deemed unhealthy property values drop accordingly. In the Mousam Lake watershed, a tragedy like this would devastate not only the watershed but also town revenues.



Courtesy Boat Inspection Program

General Overview:

The goal of the ASYCC Courtesy Boat Inspection Program (CBI) is to prevent the introduction of invasive aquatic plants from entering the local watersheds. Invasive aquatic plants threaten the livelihood of the freshwater bodies, surrounding towns, and wildlife populations in the area. The ASYCC CBI program works with boat owners to inspect boats for plant fragments and provide the boat owner with knowledge about invasive aquatic plants. Boat inspections and education are the best ways to protect Mousam Lake, Square Pond, Loon Pond, and Goose Pond waterbodies from the attack of invasive aquatic plants. Once an invasive aquatic plant enters a waterway it is very costly and usually unsuccessfully treated or removed. The result of an invasive aquatic plant attack is a drastic decrease in property values, water quality, and recreational opportunities. There are several lakes in the region that have fallen victim to invasive plant fragments entering their water body, which is why the ASYCC CBI program works very hard to prevent invasive aquatic plants from entering Mousam Lake and Square Pond.

CBI's are located on the Mousam Lake and Square Pond public boat ramps to check all boats, trailers, and other items within the boats such as fishing tackle, lines, ropes, water toys, etc for invasive aquatic plants and fragments. If plants are found in or on the boat the CBI removes the plant or fragment and sends it to the lab for identification.

Since 2008, the ASYCC has increased the number of hours on both the Mousam Lake boat ramp and the Square Pond boat ramp.

- In 2008, the Square Pond boat ramp was covered Saturday and Sunday for a total of 12 hours per week, running from the first weekend of July to the last weekend of August, with additional coverage on Columbus Day. A total of 173 boats were inspected during the 2008 CBI Season.
- In 2009, coverage on Square Pond increased to Friday through Sunday for a total of 21 hours, running from June 15th to Columbus Day weekend (October 12th). A total of 233 boats were inspected during the 2009 CBI Season.
- In 2010, CBI coverage on Square Pond increased to Monday through Thursday for a total of six hours per day, with Friday through Sunday at 12 hours per day. The CBI program during the 2010 season ran from June 6th to Columbus Day. Please note that after Labor Day coverage on Square Pond decreased to four hours per day, Friday through Sunday. A total of 432 boats were inspected during the 2010 CBI Season.
- In 2011, coverage on Square Pond increased during the pre and post seasons. The CBI pre-season and post-season runs Friday through Sunday for six hours per day for a total of 18 hours per week. Pre-season ran from May 30th-June 26th, while the post-season runs from September 9th-October 10th. Regular season on Square Pond CBI runs Monday through Thursday for five hours per day and Friday through Sunday for 12 hours per day, bringing the total to 56 hours per week. A total of 531 boats were inspected during the 2011 CBI Season.

Like Square Pond, Mousam Lake has also seen a significant increase in coverage since the 2008 CBI season.

- In 2008, the Mousam Lake boat ramp was covered Monday through Thursday for eight hours per day, and Friday through Sunday for ten hours per day, for a total of 62 hours per week. A total of 1,182 boats were inspected during the 2008 CBI Season.

- In 2009, the number of hours on Mousam Lake increased to Monday through Thursday for 12 hours per day, and Friday through Sunday for 14 hours per day, for a total of 90 hours per week. A total of 2,316 boats were inspected during the 2009 CBI Season.
- In 2010, Mousam Lake the number of hours covered was increased. The Mousam Lake Boat Ramp was covered Sunday through Saturday for a total of 14 hours each day, for a total of 98 hours per week. A total of 2,663 boats were inspected during the 2010 CBI Season.
- CBI coverage for 2011 has remained the same from 2010, with Sunday through Saturday receiving 14 hours per day for a total of 98 hours per week. During the pre-season, May 30th-June 26th and post-season, September 9th-October 10th, Mousam Lake CBI coverage is reduced to Friday through Sunday for 14 hours per day, 42 hours per week. A total of 3,638 boats were inspected during the 2011 CBI Season.

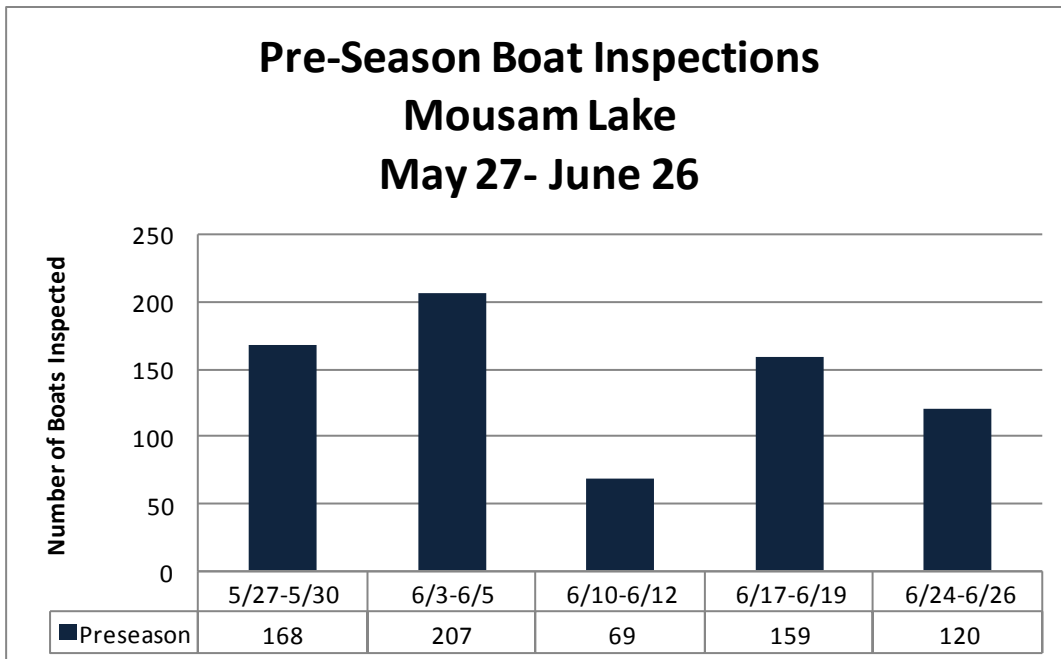
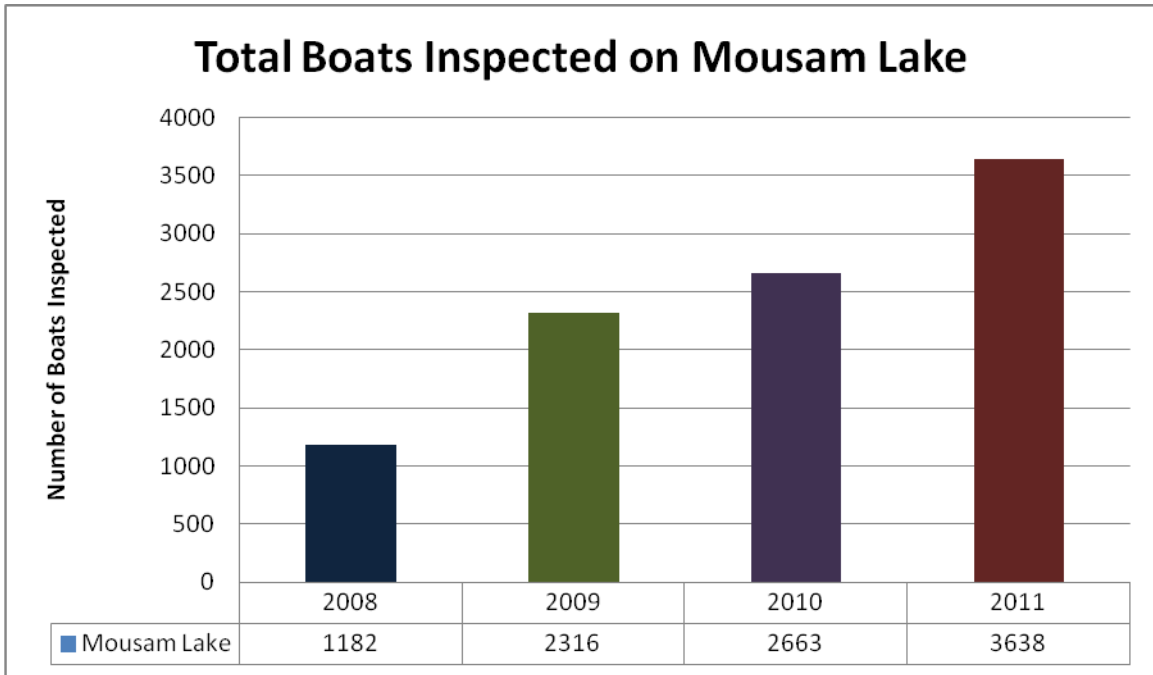
The total number of boats inspected on Mousam Lake and Square Pond has significantly increased since 2008.

- Mousam Lake: In 2011a total of 3,638 boats were inspected. This is an increase of 26.8 percent from 2010.
- Square Pond: In 2010 a total of 531boats, an increase of 18.6 percent from 2010.

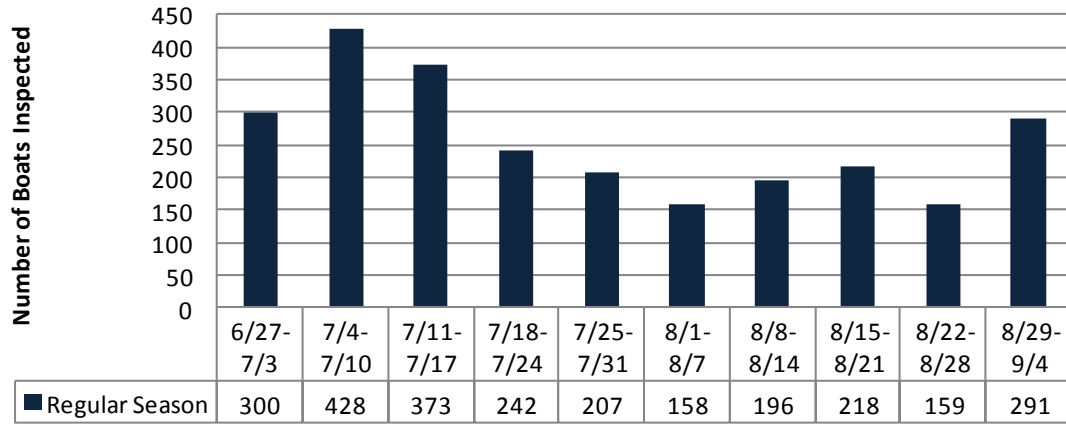
The total number of plant fragments was 58, with two of them being invasive aquatic plants. One of the invasive aquatic plants was caught entering Square Pond in June and the other fragments were found entering Mousam Lake in October. The number of waterways with invasive plants in them in New Hampshire, Maine, and Massachusetts has significantly increased each year. The increase in invasive aquatic plants in nearby waters demands increase coverage on our boat ramps, in addition to better boater education which our Courtesy Boat Inspectors provided to boat owners and anglers.

Below are tables representing the number of boats inspected on a weekly basis from Square Pond and Mousam Lake, in addition to a yearly Lake/ Pond comparison of boat inspections. As the numbers of hours covered on Square Pond and Mousam Lake have increased over the years, so have the number of boat inspections.

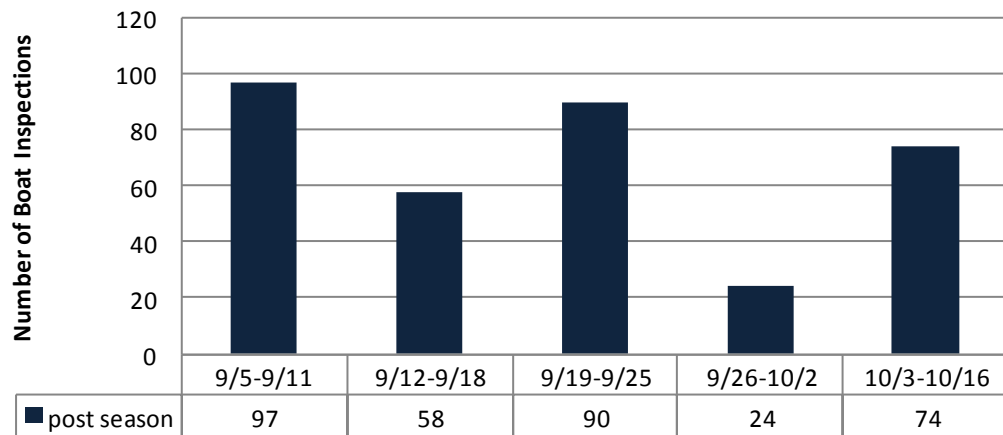
Mousam Lake



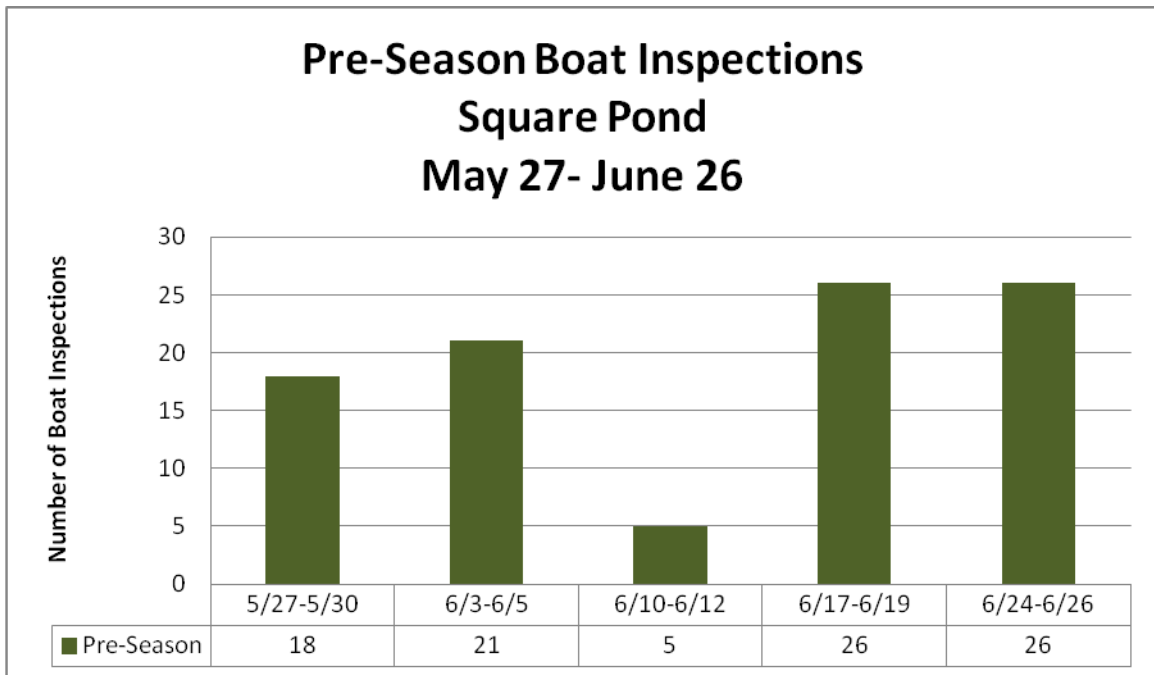
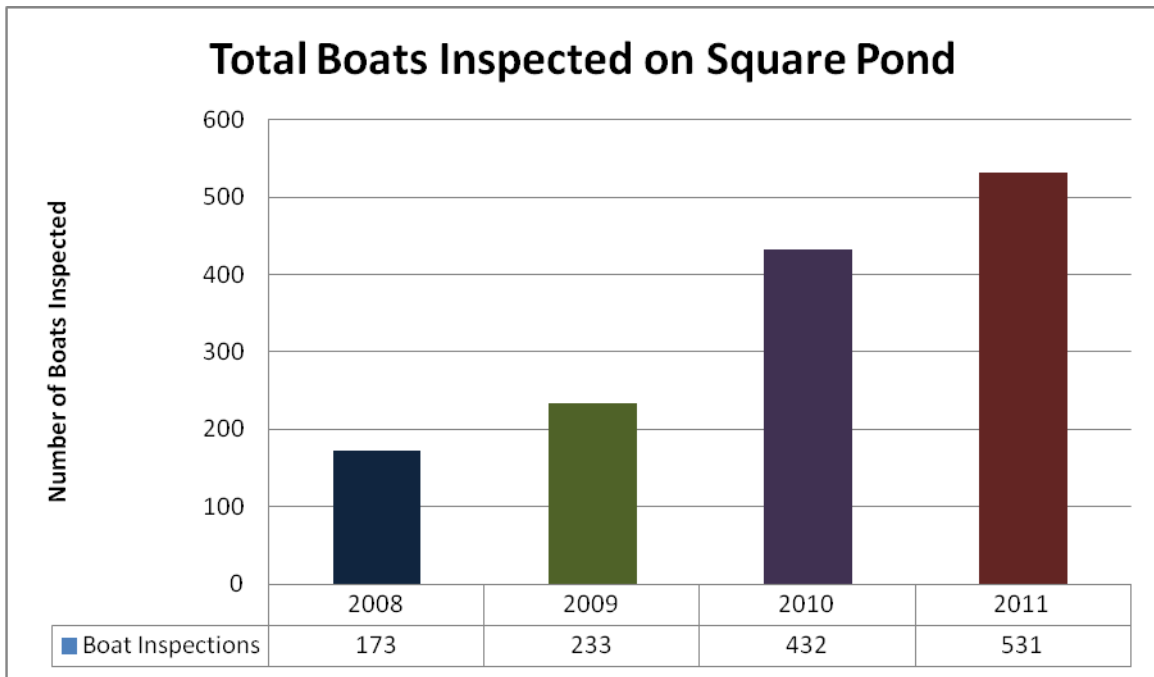
Regular Season Boat Inspections Mousam Lake June 27- September 4



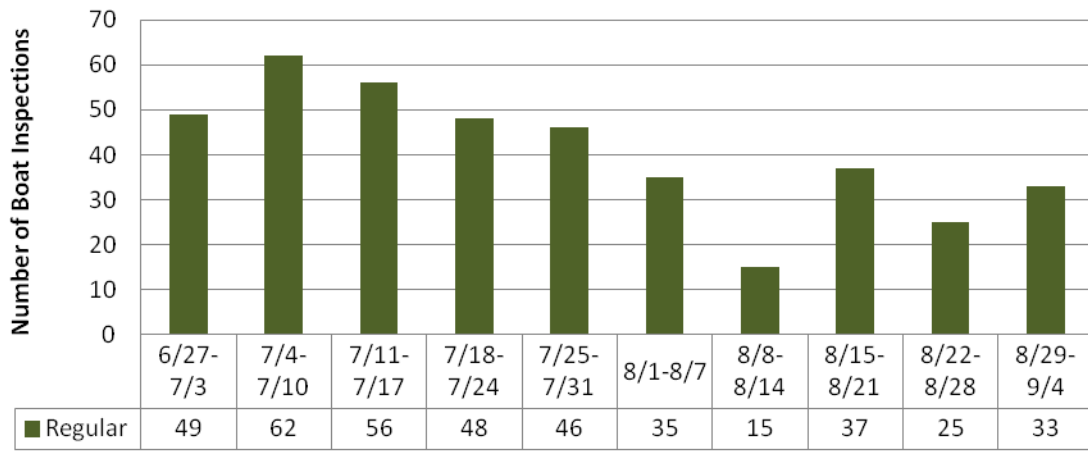
Post-Season Boat Inspections Mousam Lake September 5-October 10



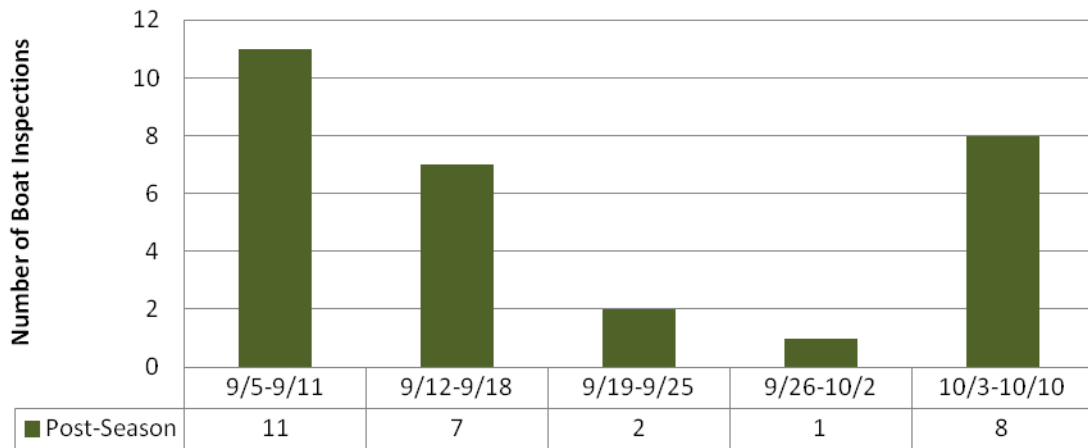
Square Pond



Regular Season Boat Inspections Square Pond June 27- September 4



Post-Season Boat Inspections Square Pond September 5- October 10



Plant fragments found during the 2011 Courtesy Boat Inspection Season. Plant fragments highlighted in red are invasive aquatic plant fragments found entering Mousam Lake or Square Pond.

Date	Water Body	Courtesy Boat Inspector	Native or Non-native	Plant Species if known
June 25	Mousam Lake	Donnie	Native	
June 25	Mousam Lake	Pat	Native	
June 25	Mousam Lake	Pat	Native	
June 26	Square Pond	Sue	Invasive: not confirmed*	Milfoil
June 27	Square Pond	Sue	Native	
June 30	Square Pond	Gail	Native	
June 30	Square Pond	Sue	Native	
Date	Water Body	Courtesy Boat Inspector	Native or Non-native	Plant Species if known
July 4	Square Pond	Brandon	Native	
July 5	Mousam Lake	Gail	Native	
July 5	Mousam Lake	Gail	Native	
July 7	Square Pond	Sue	Native	
July 7	Square Pond	Sue	Native	
July 9	Square Pond	Chad	Native	
July 10	Mousam Lake	Anna	Native	Bladderwort
July 10	Mousam Lake	Brandon	Native	Bladderwort
July 13	Mousam Lake	Gail	Native	
July 14	Square Pond	Sue	Native	
July 14	Square Pond	Sue	Native	
July 14	Square Pond	Sue	Native	
July 14	Square Pond	Sue	Native	
July 14	Square Pond	Sue	Native	
July 15	Square Pond	Gail	Native	
July 17	Square Pond	Brandon	Native	Pipewort
July 19	Mousam Lake	Gail	Native	Bladderwort
July 21	Square Pond	Sue	Native	
July 25	Square Pond	Sue	Native	Pipewort
Date	Water Body	Courtesy Boat Inspector	Native or Non-native	Plant Species if known
August 3	Square Pond	Sue	Native	
August 3	Square Pond	Sue	Native	
August 4	Square Pond	Sue	Native	
August 11	Mousam Lake	Donnie	Native	Eloдея
August 29	Square Pond	Sue	Native	
August 29	Square Pond	Sue	Native	
August 29	Square Pond	Sue	Native	
August 31	Mousam Lake	Alyssa	Native	
Date	Water Body	Courtesy Boat Inspector	Native or Non-native	Plant Species if known
September 4	Mousam Lake	Sue	Native	
September 4	Mousam Lake	Sue	Native	
September 4	Mousam Lake	Sue	Native	
September 4	Mousam Lake	Sue	Native	
September 5	Square Pond	Sue	Native	
September 11	Mousam Lake	Sue	Native	
September 11	Mousam Lake	Sue	Native	
September 23	Mousam Lake	Gail	Native	Bladderwort
September 24	Mousam Lake	Sue	Native	Bladderwort
September 24	Mousam Lake	Sue	Native	
September 24	Mousam Lake	Sue	Native	
September 24	Mousam Lake	Sue	Native	
September 24	Mousam Lake	Sue	Native	
September 24	Mousam Lake	Sue	Native	
September 25	Mousam Lake	Sue	Native	
September 25	Mousam Lake	Sue	Native	Bladderwort
September 25	Mousam Lake	Sue	Native	
September 25	Mousam Lake	Sue	Native	
September 25	Mousam Lake	Sue	Native	
September 25	Mousam Lake	Sue	Native	
September	Mousam Lake	Sarah	Native	
September	Mousam Lake	Sarah	Native	
Date	Water Body	Courtesy Boat Inspector	Native or Non-native	Plant Species if known
October 9	Mousam Lake	Donnie	Invasive: Not confirmed*	Milfoil

*Identified in the field as invasive milfoil, invasive identification not confirmed through DNA testing (fragment too destroyed to conduct a DNA test on)

Appendix

Appendix A: ASYCC Yearly Statistics

Acton-Shapleigh Youth Conservation Corps

Our record, by the numbers

		2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	To Date
Erosion Control Deomonstration Projects		27	24	16	20	18	26	18	17	17	15	20	218
By town	Acton	11	7	2	6	8	16	11	9	4	7	10	91
	Shapleigh	16	17	14	14	10	10	7	8	13	8	10	127
By lake	Mousam Lake	14	7	9	10	7	10	10	12	12	9	12	112
	Square Pond	11	15	6	6	7	3	1	2	2	1	3	57
	Goose Pond	0	0	1	1	2	2	4	1	0	1	1	13
	Loon Pond	2	2	0	3	2	11	4	1	1	3	2	31
	Other	0	0	0	0	0	0	2	1	0	1	1	5
Technical Visits		43	34	33	32	48	65	17	31	30	35	60	428
Courtesy Boat Inspections	Total	4169	3095	2549	1421	1051	580	617	585	506			14573
# of Inspections By Lake	Mousam Lake	3638	2663	2316	1239	1042	553	616	573	506			13,146
	Square Pond	531	432	233	182	9	27	1	12				1427
Plant Fragments Collected	Mousam Lake	34	0	14	7	33	5	8	7	0			108
	Square Pond	24	3	3	1	0	1	0	1				33
	Loon Pond		1										1

Appendix B: ASYCC Information Handout- Printed in MLRA newsletter, SPIA newsletter, and available in print format at Acton and Shapleigh Town Halls, Mousam Lake and Square Pond Boat Ramps, and YCSWD



The Acton-Shapleigh Youth Conservation Corps

What is the ASYCC?

The Acton-Shapleigh Youth Conservation Corps (ASYCC) is a 501c3 non-profit organization formed to protect Mousam Lake, Square Pond, Goose Pond, and Loon Pond known collectively as the Mousam Lake-Square Pond Watershed. The ASYCC is committed to providing education, community outreach, technical assistance, courtesy boat inspections, and accomplishing erosion control projects to manage and maintain water quality within the Mousam Lake-Square Pond Watershed. Our efforts are two-pronged: An Erosion Control Crew (ECC) whose job is to reduce phosphorous intrusion into our lakes, and the Courtesy Boat Inspection (CBI) program designed to prevent invasive plants from entering our lakes.

The ASYCC is funded by taxpayer money from the towns of Acton and Shapleigh, local lake associations, the proceeds from the annual golf tournament, and private donors like you. The ASYCC provides FREE labor for Environmental Landscaping, Education, Community Service, and Boat Inspections through these funds.

The ASYCC is overseen by a Board of Directors (BOD) made up of volunteers dedicated to a healthy lake. The BOD hires and trains local personnel (mostly teenagers) and directs the organization's activities and functions.

The ASYCC season runs from late spring to early fall, offering property owners within the Mousam Lake-Square Pond Watershed expertise on how to remediate erosion on their property and to monitor boats that enter and exit our waters.



Courtesy Boat Inspectors (CBI)

We all clean our boats in the fall and prep them in the winter for the next spring's boating season. But do we closely inspect our boats for plant fragments on the propeller, trailer, anchor, fishing gear or other surfaces

before entering or leaving a lake? We hope you do, but we don't rely on that hope.

The Mousam Lake-Square Pond Watershed is surrounded by lakes with invasive aquatic plants that can destroy a waterbody. Non-native plants like Milfoil, Curly Leaf Pondweed, Hydrilla, Brazilian Elodea, European Frogbit, European Naiad, Fanwort, and Parrot Feather can and do invade lakes in the U.S. Our watershed is surrounded by several lakes that have been invaded by non-native aquatic plants. Just one small fragment of an invasive plant can create an entire lake invasion.

Invasive plants have no natural enemy to keep them under control and therefore reproduce rampantly. Yes, all waterbodies in the Mousam Lake-Square Pond Watershed have

vegetation and weeds naturally, but these plants are native and therefore self-controlled.



With no natural checks for invasive aquatic plants and an increase in phosphorus contamination, these plants grow rapidly, stunting the growth of the native plants, and before long invade and dominate the entire plant zone in a very short time. Invasive aquatic plants inhibit swimming, fishing, motor boating, paddling a canoe or kayak. In other words, the lake becomes choked with invasive plants. To remove these plants is a very costly endeavor, hundreds of thousands dollars are spent annually to reduce invasive aquatic plants from contaminated lakes, often without success. Bottom line: it is much easier to prevent the introduction of invasive aquatic plants than to rid an infested lake of these plants.

The ASYCC maintains a CBI program at the Mousam Lake and Square Pond boat ramps on a regular basis from Memorial Day to Columbus Day each year. CBIs visually inspect all boats entering and leaving Mousam Lake and Square Pond while maintaining records indicating date and time of entry and exit, last known lake visited. This data is important for tracking plant fragments found on boats and to better track invasive plants movement from waterbody to waterbody. When a plant is found, CBIs examine the plant fragment and if a question arises as to its

identification, the plant fragment is sent to the Maine Center for Invasive Aquatic Plants for identification.

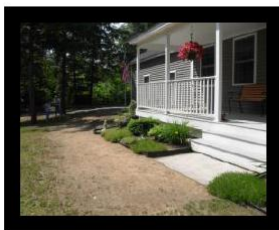
CBIs are not present at the ramps year round, so this leaves boat inspections up to the boat owners during the off months. Please do your part and inspect your boat every time you ENTER and EXIT a lake.

Erosion Control Crew (ECC)

In the mid 80's to early 90's water testing in the Mousam Lake-Square Pond Watershed revealed deteriorating water quality. The culprits were **PHOSPHORUS** and **SEPTIC INTRUSION**.

Phosphorus enters our lakes by rain event run off. Runoff from developed land occurs 10 times faster than from an undeveloped forest due to the compaction of soils, removal of trees and buffer strips, and the introduction of impervious surfaces, e.g. building, roads, and driveways, in addition to the overuse and abusing of septic system. These factors all cause rain water to carry phosphorus and waste contaminants into our lakes. Contamination of lakes and ponds by phosphorus can be reduced by re-vegetating and covering exposed soil. That work is the main focus of the ECC. With help from the ECC landowners can do their part in protecting our waters.

If you own a property within the Mousam Lake-Square Pond Watershed, and use a septic system, have paved driveways or other impervious surfaces, have lost trees or buffer strips, the ECC can help.



Before



After

The best way to fix the problem is to play detective during a rain event. During and after a rainstorm, look for areas where the rain creates gullies. Find where storm water enters and exits your property. Look for areas where pine needles or leaves have been pushed aside from the water path. If you find an "erosion footpath"- you have a problem, a problem with phosphorus run-off that needs remediation.

The ASYCC can provide **FREE assistance to help fix the problem!!!!!!** Our Technical Director will visit your property, provide you with a remediation plan, and if you

decide to accept our help we will send our Erosion Control Crew to remediate the problem. The landowner is responsible for supplying the materials to accomplish the project.

The ECC crew is comprised of 5-6 local teenagers and completes on average 25 erosion control projects annually. Under the guidance of the ASYCC Technical Director the ECC will apply best management erosion control practices to correct your erosion problem.



Septic Systems

The Mousam Lake-Square Pond Watershed is unique in that we have sandy soils that allow nutrients easy access to our waters. For this reason, septic systems are a source of unwanted nutrients to our lakes. Year- round residents should pump their septic system every 2-3 years and seasonal residents every 3-5 years, In order to properly maintain your system use only the amount of water needed for a given task, e.g.:

- Do only 1 load of laundry a day
- Limit shower use
- Put nothing down the toilet except human waste
- Limit the amount of grease entering your septic system, scrap food from plates before washing, consider eliminating your dishwasher

If fact, attend or sponsor a SEPTIC SOCIAL and get the "poop scoop." Septic socials are FREE and EDUCATIONAL.

Doing nothing to promote good water quality has a downside: your investment will suffer. Excessive phosphorus or waste encourages the growth of lake vegetation and algal blooms that inhibits swimming, fishing, and creates obnoxious odors, all of which decrease your property values. The ASYCC exists to help you and other landowners preserve and protect our local natural resources...as well as your investment.

To learn more about the ASYCC please visit our website

www.asycc.com

Appendix C: ASYCC ECC Photo Analysis