

### Acton-Shapleigh Youth Conservation Corps

P.O. Box 47, Springvale, Maine 04083 www.asycc.com



# 2018 Annual Report

### A message from the ASYCC Board President...

The Acton-Shapleigh Youth Conservation Crops (ASYCC) would like to thank our many supporters that made it possible to continue our efforts in maintaining the quality of the water-bodies in the Mousam Lake, Square, Goose and Loon Pond watersheds.

Highlights for 2018 include 60 technical visits and 19 projects for the Erosion Control Crew (ECC) and a projected 7,000+ boat inspections conducted by our Courtesy Boat Inspectors (CBIs), with all plant and animal collections being identified as native. Additional details can be found within the body of this Annual Report.

Our 2018 golf tournament was again held at the Province Lake Golf Course, in Parsonsfield, ME, even though the golf course endured a devastating fire the previous winter. The 14th Annual Event was a great success. 105 golfers and 14 volunteers gathered to help raise over \$20,000 in net proceeds! We truly appreciate our Sponsors, Donors, Golfers and Volunteers involved to help keep our important mission funded and running smoothly. Next year's golf event will be held again at Province Lake Golf Course on Friday August 2<sup>rd</sup>.

As the number of boaters visiting the clean waters of the Mousam Lake-Square Pond Watershed continues to increase, so do the chances of an invasive plant or organism being entered into our important waters. With the constant and consistent presence of the CBIs on the Mousam Lake and Square Pond Boat Launches, the public continues to be favorable toward inspection and better educated about the risks of these invasive and their potential hazards to our beautiful waterways. The ASYCC CBI program is an important line of defense for our lakes.

As a new effort to protect our watersheds, we are working with Laurie Callahan Founder and Coordinator at the York County Invasive Aquatic Species Project (*YCIASP*) to start a new pilot project in 2019 to carry out systematic Invasive Plant Patrols (IPP). This effort will begin on Mousam Lake and we will be training several CBI's to look for Invasive plants. This will be a "win-win", providing a new way to protect Mousam Lake and generate further training for our CBI's to keep a sharper lookout for invasive plants when doing boat inspections.

We have received word that the Mousam Lake Watershed Protection Project has been conditionally awarded by DEP (319 Grant)! Whitney Baker (York County Soil and Water Conservation District) will be negotiating a final work plan with our Agreement Administrator from the DEP, John Maclaine, over the next month or so. We are hoping to have final contracts signed by the end of November. A similar process to apply for a 319 grant on Square Pond has been started in a collaboration with SPIA, ASYCC and YCSWCD, with Betty Smith as the grant program director.

The ASYCC is a non-profit organization with an all-volunteer Board of Directors and we welcome anyone within the watershed to join us in our efforts. We look forward to continuing our efforts to preserve the value of your home and quality of your lakes for years to come. For more information, please take a moment to review this Annual Report and be sure to visit www.asycc.com.

Sincerely,

Kent Hooke

Kent Haake President, ASYCC Board of Directors





## Thanks to everyone who helped make the

# 2018 ASYCC season successful!

### Program Funding & Support

- 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
- Province Lake Golf Course for hosting our annual fundraising golf tournament along with tournament sponsors and golfers.

### 2018 ASYCC Staff

### **2018 Board of Directors**

- Kent Haake, President, Acton Mousam Lake
- Joe Borst, Treasurer, Shapleigh Mousam Lake
- Jane Thomas, Secretary, Acton Square Pond
- Scott & Debbie Lansberry Co-Directors Acton Square Pond
- Craig & Annemarie McMurray Co-Directors Square Pond
- John Chamberlain Director Mousam Lake
- Betty Smith—Program Consultant
- Marsha Letourneau & Dennis Roberge, Aquatic Plant
  Specialist

#### **Erosion Control Crew**

#### Doug Ridley, ECC Director, Shapleigh

- Sam Foglio, Crew Leader Shapleigh
- John T Matlosz Acton/Sanford
- Bailey Chretien Shapleigh
- Collin Milburn Shapleigh
- James Lessard Shapleigh
- Emily Kelley Shapleigh

#### **Courtesy Boat Inspectors**

#### David Burns, CBI Director, Alfred

- Lauren Johnson, Asst Ldr Sanford
- Sebastian Beaupre Sanford
- Gavin Coleman Acton
- Valentina Drown Acton
- Sam Foglio Shapleigh
- Linda Johnson Springvale
- Emily Kelley Shapleigh
- Donnie LaLievre Acton
- Mark Phelps Shapleigh
- Doug Ridley— Shapleigh
- Sharon Ridley Shapleigh
- Christian Reehl Shapleigh
- Abigail Rickard Acton
- Erma Roberge Rochester NH



## The Acton Shapleigh Youth Conservation Corps

### Introduction

The Acton Shapleigh Youth Conservation Corps (ASYCC) is a non profit organization founded in 2001, working to protect Mousam Lake, Square Pond, Goose Pond and Loon Pond collectively known as the Mousam Lake-Square Pond Watershed. The ASYCC provides education, community outreach, technical assistance, courtesy boat inspections and the installation of erosion control practices in the watershed. The goal of the ASYCC is

to sustain and protect the valuable water resources for its ecological importance as well as for the enjoyment of the local community, businesses and visitors.

The ASYCC is grateful to the Town of Acton and Shapleigh, the Mousam Lake Region Association and the Square Pond Improvement Association for their ongoing financial support. In addition, fundraising occurs through the annual ASYCC Golf Tournament, grant opportunities through the State and private donations. Using this local support, the ASYCC is able to hire local residents who have a vested interest in protecting the local waterways. Between the Courtesy Boat Inspection (CBI) Program and the Erosion Control Crew (ECC) Program, the ASYCC hires approximately 15-20 local residents.



The ASYCC provides <u>two</u> important resources to help protect the Greater Mousam Lake - Square Pond Watershed.

 First, the CBI Program works to protect Mousam Lake and Square Pond from invasive aquatic plants and organisms by inspecting boat going into and coming out of our local waterways. Invasive species threaten New England waterbodies more and more each year; the CBI program was designed to detect



the transportation of invasive aquatic species.

 Secondly, the ECC Program provides education and shares information about and installs a variety of erosion controls and conservation practices that minimize shoreline erosion. Additionally, the ECC leaders work closely with landowners providing education regarding the necessary maintenance of conservation practices that were installed on the property.

The ASYCC emphasizes education, outreach and community involvement as one of the most important purposes of the program, helping boaters and landowners understand how vital it is to protect the Mousam Lake & Square Pond Watershed.

## The Erosion Control Crew (ECC) Program

The "YCC" model has been successfully adopted to protect and improve water quality in several other communities across the state. With ongoing development and construction on lakeside properties, the ECC helps to educate homeowners about environmentally friendly lake living. The use of EPA's Best Management Practices is the foundation of our work. The aim is to minimize human impact on the land, use local materials, incorporate the natural landscape into the erosion remedy, promote vegetation and prevent pollutants from entering the water body.

The ECC completed its 17th season in August 2018. This report showcases the variety of conservation projects that the crew completed throughout the 8 week season. The program is responsible for educating landowners, business owners and municipalities about the affects that weather, wave action and development have on their properties. The ECC is comprised of a group of local high school students and a crew leader who install erosion controls with guidance from the ECC Director.

The ECC services are open to any property owner in the Mousam Lake, Square Pond, Goose Pond or Loon Pond Watersheds. A project typically begins with a homeowner requesting a technical assistance visit to assess any erosion issues. Next steps include:

- The ECC Director having gathered pertinent information from the homeowner regarding usage of the property will recommend standard erosion control Best Management Practices (BMP's) to address erosion.
- A technical report will be delivered to the homeowner
- Also included, is a letter of agreement that outlines the responsibilities of the homeowner and the ECC/ ASYCC which highlights instructions and guidance of maintenance needed to retain the BMP's effective design.
- The labor is free and the homeowner is responsible for purchasing and having materials on site prior to the crew work day. The ASYCC has an overhead fee of \$75.00 and this is charged to all landowners that we work with each season. The ECC Director and homeowner will work together to schedule a day when the work will take place.

		Tot	al Con	nplete	d Eros	ion Co	ntrol	Projec	ts		
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Mousam	8	6	6	13	9	7	13	14	7	9	10
Square	9	12	23	10	7	20	8	11	15	6	6
Goose	1	0	0	0	2	0	1	0	0	1	1
Loon	1	2	1	1	1	3	4	2	2	0	3
Totals	19	20	30	24	19	30	26	27	24	16	20

		Tota	Numl	ber of	Techn	ical As	ssistan	ce Vis	its		
Year	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Amount	60	48	67	64	32	35	44	43	34	33	32

## The Courtesy Boat Inspector (CBI) Program

The goal of the ASYCC CBI Program is to prevent the introduction of invasive aquatic plants and organisms from entering local water bodies. Inspectors conduct boat and trailer inspections for plants, and plant fragments and provide information to boaters about invasive aquatic plants and organisms. Inspectors are located on the Mousam Lake and Square Pond public boat ramps and check all boats, trailers, jet skis, fishing tackle, lines, ropes and water toys for aquatic plants and organisms like variable leaf-milfoil, Eurasian water—milfoil and marine organisms such as water chestnuts and zebra mussels are just a few invasive species the inspectors look for.

(For more information regarding invasive aquatic species check the Maine Volunteer Lake Monitoring web page at <u>http://www.mainevlmp.org/prevention-7/</u> or the Lakes Environmental Association at <u>http://</u> mainelakes.org/?page id=192.)



Courtesy Boat Inspector Is ON DUTY Invasive aquatic plants and organisms threaten the ecology of the freshwater lakes and rivers, the regional economy, and wildlife populations in the area. Boat inspections and public education are the best ways to protect Mousam Lake, Square Pond, Loon Pond and Goose Pond from invasive aquatic plants and organisms. Once an invasive species enters a waterway it is very costly to treat or remove. The impacts are far reaching and include a decrease in nearby property values, degraded water quality, decrease in marine life biodiversity and restricted recreational opportunities. There are several lakes in the region that are currently

overwhelmed with the removal and maintenance of invasive aquatic species.

In 2018, CBI coverage hours were increased as compared to previous seasons at both the Mousam Lake and Square Pond launches by 300 hours and 46 respectively.

- Square Pond coverage began on April 21st for the "early pre-season" which ran for four weeks, a "pre-season" coverage for five weeks, the "regular season" ran for 12 weeks and the final "post season" for six weeks ending November 1 with a grand total of 821 inspector hours.
- Mousam Lake coverage began on April 21st for the "early pre-season" which ran for four weeks, a "pre-season" coverage for five weeks, the "regular season" ran for 12 weeks and the final "post season" for six weeks ending November 1 with a grand total of 1748 inspector hours.



Total Number of Inspections and Plant Fragments Collected throughout the 2018 season includes:

- $\Rightarrow$  Total number of native plants identified from specimens: 14
- $\Rightarrow$  Total number of invasive plants identified from specimens: 0
- $\Rightarrow$  The only invasive species found was an incident of Chinese Mystery Snails from Mousam Lake.

	Total number of inspections	Number of plant fragments found/ submitted	Number of confirmed invasive plants
Mousam Lake	6858	730/19	0
Square Pond	1012	176/9	0
Total	7870	906/28	0

## 2018 ECC Accomplishments

In a short eight week season, a team of five high school students, led by a crew leader and a technical director successfully completed 19 erosion control projects in the Watershed. By the end of the summer they had:

- \* Spread 60 cubic yards of mulch
- \* Hand placed 15 cubic yards of crushed stone
- \* Installed 3 rubber razor blades
- \* Hand placed 10 yards of rip rap
- \* Cleaned, raked and prepared both public beaches for the season





### Mulch can be magic

Mulch is the quickest and easiest way to control erosion, relatively inexpensive and comes is a variety of sizes. Uses include covering bare soil, steep slope stabilization, in and around garden beds and certain types are used in playgrounds.

\* Erosion Control Mulch (ECM) - made from partially composted bark, sand, gravel, stone and wood fragments. A good slope stabilizer and used in the construction industry in place of silt fence.

 <u>Soil Conservation Mulch (SCM)</u> - Also good for stabilizing slopes and is made from the same mixture as ECM but much smaller or finer pieces.

Both can be used in landscape situations and the SCM can be used to top dress over the chunkier ECM.

As with any conservation practice, maintenance is key once installation is complete. Inspect regularly, after large rainfalls and do not rake. Replenish annually or as needed.

#### A note about our **General Overhead Charge** of \$75.00.

When the ECC team works with a landowner, a \$75.00 fee is on your invoice and the fee covers the following:

# ~ Wear and tear on equipment; storage for equipment, tools, materials, technical assistance visits, recommendations report, filing permits and transportation and gas ~

Each year it costs approximately \$400+ for replacement tools and equipment ; \$450 for storage of tools; \$2800 for truck rental and gas; and the average cost of a technical assistance visit, report and permits is \$500. If we had divided these costs between the total number of landowners we worked with this year, the fee would have been \$200 rather than the \$75.00.

# Rubber Razor Blades (Water Diverters)

Rubber razor blades are used to divert water off slopes, driveways or seasonal roads into vegetated or stone lined plunge pools. Install the rubber razor at a 30 degree angle to the road edge and point the outlet toward a stable vegetated area. Construction utilizes pressure treated 2x6's with a piece of rubber (conveyor belt) sandwiched in between where the rubber protrudes above the surface allowing water to be diverted but allowing vehicles to pass over. To maintain these structures, periodically remove accumulated debris from behind the razor.



# Infiltration Steps

Infiltration steps and trenches are designed to receive stormwater runoff and allow that runoff to infiltrate into the ground. They provide water quality treatment and groundwater recharge. These trenches or steps are rock filled and are typically lined with geotextile fabric that trap sediments but allows water to flow through.



### NEW for 2019 includes the "New CBI Invasive Plant Patrols" and

As a new effort to protect our watersheds, we are working with Laurie Callahan Founder and Coordinator at the York County Invasive Aquatic Species Project (*YCIASP*) to start a new pilot project in 2019 to carry out systematic Invasive Plant Patrols (IPP).

This effort will begin on Mousam Lake and we will be training several CBI's to look for Invasive plants. This will be a "win-win", providing a new way to protect Mousam Lake and generate further training for our CBI's to keep a sharper lookout for invasive plants when doing boat inspections.

During Invasive Plant Patrol (IPP) surveying carried out this year on Square Pond, a very invasive plant -Japanese Knotweed was found on the west side of the lake. It is a plant that will need trimming and monitoring several times during the summer.

The SPIA, Invasive Plant Patrol, and the ASYCC would like to help you in eliminating this plant. Careful trimming of the plant and disposal of the plant cuttings is very important to prevent the spread of this plant. If you would like further information to identify whether this plant is on your property, or if you want help from the ASYCC Erosion Control Crew during 2019 season, contact Doug Ridley ECC leader at 207-432-2665 <u>eccleader@asycc.com</u> or Donna Rosenkrans IPP Leader SPIA at ippsquare-pond@gmail.com

#### What You Can Do to Rid Your Property of Japanese Knotweed

Japanese knotweed stems are easily cut with clippers or pruning shears. However, just removing the stems above ground doesn't deal with the belowground rhizomes (roots), and both stems and rhizomes (roots) can re-sprout. Depending on what you encounter, there are a few options:

- Cutting and digging can be effective. However, care must be taken to leave the material to dry and die on hot pavement, burn it safely, or thoroughly wrap it in black plastic bags and discarded in a dumpster.
- It's a safe bet that new sprouts will form from rhizomes (roots) that weren't caught. Three (or more!) successive cuttings/digs during the summer may be needed to starve the plants of the energy stored in the rhizomes (roots).
- Digging can promote soil disturbance and should be done carefully or not at all.
- The young plants can be pulled by hand but must be disposed of as above.
- Do NOT mow or weed-whack stands of Japanese knotweed; this will spread the fragments far and wide and only worsen the problem.
- Do NOT attempt to compost the cut material. You'll end up with a lovely stand of knotweed in your compost pile!
- The area will need to be monitored for a few years to watch for regrowth

#### Japanese Knotweed sprouts





**Blooming Japanese Knotweed** 

### The 14th Annual GOLF TOURNAMENT Friday Aug. 3, 2018 - Province Lake



The 14th annual golf tournament was held at Province Lake Golf Course on Friday August 3, 2018, under warm summer skies and clouds that did not burst.

Our golf event supports the Acton-Shapleigh Youth Conservation Corps to continue its mission of protecting your favorite local waterbody.

105 golfers and 14 volunteers gathered to help raise over \$20,000 in net proceeds! We truly appreciate our Sponsors, Donors, Golfers and Volunteers involved to help keep our important mission funded and running smoothly.

View our Shutterfly pictures at: <u>https://asyccgolf2014.shutterfly.com</u> To see a list of our supporters, visit our Sponsors page at http://www.asycc.com/sponsors.html.

If you are interested in supporting the ASYCC in its efforts to help protect Mousam Lake, Square Pond, Loon Pond, and Goose Pond please participate in the 15th annual golf tournament either by playing, sponsoring a hole, making a donation, or becoming a volunteer - August 2, 2019.

	2018 E	rosion Control Pr	ojects
Site	Location	Issue/Problem	Work Completed
MLRA	Mousam Lk Public Beach	Winter debris	3ake up debris, summer clean up
Town/Desmond	Square Pond Public Beach	Winter debris	3ake up debris, summer clean up and weed
		Pathway/access to water with moderate	nstalled infiltration steps, water bars, stone and
Lindquist	362 Cedar Drive	surface erosion	mulch
Mrazik	1080 West Shore Drive	Replace mulch-refresh	spread mulch on walking path, at side of driveway
Weber	32 Richard Road		Spread conservation mulch and
Hogan	41 Treasure Island Road	Bare soil	spread conservation mulch
Prichett	77 32nd Street		Spread stone and conservation mulch
Gannon	13th Street	Plunge pool filled with debris	Clean debris out and removed
Vetrano	12 Cherry Road	Refresh –replace conservation mulch	spread conservation mulch
Baxter	24 Westview Dr	Bare soil	spread erosion control mulch
Bogart	336 Cedar Drive		Replace fallen stone and spread mulch
Currier	43 Avenue C	Surface erosion at access to lake	Construct infiltration pathway
		Water bars disintegrated, pathway surface	Replace water bars w new timbers, define pathway
Cahalane	771 13th Street	erosion	with crushed stone
			nstall French drain, fill with crushed stone and spread
Lansberry	998 West Shore Drive	Surface flow of runoff on side slope	mulch
			nstall infiltration steps, fill with crushed stone and
Spencer	31 Tanzella Drive	Shoreline and access to lake erosion	mulch around steps.
Tuttle	1,3,5 Waters Edge	Moderate surface erosion	nstall rubber razor blade with outlet plunge pool
Bracy	294 Indian Village	Repair /replace existing rubber razor blade	Replaced with new rubber razor
		Path access moderate to severe surface	nstall and hand place riprap to stabilize pathway and
Desmond	Hodgdon Road	erosion.	spread mulch
Thomas	West Shore Drive	Replace/refresh mulch	Spread mulch

							ASYC	C Year	ly Stat	tistica	I Anal	ysis								
									2001-2	2018										
		2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003 2	2002	2001	Fo date
Erosion Control Projects	Totals	19	20	30	24	19	30	26	27	24	16	20	18	26	18	17	17	15	20	386
By Town	Acton	8	9	22	8	11	14	14	11	7	2	9	8	16	11	6	4	7	10	174
	Shapleigh	11	14	8	16	8	16	12	16	17	14	14	10	10	7	8	13	8	10	212
By Lake	Mousam	8	9	6	13	6	7	13	14	7	6	10	7	10	10	12	12	6	12	174
	Square	6	12	23	10	7	15	8	11	15	9	9	7	3	1	2	2	1	3	141
	Goose	1	0	0	0	2	0	1	0	0	1	1	2	2	4	1	0	1	1	17
	Loon	1	2	1	1	1	3	4	2	2	0	3	2	11	4	1	1	3	2	44
Technical Visits		60	48	37	64	32	35	44	43	34	33	32	48	65	17	31	30	35	60	748
Courtesy Boat In- spections	Total	7870	6650	6638	6009	5354	5336	5303	4169	3095	2549	1421	1051	580	617	585	506	0	0	58,002
# of in- spections per lake	Mousam Lake	6858	5526	5815	5274	4668	4615	4939	3638	2663	2316	1329	1042	553	616	573	506	0	0	50,931
	Square Pond	1012	1124	823	735	668	718	564	531	432	233	182	6	27	1	12	0	0	0	7071
Plant Samples Collected	Mousam Lake	730	1572	288	297	154	291	233	34	0	14	7	33	ß	8	7	0	0	0	3,673
	Square Pond	176	287	84	76	79	75	30	24	3	3	1	0	1	0	1	0	0	0	840
	Loon Pond	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2



Lake protection never reaches an endpoint. It requires a continual process of education and routine

maintenance.



Acton Shapleigh Youth Conservation Corps P.O. Box 47, Springvale, Maine 04083 http://asycc.com Phone: 413-695-1533