

waterlines

COVEHEAD-BRACKLEY WATERSHED NEWS

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ENHANCEMENT WORK COMPLETED 2012

2012 was another busy summer for FCBB's six employees. The planned work was all completed along with additional projects including:

- Wildlife Species Indicator surveys
- 4 Molson-Evergreen Stewardship events
- Cleared 5 streams from springs to estuaries
- More brush mats
- Planted 250 native trees and shrubs with rabbit protection
- Built a wheelchair accessible fishing dock at Cass's Pond
- Erosion reduction booklet
- Canada Day celebrations with a display
- Education on shoreline erosion reduction
- Measured silt depths in estuaries and ponds
- Monitored anoxic events in Bays
- Cleaned Covehead and Brackley Bay shorelines
- Installed interpretive signs at Cass's and Marshall's ponds
- Hosted a Youth Eco-Learning Day
- Completed and distributed spring & fall newsletters
- Tested nitrate levels at surface water stations
- Established erosion monitoring points using GPS
- Hosted summer public meeting
- Conducted green crab trapping and distribution survey
- Developed a website and Facebook page
- Participated in the Community Aquatic Monitoring Program
- Silt trap renewal in Black River (ongoing)
- Collected silt samples for chemical analysis
- Measured and mapped berm in Brackley Bay
- Monitored water quality in streams, springs, ponds, estuaries and bays with water testing equipment



2012 FCBB Crew: Max McCosham, Nathan Roberts, Wanson Hemphill, Brianna Stewart and Justin Walsh. Missing: Colin Jeffrey.

WATER TESTING

FCBB has continued to monitor water quality in our streams. Temperature, pH, dissolved oxygen and phosphate levels were recorded weekly in each of the five streams in Covehead and Brackley Bay. Data collected from this

process will be compared with that from previous years to determine trends in the water quality of our streams. Water from 10 sites (springs, streams and ponds) was collected and sent to PEI Analytical Laboratories for nitrate level

testing. Nitrate levels in 9 out of 10 samples were lower than in the past two years' results. FCBB would like to purchase accurate nitrate testing equipment in order to conduct more frequent nitrate testing in the watershed.

GREEN CRAB

FCBB first noticed the presence of the European Green Crab in Covehead and Brackley Bays during the June CAMP program and is conducting a survey to determine the abundance and density of this invasive species.

Since being introduced from Europe, the Green Crab has spread throughout Atlantic Canadian waters. The Green Crab feeds on mollusks, worms, small crustaceans and juvenile finfish. When digging for prey, the Green Crab cuts the roots of eel grass, destroying the most important habitat for juvenile fish in our bays.

For the survey, 11 traps were placed in five locations in Covehead and Brackley Bays.

Since July 24th, more than 1,000 Green Crab have been caught, with

the greatest abundance found along the east side of Covehead Bay.

Results will be made public later this month.



Green Crab catch yields in Covehead and Brackley Bays.

EROSION REDUCTION

Steps were taken this year to measure erosion rates along the shorelines of Covehead and



Brackley bays. At chosen measurement sites, the distance between the bank edge and a landmark was recorded. In this way, annual erosion rates can be monitored and the ensuing information can be passed on to landowners.

FCBB has also begun to measure a berm at the mouth of Brackley Bay. This work is being undertaken to

understand whether the berm is restricting tidal flow within Brackley Bay.

FCBB has also updated and reprinted its booklet *Shoreline Erosion On PEI Bays*. This booklet explains factors contributing to shoreline erosion within coastal bays and describes some low-cost methods for reducing the impacts of erosion.

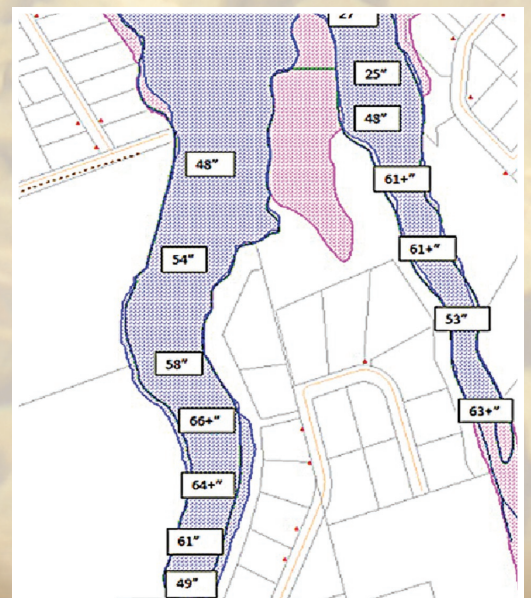
SILT MEASUREMENT

This summer, FCBB continued to document silt depths within the watershed. Building on last year's stream assessment work that included the measurement of silt depths in watershed streams, we measured silt depths in the ponds and estuaries.

Through this process, FCBB seeks to understand where and how sediment collects. Substantial

sediment depths of 5 feet or more were recorded in parts of each pond and estuary. Annual testing of sediment levels at these locations will continue in order to understand erosion rates and silt movement within the Covehead-Brackley Bay watershed.

Silt depths in Bell's Creek and Auld's Creek estuaries.



FISHING DOCK AT CASS'S POND



FCBB has constructed a fishing dock at Cass's Pond that allows access for wheelchairs along with fishers of all ages.

The platform extends over the water by 3 feet and has a bench at the back of the 12 by 12 foot deck as well as an access ramp. An interpretive sign is attached showing the pond wildlife, as well

as a plaque designating the structure in memory of David Latimer, a long-time advocate and co-chair of the Friends of Covehead-Brackley Bay.

Construction was completed in June and a dedication ceremony was held August 1st. The PEI Wildlife Conservation Program provided funding for this project.

PARKS CANADA UPDATE

The summer of 2012 was a very busy and productive one for Parks Canada ecologists in PEI National Park (PEINP). Here are some highlights of the great work that was accomplished this year.

Three pairs of the endangered Piping Plover returned to the beaches in PEI National Park to breed this spring. While only one of those pairs was successful at hatching its brood, the good news is that all four chicks fledged!

A dragonfly exuvia sampling blitz was completed within wetlands across PEI. The sampling results from PEI and PEINP will be compared to determine whether dragonfly communities in the park are healthy.

Together, Parks Canada and the Mi'kmaq Confederacy of PEI sampled ponds for the American Eel, a threatened species in Canada. Once caught, eels were tagged sub-cutaneously with PIT tags that track their movement. The information from the PIT tags will be used to learn about eel populations and distribution in our ponds.

Over 100 Gulf of St. Lawrence Aster plants (a threatened species

in Canada) were transplanted at a traditional site on Blooming Point. The plants were produced at UPEI.

Over 100 kilograms of the invasive alien plant species garlic mustard and glossy buckthorn were removed from the park this summer!

For more information or to contact Parks Canada, please call us at (902) 672-6389, or visit our website: www.parkscanada.gc.ca/pei or "Like" us facebook: www.facebook.com/PEInationalpark



An American eel, caught in Long Pond in PEI National Park - courtesy P. Giroux, Parks Canada.

SILT TRAP

This fall, FCBB is hoping to empty a silt trap that was constructed in 2003 along Black River near the Brackley Point road. Originally 12 feet deep, the silt trap is now overflowing in places and is no longer effective. In order to empty the trap, Black River must be

diverted around the trap using several hundred sandbags.

FCBB staff have applied for the necessary permits and are busy making sandbags! It is hoped that the project can be completed this year.



PUBLIC PARTICIPATION EVENTS

On June 30th, the Friends of Covehead-Brackley Bay partnered with Molson Evergreen for our second Molson Redleaf Project of the year. Approximately 100 people volunteered their time and joined FCBB and Parks Canada for beach cleanups and bird watching in the Stanhope and Brackley sections of the park. Despite the hot weather,



volunteers were helpful and enthusiastic. Each volunteer received a ticket to the Cavendish Beach Music Festival.

Our annual Kid's Day was filled with interesting activities for children aged 8-14. The day began with a FCBB slideshow highlighting our current projects and the wildlife found within our watershed. Parks Canada provided a presentation on the American Eel, a species frequently found in Covehead and Brackley bays. Much of the day was spent outdoors where participants learned about wetlands, stream crossings and tree planting. Brook trout were also examined up close



during an electro-fishing demonstration. One highlight was a visit to the Danny Clark taxidermy centre where kids could get close to a variety of wildlife species.

The half-day event ended with a delicious BBQ at Stanhope Place.

FUNDING PARTNERS

Friends of Covehead-Brackley Bay Watershed wish to thank the many funding partners and great volunteers, without which, very little could be accomplished.

2012 Funding Partners:

- PEI Dept. of Environment, Labour & Justice
- PEI Dept. of Transportation & Infrastructure Renewal
- Honourable Robert Vessey
- TD Friends of the Environment
- Home Depot Foundation
- Royal Bank Community Fund
- RDEE (French Internship Program)
- Rural Jobs Initiative
- Greening Spaces Program
- Parks Canada
- PEI Employment Development
- PEI Jobs For Youth
- PEI Wildlife Conservation Fund
- Walmart-Evergreen Program
- North Shore Community Council
- Molson-Evergreen Foundation
- Canada Summer Jobs
- FCBB Volunteer Board of Directors
- Charitable Donations



Max and Nathan testing stream water.

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FCBB now has a new website www.fcbbwatershed.ca where you can find a link to our Facebook page and follow our latest projects and events.



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