Acton-Shapleigh Youth Conservation Corps

Season in Review
Annual Season Program Report
2010

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Contents

Executive Summary:

The Acton-Shapleigh Youth Conservation Corps (ASYCC) is in its tenth season of serving the towns of Acton and Shapleigh, Maine. The ASYCC is commit[illegible]tecting the waters of Goose Pond, Loon Pond, Mousam Lake, and Square Pond. The group executes t[illegible]n Control Crew (ECC) and the Courtesy Boat Inspection (CBI) program has successfully protected the Mousam Lake watershed. In the past ten years, these programs have raised awareness and positively impact lakes' water quality for this region. The ASYCC provides education, community outreach, technical assistance, courtesy boat inspections, and installation of conservation projects for landowners, business owners, and municipalities.

In 2010 the ECC worked extremely hard to help prevent shoreline erosion, loss of soils on driveways and roadways, and provide education to landowners about conservation practices and the known dangers of using herbicides and pesticides near the lake. The ECC completed 24 landowner conservation projects this season.

Efficiency of the program has improved again. Direct labor of the ECC crew remained the same as last year, but the crew completed 8 more projects than last year and 4 more than 2008. The number of technical visits in 2010 increased to 34- in pace from 33 in 2009 and 32 in 2008. This is more efficient than last year because with just 1 additional technical visit, ASYCC completed 8 more projects. The numbers of technical reports decreased slightly. In the 2010 season there were 21 technical reports written, in 2009 a total of 29 written, and in 2008 a total of 26 written. The ECC continues to improve every year. 17 landowners have already verbally committed to projects for next year. Overall, the ECC is more efficient in the number of technical reports and technical visits leading to projects for landowners.

The goal of CBI program is to prevent the introduction of aquatic plants from entering Mousam Lake and Square Pond. The introduction of invasive plant to the waters of Mousam Lake and Square Pond is

detrimental to the towns of Acton and Shapleigh because these two water bodies provide the lion's share of each town's tax revenue. The best method to protect the tax revenue is to continue improving the CBI program. That way, responsible boat owners will always check their boats for plant fragments. Because invasive plants are overrunning some surrounding lakes in the area, it is reasonably necessary desirable to increase CBI coverage again in 2011. Each year the ASYCC has increased the number of hours that the ramps are covered by the CBIs. CBI coverage on Square Pond has increased significantly from 12 hours per week in 2008, to 21 hours per week in 2009, to 60 hours per week ~~now~~ in 2010. Mousam Lake also has significantly increased the number of hours of coverage, from 62 hours per week in 2008, to 90 hours per week in 2009, to 98 hours ~~now~~ in 2010. Without the CBI program, the towns increase the risk of losing major tax revenue they both depend upon for funding basic municipal services.

Acton-Shapleigh Youth Conservation Corps

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 played a significant role in the successful restoration of Mousam Lake from an impaired condition to its current revitalized state, and continue to play important roles in maintaining that revitalized state. ECC and CBI programs also work to protect Square Pond and Loon Pond from the dangers of invasive plants and shoreline erosion.

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 bedroom community, resulting in the loss of naturally forested areas and 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 a decrease in turbidity. Indicator species such as frogs, salmon, cranes, loons, and other native birds and wildlife left the area due to the poor water quality and losing 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 and placed Mousam Lake on Maine's Impaired Waters List. Because it was classified an Impaired Water Body, Mousam Lake received funding and special attention from the state and local governments to help fix the poor water quality. Today, 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. Now, more than ever, continued attention to the health of Mousam Lake is critical. Without proper management and protection from invasive species and harmful elements, Mousam Lake will relapse to its previous impaired state.

Similarly, Square Pond has experienced suburban growth along its shores ~~banks~~. Although Square Pond is not an impaired water body, without proper management by the Square Pond Improvement Association, and other local organizations 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. Square Pond has recently been placed on the Lake Watch List. The Lake Watch List is a list of lakes that the Maine Department of Environmental Protection and local experts fear may soon be in difficulty if proper maintenance is not maintained.

Geography of Mousam Lake Watershed:

Mousam Lake covers 926 acres, with over 750 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.[1]

Problems affecting the Mousam Lake Watershed

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

Erosion is breakdown of materials over time, sedimentation deposits, excessive nutrient loading, use of fertilizers, and loss of shoreline.

- Sedimentation deposits are a direct result of point source and non-point source runoff, leading to mud flats, excessive beds of aquatic vegetation, and the loss of shoreline into the water body. The best way to think about how fertilizers and nutrients affect the water is consider what they do on the land to your plants. These powerful chemicals will do the same thing in the water to aquatic plants as they do on land-to-land plants. The use of fertilizers and nutrients next to a water body will result in excessive algae blooms or massive aquatic plant growth.
- Algae blooms result in depletion of water quality. One aspect of depleted water quality is lack of available oxygen. Lack of available oxygen in a water body leads to "fish kill" and the elimination of other native wildlife. Species most affected by algae blooms are cold-water species that include salmon and game fish.

The second major issue affecting Mousam Lake Watershed and all other watersheds within New England is the introduction of invasive aquatic plants. Invasive aquatic plants that are native to Asia,

[1] Mousam Lake Water Quality Improvement Project, #2000R-40-WIFAP. Viewed on September 13, 2010, retrieved from http://www.maine.gov/dep/blwq/docgrant/319_files/reports/2004pg34_43.pdf

Europe, and Africa, have made their way into our local waterways. The first introduction of these plants is often done by a person dumping their fish tank filled with non-native plants into local waterways.

These foreign plants were not part of the local ecosystem before, they lack any natural predator. They just don't die at the rate of other plants. Instead they grow out of control, taking over the water body ultimately decreasing property values. The growth of invasive aquatic plants is accelerated with the use of fertilizers and nutrients along the shorelines of the waterway, though storm events, erosion, and runoff.

Invasive aquatic plants move from water body to water body via boats, trailers, fishing tackle, lines, and other items that they can attach to on a boat. When a boater leaves or enters a water body they should always check to see if they have any aquatic plants attached to their boats. These plant fragments are known as "hitch hikers. Invasive aquatic plants threatening New England's waterways include Hydrilla, Eurasian Milfoil, and Variable Leaf Milfoil. Once these invasive aquatic plants enter a waterway, they are very expensive to control and even harder to eradicate.

Acton-Shapleigh Youth Conservation Corps Employment

Acton-Shapleigh Youth Conservation Corps Supporters

- Program Supporters:
- Town of Acton, Maine
- Town of Shapleigh, Maine
- Mousam Lake Region Association
- Square Pond Improvement Association
- Maine Department of Environmental Protection
- Lakes Environmental Association
- Private Donors

Acton-Shapleigh Youth Conservation Corps Staff

- Amanda Loomis, Technical Director
- Pat Jackson, Assistant Technical Director
- Jake Bergeron (Shapleigh), Erosion Control Crew Leader
- Morgan Johnson (Shapleigh), Erosion Control Crew Member
- Norris Johnson (Shapleigh), Erosion Control Crew Member
- Keegan Simons (Shapleigh), Erosion Control Crew Member
- Ben Yeaton (Acton), Erosion Control Crew Member
- Collin Boisvert (Acton), Erosion Control Crew Member
- Aaron Rivard (Shapleigh), Erosion Control Crew Member
- Don Lelievre (Acton), Courtesy Boat Inspector
- Gail Boisvert (Acton), Courtesy Boat Inspector
- AJ Walsh (Springvale), Courtesy Boat Inspector
- Taylor Perkins (Shapleigh), Courtesy Boat Inspector
- Kristen Farah (Acton), Courtesy Boat Inspector
- Jenny Supinski (Acton), Courtesy Boat Inspector
- Alyssa Clarke-Cartwright (Acton), Courtesy Boat Inspector
- Jacquelyn Archambault (Acton), Courtesy Boat Inspector
- Bryan Levanie (Acton), Courtesy Boat Inspector
- Kady Lemelin (Shapleigh), Courtesy Boat Inspector

Acton-Shapleigh Youth Conservation Corps Board of Directors:

- George Emery, President
- Bill Sherman, Vice President
- Phil Gannon, Treasurer
- Sheila Hayes, Secretary
- Jane Thomas
- Dennis Roberge
- Norm Lambert

Overview of ASYCC Hired Positions

- **Technical Director:** The Technical Director is position responsible for assisting landowners in the technical design of their properties, directing the assistant technical director, scheduling and maintaining the courtesy boat inspection program, and serving as the liaison between the ASYCC Board of Directors, ECC, and CBI programs. During the "off season" the Technical Director maintains equipment, prepares for the coming season, and pursues grants.
- **Assistant Technical Director:** The Assistant Technical Director, is responsible for the following:
    - Assist the Technical Director on ECC projects design and preparation
    - Direct supervision of the ECC crew leader
    - Answer questions by the landowners on the job site
    - Ordering supplies
    - Payroll and invoices
- **Erosion Control Crew Leader:** The Erosion Control Crew Leader is in charge of training and educating the members of the ECC. The priorities of the ECC crew leader are safety, efficiency, and fun, in that order. Safety is always job number one on an ASYCC job site. This position is a 35-hour per week, Monday through Friday position paying $12.00 an hour.
- **Erosion Control Crew Member:** The ECC consists of five hard working, full-time members and one alternate member. All ECC members are residents of the towns Acton or Shapleigh. ECC members install the erosion and runoff control practices designed by the Technical Director. The crew is only allowed to use hand tools during the construction of the project. This position is a 30-hour per week, Monday through Friday position paying $9.00 an hour.
- **Courtesy Boat Inspector Coordinator:** The CBI coordinator is in charge of scheduling the CBI members on the boat ramp, ensuring that CBIs have all the necessary materials and training to properly do their jobs, and data management of the CBI program. The CBI coordinator position is a five-hour per week position with the coordinator working an additional 30 hours as a CBI member.
- **Courtesy Boat Inspector Member:** The CBIs' job entails educating boat owners about the potential dangers of invasive species within waterways, inspecting boats, trailers, and equipment in the boat, and protecting the waterways from invasive plants. In the 2010 season, ten CBI were hired, to work18 to 20 hours per week covering the boat ramps of Mousam Lake and Square Pond. CBIs are paid $10.00 per hour, and work both Mousam Lake and Square Pond boat ramps.

Acton-Shapleigh Youth Conservation Corps Programs

The ASYCC consists of two major programs that work independent of each other, while still working to protect the valuable resources within the Mousam Lake watershed including Goose Pond, Loon Pond, Mousam Lake, and Square Pond. The ASYCC program includes the Courtesy Boat Inspection (CBI) Program located on Mousam Lake and Square Pond boat ramps and the Erosion Control Crew (ECC) who work on private properties to prevent erosion. Both programs work to educate landowners and users of the local water bodies about the threats of invasive aquatic plants, property management, and lake protection.

Erosion Control Program

The ECC is the older of the two ASYCC programs and is vitally to the health of the watershed. The ECC educates landowners, business owners, and municipalities about the effects that weather, wave action, and development have on their properties and the region. The ECC program is a group of local high school students who work under the direction of a crew leader installing conservation projects around the Mousam

Lake Watershed. Crewmembers get on-the-job training during their first week by completing projects at the Foot of Mousam Lake and at the Shapleigh Town Beach.

The ECC is available to all residents, landowners, business owners, and municipalities located on or near Goose Pond, Loon Pond, Mousam Lake, and Square Pond. Landowners must request services of the ECC to hear erosion control recommendations and to have the ECC work on their properties. The object of the ECC is to conserve and protect landowners' properties from the effects of storm water, erosion, foot traffic, and shoreline wake. While the ASYCC ECC provides the labor at no charge, the property owners are expected to supply the materials for the project.

Over the past three years the ECC has made significant improvements in the number of projects completed, the number of technical reports written, and the number of sights visited. During the 2008 ECC season the crew completed 20 projects, in the 2009 season the crew completed 16 projects, and in the 2010 ECC season the crew completed 24 projects. The 24 projects were divided amongst Acton and Shapleigh. Of the 24 projects in 2010, 17 were completed in Shapleigh, mainly on Square Pond, and 7 projects were completed on Loon Pond and Mousam Lake. It is expected in the 2011 ECC season that the number of residents from Loon Pond will use the services of the ECC as a result of reorganization of the Loon Pond Association.

Other significant increases in numbers for the 2010 season include the number of technical visits. In 2008 a total of 32 visits were made amongst the Mousam Lake Watershed, in 2009 there were 33 technical visits made, and in the 2010 ECC season a total of 34 technical visits were conducted. The number of technical reports fell slightly in the 2010 season due to the time spent educating landowners in conservation practices. Several of the ECC projects in 2010 were conducted on sites where the landowner had already created a conservation plan but needed assistance in installing the project and ensuring that their ideas were the best for the lake or pond.

Technical Visit Log

1. Foot of Mousam Lake
2. Shapleigh Town Beach
3. Moskowitz, 120 Treasure Island, Shapleigh, ME (Square Pond)
4. Whatley, 14 Catalpa Dr, Shapleigh, ME (Square Pond)
5. Plaisted, 24 Jib Way, Shapleigh, ME (Mousam Lake)
6. Thomas, 1062 West Shore Dr, Acton, ME (Square Pond)
7. Bickford, 159 Middle Rd, Acton, ME (Loon Pond)
8. Porreca, 150 Apple Rd, Shapleigh, ME (Square Pond)
9. Roberge Ligay, 77 24th St, Shapleigh, ME (Mousam Lake)
10. Powers, 266 Indian Village Rd, Shapleigh, ME (Square Pond)
11. Leupold, 115 Kato's Nose, Shapleigh, ME (Mousam Lake)
12. Johnson, 120 Dogwood Dr, Shapleigh, ME (Square Pond)
13. Beck, 52 Covewood Dr, Acton, ME (Mousam Lake)
14. Butkus, 23 First St, Shapleigh, ME (Mousam Lake)
15. Rautenberg/ Ball, 110 Dogwood Dr, Shapleigh, ME (Mousam Lake)
16. Burns, 394 Indian Village Rd, Shapleigh, ME (Square Pond)
17. Merchant, 50 Indian Village Rd, Shapleigh, ME (Square Pond)
18. McNamara, 96 11th St, Acton, ME (Mousam Lake)
19. Toomire, 15 Hickory Lane, Acton, ME (Mousam Lake)
20. Hutchins, 202 Indian Village Rd, Shapleigh, ME (Square Pond)
21. Butt, 182 Indian Village Rd, Shapleigh, ME (Square Pond)
22. Bagwood, 8 Blueberry Lane, Shapleigh, ME (Mousam Lake)
23. Gelet, 126 East Shore Dr, Acton, ME (Loon Pond)
24. Sullivan, 223 Loop Rd, Acton, ME (Loon Pond)
25. Volta, 116 Shapleigh Corner Rd, Shapleigh, ME (Mousam Lake)
26. Simpson, 985 Goose Pond Rd, Shapleigh, ME (Mousam Lake)
27. Mapes, 76 10th St, Acton, ME (Mousam Lake)
28. Chamerlan, 32 Jib Way, Shapleigh, ME (Mousam Lake)
29. Gianciulli, 226 East Shore Dr, Acton, ME (Loon Pond)
30. Coye, 160 Indian Village Rd, Shapleigh, ME (Square Pond)
31. Alexandre, 206 Indian Village Rd, Shapleigh, ME (Square Pond)
32. 13th Street Culvert, Acton, ME (Mousam Lake)
33. 13th Street Culvert Upper, Acton, ME (Mousam Lake)
34. Carloni, 112 Shapleigh Corner Rd, Shapleigh, ME (Mousam Lake)

Acton-Shapleigh Youth Conservation Corps Erosion Control Crew, 2010 Summer Projects

1. 2010-001: Foot of Mousam Lake (Mousam Lake), Shapleigh
2. 2010-002: 13th Street Culvert-Upper (Mousam Lake), Shapleigh
3. 2010-003: Thomas- 1062 West Shore Drive (Square Pond), Acton
4. 2010-004: Shapleigh Town Beach (Square Pond), Shapleigh
5. 2010-005: Porreca- 150 Apple Road (Square Pond), Shapleigh
6. 2010-006: Plaisted- 24 Jib Way (Mousam Lake), Shapleigh
7. 2010-007: Beck- 52 Covewood (Mousam Lake), Acton
8. 2010-008: Johnson- 120 Dogwood Dr (Square Pond), Shapleigh
9. 2010-009: Powers- 266 Indian Village Rd (Square Pond), Shapleigh
10. 2010-010: Butkus- 23 First Street (Mousam Lake), Shapleigh
11. 2010-011: 13th Street Culvert-Middle (Mousam Lake), Shapleigh
12. 2010-012: 13th Street Culvert-Lower (Mousam Lake), Shapleigh
13. 2010-013: Rautenberg/Ball-110 Dogwood Dr (Square Pond), Shapleigh
14. 2010-014: Whatley-14 Catalpa St (Square Pond), Shapleigh
15. 2010-015: Burns-394 Indian Village Rd (Square Pond), Shapleigh
16. 2010-016: Butt-182 Indian Village Rd (Square Pond), Shapleigh
17. 2010-017: Hutchins-202 Indian Village Rd (Square Pond), Shapleigh
18. 2010-018: Merchant-50 Indian Village Rd (Square Pond), Shapleigh
19. 2010-019: Indian Village Boat Ramp (Square Pond), Shapleigh
20. 2010-020: Coye-160 Indian Village Rd (Square Pond), Shapleigh
21. 2010-021: Alexandre-206 Indian Village Rd (Square Pond), Shapleigh
22. 2010-022: Bickford-159 Middle Rd (Loon Pond), Acton
23. 2010-023: Gianciulli-226 East Shore Dr (Loon Pond), Acton
24. 2010-024: Gannon-19 Dahlia St (Square Pond), Shapleigh

2010 Erosion Control Crew Project Locations

Acton-Shapleigh Youth Conservation Corps Erosion Control Crew Statistics

Total Number of Technical Visits

- 34 Technical Visits in 2010
- 33 Technical Visits in 2009
- 32 Technical Visits in 2008

Total Number of Technical Reports

- 21 Technical Reports written in 2010
- 29 Technical Reports written in 2009
- 26 Technical Reports written in 2008

Total Number of Projects Completed

- Total Number of Projects Completed in 2010: 24
- Total Number of Projects Completed in 2009: 16
- Total Number of Projects Completed in 2008: 20

Total Number of Project Breakdown by Water Body

Project Breakdown 2010

-Mousam Lake, Shapleigh: 3
-Mousam Lake, Acton: 4
-Square Pond, Shapleigh: 14
-Square Pond, Acton: 1
-Goose Pond, Shapleigh: 0
-Loon Pond, Acton: 2

Project Breakdown 2009

-Mousam Lake, Shapleigh: 7
-Mousam Lake, Acton: 2
-Square Pond, Shapleigh: 6
-Square Pond, Acton: 0
-Goose Pond, Shapleigh: 1
-Loon Pond, Acton: 0

Project Breakdown 2008

-Mousam Lake, Shapleigh: 9
-Mousam Lake, Acton: 1
-Square Pond, Shapleigh: 4
-Square Pond, Acton: 2
-Goose Pond, Shapleigh: 1
-Loon Pond, Acton: 3

Types of Conservation Practices Installed in 2010

- Rubber Razor Blade
- Infiltration Trench
- Drip Line Trench
- Water Bars
- Infiltration Pathway
- Shoreline Vegetation
- Slope Stabilization Planting
- Vegetated Buffer Strip
- Retaining Wall
- Mulch (erosion control mulch)
- Dry –well
- Infiltration Staircase

Acton-Shapleigh Youth Conservation Corps Erosion Control Crew Projects 2010 Season

(Please refer to appendix for pictures of all sites)

2010-001: Foot of Mousam Lake (Mousam Lake), Shapleigh

Existing issue: The Foot of Mousam is a heavily used swimming area for the non-lake residents of the Sanford area. The heavy use of this area causes erosion from the foot traffic and wave action. Additionally erosion is caused by runoff from the roadway that surrounds the beach. During rainstorms, water travels down the roadway with great velocity taking sand and ground cover with it.

Solution and conservation practices installed: To help prevent the loss of soils caused by foot traffic and road runoff, the ECC covered the ground with 10 yards of erosion control mulch. In addition to the mulch the crew transplanted several plants to help ensure the success of their growth.

Materials used:

- 10 yards of erosion control mulch

2010-002: 13th Street Culvert-Upper (Mousam Lake), Shapleigh

Existing issue: A significant portion of 13th Street was recently paved which has caused the amount of water traveling on the road to cause damage along the side of the road during storm events. The runoff travels at a great velocity carrying sediments down the slope and creating a gully along the side of the road. To help reduce erosion the road association created a dry well to collect storm water during events. The dry well is currently being overpowered by the storm events.

Solution and conservation practices installed: To help reduce the erosion along the roadside caused by the runoff and improved the functioning of the current dry well the ECC removed all sediment in the dry well as well as deepening the dry well to improve its ability to catch more runoff.

Materials used:

- Geo fabric
- Rip rap stone

2010-003: Thomas- 1062 West Shore Drive (Square Pond), Acton

Existing issue: 1062 West Shore Drive is located at the bottom of a steep slope. During storm events storm water travels down the roadway, onto the driveway, and into Square Pond. Recently the Thomas' had a pipe replaced under their paved driveway removing a 50' by 10' section of pavement. The pavement was never replaced; the Thomas' were seeking an alternative solution to pavement.

The area from the camp to the boat dock receives a lot of foot traffic, which causes erosion. This area is next to the beach area on the Thomas's property and is heavily used. Something needed to be created to help reduce the amount of erosion in this area.

Solution and conservation practices installed: To help reduce the amount of runoff coming from West Shore Drive and the velocity of the storm water the ECC installed a brick infiltration section into the driveway. The storm water bricks that were used in place of the pavement were permeable allowing the water to infiltrate into the ground through the bricks rather than run on top of them. The brick infiltration section was created by digging a shallow trench where the pavement was missing. From there, the crew tamped and leveled off the area to ensure the bricks would lie flat. After tamping the area, the crew lined the trench with infiltration fabric and filled the trench with 3/4" crushed stone, and then 3/8" crushed stone. After filling the trench with stone the area was tamped again. Once the area was flat the crew placed the bricks in the suggested pattern and again tamped the area to ensure the bricks were in place.

For the trail from the camp to the boat dock, the crew installed an infiltration pathway.

Materials used:

- 3/4" stone
- 3/8" stone
- Infiltration bricks
- Infiltration fabric
- Stone pavers

2010-004: Shapleigh Town Beach (Square Pond), Shapleigh

Existing issue: The Shapleigh Town Beach is a heavily used local swimming and relaxing area for residents of Shapleigh who do not own lakeside property. The heavy use of this land leads to foot traffic erosion, the retention of water in the parking area, and the lack of vegetation. Since the Shapleigh Town Beach is quite a large project the ASYCC broke it up into 3 different project sections. The first area of concern was the parking area. Water collects in this area after large storms. The edges of the parking area are bermed so rainwater cannot exit the area.

Projects number two and three for the Shapleigh Town Beach includes the bare or exposed soil caused by storm events and foot traffic.

Solution and conservation practices installed: The solution for project number one at the Shapleigh Town Beach was to construct an exit point for the water to leave the parking area. Currently there is a rain garden on the other side of the parking lot berm next to the driveway. The crew expanded the rain garden with sweet fern, blueberry bushes, and several other native plants. Then the crew took a piece of PVC pipe and cut it into half. The ECC dug a trench below the ground running from the puddle in the parking area to an exit point, which was the rain garden. The PVC pipe was then covered with infiltration fabric, submerged into the ground, and then covered with 3/4" stone.

Project number two was the reconstruction of the infiltration pathways that currently lead from the parking lot to Square Pond. The infiltration pathway was originally constructed in 2008 and needed new stone and re-leveling of the timbers. Project number three was the addition of erosion control mulch to the area that was mulched in previous years.

Materials used:

- 3/4" crushed stone
- Infiltration fabric
- PVC pipe
- Various types of native plants

2010-005: Porreca- 150 Apple Road (Square Pond), Shapleigh

Existing issue: The 150 Apple Road project was a continuation to a project from the 2009 ECC season. In the 2009 ECC season the crew held a workshop at 160 Apple Road, creating an infiltration pathway, however the infiltration pathway stopped at the Porreca's property line. The Porrecas wanted to continue the infiltration pathway to their boat dock, since this pathway receives a lot of foot traffic. Another project on this property dealt with the base of the stone retaining wall that runs along the beach. This area was receiving severe erosion from storm events causing sand to run into Square Pond.

Solution and conservation practices installed: To resolve the incomplete pathway between 160 and 150 Apple Road the ECC completed the pathway between the two properties, running the infiltration pathway from the existing pathway to the boat dock. The infiltration pathway was created with the same materials as the 150 Apple Road infiltration pathway, using 3/4" stone, infiltration fabric, and 2'x2' pavers.

To help prevent the loss of sand from the beach into Square Pond the ECC planted several blueberry bushes along the stone retaining wall, and then placed a 2' wide strip of erosion control mulch along the wall to prevent storm water from fall directly off the wall onto the beach. It should be noted that with the stone retaining wall there is a storage shed built within the slope, instead of placing the erosion control mulch the crew installed an infiltration trench to catch the storm water that runs off the roof of the shed.

Materials used:

- Erosion control mulch
- 3/4" stone
- 2'x2' pavers
- Infiltration Fabric
- Blueberry bushes
- 4"x4" timbers
- Rebar

2010-006: Plaisted- 24 Jib Way (Mousam Lake), Shapleigh

Existing issue: 24 Jib Way sits at the bottom of a steep slope and is the low point between neighboring camps. 24 Jib Way receives a lot of storm water that pools in the center of the property and eventually runs towards Mousam Lake creating a river within the exposed soils. The property consisted of exposed soils, heavy foot traffic erosion, and little vegetation other than several large trees.

Solution and conservation practices installed: To help reduce the loss of soils on 24 Jib Way the ECC installed an infiltration pathway with infiltration fabric, 3/4" smooth stone, and stone pavers. Along the infiltration pathway the crew planted various plants that included day lilies, hosta, blueberry bushes, and northern bayberry bushes. After installing the infiltration pathway the ECC spread erosion control mulch over the entire property to help reduce the amount of exposed soils and prevent the river from being formed.

In addition to the infiltration pathway and the erosion control mulch the crew created a drainage system. The drainage system was created by submerging three PVC pipes into three separate holes along the property line to help reduce the amount of runoff coming from the neighbor's properties which also had a lot of exposed soils and runoff. The PVC pipes were drilled so they had 1" holes running along the sides of the pipe and then wrapped with infiltration fabric to prevent soil from clogging the holes. The pipes were then placed into the holes and filled with 3/4" stone inside and outside of the pipe.

Materials used:

- Infiltration fabric
- 3/4" stone
- Stone pavers
- Erosion control mulch
- PVC pipes
- Day lilies, hosta, blueberry, and northern bay berry bushes

2010-007: Beck- 52 Covewood Drive (Mousam Lake), Acton

Existing issue: 52 Covewood Drive is located off 13th Street on lower Mousam Lake. The property was well vegetated but foot traffic and storm water runoff from the house and driveway were causing the foot path from the house to the lake to be eroded.

Solution and conservation practices installed: To help resolve the loss of soils to runoff and foot traffic the ECC lined the pathway with infiltration fabric and then placed 3/4" smooth stone within the pathway. The 3/4" smooth stones allowed the owners to still walk on the pathway barefoot which still serving the infiltration purpose. In addition to the infiltration pathway the ECC installed several infiltration steps along the slope to the infiltration pathway to help aid in the access to the lake.

Materials used:

- 3/4" smooth stones
- 4x4 timbers
- Infiltration fabric
- Rebar

2010-008: Johnson- 120 Dogwood Drive (Square Pond), Shapleigh

Existing issue: 120 Dogwood is an extensive project with several different contributors of runoff and erosion. Since this project was a large undertaking, it was broken up into three different projects which include project

number one: back slope behind the house, project number two: access to the water, project number three: front waterside slope.

Project number one was a 5' high slope that had little, to no vegetation that left the slope venerable for erosion. Project number two was the lack of a direct access way to Square Pond from the house that led to foot traffic erosion. Project number three was the exposed soils on the front waterside slope that had a small vegetated buffer at the top and bottom of the slope but lacked vegetation and ground cover in between.

Solution and conservation practices installed: For project area number one, the ECC planted several low-lying shrubs, which included blue rug junipers and Bar Harbor junipers. In addition to the plantings the crew installed erosion control mulch to help protect the exposed soils.

To help establish a pathway from the camp to Square Pond, the ECC crew installed a set of infiltration steps for project area number two. The infiltration steps started at the camp and descended to the dock. Along the staircase the crew placed infiltration fabric to cover any soils that were exposed when installing the staircase. Over the infiltration fabric, along the staircase the crew installed erosion control mulch to add extra protection for the exposed soils.

Project area number three is the waterside slope that was slightly vegetated with a vegetated buffer at the top and bottom of the slope but little vegetation between the buffers. To help increase the amount of vegetation within the area the crew added more plants to the existing vegetated buffers, which included day lilies and hostas. For the area between the two buffers the crew planted several different types of shrubs which included blueberry bushes, northern bayberry, and St. John Wort bushes in addition to day lilies and obedient plants for low lying ground coverage. Between the plantings the crew placed infiltration fabric to protect the underlying soils and then erosion control mulched the area.

Materials used:

- 6x6 timbers
- Infiltration fabric
- Erosion control mulch
- Plantings (blueberry bushes, northern bayberry, St. John wort bushes, junipers, day lilies, hostas, obedient plants)
- 1-3" smooth river rock
- ¾" stone
- Blue flag pavers

2010-009: Powers- 266 Indian Village Road (Square Pond), Shapleigh

Existing issue: The Power's property is located towards the end of Indian Village Road, at the bottom of a down slope of the road. Over the years the road has been pitched away from the wooded side of the road and now towards the Power's property. During major storm events, storm water would run down the slope of the road and pool in the Power's driveway, which eventually would overflow and create a river from the driveway down the slope along the Power's camp and into Square Pond. The area along the side of Power's camp erosion from major storm events has eroded away a lot of the soils causing the roots of large pine trees to be exposed.

Solution and conservation practices installed: To help reduce the rate of storm water travel and pooling on the Power's property the ECC installed an infiltration pathway from the driveway to the lakefront patio. Along the sides of the infiltration pathway the crew planted a buffer strip of day lilies and erosion control mulch to expand the area of conservation practices installed in this high water velocity area.

Materials used:

- 3/4" stone
- Infiltration fabric
- 4x4 timbers
- Rebar
- Day lilies
- Erosion control mulch

2010-010: Butkus- 23 First Street (Mousam Lake), Shapleigh

Existing issue: The Butkus property was a multiple step project for the ECC. To tackle this project the ECC broke the property up into four projects.

- Project area number one: during storm events water runs down First Street pools in the turnabout and then eventually travels to the Butkus driveway where it pools until evaporated or infiltrated into the ground.
- Project number two: involves the pathway to the water from the camp. Prior to the ECC working on the property the pathway was an imperious surface made with slate pavers touching end to end, when wet they become slippery. The pathway runs down a gradual slope and was becoming a problem.
- Project number three: the pooling of storm water exiting the storm gutters from roof runoff. During and after storm events roof runoff runs from the roof gutters into a pipe system into a small rock catch basin, eventually overflowing and pooling in the sitting area off the porch.
- Project number four: the lack of pathway from the existing retaining wall to the docks in the water. Previously prior to the ASYCC people traveled via foot on exposed soils causing foot traffic erosion.

Solution and conservation practices installed: To help reduce the rate of runoff and erosion on the Butkus' property the ECC installed several conservation practices. In project area number one, which is the driveway, the crew laid out infiltration fabric to cover the exposed soils in the driveway. Along the sides of the driveway the crew installed 4x4 timbers to hold in the stone and help define the driveway. Once the infiltration fabric was in place and the timbers installed the crew filled the area with 1" stone.

For project number two, the crew installed a combination of infiltration pathway and infiltration staircase. Starting at the backdoor to the camp the crew removed the existing slate pathway and dug a shallow trench that was 4" deep and 4' wide, then lined it with infiltration fabric, filled the trench with ¾" crushed stone, and then placed the old slate pavers in the stone every 8" to help aid in walking. The infiltration pathway runs from the back door of the camp to the front porch of the camp. For the remainder of the slope the crew built an infiltration staircase, since this area was extremely steep to continue the infiltration pathway.

Project number three was the creation of a larger catch basin to help infiltration the roof runoff from the pipes. To do this the crew created an 8'x8' area where the water pools, trenched out the area, lined it with infiltration fabric, created a water bar boarder around the area to retain the stones, and then filled the area with ¾" smooth stone. Now instead of this area left unused due to the standing water the Butkus and guest can use it as a sitting area while the water infiltrates below them.

Project number four was the establishment of a pathway from the end of the infiltration steps to the boat docks. To do this the crew again trenched the area 4" deep and 3' wide, then filled the trench with ¾" crushed stone, and placed the old slate pavers 8" area to again aid in walking.

Materials used:

- ¾" smooth stone
- ¾" crushed stone
- 1" crushed stone
- 4x4 timbers
- 6x6 timbers
- Erosion control mulch
- Infiltration fabric
- 6" and 8" spikes
- Rebar

2010-011: 13th Street Culvert-Middle (Mousam Lake), Shapleigh

Existing issue: During the winter the existing 13th Street culvert filled with sediment from the road and storm events.

Solution and conservation practices installed: To help this storm water culvert remain in working condition, the ECC cleaned out the sediment, repaired or replaced infiltration fabric if needed, and cleaned out the PVC pipe drainage system by replacing the infiltration fabric, the cap, and stone if needed.

2010-012: 13th Street Culvert-Lower (Mousam Lake), Shapleigh

Existing issue: Currently, water runs directly down 13th street, into a wooded area, which is ideal, except during exceptionally large storms like we have had over the past few years the storm water continues to flow and flood a landowner's property that is located on the other side of the wooded area.
Solution and conservation practices installed: To solve this problem the ECC installed a storm water culvert to catch and retain the storm water from the roadway. In addition to the storm water culvert, the crew installed three PVC pipe drainage systems as described in the 24 Jib Way project.
Materials used:

- 6-8" rip rap stone
- Infiltration fabric
- PVC piping
- ¾" crushed stone

2010-013: Rautenberg/Ball-110 Dogwood Drive (Square Pond), Shapleigh

Existing issue: 110 Dogwood Drive had a mixture of erosion issues. Along the shoreline, wave action was causing undercutting and the loss of soils. The other issue on the property was the erosion in the driveway. During storm events water would run at a high velocity down the driveway taking soils with it leaving behind washout and gullies.
Solution and conservation practices installed: To handle the shoreline erosion issue the ECC planted a shoreline buffer consisting of 75 various types of plants. In addition to the plantings the crew installed erosion control mulch to cover any exposed soils.

For the driveway area, the crew installed two rubber razor blades, which broke down storm water runoff and also diverted the storm water into the wooded area along the side of the driveway. A rubber razor blade is a piece of rubber from a conveyor belt sandwiched between two 2x6s and nailed together. The rubber is sandwiched 4" between the lumber and had 4" free flowing. Once the rubber razor is constructed a trench is due across the driveway or roadway, and the wooden portion of the rubber razor is submerged into the ground and covered with soils and ¾" crushed stone. The free portion of the rubber razor blade is the only part above ground, cars and trucks can drive easily over without noticing it is there.
Materials used:

- 2x6 lumber
- Nails
- Rubber
- ¾" crushed stone

2010-014: Whatley-14 Catalpa Drive (Square Pond), Shapleigh

Existing issue: 14 Catalpa Drive is located at the bottom of a steep slope. The neighbors at the top of the slope bring in sand each year. During storm events the neighbor's sand is washed down the steep slope and deposited on the 14 Catalpa Drive property. In addition to the imported sand being washed down the slope, the storm events also cause erosion on the slope.
Solution and conservation practices installed: The original plan was to install an infiltration pathway from 14 Catalpa to Square Pond, mulch the remaining area with erosion control mulch, and create a vegetated buffer along the shoreline, but the situation of the sand being washed down the slope need to be tend to since it was a major concern. To help slow down water movement within the slope area and to cover exposed soils the ECC installed erosion control mulch over the entire slope area.
Materials used:

- Erosion control mulch

2010-015: Burns-394 Indian Village Road (Square Pond), Shapleigh

Existing issue: 394 Indian Village Road project was once a salmon spawning area, due to expansions of roadways and recent culvert works at the head of the stream. The waterway no longer serves as a spawning area.

Overview of the stream: The stream is located between Indian Village Road and Apple Road. The area is extremely vegetated, but with recent changes in the road and the installation of the storm water culvert on

Apple Road the stream receives a lot of sediment and debris causing the stream to become shallow and decrease in width.
Solution and conservation practices installed: To help clean up the stream, the ECC removed excess sediment from the banks of the stream, removed logs that were preventing flow of the stream, and picked up any trash that was left in the woods by hikers or other users of the area.

2010-016: Butt-182 Indian Village Road (Square Pond), Shapleigh

Existing issue: 182 Indian Village Road receives a lot of runoff from Indian Village Road. Indian Village Road is pitched towards the Square Pond side of the road rather than the wooded side. The pitching towards Square Pond caused the camps along Indian Village Road on the Square Pond side to receive excessive amount of storm water during storm events. The Butt's property is located between two down slopes causing this property to receive more than the average amount of storm water down the properties driveways.
Solution and conservation practices installed: To help reduce the amount of storm water that flows down one of the two driveways located on 182 Indian Village Road, the ECC installed two rubber razor blades, and a dry well. Both rubber razor blades detour water coming from Indian Village Road to travel into the woods and infiltrate into the ground.
Materials used:

- Infiltration fabric
- 2x6 lumber
- Rubber from a conveyor belt
- Nails
- Rip rap stone

2010-017: Hutchins-202 Indian Village Road (Square Pond), Shapleigh

Existing issue: 202 Indian Village Road also receives an excessive amount of water running off Indian Village Road due to the pitching and sloping of the roadway.
Solution and conservation practices installed: To help reduce the amount of storm water that travels from Indian Village Road onto 202 Indian Village Road the ECC installed a rubber razor blade. At the end of the rubber razor blade the crew installed a dry well to help hold and prevent storm water from traveling around the rubber razor blade.
Materials used:

- Infiltration fabric
- 2x6 lumber
- Rubber from a conveyor belt
- Nails
- Rip rap stone

2010-018: Merchant-50 Indian Village Road (Square Pond), Shapleigh

Existing issue: The Merchant property on Indian Village Road is located at the bottom of a major slope that is paved. The steepness of the slope, the pitch, and the pavement all contribute to the rate and amount of water that this property receives. During storm events water flows down the paved slope, onto the Merchant's driveway which is also paved, along the side of the house, down the beach, and eventually into the Square Pond. During this time not only does the water travel at a great velocity, it also causes major erosion on the soils and beach of the property.
Solution and conservation practices installed: To reduce the rate of storm water travel, prevent further loss of the soils on the property, and infiltrate storm water the ECC created a storm water trench along the side of the driveway. The driveway is pitched away from the house, which is paved. The crew removed the grass along the driveway, dug a trench roughly 2' deep and 2' wide, then lined the trench with infiltration fabric, then filled the trench with 6-8" rip rap stone, and finally covered the trench with ¾" stone.

Materials used:

- ¾" crushed stone
- 6-8" rip rap stone
- Infiltration fabric

2010-019: Indian Village Boat Ramp (Square Pond), Shapleigh

Existing issue: The Indian Village Boat Ramp is not an official boat ramp, but rather a right-of-way for the residents of Indian Village Road who do not own lake front property on Square Pond. Like the other properties on Indian Village Road the pitch of the road and its location at the bottom of a slope causes a lot of water to travel down the boat ramp. It should be known that the wooded side of Indian Village Road is roughly one to two feet higher than the road; therefore it is impossible for storm water to exit the roadway.
Solution and conservation practices installed: To help prevent storm water from traveling down the boat ramp causing erosion, the ECC installed a rubber razor blade and a dry well.
Materials used:

- Infiltration fabric
- 2x6 lumber
- Rubber from a conveyor belt
- Nails
- Rip rap stone

2010-020: Coye-160 Indian Village Road (Square Pond), Shapleigh

Existing issue: The Coye property is located at a low point on Indian Village Road and is located on a part of the road where the pitch is flat. Between the flat pitch, the high wooded side of the road, and located at a low point of the road this all results in storm water running down the Coye property to Square Pond. During a storm event water from the road travels down the driveway, through the existing vegetated buffer, down a stones staircase, over the beach, and into Square Pond causing severe soil erosion.
Solution and conservation practices installed: Due to the length of time needed to complete the Coye project the ECC started the work this summer and the remaining part of the project will be finished in 2011. The ECC installed an infiltration trench across the mouth of the driveway, which is also the width of the property. The crew then installed two water bars at the end of the driveway out of river stone. To help cover exposed soils between the new stone water waters and the existing vegetated buffer the crew placed erosion control mulch within this area. To finish the project for this season the crew installed an infiltration pathway from the driveway to the camp to help prevent erosion caused by foot traffic.
Materials used:

- Infiltration fabric
- ¾" crushed stone
- Rip rap stone
- Erosion control mulch

2010-021: Alexandre-206 Indian Village Road (Square Pond), Shapleigh

Existing issue: 206 Indian Village Road like the other properties worked on by the ECC is located at a low point in Indian Village Road, and is pitched towards Square Pond. The camp is nicely vegetated, the only non-vegetated place is the driveway that allows the water to run straight down and erode soils away in its travels.
Solution and conservation practices installed: To prevent water from running straight down the driveway the ECC installed a rubber razor blade, which pushed the water off the driveway into the wooded area, long the driveway.

Materials used:

- Infiltration fabric
- 2x6 lumber
- Rubber from a conveyor belt
- Nails

- Rip rap stone

2010-022: Bickford-159 Middle Road (Loon Pond), Acton

Existing issue: The Bickford property is located on Loon Pond. The property previous had a set of stairs built by a contractor, which recently have begun to breakdown resulting in the property owners using alternative routes to Loon Pond.

Solution and conservation practices installed: The ECC reconstructed the staircase to allow the property owners to access the water via stairs instead of causing foot traffic erosion. In addition to the reconstruction of the staircase, the crew laid more erosion control mulch on the slope next to the house.

Materials used:

- Erosion control mulch
- 4x4 timers
- Rebar

2010-023: Gianciulli-226 East Shore Drive (Loon Pond), Acton

Existing issue: 226 East Shore Drive had a boardwalk type access way to Loon Pond. In recent years the walkway started to rot. The new owners of the property wanted to replace the existing walkway before it became a dangerous issue.

Solution and conservation practices installed: The ECC removed the old rotten boardwalk and replaced it with an infiltration pathway. The new pathway sits in the footprint of the old boardwalk and is made with ¾" smooth crushed stone, infiltration fabric, and pavers.

Materials used:

- ¾" smooth crushed stone
- Infiltration fabric
- Stone pavers

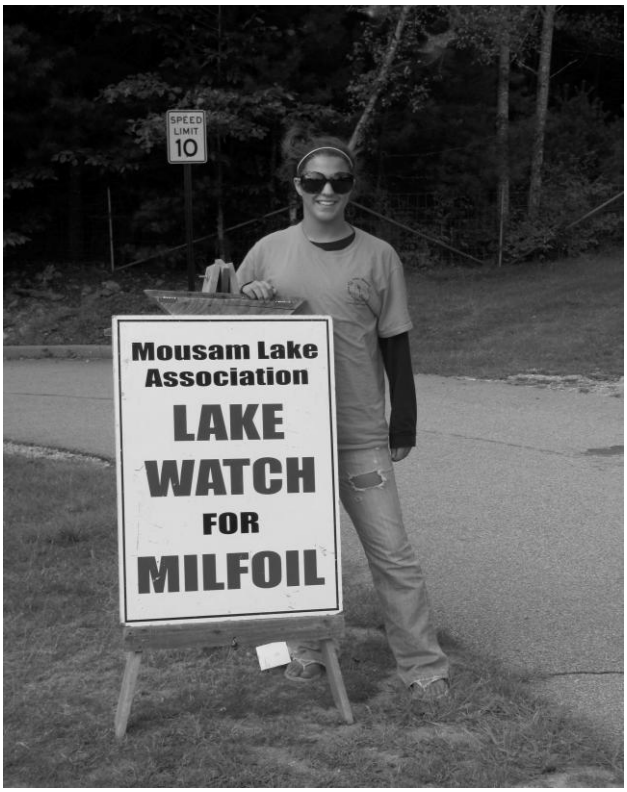
2010-024: Gannon-19 Dahlia St (Square Pond), Shapleigh

Existing issue: 19 Dahlia Street was a project from the 2009 season project. Over the winter water from the Dahlia Street had eroded an area around the staircase leading to the house.

Solution and conservation practices installed: To prevent the further loss of soils caused by the storm water runoff from Dahlia Street the ECC removed the box step and install an infiltration trench, constructed with riprap stone. After the trench was installed the existing box was placed on top of the infiltration trench, lined with infiltration fabric, and filled with ¾ crushed stone.

Materials used:

- Rip rap stone
- Infiltration fabric
- ¾" crushed stone



Acton-Shapleigh Youth Conservation Corps
Courtesy Boat Inspection Program

The goal of the CBI program 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. Invasive aquatic plants such as Hydrilla, Eurasian Milfoil, and Variable Leaf Milfoil are threatening New England's waterways. The ASYCC CBI program checks boats for plant fragments and provides boat owners with education about invasive aquatic plants. Boat inspections and education are the best methods to protect Mousam Lake, Square Pond, Loon Pond, and Goose Pond from the attack of invasive aquatic plants. Once an invasive plant enters a waterway it is very costly to fight back, and rarely actually removed from the water body. . The result of an invasive aquatic plant attack is a decrease in property values, water quality, and recreational opportunities. This is why the 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

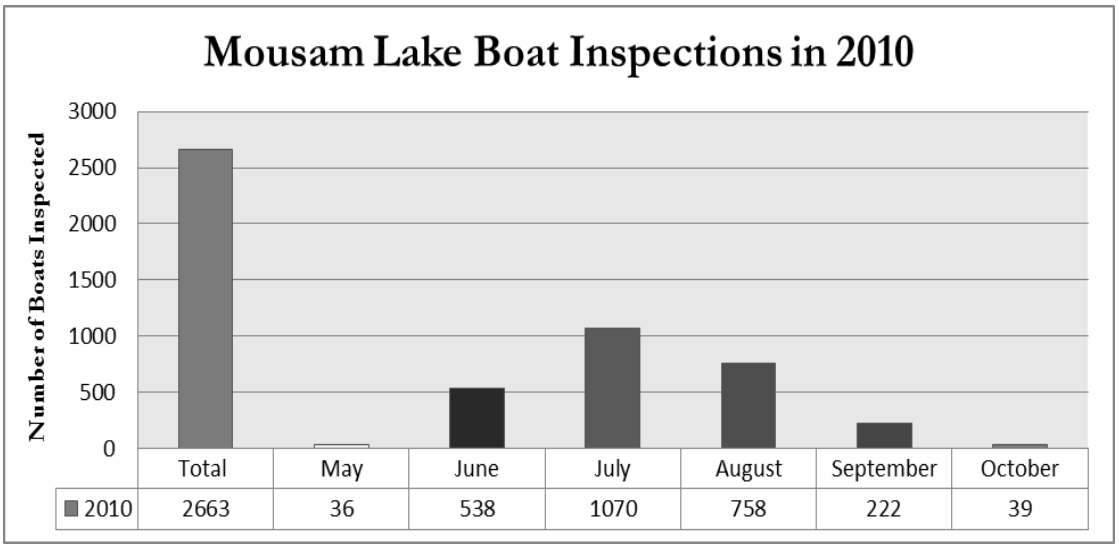
Since 2008, the ASYCC has increased the number of hours covered on both the Mousam Lake boat ramp and the Square Pond boat ramp. In 2008, the Square Pond boat ramp was covered Saturday and Sunday for a total of 12 hours per week from the first weekend of July to the last weekend of August, with coverage on Columbus Day. 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. Once again coverage increased in the 2010 CBI season on Square Pond. In 2010, CBIs covered Square Pond Monday through Thursday for a total of six hours per day and Friday through Sunday for 12h hours per day. The CBI program during the 2010 season runs 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.

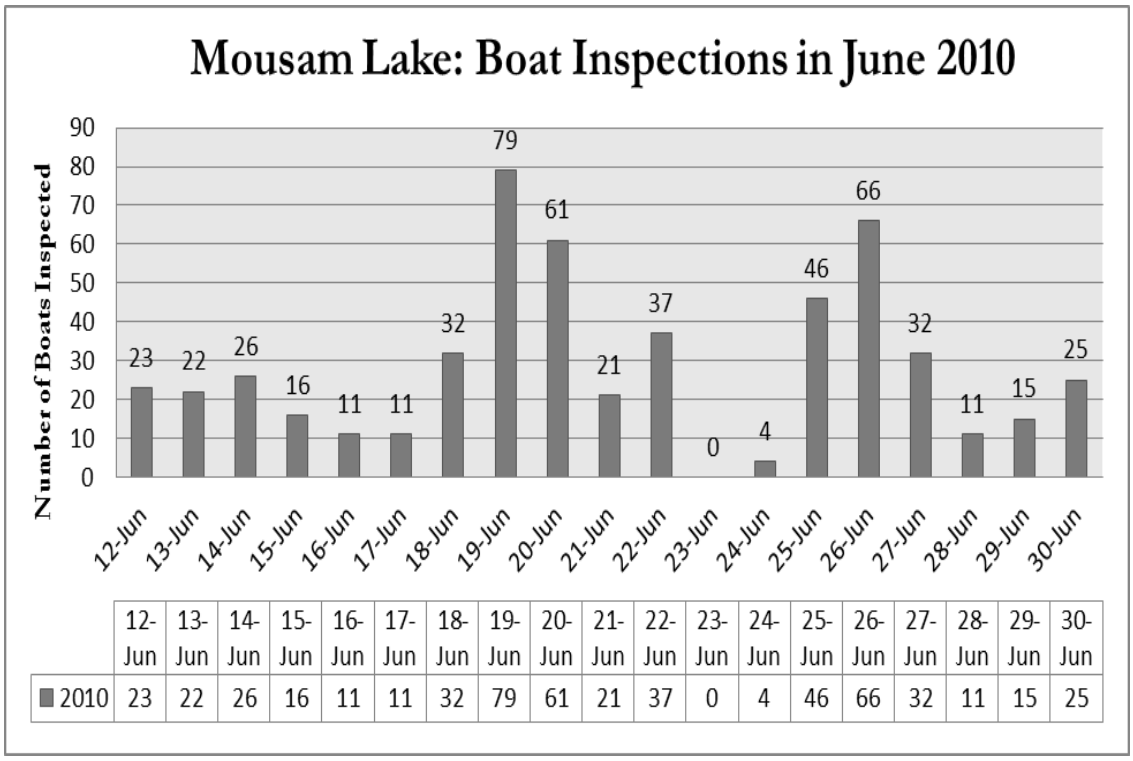
Like Square Pond, Mousam Lake has also seen a significant increase in coverage since the 2008 CBI season. In 2008, the Mousam Lake boat ramp was covered Monday through Thursday for a total of eight hours per day, and Friday through Sunday for ten hours each day, for a total of 62 hours per week. In 2009, the number of hours on Mousam Lake increased to coverage from Monday to Thursday for 12 hours per day, and Friday through Sunday for 14 hours per day, for a total of 90 hours per week. Once again the number of hours increased in the 2010 season. In 2010, Mousam Lake was covered Sunday through Saturday for a total of 14 hours each day, for a total of 98 hours per week resulting in more coverage and an increase in the number of boats inspected.

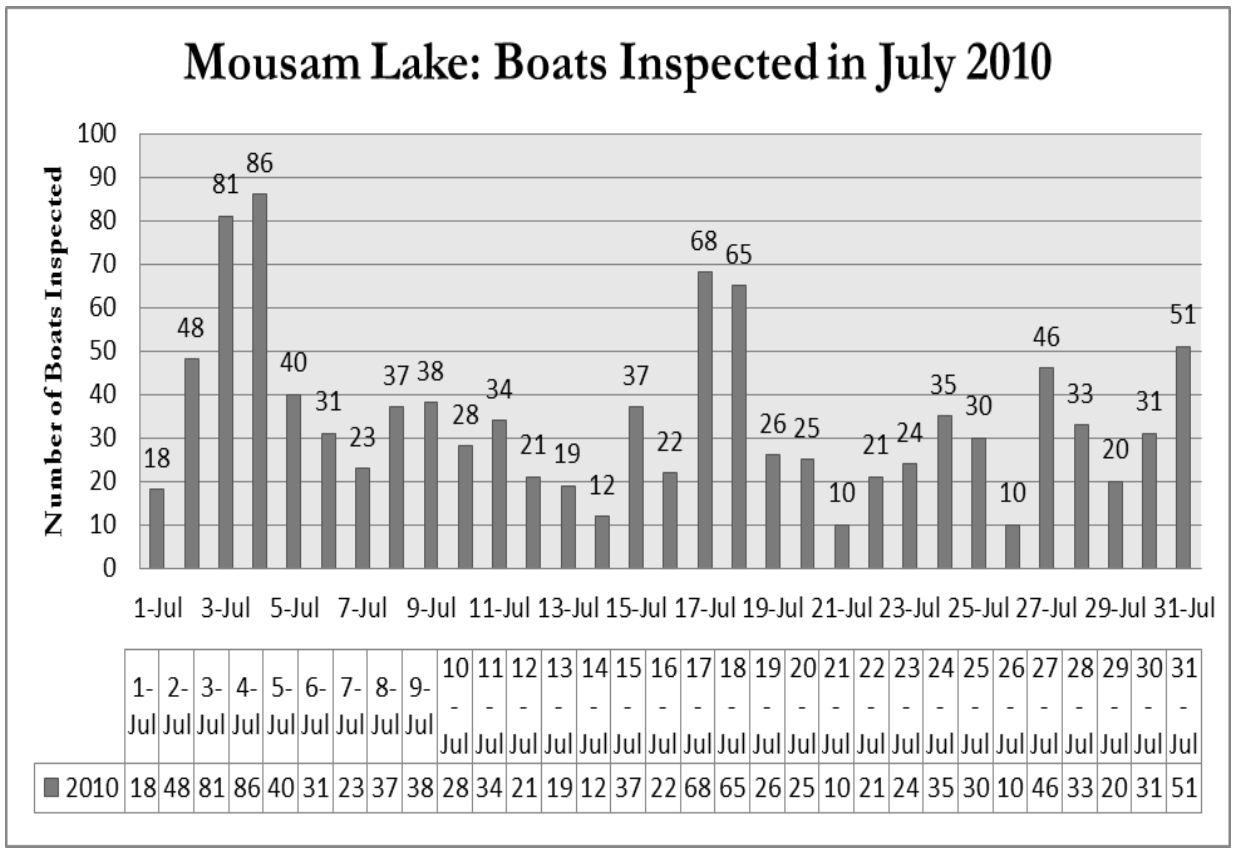
In addition to increasing the number of hours on Mousam Lake, the ASYCC was also able to extend the length of the CBI program each year. In 2008, Mousam Lake CBI season ran from June 21 to October 13, 2008. In 2009, the CBI season started much earlier, May 22 to October 12, 2009. Finally in the 2010 CBI season the program ran from May 14 to October 11, 2010. Like Square Pond, Mousam Lake runs seven days a week from May to Labor Day. After Labor Day the CBI program reduces the number of days and hours covered to Friday through Sunday, for a total of 21 hours covered.

As the numbers of hours covered on Square Pond and Mousam Lake have increased over the years, so have the number of boat inspections. The charts below represent the number of boat inspections conducted in the 2010 ASYCC CBI season.

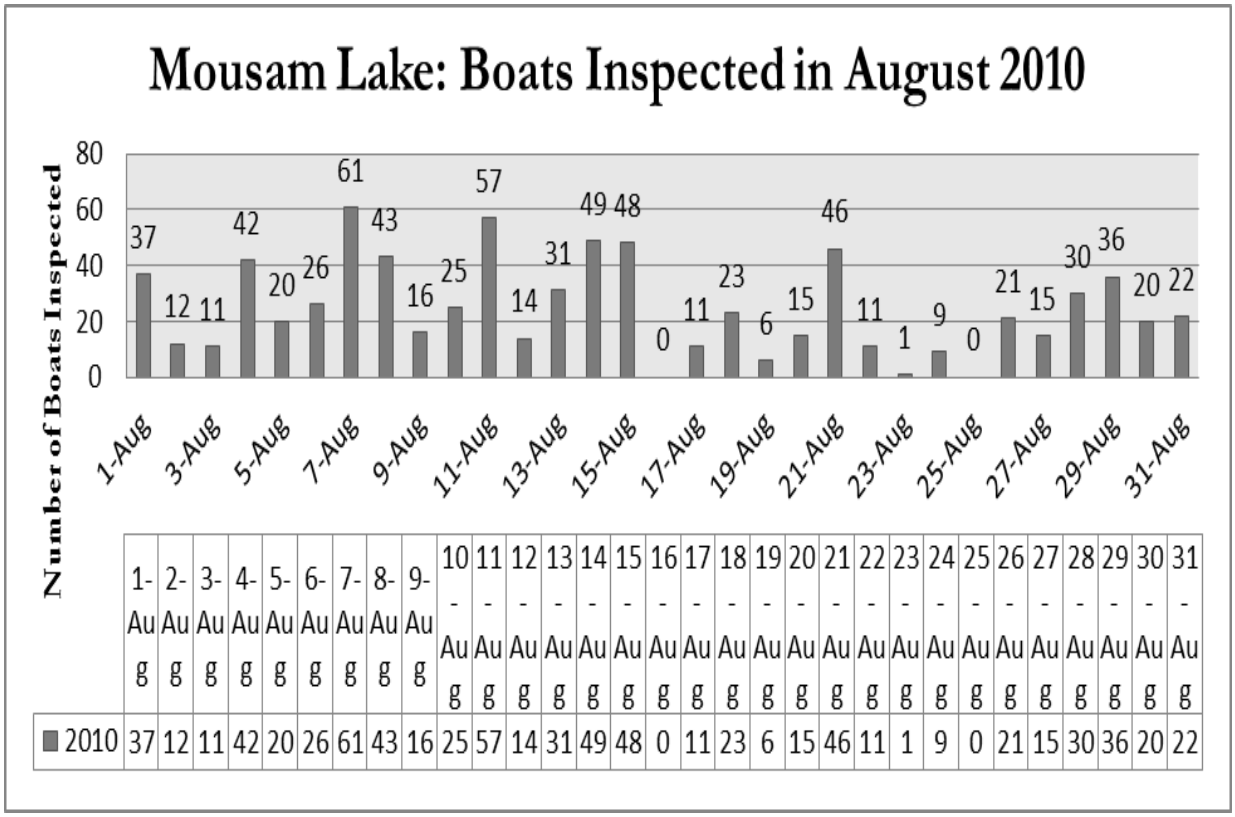
Mousam Lake Courtesy Boat Inspection Data







	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul
2010	18	48	81	86	40	31	23	37	38	28	34	21	19	12	37	22	68	65	26	25	10	21	24	35	30	10	46	33	20	31	51



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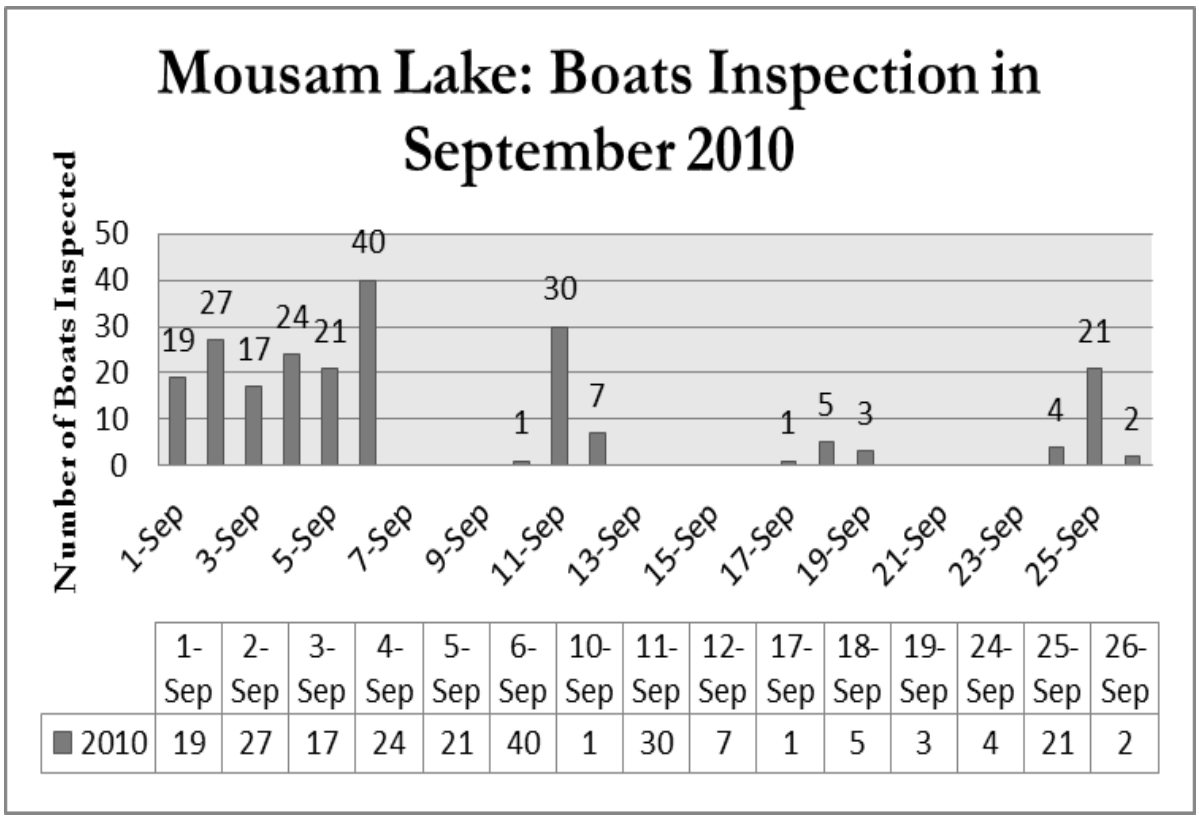
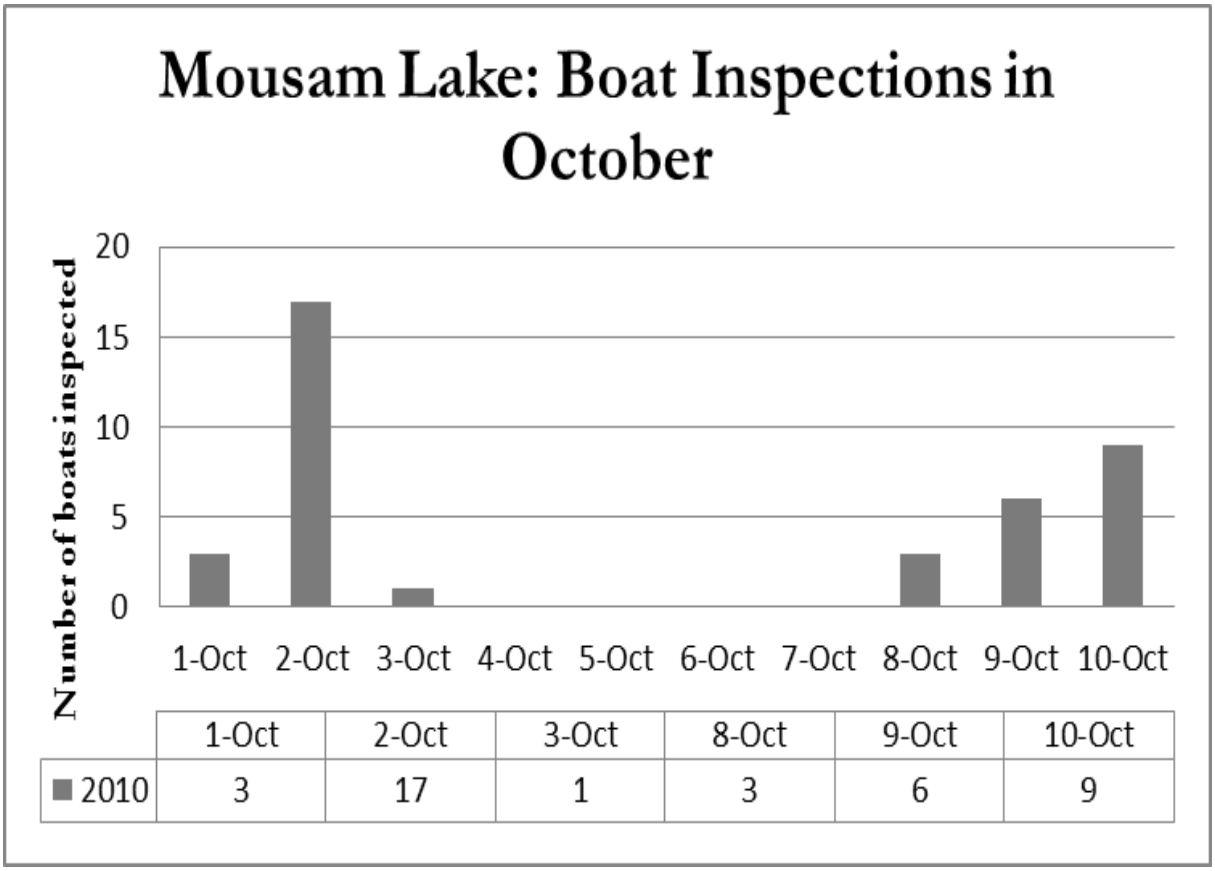
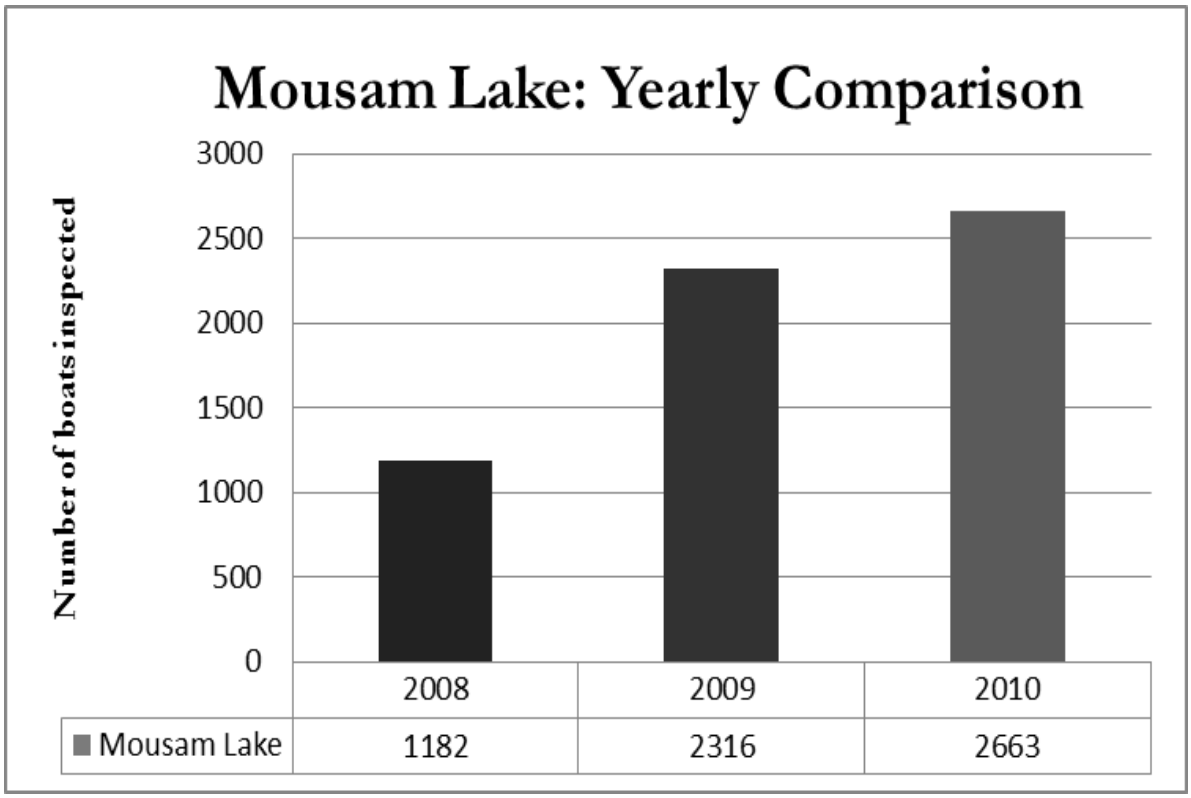
2010	37	12	11	42	20	26	61	43	16	25	57	14	31	49	48	0	11	23	6	15	46	11	1	9	0	21	15	30	36	20	22



	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	10-Sep	11-Sep	12-Sep	17-Sep	18-Sep	19-Sep	24-Sep	25-Sep	26-Sep
2010	19	27	17	24	21	40	1	30	7	1	5	3	4	21	2

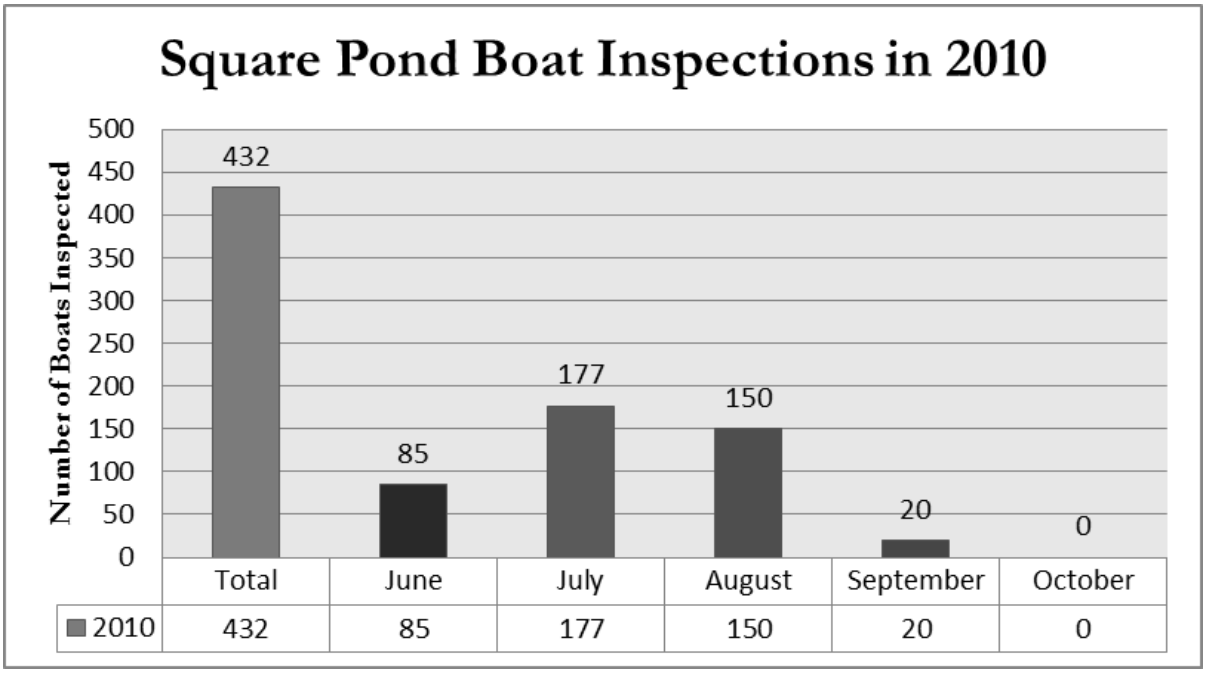


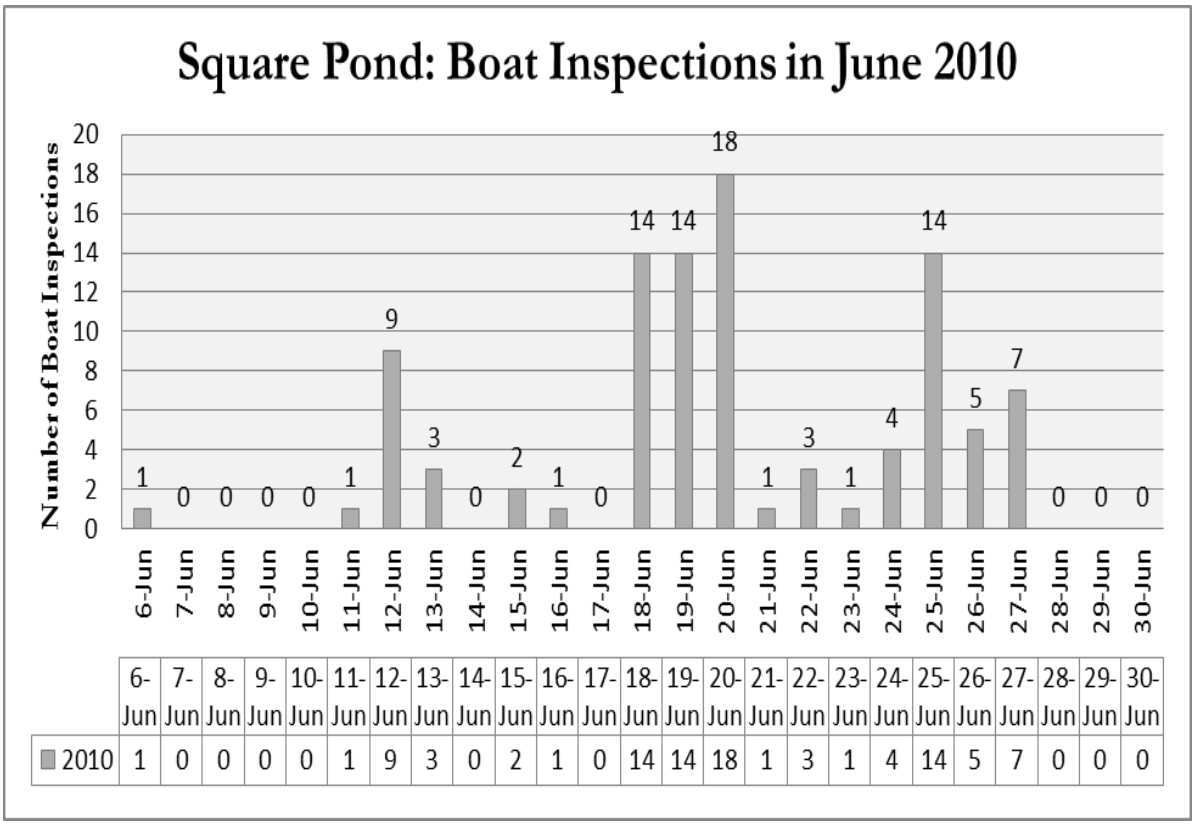
	1-Oct	2-Oct	3-Oct	8-Oct	9-Oct	10-Oct
2010	3	17	1	3	6	9

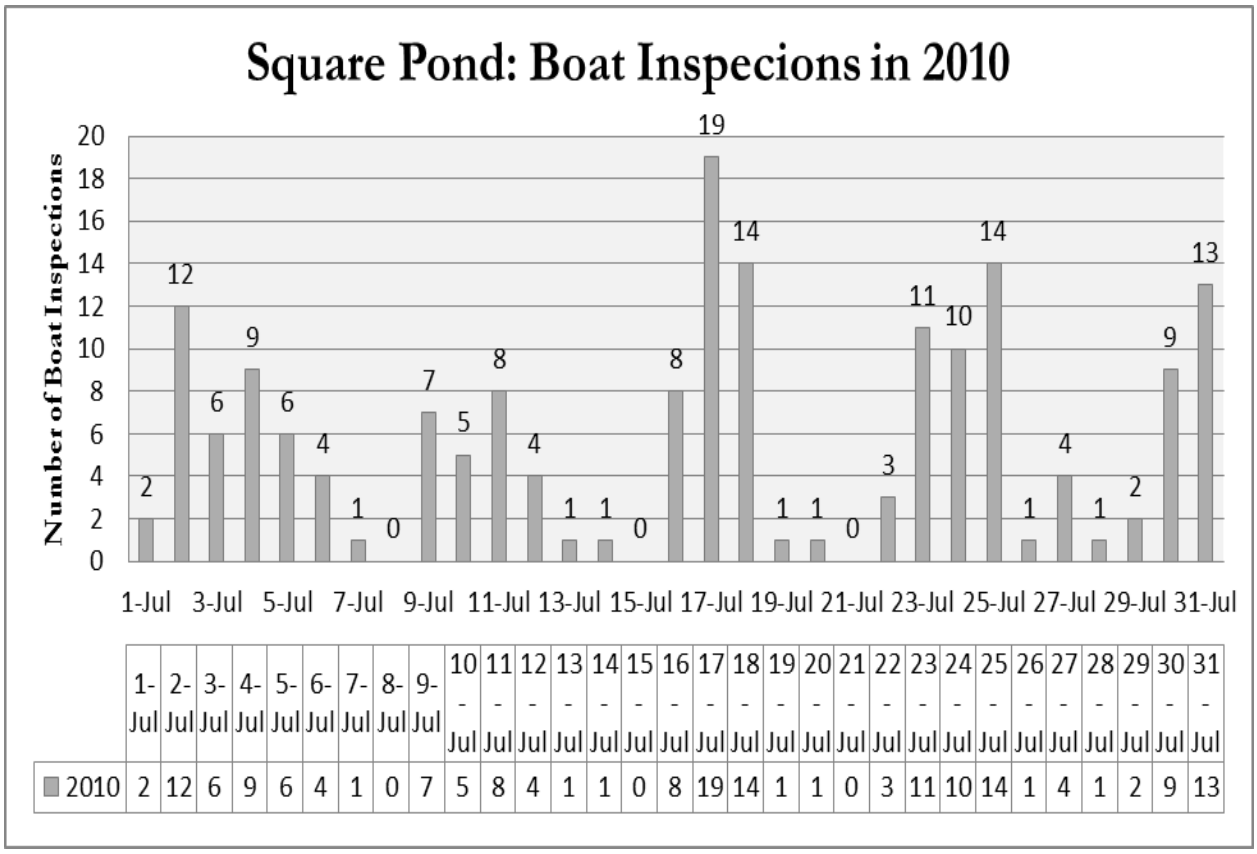

Mousam Lake: Yearly Comparison
Number of boats inspected
3000
2500
2000
1500
1000
500
0
2008
2009
2010
Mousam Lake
1182
2316
2663


Mousam Lake
Association
LAKE
WATCH
FOR
MILFOIL

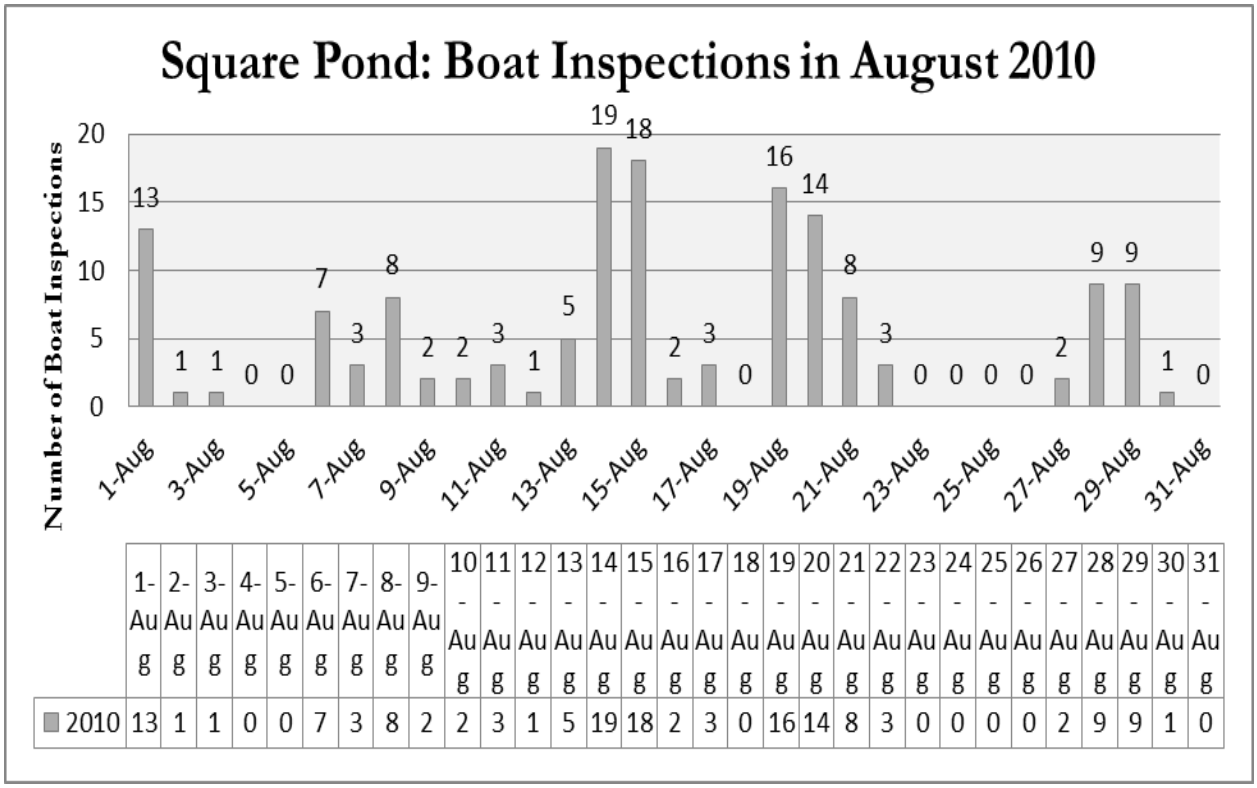
Square Pond Courtesy Boat Inspection Data



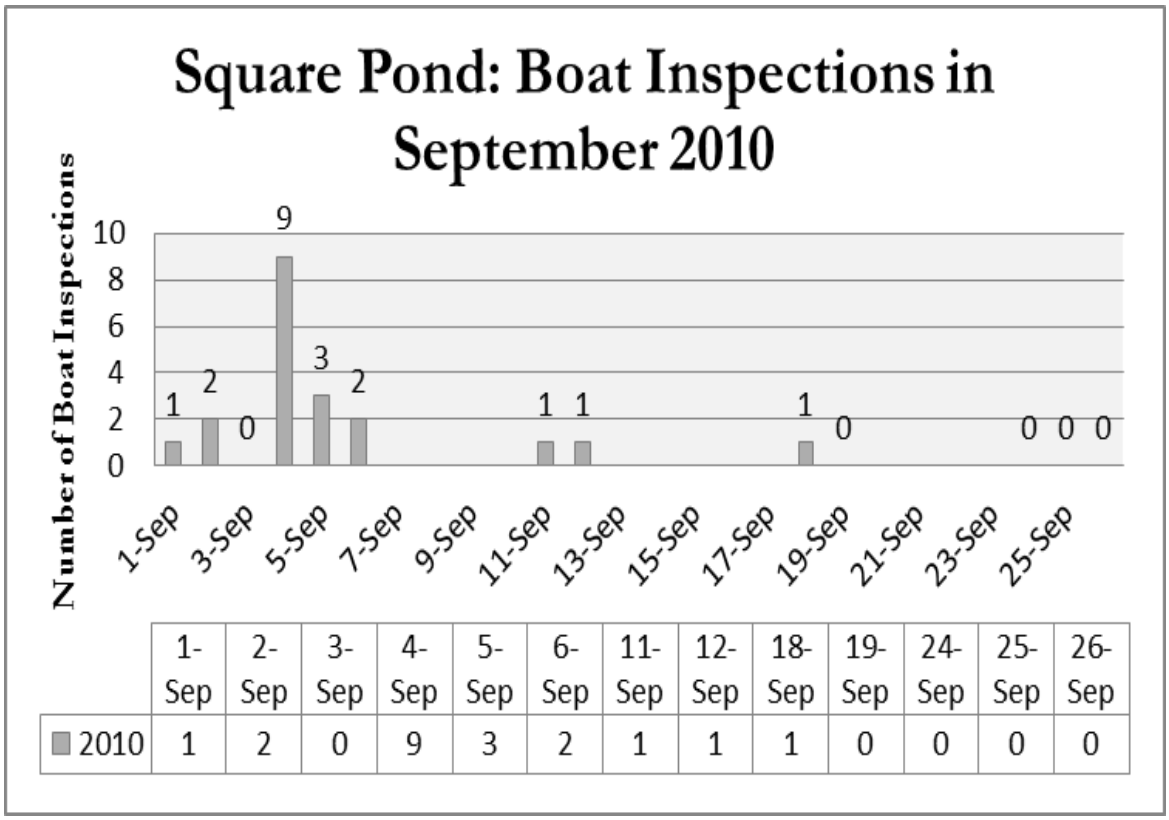




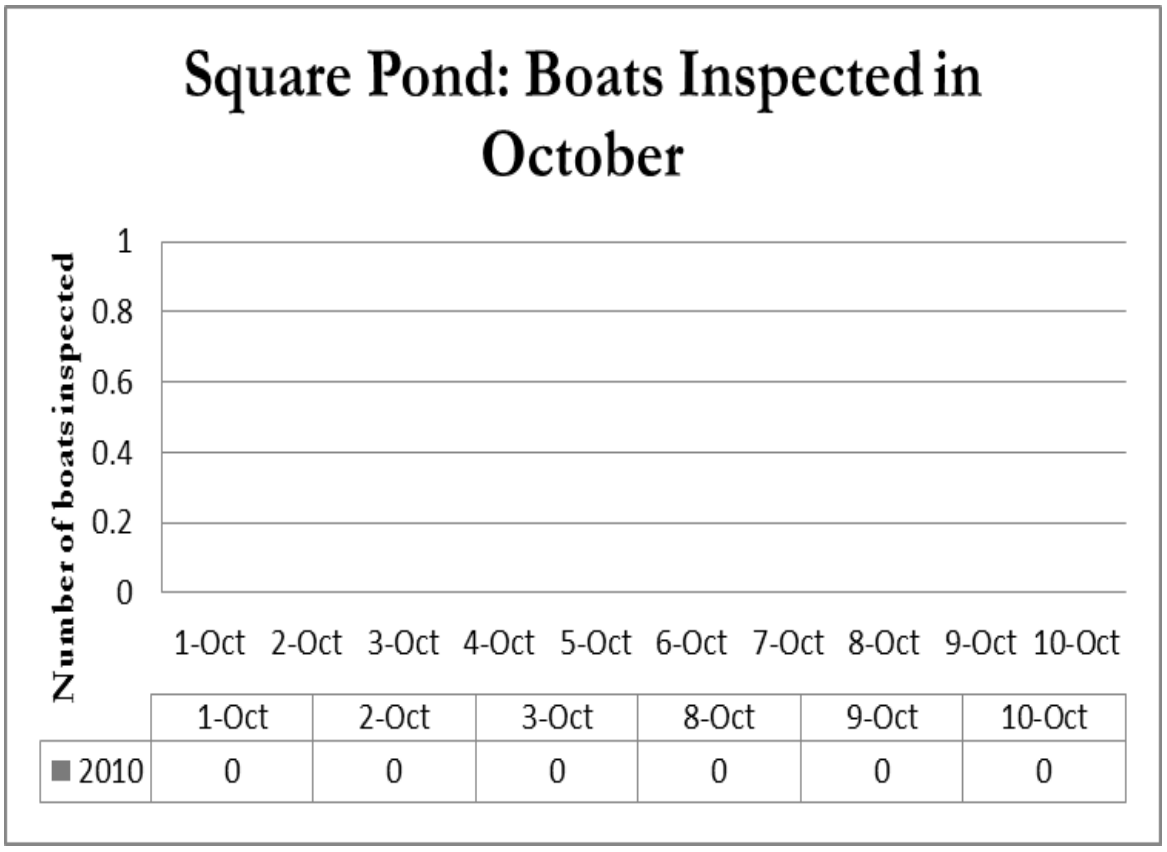
	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul
2010	2	12	6	9	6	4	1	0	7	5	8	4	1	1	0	8	19	14	1	1	0	3	11	10	14	1	4	1	2	9	13



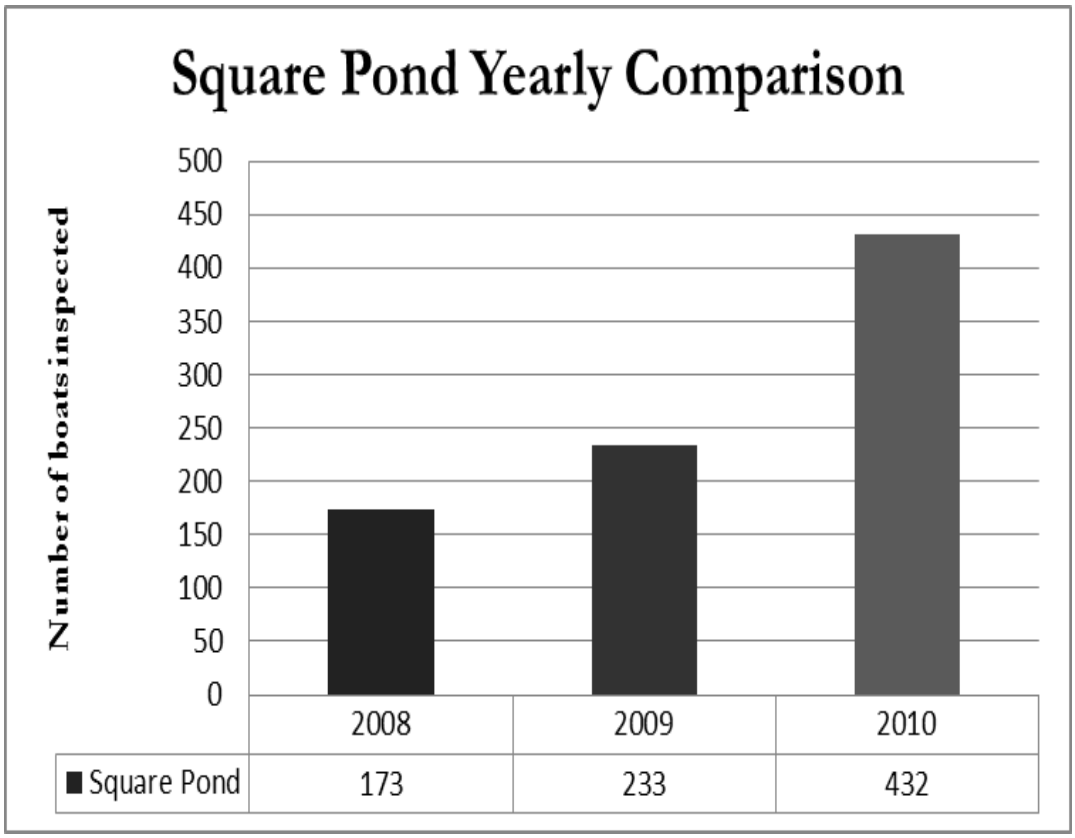
	1-Aug	2-Aug	3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
2010	13	1	1	0	0	7	3	8	2	2	3	1	5	19	18	2	3	0	16	14	8	3	0	0	0	0	2	9	9	1	0



	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	11-Sep	12-Sep	18-Sep	19-Sep	24-Sep	25-Sep	26-Sep
2010	1	2	0	9	3	2	1	1	1	0	0	0	0



	1-Oct	2-Oct	3-Oct	8-Oct	9-Oct	10-Oct
2010	0	0	0	0	0	0


Square Pond Yearly Comparison
Number of boats inspected
500
450
400
350
300
250
200
150
100
50
0
2008
2009
2010
Square Pond
173
233
432

Appendix

Appendix A

Appendix A shows the statistics for all programs since the ASYCC establishment in 2001. It should be noted that the 2010 ASYCC CBI season for Square Pond doubled in the number of inspections and Mousam Lake continued to increase its numbers from years past. Additionally the ASYCC ECC program increased its number of projects to become the second highest year for number of project behind the 2006 season.

Acton-Shapleigh Youth Conservation Corps

Our Record, by the numbers:

		2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	Total to Date
Erosion Control Demonstration Projects	Total per year	24	16	20	18	26	18	17	17	15	20	191
By Town:	Acton	7	2	6	8	16	11	9	4	7	10	80
	Shapleigh	17	14	14	10	10	7	8	13	8	10	111
By Lake:	Mousam Lake	7	9	10	7	10	10	12	12	9	12	98
	Square Pond	15	6	6	7	3	1	2	2	1	3	46
	Goose Pond	0	1	1	2	11	4	1	0	1	1	22
	Loon Pond	2	0	3	2	11	4	1	1	3	2	29
	Other	0	0	0		0	2	1	0	1	1	5
Technical Visits		34	33	32	48	65	17	31	30	35	60	385
Courtesy Boat Inspections		3095	2549	1421	1051	580	617	585	506			10404
By Lake:	Mousam Lake	2663	2316	1239	1042	553	616	573	506			9508
	Square Pond	432	233	182	9	27	1	12				896
Plant Fragments Collected	Mousam Lake	0	14	7	33	5	8	7	0			74
	Square Pond	3	3	1	0	1	0	1				9
	Loon Pond	1										1

Appendix B

At the start of the 2010 Erosion Control Crew Season, the met with Carolyn Romano, member of the Shapleigh Emergency Medical Technician Team to learn about first aid safety for outdoors work. Article from the Sanford News Newspaper

Sanford News

Young lake volunteers trained in water safety

Thursday, July 22, 2010

SHAPLEIGH — Members of the Acton-Shapleigh Youth Conservation Corps met on the "green" beside Key Real Estate on Route 109 on June 28 and learned the basics of safety training.

The young people of ASYCC dedicate themselves to helping to curb erosion in areas surrounding lakes in Acton and Shapleigh.

Shapleigh EMT Carolyn Romano worked with the erosion crew team and its leader, Jake Bergeron, during the training. Romano taught the members about some of the situations they might encounter during the course of the summer and helped them understand dehydration, learn how to use compresses, and become aware of water safety.

Romano expressed the importance of calling 9-1-1 during any emergency and proceeded to show the crew how the local rescue squad functions. She also gave the crew a tour of the rescue vehicle.

ASYCC board member Phil Gannon, a year-round resident at Square Pond in Shapleigh, attended the training with Technical Director Amanda Loomis and Assistant Technical Director Patrick Jackson.

Members of the Acton-Shapleigh Youth Conservation Corps recently learned the basics of water safety training. From left are Corps members Pat Jackson, Aaron Rivard, Norris Johnson, Jake Bergeron, Morgan Johnson, and Keegan Simons; Shapleigh EMT Carolyn Romano; and Corps members Colin Boisvert and Ben Yeaton.

In a press release, the ASYCC members thanked the Shapleigh Rescue Squad and the team leaders and for taking the time to expand their knowledge and enhance their skills.

Appendix C

Post for the Mousam Lake Region Association Annual Meeting held of July 24, 2010, complements of Elaine Beck

ACTON-SHAPLEIGH YOUTH CONSERVATION CORPS (ASYCC)

STONE WALK PROJECT COMPLETED BY ASYCC ON JULY 12, 2010 ON HUBBARDS COVE, ACTON

Pictured left to right are: Colin Boisvert, Keegan Simons (red shirt), Jake Bergeron (teal shirt), Norris Johnson (white shirt), Aaron (checker-board shirt), Pat Jackson, Assistant Technical Director; Amanda Loomis, Technical Director; and Morgan Johnson.

If you have erosion problems on your lakeside property and would like more information on having ASYCC work with you to mitigate the problem, please contact ASYCC Technical Director, Amanda Loomis at technicaldirector@asycc.com

Appendix D

At the end of each Erosion Control Crew Season, the crew hosts a Season Tour. During the tour the crew showcase eight of their projects to landowners, residents of the Mousam Lake Watershed, Business owners, members of the Mousam Lake Region Association, Square Pond Improvement Association, and other interested individuals.

Acton-Shapleigh Youth Conservation Erosion Control Crew 2010 Season Tour

Sites on the Tour:

1. Mousam– Butkus, 23 First Street, Shapleigh
2. Mousam– Plaisted, 24 Jib Way, Shapleigh
3. Square– Coye, 160 Indian Village Rd, Shapleigh
4. Square– 182, 202, 206 Indian Village Rd, Shapleigh
5. Square– 110 Dogwood Drive, Shapleigh
6. Square– 120 Dogwood Drive, Shapleigh
7. Square– 1062 West Shore Drive, Acton

ASYCC Erosion Control Crew Season Overview:

- Number of Projects Completed to date: 24
- Break down of projects by lake
  - Mousam Lake, Shapleigh: 3
  - Mousam Lake, Acton: 4
  - Square Pond, Shapleigh: 13
  - Square Pond, Acton: 1
  - Loon Pond, Acton: 2
- Number of technical visits: 36
- Number of technical reports: 24

Conservation Practices Installed:

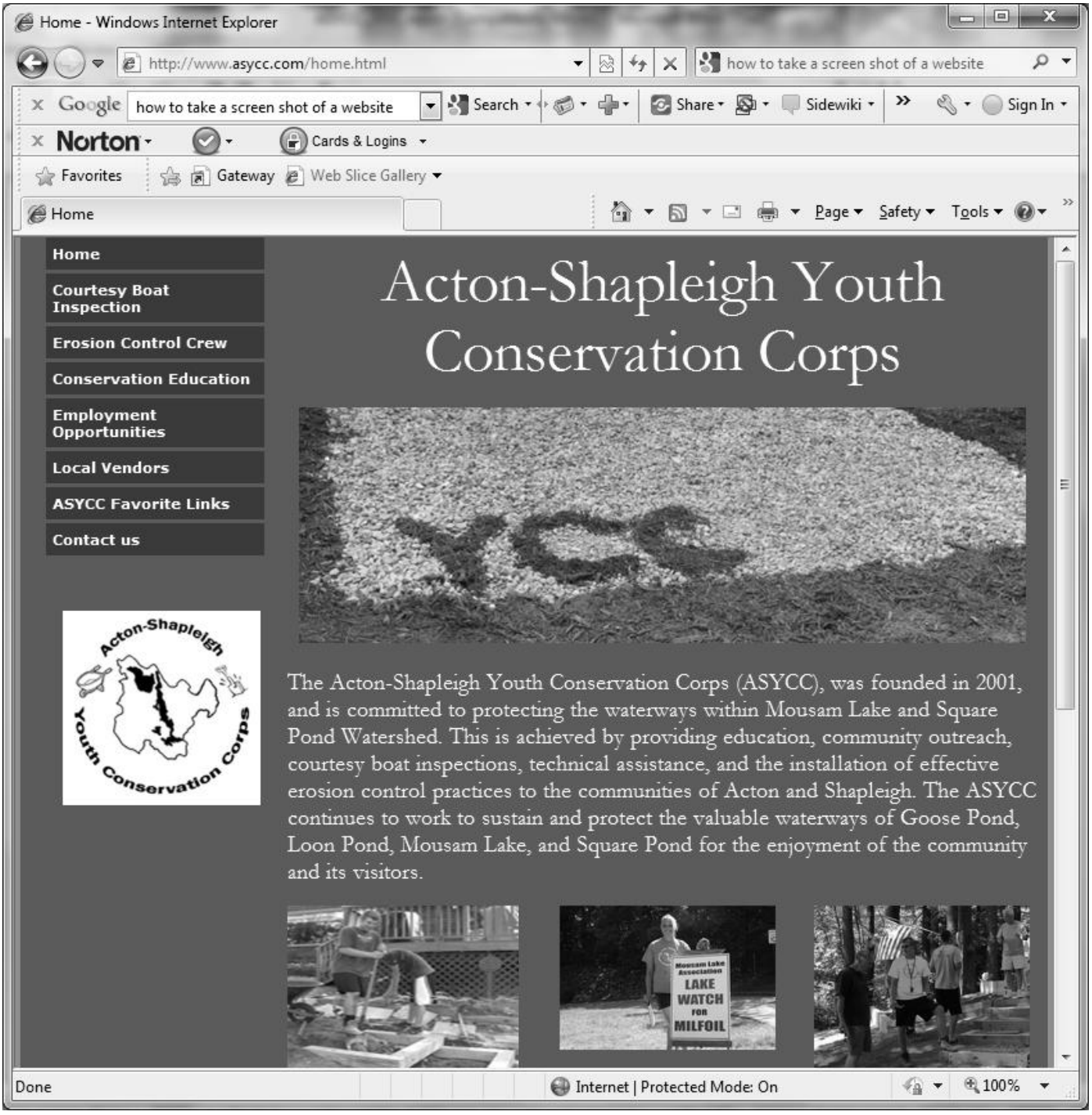
- Rubber Razor Blade
- Infiltration Trench
- Drip Line Trench
- Water bar
- Infiltration Pathway
- Shoreline vegetation
- Vegetated Buffer Strip
- Rip Rap
- Drywell
- Mulching
- Other

Appendix E

In addition for the 2010, ASYCC CBI season was the No Courtesy Boat Inspectors on Duty signs. These signs area put up when the last CBI leaves for the day and is removed when the first CBI starts the day. The intention of the sign is to have people inspect their own boats when there is no CBI on duty, and to get people to always inspect their boats when entering and leaving a waterway.

Appendix F

During the 2010 ASYCC season, www.asycc.com website was redone and now has program information, reports and other ASYCC documents, education, links, contact information, and employment opportunities.




Courtesy Boat Inspection - Windows Internet Explorer
http://www.asycc.com/courtesyboatinspection.html
Home
Courtesy Boat Inspection
Erosion Control Crew
Conservation Education
Employment Opportunities
Local Vendors
ASYCC Favorite Links
Contact us
ASYCC Courtesy Boat Inspector
Help protect your waterways, alway check your boats, trailer, line, and tackle for plant fragments.
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 economies, and wildlife populations in the area. Invasive aquatic plants threatening New England's waterways include Hydrilla, Eurasian Milfoil, and Variable Leaf Milfoil.
The ASYCC CBI program works with boat owners to educate and check their boats for plant fragments. CBI's are placed on both Mousam Lake and Square Pond public boat ramps to check all boats, trailers, and other items such as fishing tackle, lines, ropes, and water toys. If a plant fragment is found the CBI removes the plant from the boat, identifies the fragment or sends it to the lab for identification, and properly disposes of the plant.
When a plant fragment is found an a CBI is not on duty please thrown the plant fragment in the trash can. Plant fragments thrown on the ground can make their way into a waterbody during a storm event and cause an infestation from the plant
Mousam Lake Association
LAKE WATCH FOR MILFOIL
Kristen F, 2010 Courtesy Boat Inspector
Courtesy Boat Inspection Annual Reports
2008 ASYCC Courtesy Boat Inspection Annual Report
Internet | Protected Mode: On


Erosion Control Crew - Windows Internet Explorer
http://www.asycc.com/erosioncontrolcrew.html
Home
Courtesy Boat Inspection
Erosion Control Crew
Conservation Education
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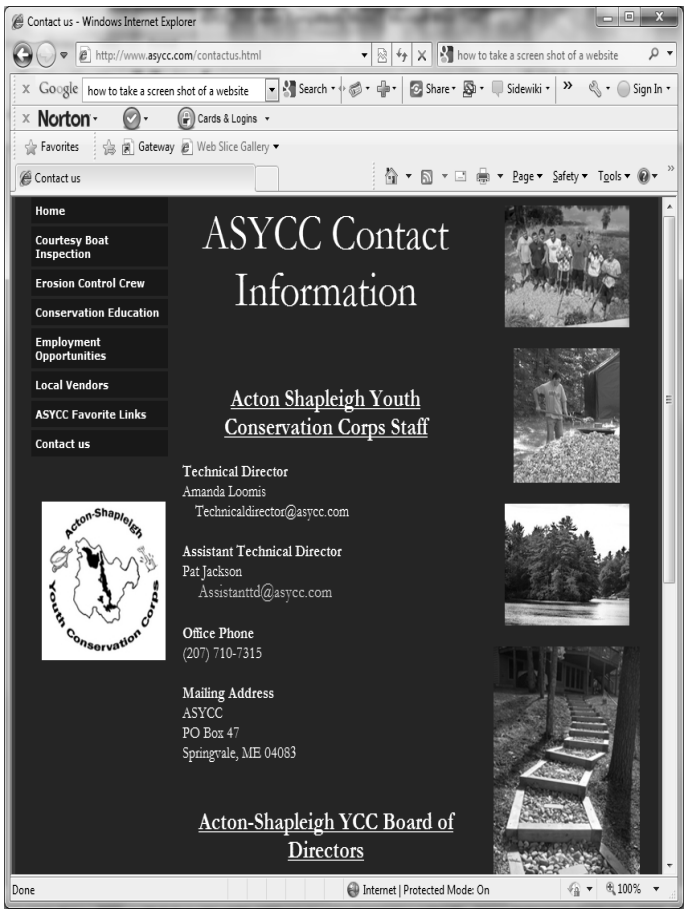
Local Vendors
ASYCC Favorite Links
Contact us
ASYCC Erosion Control Crew
Have you noticed erosion caused by wave action, storm events, or foot traffic on your property? If so the ASYCC Erosion Control Crew (ECC) can help free of charge! Each year the ECC completes conservation projects on properties within Goose Pond, Loon Pond, Mousam Lake, and Square Pond. Think you might have a erosion problem? Contact us for a FREE technical visit and site report.
The Erosion Control Crew (ECC) is a group of local high school aged students working under the direction of a crew leader. The crew works together to install conservation projects around Goose Pond, Loon Pond, Mousam Lake, and Square Pond. These conservation projects are for landowners, business owners, and municipalities who request the services of the ECC. The ASYCC
Internet | Protected Mode: On


Conservation Education - Windows Internet Explorer
http://www.asycc.com/conservationeducation.html
Home
Courtesy Boat Inspection
Erosion Control Crew
Conservation Education
Employment Opportunities
Local Vendors
ASYCC Favorite Links
Contact us
Conservation Eduction
ASYCC Events, Documents, and other helpful information
The ASYCC provides educational services on a daily basis during the summer season. Each year the ECC hosts a annual project tour, a landowner workshop, and other opportunities for landowners to view and learn about protecting their properties. To find out what is going on with the ASYCC check out our calender, educational documents, and reports
Document Library
Name
Description
2008 ASYCC Season in Review Report
Annual Season Report
2009 ASYCC Season in Review Report
Annual Season Report
Mark Your Calenders Up Coming ASYCC Events
There are no scheduled up coming events, please check back in April 2011.
Internet | Protected Mode: On


Contact us - Windows Internet Explorer
http://www.asycc.com/contactus.html
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ASYCC Favorite Links
Contact us
ASYCC Contact Information
Acton Shapleigh Youth Conservation Corps Staff
Technical Director
Amanda Loomis
Technicaldirector@asycc.com
Assistant Technical Director
Pat Jackson
Assistanttd@asycc.com
Office Phone
(207) 710-7315
Mailing Address
ASYCC
PO Box 47
Springvale, ME 04083
Acton-Shapleigh YCC Board of Directors
Done
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Appendix G

Appendix G interprets all ECC projects through before and after photos for the 2010 season.