Acton-Shapleigh Youth Conservation Corps
Season in Review

Annual Season Program Report

2008 Summer Season

The Acton-Shapleigh Youth Conservation Corps

The Acton Shapleigh Youth Conservation Corps, was founded in 2001, and is committed to protecting the waterways within the Mousam Lake and Square Pond Watershed. This is achieved by providing education and community outreach, technical assistance, and the installation of effective erosion control practices to the communities of Acton and Shapleigh. The ASYCC continues to work to sustain and protect these valuable water resources for the enjoyment of the community and its visitors.

Overview of history:

Mousam Lake and Square Pond are located in the towns of Acton and Shapleigh Maine. Over time, Mousam Lake saw rapid residual development along its shores and banks. Previously, the area was naturally forested, but now it has been rapidly urbanized. The rapid urbanization decreased water quality in the Mousam. This is because phosphorus, nitrate, nitrite levels increased; and dissolved oxygen (DO); biological oxygen demand (BOD), and turbidity decreased. Indicator species such as frogs, salmon, and other native birds and wildlife started to leave the area or die off due to the poor water quality. When the effects of the poor water quality were noticed by residents, several local advocates stepped in. Next, the Maine Department of Environmental Protection (MDEP) got involved and conducted several tests to determine the Total Daily Maximum Load (TMDL) of the lake. After finding out that the lake was not meeting TMDL standards the MDEP. First, the MDEP required towns to enforce the 75foot shore land zoning rule. Second the MDEP developed the Acton-Shapleigh Youth Conservation Corps. And third was the placement of Courtesy Boat Inspectors on the Mousam Lake Boat Ramp during hours of operation (sun up to dusk).

About the ASYCC's Erosion Control Program

The ASYCC employs a group of high school students led by a crew instructor working with landowners to install conservation practices to help improve water quality. ASYCC complete projects for landowners, business owners, and municipalities. ASTCC provides the labor free of charge while landowners are merely asked to provide direct materials. All work conducted by the ASYCC is without the assistance of machinery.

Problems affecting lakes

Erosion from lawns, the use of fertilizers and herbicides, and increased activity on the water have decrease water quality. Erosion and water flow problems remain a major threat to the quality of our lake waters and the natural beauty of the shoreline. Excess sediments deposited in the lake basins include phosphorus, algae blooms, and sedimentation deposits.

- Phosphorus is a natural element essential to plant and animal growth. Too much algae creates an algae bloom
- Algae blooms depredate water quality because they reduce available oxygen and the kill off fisheries. The treasured cold water species have been extraordinarily affected.
- Sedimentation deposits and excess nutrient loading can create unpleasant shoreline situations forming mud flats, or excessive beds of aquatic vegetation. This means people can't enjoy clear water for recreation.

Why protecting the water is important.

Without nutrient-rich topsoil the land is not able to support natural or introduced vegetation. This results in bare or exposed shorelines; rather than lush and protected buffer zones.

Erosion and Phosphorus contamination becomes an economic concern as well. Studies have shown that with the loss of water quality land values plummet and property taxes tend to rise. When considering the staggering costs to recover lost water quality, preventive steps are not only reasonable, but represent excellent investments in maintaining the integrity of the region's economic base.

About the ASYCC

The ASYCC Courtesy Boat Inspection Program provides education and free boat inspections to ensure that Milfoil or Hydrilla stay out of our lakes.

Milfoil and Hydrilla are invasive plants native to Europe, Asia and Northern Africa. Once introduced into a lake within North America, these invasive plant species grow uncontrollably. Eradication of these plants is cost prohibitive for small municipalities.

Supporters, Staff and Board Members

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

Mousam Lake Youth Conservation Corps Staff:

- Amanda Loomis, Program Director
- David MacLean, ASYCC Erosion Control Crew Leader
- Emil Cashin, Erosion Control Crew Member
- Matt Osborne, Erosion Control Crew Member
- Jeff Basinger, Erosion Control Crew Member
- Josh Sawyer, Erosion Control Crew Member
- Bryan Desrochers, Erosion Control Crew Member
- Kelsey Best, Erosion Control Crew Member
- Alan Walsh, Mousam Lake Courtesy Boat Inspector
- Kaitlyn Oddy, Mousam Lake Courtesy Boat Inspector
- Alissa MacLean, Mousam Lake Courtesy Boat Inspector
- Donald Lelievre, Mousam Lake Courtesy Boat Inspector
- Susan Mrazik, Mousam Lake and Square Pond Courtesy Boat Inspector
- Erica Mrazik, Square Pond Courtesy Boat Inspector

ASYCC Board Members:

- Pat Baldwin, President
- Bill Sherman, Vice President and Treasurer
- Jim McClaine, Secretary
- Sheila Hayes
- Lorraine Yeaton

Overview of ASYCC Hired Positions

Program Director: Program Director is a forty hour salaried position. The program director is in charge of hiring, scheduling, and direct supervision in addition to all logistics. During the month of May the program director's duties include, but are not limited to, hiring, conducting technical assistance visits, composing and distributing handouts, and attending meetings. A technical assistance visit is similar to providing a construction estimate, except the labor is provided for free without pay or expenses for all transportation. During June the program director trains the Courtesy Boat Inspectors (CBI), schedules CBI hours on the launch, books sites for Erosion Control Crew projects and continues technical assistance visits.
In July and August, the program director continues to provide technical assistance to land owners, gathers materials for the ECC projects, educates land owners, attends meetings, and monitors the CBI program.

Erosion Control Crew Leader: The erosion control crew lead is in charge of training and education the member of the erosion control crew, oversees all projects conducted by the ECC, speaks with landowners in that absence of the program director. In addition to ensuring that all projects conducted by the ECC are done in a safe, efficient and fun manor.
This position is a forty hours a week from Monday until Friday for $12.00 an hour.

Erosion Control Crew Members: Members of the erosion control crew (ECC) typically work thirty hours per week, weather permitting. The ECC consists of five full-time members and one alternate member. All ECC members are residents of towns within the Watershed. Residents of Acton, Springvale, Waterboro and Berwick served on the crew this year. ECC crew members install the erosion and runoff control practices designed by the program director. Only hand tools are used in the entire process.

Courtesy Boat Inspector: This year the ASYCC received granted funding to hire, three full-time Courtesy Boat Inspectors (CBI) on Mousam Lake and one 8hour per week position on Square Pond. The CBIs educate boat owners about the potential dangers of invasive species within waterways while inspecting boats and propellers for invasive aquatic plants. The main purpose of this is to protect our waterways from invasive plants.

ASYCC Erosion Control Crew 2008 Summer Projects

1. Foot of the Pond
2. Shapleigh Town Beach
3. Joanne Weiss, 34 Cillie Road, Shapleigh (Goose Pond)
4. Jane Carmichael, 66 Point Road, Shapleigh (Mousam Lake)
5. Karen Ward, 3 Narrow Lane, Shapleigh (Mousam Lake)
6. Maynard Hanson, 154 Loop Road, Shapleigh (Loon Pond)
7. Herb Emery, 372 Cedar Drive, Shapleigh (Square Pond)
8. Dick and Libby Tuttle, 5 Water's Edge, Shapleigh (Mousam Lake)
9. Ann Philbrook, 26th Street, Shapleigh (Mousam Lake)
10. Nancy Small, 128 Apple Road, Shapleigh (Square Pond)
11. Barbara Pickard, 83 24th Street, Shapleigh (Mousam Lake)
12. Dennis Roberge, 91 24th Street, Shapleigh (Mousam Lake)
13. James and Helen Flaherty, 145 Loop Road, Acton (Loon Pond)
14. Sylvia Morrill, 1010 West Shore Drive, Acton (Square Pond)
15. Gerri and Michal Waitt, 572 West Shore Drive, Acton (Square Pond)
16. Steve Nichols, 42 17th Street, Shapleigh (Mousam Lake)
17. Brenda Melvin, 989 Goose Pond Road, Shapleigh (Mousam Lake)
18. Loop Road, Boat Launch Access, Acton (Loon Pond)
19. Bill Dame, 182 Avenue D, Acton (Mousam Lake)
20. Nichola and Alan Lindquist, 368 Cedar Drive, Shapleigh (Square Pond)


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Number of Technical Visits:

1. 5/24/08: Mr. and Mrs. Hanson, 154 Loop Road, Acton, ME
2. 5/29/08: Joanne Weiss, 34 Cillie Rd, Shapleigh, ME
3. 5/31/08: Karen and Dennis Ward, 3 Water's Edge, Shapleigh, ME
4. 5/31/08: Dick and Libby Tuttle, 5 Water's Edge, Shapleigh, ME
5. 5/31/08: Ann Philbrook, 26th St, Shapleigh, ME
6. 5/31/08: Jane Carmichael, 66 Point Rd, Shapleigh, ME
7. 6/22, 23/08: Joanne and Bill MacDonald, Point Rd, Shapleigh, ME
8. 6/23/08: Herb Emery, 372 Cedar Dr, Shapleigh, ME
9. 6/25/08: Dick and Susan Goodnough, 116 21st St, Shapleigh, ME
10. 6/27/08: Gail Lamont, 255 23rd St, Shapleigh, ME
11. 6/27/08: Barbra Pickard, 83 24th St, Shapleigh, ME
12. 6/27/08: Alyssa Harding, 24th St, Shapleigh, ME
13. 7/1/08: Darel Nower, 27 Chestnut Rd, Shapleigh, ME
14. 7/3/08: Steve Nichols, 17th St, Shapleigh, ME
15. 7/8/08: Nancy Small, 128 Apple Rd, Shapleigh, ME
16. 7/8/08: Dennis Roberge, 91 24th St, Shapleigh, ME
17. 7/14/08: James and Helen Flaherty, 145 Loop Rd, Shapleigh, ME
18. 7/14/08: Dawn and Joe Flak, 16 Chestnut Dr, Shapleigh, ME
19. 7/15/08: Nichola Lindquist, 368 Cedar Dr, Shapleigh, ME
20. 7/15/08: Gerri and Michael Waitt, 572 West Shore Rd, Acton, ME
21. 7/28/08: Henry and Lydia Gole, 159 23rd Street, Shapleigh, ME
22. 7/28/08: Lynette Plaisted, 24 Jib Way, Shapleigh, ME
23. 7/29/08: Sylvia Morrill, 1010 West Shore Drive, Shapleigh, ME
24. 7/30/08: Steve Nichols, 42 17th Street, Shapleigh, ME
25. 7/31/08: Bill Dame, 182 Avenue D, Acton, ME
26. 8/02/08: Steve Eastman, 46 Portside Rd, Shapleigh, ME
27. 8/04/08: Loop Road Boat Access, Acton, ME
28. 8/18/08: Brenda and Ralph Melvin, 989 Goose Pond Road, Shapleigh, ME
29. 8/21/08: Jamie Verity, 180 Avenue D, Acton, ME
30. 8/29/08: Wayne Thurrott, 79 Totte Road, Shapleigh, ME
31. 9/5/08: William and Donna Rosenkrans, 360 Cedar Drive, Shapleigh, ME
32. 9/5/08: John Atwood, 110 Apple Road, Shapleigh, ME

ASYCC Erosion Control Crew Project Breakdown List:

- Total Number of Technical Visits:
  - ✓ 32 Technical Visits have been made
  - ✓ 28 Site Reports have been written
- Project complete
  As of August 8, 2008:

  - ✓ Total Number of Projects Completed: 20
  - ✓ Project Breakdown:
    - Mousam-Shapleigh: 10
    - Mousam-Acton: 1
    - Square-Shapleigh: 4
    - Square-Acton: 2
    - Loon-Acton: 3
  - ✓ Total number of projects completed this season: 47
  - ✓ Project Breakdown:
    - Mousam-Shapleigh: 30
    - Mousam-Acton: 1
    - Square-Shapleigh: 7
    - Square-Acton: 4
    - Loon-Acton: 5

Conservation Practices Installed:

- **Rubber Razor Blade**
- **Infiltration Trench**
- **Open-top Culvert**
- **Drip Line Trench**
- **Rain Garden**
- **Water Bars**
- **Infiltration Pathway**
- **Shoreline Vegetation**
- **Slope Stabilization Planting**
- **Vegetated Buffer Strip**
- **Rip Rap**
- **Retaining Wall**
- **Check Dams**
- **Mulching (Erosion Control Mulch)**
- **Establish Pathway**
- **Turn-out**
- **Drywell**

ASYCC Erosion Control Projects for the 2008 Season: **(Please refer to appendix for pictures of all sites)**

1. **Foot of the Pond**

   Existing Problem: The Foot of the Pond is a heavily used beach at the base of Mousam Lake. During the summer months the heavy foot traffic results in erosion along the beach. In addition to the heavy foot traffic, a lot of storm water runoff comes off of the road, down the slope, and then into the lake. The runoff from the road carries pollutants and sediments into the lake which in turn decreases the quality of the lake's water.

   Solutions and conservation practices installed: To help reduce the amount of erosion and sediment loss on the beach an infiltration pathway was installed. Native plants were installed to help further deter erosion, 5 yards of mulch was spread, and several water bars were placed in vulnerable areas of the beach.

   Materials used:

   - 4x4 Timbers
   - 3/8" stone
   - Logs from the lake
   - Rebar
   - Plantings
   - Mulch

   Plants used:

   - ✓ 10 Day Lilies (planted in rows to work as a vegetated buffer strip)
   - ✓ 6 Common Jupiter (planted within the new water bars to the far right of the beach)
   - ✓ 5 Bearberry (planted along the berm to the left of the trail)
   - ✓ 1 Hemlock (planted to replace the tree that was removed/ cut down)

2. **Shapleigh Town Beach:**

   Existing Problem: The Shapleigh Town Beach is a heavily used piece of land located on Square Pond. The Shapleigh Town Beach is a private beach area open to the public. Heavy use of the beach has depleted ground cover. Depleted ground cover results in exposed tree roots. When tree roots are exposed no other vegetation can be supported in the immediate area. This means that the beach lacks other vegetation.

   Solution and conservation practices installed: To prevent further soils and vegetation loss, the ASYCC Erosion Control Crew (ECC, established two infiltration pathways connecting at the end of the staircase leading down to the water. The remaining area was covered with erosion control mulch to reduce soil loss during storm events. The final part of this project was reestablishing vegetation in the area. Again, this area was heavily vegetated in the past. Plants were placed along the sides of the park to revive plant growth. Also, non-point source runoff is a problem at the site when water and oil from the parking lot seeps into the lake. Plants were placed along the edge of the parking lot to help protect the lake.
   In addition to covering exposed root systems with the erosion control mulch, Virginia Creeper was planted. Virginia Creeper is a vine that is Native to Maine and is found growing alongside roads. One characteristic of Virginia Creeper is its ability to grow 30 to 50 feet long. The purpose of using Virginia Creeper is to develop a ground cover where one was originally.

Materials used:

- 4x4 timbers
- Plants
- Erosion Control Mulch
- 2 tons of 3/8" stone

3. **Joanne Weiss, 34 Cillie Road, Shapleigh, ME:** July 7 and 8, 2008:

Practices installed on Joanne Weiss's site include:

- Drip-line trench on both sides of her house
- Infiltration pathway along the right side of her house
- Vegetated Buffer strip planting along the edge of the steep slope

Materials used within this project include:

- 4x4 pressure treated timbers (water bars)
- 3/8" gravel stone (placed between water bars to create the infiltration pathway)
- ¾" gravel stone (Drip line trench)
- Geo-tex fabric (Drip Line Trench)
- Transplant Hosta from other area of lawn
- 1 Rhododoendron (Rhododendron Olga Mezitt)

Time to complete project: 1 ½ days

Crew: Josh, Bryan, Jeff, Matt, Emil, David (Crew leader)

It should be noted that Joanne Weiss received work from the ASYCC ECC several years ago to help stabilize her hill. Recently, Weiss had a new foundation installed. The activities of the crew were concentrated in the new construction area.

4. **Jane Carmichael, 66 Point Road, Shapleigh, ME:** Wednesday, July 9 and 10, 2008:

Practices installed on Jane Carmichael's Site include:

- Rip Rap along the side of the island
- Plantings to help hold and secure side of the island.

Materials used within this project include:

- 9 tons of 6" rip rap stone
- Geo-tex fabric
- Plantings

Number of Plants	Latin Name	Common Name
3	Aronia Arbutifolia Brilliantissima	Red Chokeberry
3	Aronia Melanocarpa	Black Chokeberry
10	Cephalanthus Occidentalis	Buttonbush
2	Cornus Sericea	Redosier Dogwood
2	Cephalanthus Occidentalis	Buttonbush
6	Aronia Arbutifolia Brilliantissima	Red Chokeberry

Time to complete project: 2 days

Crew: Josh, Bryan, Jeff, Matt, Emil, Kelsey and David (Crew Leader)

Overview of Project: Rip rap was installed to help prevent the lost of the island. The landowner reported that people continually climb up onto the island causing soil erosion. ASYCC ECC hand placed 9 tons of 6" rip rap stone along the side of

the island. A combination of Red Chokeberry, Black Chokeberry, Buttonbush, and Redosier Dogwood was planted to deter people from climbing onto the island.

5. **Karen and Dennis Ward, 3 Narrow Lane, Shapleigh, ME:** Friday, July 11 and 14, 2008:
   Practices installed on Karen and Dennis Ward's Site includes:
   - Rip Rap along the side of a steep embankment
   - Buffer strip plantings
   - Check Dams with the stone to slow down sheet flow

   Materials used within this project include:
   - 12 tons of 6" rip rap stone
   - Geo tex fabric
   - Plants

Number of Plants	Latin Name	Common Name	Individual Price	Total Price
4	Phlox Subulta	Creeping phlox	$4.50	$18.00
2	Phlox Subulta	Candy Strips	$4.50	$9.00
2	Hemerocallis	Day lily: Daring Deception	$5.25	$10.50
2	Hemerocallis	Day lily: Bama Bound	$5.00	$10.00
2	Hemerocallis	Day lily: Little Grapette	$5.25	$10.50
2	Hemerocallis	Day lily: Nanuq	$5.25	$10.50
2	Polygonatum	Solomon's Seal	$5.25	$10.50
2	Aquilegia: Canadensis	Columbine	$4.50	$9.00
3	Aquilegia: Grandmothers Garden	Columbine	$4.50	$13.50
1	Tradescantia: Bilberry Ice	Spiderwort	$4.75	$4.75
1	Tradescantia: Concord Grape	Spiderwort	$4.75	$4.75
1	Tradescantia: Danielle	Spiderwort	$4.75	$4.75
3	Echinacea: Purpurea magnus	Coneflower	$5.50	$16.50
Total				$132.25

   Time to complete project: 2 days
   Crew: Josh, Bryan, Jeff, Matt, Emil, Kelsey and David (Crew leader)

   Overview of project: The Ward's project was a two phase project. Phase one took place last year. Phase two was completed this year. In phase one the crew constructed infiltration steps alongside the Ward's Camp. Phase two focused on the steep slope next to the water. Severe erosion within this area caused rapid soil loss. Mrs. Ward said that a tree used to be growing on the embankment. That tree died because of the rapid soil erosion. The crew's work will ensure that future vegetation gets the soil needed. This future vegetation will protect the lake from runoff.

   The ASYCC ECC hand placed 12 tons of rip rap to help protect the exposed soil along the embankment. As well as planted a vegetated buffer strip across the top of the slope to help reduce and slow down the velocity at which storm water travel over this area at.

6. **Maynard Hanson, 154 Loop Road, Shapleigh, ME:** Monday, July 14, 2008:

   Practices installed on Hanson's Site include:

   - Hand placed 6" Rip Rap Stone
   - Plantings across the top of the rip rap
   - Mulch existing pathway
   - Lined the side of the pathway with stone

   Materials used within this project include:

   - 3 tons of 6" rip rap stone
   - Geo- tex fabric
   - 3 –five gallon buckets of 3/8" gravel stone
   - Mulch
   - 3 Creeping Junipers

   Time to complete project: 1/2 day

   Crew: Josh, Bryan, Jeff, Matt, Emil, David (Crew leader)

   Overview of project: The Hanson Project is a project was not completed by the ASYCC in 2007. The 2008 ASYCC ECC finished the project by placing 3 more tons of 6"rip rap within an area that is vulnerable to runoff and installing stones along a pathway to prevent it from being washed away. Creeping Junipers were planted to slow down the speed of storm water in the area.

7. **Herb Emery, 372 Cedar Drive, Shapleigh, ME:** Tuesday, July 15, 2008:

   Practices installed on Emery's Site include:

   - Constructed 7 infiltration trenches
   - Turnout
   - Graveled remaining area

   Materials used within this project include:

   - Mixture of ¾" and 1 ½" gravel stone (6 tons)
   - Geo- tex fabric

   Time to complete project: 1 day

   Crew: Josh, Bryan, Jeff, Matt, Emil, David (Crew leader)

   Construction of this practice along the roadside will reduced the velocity of storm water. The gravel was installed to allow water to exit the road without going directly down the stream channel.

8. **Dick and Libby Tuttle, 5 Water's Edge, Shapleigh, ME:** Monday, June 30, and Wednesday, July 16, 2008:

   Monday, June 30, 2008:

   Phase one of the Tuttle project was completed this year. On June 30 2008, the crew went to the Tuttle's Camp on Mousam Lake to plant four Sweet Fern *(Comptonia Peregrina)* and 6 Woodbine/ Virginia Creeper *(Parthenocissus Quinquefolia).* This site allowed the crew leader, David, to teach the ECC members the correct techniques of planting. The project only took forty-five minutes.

   · Part two of this project includes the construction of two top-open culverts which will run across the roadway to divert storm water off of the road. As well as two turn outs along the side of 23rd Street. The remaining portion of this project will be completed on July 16, 2008.

   The Tuttle's donated the left over manure and peat moss from the project for future projects of the ASYCC.

Wednesday July 16:

Practices installed on Tuttle's Site include:

- 3 turnouts along 23rd Street
- 2 open-top culverts
- Check Dams

Materials include:

- 4x6 = (20'x2=40' of wood) and (24'x2=48' of wood)
- 4x8= (20') and (24')
- 3/8" crushed stone

Time to complete project: 1 day

Crew: Josh, Bryan, Jeff, Matt, Emil, David (Crew leader)

Water's Edge is a side street off 23rd Street. It receives a lot of storm water from the steep slow before the entrance of the roadway. Along the left side of 23rd Street three turnouts were constructed to allow the water to exit the road way before it makes it to Water's Edge. If the water does make it down to Water's Edge, then it will be diverted into two open-top culverts into the natural vegetation along the roadside.

9. **Ann Philbrook, 26th Street, Shapleigh, ME:** Friday July 18, 2008:

Practices installed on Philbrook's Site include:

- Water bar
- Plantings
- Rain Garden
- Mulch pathway

Materials used within this project include:

Plants

Number of Plants	Latin Name	Common Name
7	Hemerocalliss (Purple Waters)	Daylily
4	Hemerocallis (Final Touch)	Daylily
7	Hemerocallis (Black eyed susan)	Daylily
6	Parthenocissus Quinquefolia	Virginia Creeper
3	Phlox Subulta (Emerald Blue)	Creeping Phlox
3	Phlox Subulta (Candy Stripes)	Creeping Phlox
3	Osmunda Cinnamomea	Cinnamon Fern
3	Adiantum Pedatum	Maidenhair Fern
3	Onoclea Sensibilis	Sensitive Fern
2	Aquilegia (Canadensis)	Columbine
3	Lobelia (Cardinalis)	Lobelia

- Lumber: 5- 12’ (4x4), 1-8’ (4x4) and 2-16’ (4x4)
- 3/8” Gravel Stone for pathway (2tons)
- 3 yards of Erosion Control Mulch

Time to complete project: 1 day

In short, this was a major project.

- ✓ A water bar was constructed at the end of the driveway because it is the highest point on the property.
- ✓ Day Lilies were planted along the sides, in front and behind the water bar Day
- ✓ Virginia Creeper was planted within this steep slope prior to the house. With hope the Creeper will spread to cover and protect exposed soils.
- ✓ Down the existing stone pathway the ECC placed 3/8” gravel stone between the existing large stones to help slow water flowing between stones during storm events.
- ✓ The side of the house is a heavy foot traffic area. The stone path was replaced with mulch for two reasons. First crushed stone kills roots, in turn killing adjacent trees. Second, this path leads to the lake. People often walk barefoot upon the path to access the lake. Mulch is less painful to walk upon while barefoot.
- ✓ At the bottom of the slope a rain garden was constructed to help hold and collect the amount of water that pools within this area.
- ✓ Remaining bare soil was covered with Day Lilies and moss phlox.

10. **Nancy Small, 128 Apple Road, Shapleigh, ME:** Tuesday July 22, 2008:
    Practices installed on Small’s Site include:
    - Erosion Control Mulch
    - Water bars

    Materials used within this project include:
    - 5 ½ yards of erosion control mulch
    - 2 yards of fine mulch
    - 24’ of pressure treated 4x4

    Time to complete project: 1½ days

    Crew: David, Josh, Bryan, Matt, Jeff, Emil

    Nancy Small’s project was in an area where bare soil was exposed and running into the lake. Erosion control mulch and water bars were installed to prevent runoff. The water bars were place above the high-water line, approximately 3 inches above ground.

11. **Barbara Pickard, 83 24th Street, Shapleigh, ME:** Friday and Monday, July 25 and 28, 2008:
    Practices installed on Pickards Site include**:**
    - Rubber Razor Blade
    - Infiltration pathway
    - Water bar
    - Vegetated Buffer Strip

    Materials used within this project include**:**
    - 3 tons of ¾” gravel
    - 4x4 Lumber
    - 20 stone pavers
    - 10 Hemerocallis (Day lilies)

- Rebar
- Rubber
- Nails
- 50’ of 2x6 Lumber

Time to complete project: 2 days

Crew: David, Josh, Jeff, Matt, Kelsey, Emil, Bryan

Prior to construction of the conservation practices, sheet flow was running from the road, across the lawn, over the beach, and into the lake; soil and sand were being eroded into the lake. To help prevent this from occurring, a rubber razor blade was installed across the driveway. Farther down, towards the beach, a water bar with vegetation planted along the side of it was installed and planted to help reduce the amount of water that was running from the adjacent house’s roof and driveway. The final project on the Pickard property was the construction of an infiltration pathway leading from the camp to the beach. The pathway catches storm water that was running down from the camp while directing the water to the lake in a slower, meandering path.

12. Dennis Roberge, 91 24th Street, Shapleigh, ME: July 29 and 30 and August 4, 2008

Practices installed on Roberge’s site include:

- Rubber Razor Blade
- Check Dams
- Re-vegetation
- Shoreline re-vegetation
- Buffer strip planting

Materials used within this project include:

- Erosion Control Mulch
- Manure & Peat Moss
- Rubber (for rubber razor blade)
- 2 2x6- 12’ Lumber
- Rip rap stone

Number of Plants	Latin Name	Common Name
10	Myrica Gale	Sweet gale
15	Tsuga Canadensis	Eastern Canadian Hemlock
12	Thuja Occidentalis Nigra	Arborvitae
6		Woodbine

Time to complete project: 3 days

Crew: David, Emil, Kelsey, Josh, Bryan

Starting at the road, rip rap check dams were placed within the gulley alongside of 24th street. The check dams were installed to help break up and slow down water that was concentrating along the roadside.

- ✓ The second project was to re-vegetate the side of a slope where the previous landowner removed many Hemlocks. After the trees were removed the velocity of water that came from this area increased. The crew replanted 15 hemlocks.

- ✓ The third project on this site was installation a rubber razor blade along the road, just past the house. The rubber razor blade was installed with 6" rip rap at the end to prevent water from flying off the rubber razor blade and forming a channel across the driveway.

- ✓ The fourth project was the installation of 9 Arborvitae. The plant installation served two purposes. The Arborvitae provides a vegetated buffer while acting as a fence between the house next door.

- ✓ The fifth project on the site was the planting of 10 Sweet Gales. The prior owner of the camp used a 12' pathway as a boat ramp to launch his boats. The Sweet Gales were planted to help re-vegetate the shoreline and prevent the loss of soil due to wave action.

13. James and Helen Flaherty, 145 Loop Rd, Acton, ME: Thursday, Friday and Monday July 31, August 1 and 4, 2008

Practices installed on Flaherty's Site include:

- Retaining Wall
- Infiltration pathway
- Vegetated Buffer Strip
- Drip Line Trench

Materials used within this project include:

- LaValley Lumber
  - 20- 8' (5.5x5.5)
  - 8- 16' (4x4)
  - Rebar
- Pepin Sand and Gravel 3 tons of stone
- Springvale Nurseries 15 plants
- Springvale Hardware (Clamps, peat moss, manure)
- Geo Fabric
- Pearson Nurseries
- Home Depot (Stone Pavers)
- Rip Rap Stone

Time to complete project: 3 days

Crew: David, Jeff, Matt, Bryan, Emil, Kelsey. Josh

A retaining wall that had been built more than 60 years ago was replaced. The new retaining wall runs 46' long and stands about 18-20" high. A pathway was made with 4x4, ¾" gravel and stone pavers. A drip-line trench was installed alongside the basement outline of the camp and a vegetation buffer was planted.

14. Sylvia Morrill, 1010 West Shore Drive, Acton, ME: Tuesday, Wednesday and Thursday, August 5, 6, 7, 2008

Practice installed on Morrill's site includes:

- Infiltration pathway
- Vegetated buffer

Materials used within this project include:

- 2 tons of 3/8" Gravel for pathway
- 4x4 Lumber
- Rebar

Number of Plants	Latin Name	Common Name	Individual Price	Total Price
7	Hemerocallis	Daylilies	$9.74	$68.18

Time to complete project: 4 days due to inclement weather

Originally, a brick pathway led from the driveway to the camp. The crew removed the brick and replaces the pathway with an infiltration pathway. The brick was used to outline the pathway. 3/8" stone was placed between water bars approximately 2' apart.

Daylilies were planted on the edge of the path to slow down storm water traveling down the slope.

15. Gerri and Michael Waitt, 572 West Shore Drive, Acton, ME: Tuesday August 12, 2008

Practices installed on Waitt's site include:

- Invasive species removal
- Rain Garden
- Waterbar

Materials used within this project:

- Weed Wrap, Peat Moss and Manure
- 2 yards of Erosion Control Mulch
- 1- 10' 4x4 (Lumber)

Quality of plant	**Latin Name**	**Common Name**
3	Osmunda Cnnamomea	Cinnamon Fern
3	Adiantum Pedatum	Maidenhair Fern
3	Onoclea Sensibilis	Sensitive Fern
3	Aquilegia Canadensis	Columbine
3	Lobelia Cardinalis	Lobelia
5	Hemerocallis	Purple Waters
5	Hemerocallis	Black Eyed Susan
10	Hermerocallis	Various Types
2	Echinacea	Coneflower
3	Asclepias	Milk weed

Time to complete project: 1 day
Crew: David, Emil, Kaitlyn, Jeff, Matt, Kelsey

The Waitt's property receives a large amount of runoff from West Shore Drive. A rain garden was placed within the water flow to reduce the speed and amount of water. It wasn't easy to put a rain garden because the yard was used for a driveway and boat storage. To achieve this goal and to still make the rain garden productive, the ASYCC ECC placed the rain garden along the fence, shaped like a kidney.
Invasive Japanese Knot Weed was removed. Japanese Knot Weed kills native species. Japanese Knot Weed was introduced for erosion control, but it took over everywhere it was planted. The crew clipped the weed about 3 inches from the ground, covered the area with weed paper, and then placed erosion control mulch over the paper.
All soil from a Japanese Knot Weed is hazardous waste. The crew properly disposed of the tarnished soil. Because the weed penetrates three feet underground, many people use pesticides to remove the plant. We did not use any pesticides because of proximity to the lake.

16. Steve Nichols, 42 17th Street, Shapleigh, ME: Thursday and Friday, August 14 and 15, 2008
Practices installed on Nichol's Site include:

- Rain Garden
- 2 Infiltration Trenches
- 1 Rubber Razor Blade
- Drip Line Trench
- Erosion Control Mulch
- Vegetated Buffer

Materials used within this project include:

- Geo Tex Fabric
- Manure and Peat Moss
- Erosion Control Mulch
- 3 tons of 1 ½" stone
- 1 ton of 6" Rip Rap stone
- 10' piece of rubber
- 20' of 2x6 lumber
- Nails

Latin Name	Common Name
Rudbeckia hirta	Black- eyed Susan
Echinacea	Coneflower
Monarda	Bee balm
Dicentra	Bleeding Heart
Tradescantia	Spiderwort
Iris versicolor	Blueflag iris
Athyrium Filix	Lady Fern
Oncoclea Sensibilis	Sensitive Fern
Osmunda Cinnamomea	Cinnamon Fern
Polystichum Acrostichoide	Christmas Fern
Ascleplas Tuberosa	Butterfly Weed
Parthenocissus Quinquefolia	Virginia Creeper
Hemerocallis	Various types of Daylilies
Tsuga Canadensis	Eastern Canadian Hemlock

Time to complete project: 2 days
Crew: David, Kaitlyn, Kelsey, Emil, Jeff, Matt, Bryan

The Nichols' project was done in collaboration with the York County Soil and Water District. The project was used as a workshop for local landowners. The workshops educate landowners in the lake area about preventing erosion before it drastically hurts the value of their land. The Nichols' project was ideal for this first workshop because of the typicality of their erosion issues. First, water was flowing from the road along the sides of the driveway and then right into the lake. The crew installed two infiltration drenches to fix the problem. Second, like many homeowners, water was running straight down the driveway and into the lake. A rubber razor blade was installed to slow down the water and keep it in a rain garden instead of shooting right into the lake.

The rain garden was placed at the bottom of one of the infiltration trenches and along the side of the rubber razor blade. The rain garden was designed to catch water from both of these conservation practices with the idea that the water would infiltrate through the soils and reduce the amount of flow that is occurring within this area.

- ✓ Along the sides of the house, a drip line trench was installed. Prior to the drip line trench a large amount of water was running off of the roof onto the soils often carrying the soils towards the lake.

17. **Brenda and Ralph Melvin, 989 Goose Pond Road, Shapleigh, ME:** Monday, August 18, 2008

    The Melvins were well prepared with all the proper materials to help stop excessive amounts of water coming from the roadway onto their property. Years ago, our organization installed a dry well to help with the problem. This visit we updated the drywell.
    It should be noted that the Melvins had all the materials that were needed for this project on hand.

18. **Loop Road Boat Launch, Loon Pond, Acton, ME:** Monday, August 18, 2008
    The Loop Road Boat Launch was another project that required repair. This project was an ASYCC ECC project from several years ago. The project consisted of an infiltration trench along the roadside, a turn out and a small dry well. Since being constructed, all conservation practices were serving their purposes. However, due to some misuse of the area, the erosion control practices needed updating. To help resolve the problem the ASYCC ECC of 2008 used an old log to act as a water bar and divert the storm water into a wooded area. From there the turnout was depending and check dams were created. Also the dry well was enlarged.

19. **Bill Dame, 182 Avenue D, Shapleigh, ME:** Tuesday, August 19, 2008:
    Practices installed on Dame's site include:
    - Vegetated Buffer
    - Erosion Control Mulch

- 2 tree plantings

Materials used within this project include:

- 2 yards of Erosion Control Mulch

Quantity of Plants	Latin Name	Common Name
13	Hemerocallis	Daylilies
2	Tsuga Canadensis	Eastern Canadian Hemlock
7	Echinacea	Coneflower
13	Vaccinium Angustifolium	Low bush Blueberry
7	Parthenocissus Quinquefolia	Virginia Creeper

Time to complete project: 1 day

Crew: David, Emil, Bryan, Kelsey, Jeff, Matt

The Dame Property is located on a steep slope. Over the years the area along the side of the house has received severe erosion from foot traffic. To help correct this, 2 Eastern Canadian Hemlock trees were planted to detour people from traveling within this area. In addition to the Hemlocks; daylilies and Virginia Creeper were planted and erosion control mulch was placed.

In the area in front of the house, along the retaining wall, a mixture of Low bush Blueberry plants and Echinacea were planted to help reduce the amount of soil loss within this area and also to help establish roots within this area.

The last area on the Dame property was the area along the other side of the house next to the staircase. This area has exposed soils, to help reduce the amount of exposed soils Virginia Creeper were planted and erosion control mulch was placed.

20. Alan and Nichola Lindquist, 368 Cedar Drive, Shapleigh, ME: Thursday, August 21, 2008

Practice installed on Lindquist's site includes:

- Vegetated buffer
- Water bars
- Erosion Control Mulch

Materials used within this project include:

- 3- 10' (4x4) Water bars
- 2 yards of Erosion Control Mulch

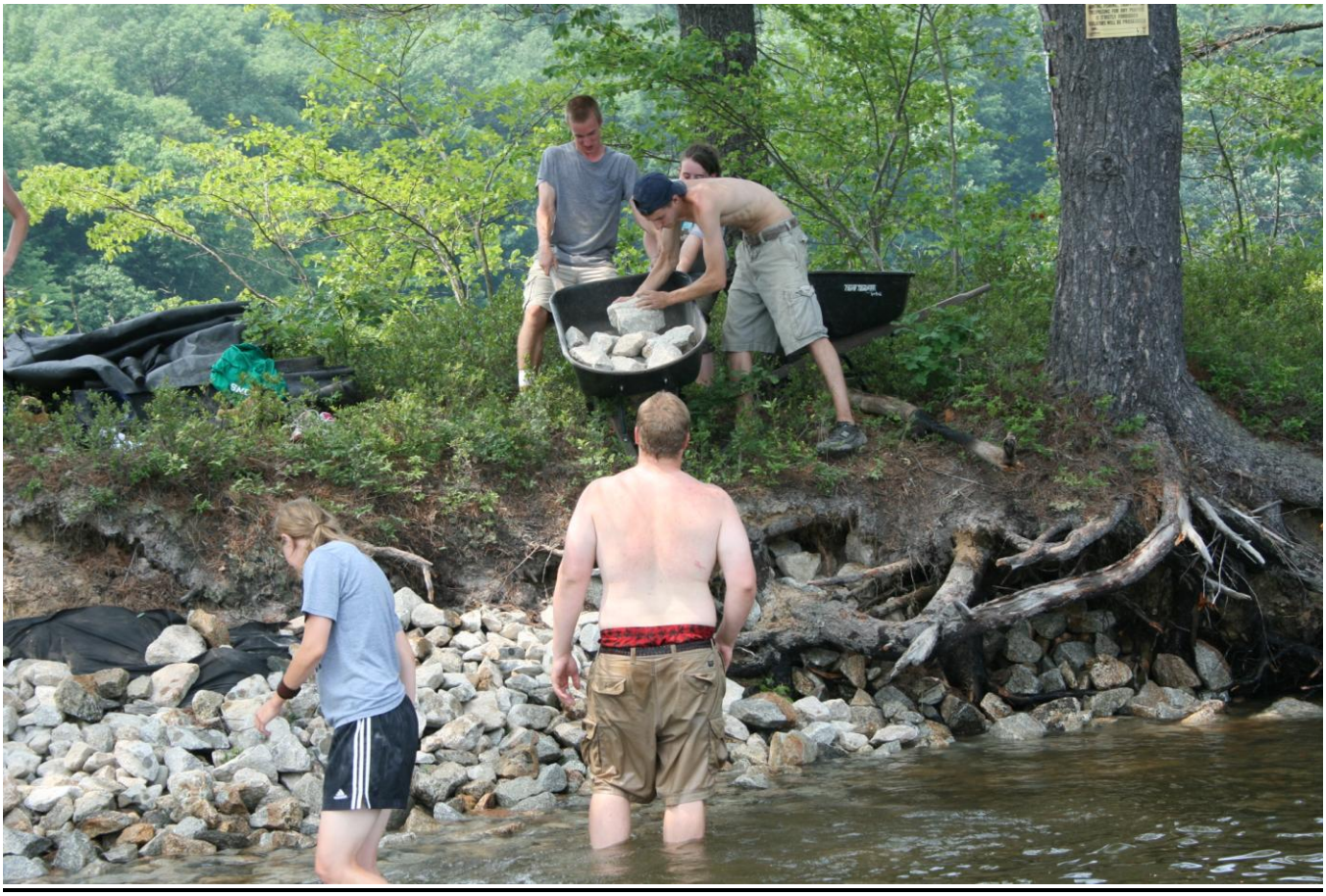
Quantity of Plant	Latin Name	Common Name
5	Vaccnium Corymobosum	High bush Blueberry
5	Echinacea	Coneflower
5	Phlox subulta	Creeping Phlox
5	Rudbechia Filgida Goldsturm	Black-eyed Susan
5	Asclepias Tuberosa	Milkweed (orange butterfly weed)
5	Geranium Maculatum	Cranesbill (wild geranium)

Time to complete project: 1

Crew: David, Emil, Bryan, Kelsey

The Lindquist project consisted of plantings, installing water bars and laying erosion control mulch. Prior to the conservation practices being install the slope next to the house were not vegetated and

had exposed soils. To help solve this problem the ASYCC ECC planted 30 plants within this area and then placed erosion control mulch to help cover the bare soils. Along the other side of the house three 10' 4x4 water bars were installed to help break up and decrease the amount of storm water that flows within this area.



ASYCC Erosion Control Crew End of the Season Project Tour

The end of the ASYCC Erosion Control Crew Season Project Tour was held on August 22, 2008. Members of the ASYCC board, Square Pond Improvement Association and several members of the community were in attendance. Members of the ASYCC ECC each selected a site to present and show off during the tour. As a group we drove around to each site, the crew members explained the project and attendees of the tour were able to ask questions. (On the next page is a handout from the tour)

Acton-Shapleigh Youth Conservation Erosion Control Crew 2008 Season Tour

Sites on the Tour:

1. 145 Loop Pond Road, Acton (Loon Pond):
2. 572 West Shore Drive, Acton (Square Pond):
3. 42 17th Street, Shapleigh (Mousam Lake):
4. Shapleigh Town Beach, Shapleigh (Square Pond):
5. 83 24th Street, Shapleigh (Mousam Lake):
6. 91 24th Street, Shapleigh (Mousam Lake):
7. 26th Street, Shapleigh (Mousam Lake):
8. Foot of the Pond, Shapleigh (Mousam Lake):

ASYCC Erosion Control Crew Season Overview:

- Number of Projects Completed: 20
- Break down of projects by lake
  - Mousam Lake, Shapleigh: 10
  - Mousam Lake, Acton: 1
  - Square Pond, Shapleigh: 4
  - Square Pond, Acton: 2
  - Loon Pond, Acton: 3
- Number of technical visits: 28
- Number of technical reports: 23

Conservation Practices Installed:

- Rubber Razor Blade
- Infiltration Trench
- Open-Top Culvert
- Drip Line Trench
- Rain Garden
- Water bar
- Infiltration Pathway
- Shoreline vegetation
- Slope Stabilization Planting
- Vegetated Buffer Strip
- Rip Rap
- Retaining Wall
- Check Dams
- Mulching (Erosion Control Mulch)
- Establish Pathways
- Turn-outs
- Drywell

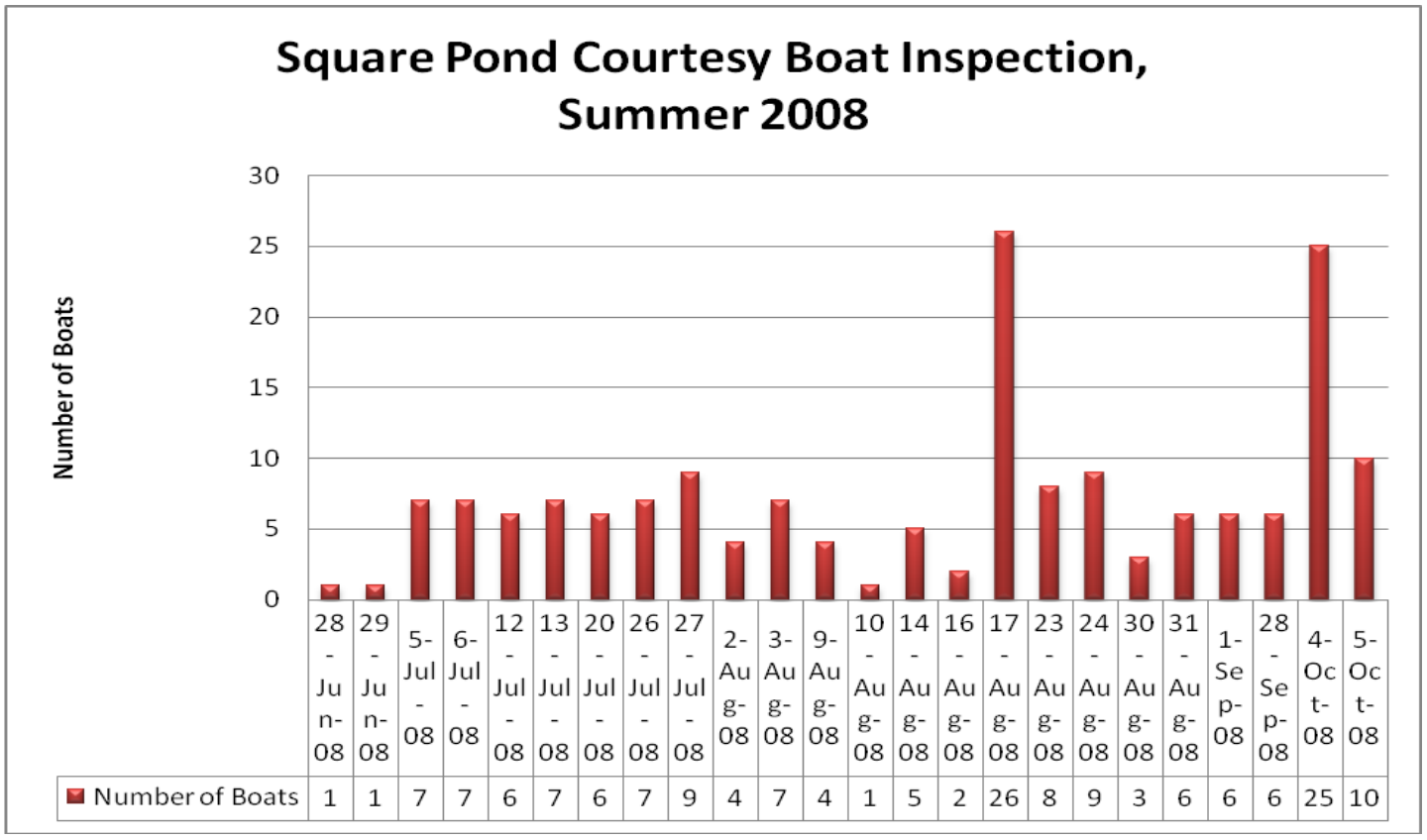
ASYCC Courtesy Boat Inspection Program, 2008 Season

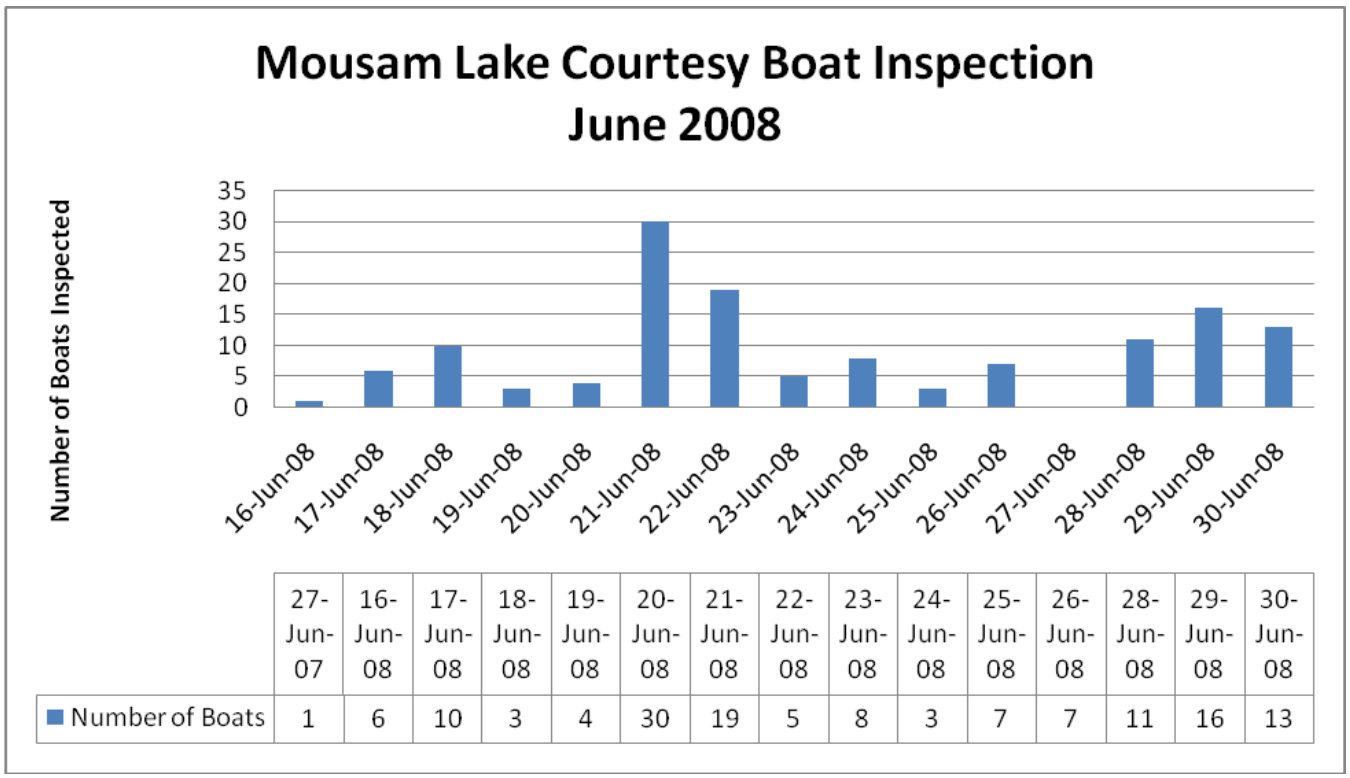
The ASYCC Courtesy Boat Inspection Program saw many changes in the 2008 season. In the summer of 2007, two Courtesy Boat Inspectors (CBI) covered the Mousam Lake and Square Pond Boat Launch. The CBIs split eighty hours a week to cover the Mousam Lake Boat Ramp and the Square Pond Boat Ramp. In 2008, the ASYCC start the season the same way the 2007 season ended. However, due to the increase in boat activity and the complication of trying to utilize two 40 hour a week CBI positions, on two lakes. Starting July, the ASYCC hired an eight hour a week CBI, to cover Square Pond on Saturday and Sunday, from 8am to noon. The addition of this position allowed the two ASYCC's 40 hour a week positions to extend their coverage on Mousam Lake.

Due to an increase in funding from the Mousam Lake Region Association, the ASYCC was able to hire a third CBI 40 hour a week position to extend coverage on the Mousam Lake Boat Ramp. In addition to the expended coverage of daily hours on the boat ramp, the ASYCC was able to extend the season. In previous seasons the ASYCC CBI program ended the weekend of Labor Day. In the 2008 ASYCC CBI season the program was lengthened and ended Columbus Day weekend.

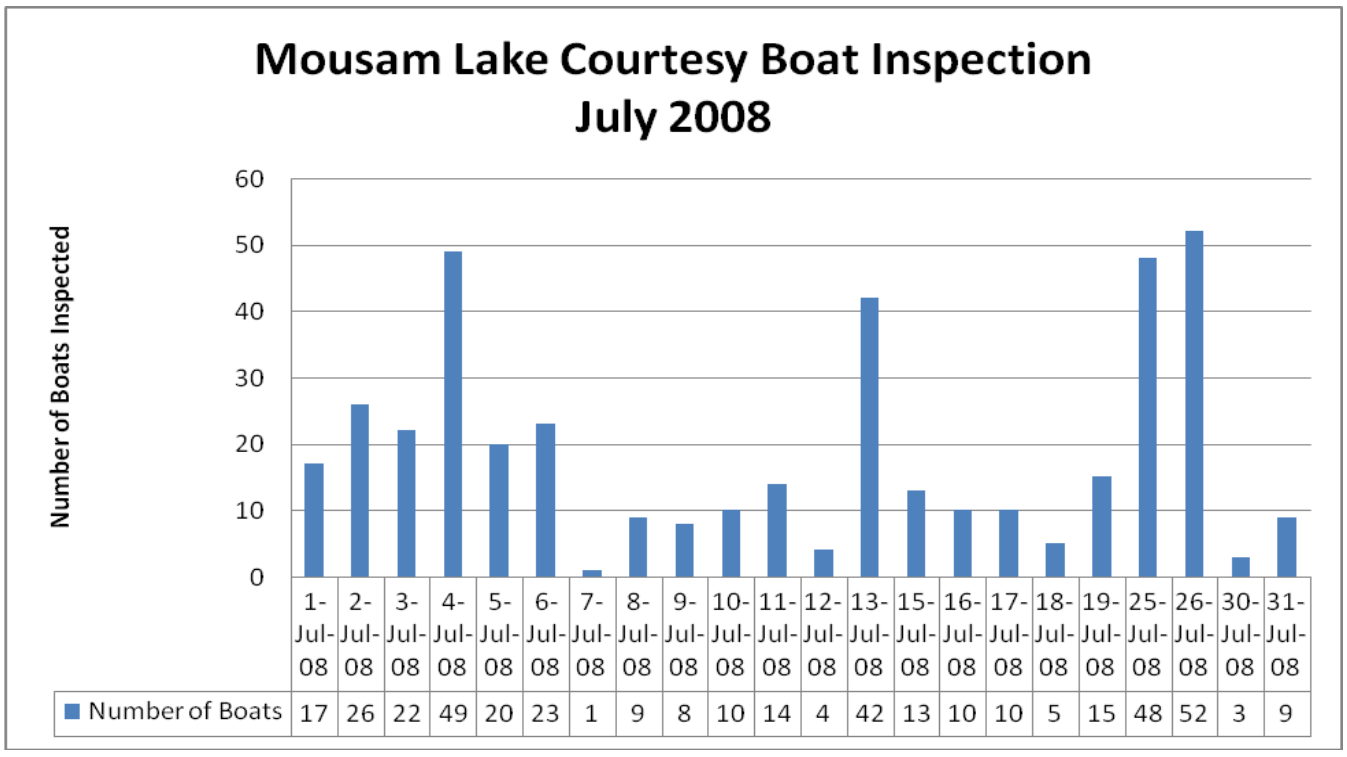
Although the ASYCC CBI season had a late start, the program covered more hours on both Mousam Lake and Square Pond Boat Ramps, and provided coverage later into the season. It is expected if funding is at hand. The ASYCC will be able to start the season earlier in the year (Memorial Day Weekend) through to Columbus Day weekend in October. In addition to the extended season the ASYCC will be able to cover additional hours on both Mousam Lake and Square Pond.

The following charts and graphs provide an overview of the ASYCC CBI season in 2008:

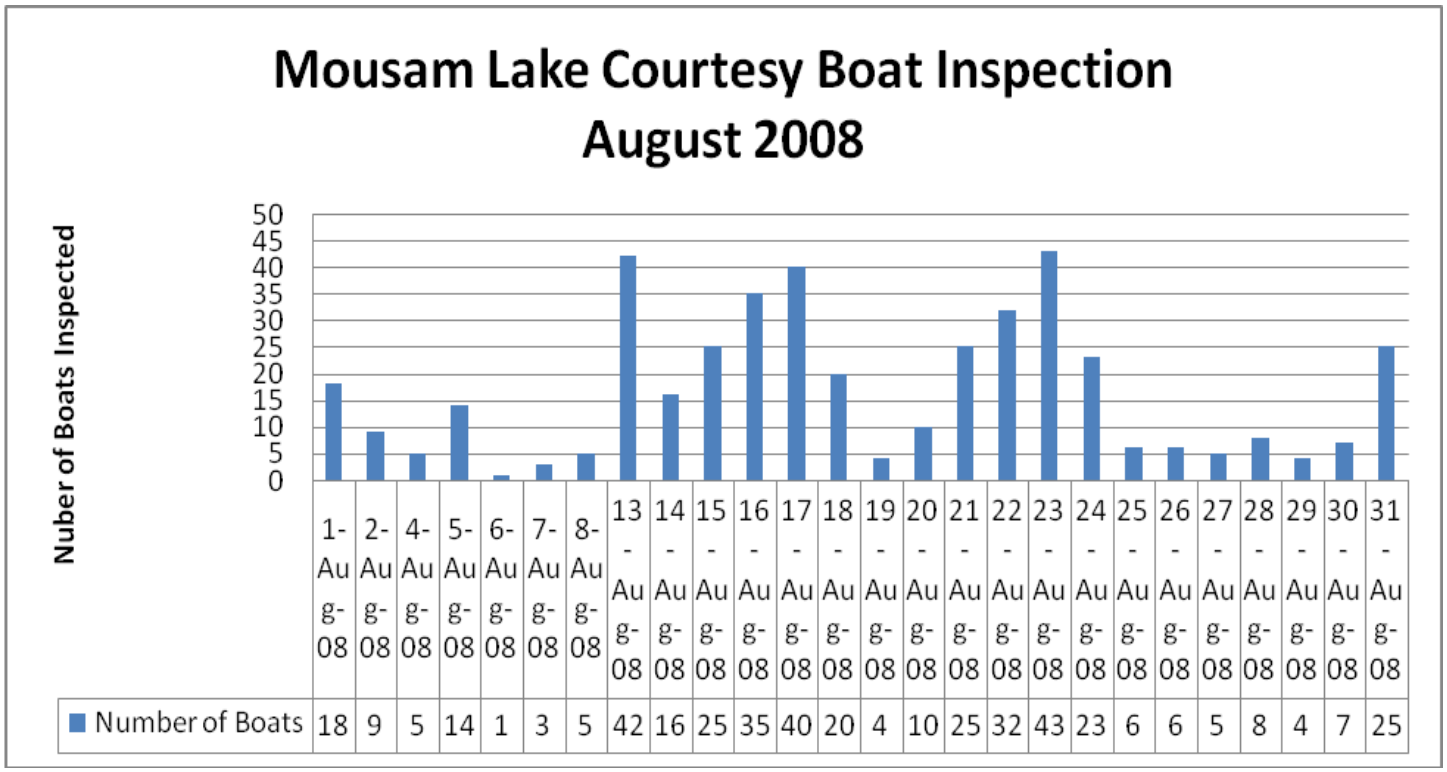


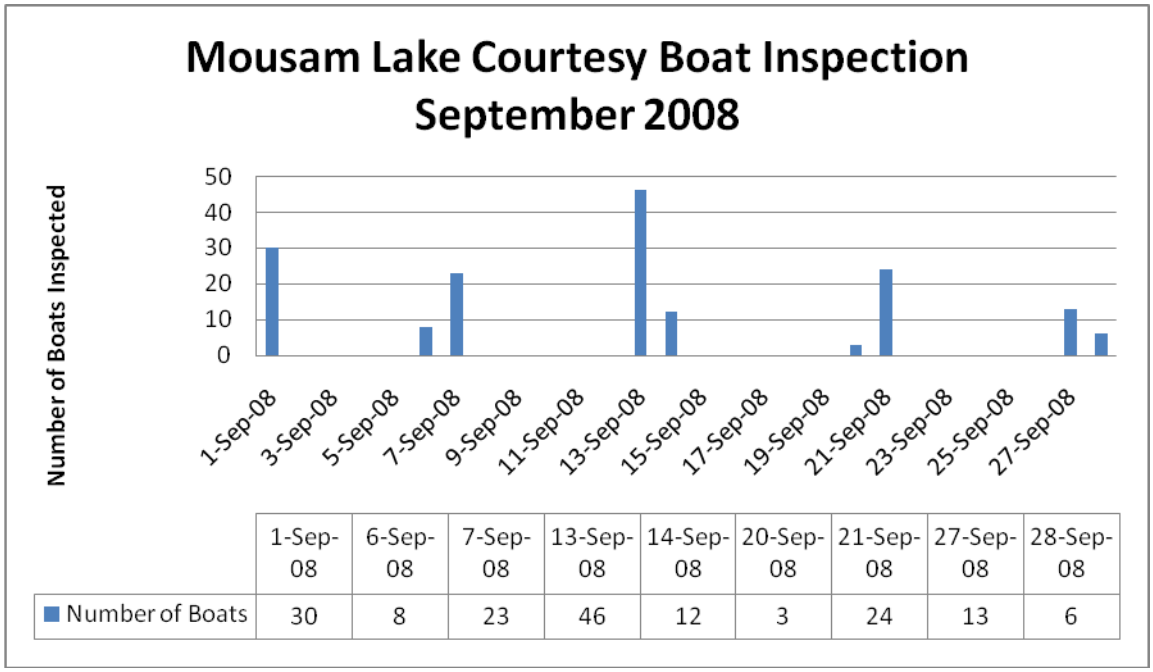


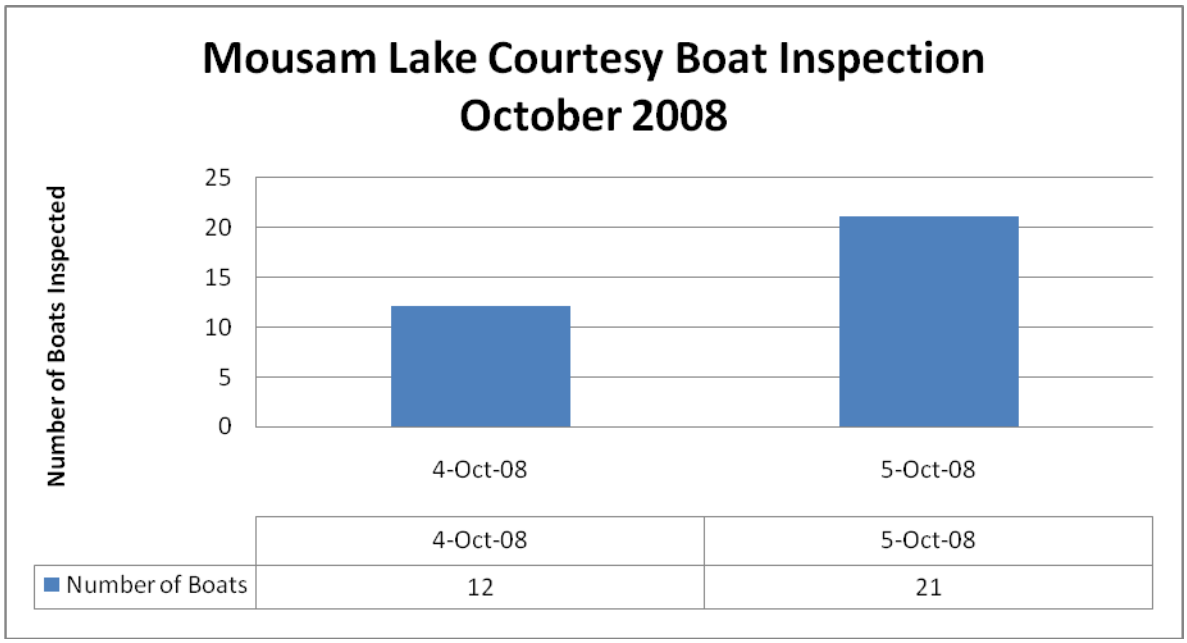
	27-Jun-07	16-Jun-08	17-Jun-08	18-Jun-08	19-Jun-08	20-Jun-08	21-Jun-08	22-Jun-08	23-Jun-08	24-Jun-08	25-Jun-08	26-Jun-08	28-Jun-08	29-Jun-08	30-Jun-08
Number of Boats	1	6	10	3	4	30	19	5	8	3	7	7	11	16	13



	1-Jul-08	2-Jul-08	3-Jul-08	4-Jul-08	5-Jul-08	6-Jul-08	7-Jul-08	8-Jul-08	9-Jul-08	10-Jul-08	11-Jul-08	12-Jul-08	13-Jul-08	15-Jul-08	16-Jul-08	17-Jul-08	18-Jul-08	19-Jul-08	25-Jul-08	26-Jul-08	30-Jul-08	31-Jul-08
Number of Boats	17	26	22	49	20	23	1	9	8	10	14	4	42	13	10	10	5	15	48	52	3	9


Mousam Lake Courtesy Boat Inspection
August 2008
Nuber of Boats Inspected
50
45
40
35
30
25
20
15
10
5
0
1-Aug-08
2-Aug-08
4-Aug-08
5-Aug-08
6-Aug-08
7-Aug-08
8-Aug-08
13-Aug-08
14-Aug-08
15-Aug-08
16-Aug-08
17-Aug-08
18-Aug-08
19-Aug-08
20-Aug-08
21-Aug-08
22-Aug-08
23-Aug-08
24-Aug-08
25-Aug-08
26-Aug-08
27-Aug-08
28-Aug-08
29-Aug-08
30-Aug-08
31-Aug-08
Number of Boats
18 9 5 14 1 3 5 42 16 25 35 40 20 4 10 25 32 43 23 6 6 5 8 4 7 25


Mousam Lake Courtesy Boat Inspection
September 2008
Number of Boats Inspected
50
40
30
20
10
0
1-Sep-08
3-Sep-08
5-Sep-08
7-Sep-08
9-Sep-08
11-Sep-08
13-Sep-08
15-Sep-08
17-Sep-08
19-Sep-08
21-Sep-08
23-Sep-08
25-Sep-08
27-Sep-08
1-Sep-08 | 6-Sep-08 | 7-Sep-08 | 13-Sep-08 | 14-Sep-08 | 20-Sep-08 | 21-Sep-08 | 27-Sep-08 | 28-Sep-08
Number of Boats | 30 | 8 | 23 | 46 | 12 | 3 | 24 | 13 | 6



Plants found:

Over the course of the ASYCC CBI program there were seven plants found. Two from Square Pond and five from Mousam Lake. The plants that were found were native and not invasive. Plant samples were sent to Lewiston for testing to ensure that they were not invasive.

Appendix: Notes from David McLean ASYCC Erosion Control Crew Leader

David McLean Daily Log:

Week I

Monday, June 30th –First day- we did intro's and team building and did some planting examples at the Tuttle's on water's edge.

Tuesday July 1st –Foot of the lake- we places water bars with stone in between them. We also did a lot of plantings and mulching, lots of volunteers helped.

Wednesday July 2nd – Shapleigh Public Beach- installed one of the two long walkways with waterbars and did plantings and mulching.

Thursday July 3rd – Shapleigh Public Beach second day – Finished the water bar paths and mulching, and then had a town BBQ with town board members.

Week II

Monday July 7th – Joanne Weiss – Installed two drip line trenches, formed a walkway with stone and water bars, did various plantings and moved a few infiltration steps.

Tuesday July 8th - Weiss 2nd Day- Perfected the drip line trenches, a few more plantings and touch ups then moved tools to Jane Carmichael's house.

Wednesday July 9th –Jane Carmichael's – Spent all day moving & placing Rip rap rock at island property.

Thursday July 10th – Jane Carmichael's 2nd Day- Finished Rip Rap & plantings on island then moved the tools to the wards and called it a day.

Friday July 11th – Wards- Went to the Wards worked until 11:00 had lunch and called it a day (Three straight days of Rip Rap doesn't work).

Week III

Monday July 14th – Ward's / Henson's – Did the Henson's small Rip rap / Mulching then went back to work at the Ward's property.

Tuesday July 15th –Kilgus's –Work on the driveway of Bill Kilgus digging infiltration trenches and spreading stone and also digging a turn out.

Wednesday July 16th – Tuttle's/ Ward's – Put in two top open culverts & three turn-outs at the Tuttle's property. Went back and finally finished the Ward's property.

Thursday July 17th – Took the day off-

Friday July 18th – Ann Philbrook's- Spread mulch, placed several water bars, lined pathway with slate/ rocks and created a water-garden as well as several other plantings.

Week IV

Tuesday July 22nd – Fixed sites, re-did Tuttle's open top culverts, installed more water bars at Ann Philbrook's and laid some rip-rap rock along the foot of the lake.

Wednesday July 23rd – Small's Property – A lot of Mulching and planting and water bars

Thursday July 24th – Rained out, Drove around checking sites

Friday July 25th – Barbara Pickard's- Built Infiltration steps, mulched, planted, and put in a rubber razor blade

July 28th – Finished Pickard Property

July 29th & July 30th – Dennis Property – Installed 12 large trees alone with shore side plantings and a rubber razor blade.

July 30th, August 1st &2nd – Flaherty Property- Installed long stoned walkway, plantings and 50 foot retaining wall.

Aug. 11th Fixed the Morrill Property – A long stoned walkway with water

bars

Aug. 12th Waitt Property- Installed large rain garden, other plantings and removed invasive species.

Aug. 14th – 18th Nichol's Workshop – Installed two long infiltration trenches, two long drip line trenches, a rain garden, 3 trees, And other plantings.

Aug. 18th – Brenda Melvin – Cleaned out three infiltration trenches and laid rip-rap rock to solidify filtration system.

Aug. 21st – Lindquist Property- Installed three water bars and solidified hill-side with several plantings and mulch.

Tools:

- 5 spades
- 3 Iron rakes
- 4 mattocks
- 2 Edger (flat shovels)
- 1 post digger
- 1 sledge
- 1 mini sledge
- 1 Snow Shovel (broken)
- 2 Clippers
- 2 Bow Saws
- 1 hammer
- 1 mini mattock
- 1 level
- 1 push broom
- 1 tamper
- 1 fan rake
- 1 hack saw
- 2 hand trowels
- 1 Drill

ASYCC Overview Report

ECC Crew Leader: David MacLean

Overview of Erosion Control Crew Seasonq

In general, this season was an incredible learning experience which taught me how to care for the environment and how to become a better leader. My position as Crew Leader had me facing different challenges every day, and it is my intent to explain some of those To Whom It May Concern for the betterment of the program in the future and to provide an overall understanding of the Crew Leader position.

Transportation:

On a daily basis my biggest challenge as a manager was transportation. The nature of our work requires a heavy-duty vehicle (pick-up truck) and forced to improvise a solution for transportation of crew and supplies, the burden often fell upon the crew members themselves. We used Matt Osborne (crew member)'s truck nearly every day this summer, and when we didn't we used his car to transport crew members. As the manager of the crew, the Crew Leader has to balance staff morale in order to maintain a productive working environment; a supplied truck (if at all possible) or a well organized (and preferably generous) system of reimbursement would make the day to day organization of the ASYCC ECC infinitely easier.

The Community:

Working within the Community of the watershed area was an absolute pleasure. We worked on twenty sites this year, the overwhelming majority of which were owned by people happy to have us there, which made my job a lot easier. The lines of communication between the MLRA and the people of Acton & Shapleigh have created an informed community willing to learn and adjust their behaviors to help the overall progress of the lakes they inhabit. I absolutely commend the work of the MLRA in distributing information throughout the community through pleasant personal contact. Dealing with friendly informed people made my job a whole lot easier!

In conclusion, I would like to say that it was a pleasure working with Amanda Loomis and the MLRA members to help the watershed area this season. It was an amazing learning and growing experience. I would further like to say that everything we accomplished was due in large part to Amanda Loomis' personal dedication to her position. Having worked closely with Amanda I got to know her personally and can easily say that the schedule she kept in order to keep this an effective and organized team was nothing short of amazing. She should be commended not only for the output of our labor, but also the immense effort she put forth daily. I would also like to thank the ASYCC and the MLRA for the opportunity and trust you gave me this season by making me ECC Crew Leader.

Sincerely,

David E. MacLean