In With the Tide

The Bay of Fundy Discovery Centre Association Newsletter



Our Fundy-Our Future

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Everyone was all smiles as the layout plans and plaque unveiling were about to take place. Left to right: Nancy Althouse Heath, Municipal Councillor David Tudor, Paul Althouse, Laurence Outhouse, Municipal Warden Linda Gregory, and Municipal Chief Administrative Officer Gordon Wilson.

As Tony and I enjoyed lunch sitting out on the deck, then enjoyed a summer walk, I decided since it felt like summer, I don't feel so badly getting this Summer issue out... do enjoy reading about the summer adventures along the Bay of Fundy. (Oct 19 & 20, 2013)



A Wonderful Donation for Future Generations

By Roger Outhouse

A misty afternoon near Boars Head in Tiverton was a perfect day for a wonderful dedication ceremony. On July 19th, the Althouse family was there along with Digby Municipal officials to mark the transfer of a precious gift in memory of the Althouse family to the Municipality and its people. For generations this property adjacent to Boars Head was owned by family members and served as a place of inspiration and exploration for generations of youth and adults who grew up on or visited Long Island. Its steep coastal slopes along the north end of Petite Passage have been places to witness the activities of marine life and the evolution of the fishing communities throughout the years.



Paul Althouse and his sister, Nancy Althouse Heath, were first approached by resident Laurence Outhouse with the possibility of donating the

property for a look-off and trail that would benefit future residents and visitors alike. The family had no intentions for the property but when this idea was proposed they were in agreement that this would be a fitting way to



honour their ancestors and help the community at large. The family and the municipality both paid tribute to the great cooperation in making this happen and to Laurence for his "dream" and assistance in making it come true. Many friends of the family and community members were on hand for the ceremony and to take a stroll out to the majestic look-off. Following the dedication everyone was invited to the Tiverton Community Hall for refreshments and conversation.

Numerous upgrades are being planned for the future but in the meantime feel free to stroll out to the Althouse Look Off for an amazing panorama of the Bay of Fundy, Petite Passage, Saint Mary's Bay, Tiverton Village and East Ferry. Don't forget your camera!

This will eventually be erected on the dramatic site of the Althouse Look Off. What a way to celebrate a family gift that is beyond words!

Digby County Family Resource Centre Hosts Marine Life

By Roger Outhouse

For the fourth year in the month of August the Bay of Fundy Discovery Centre Association has had an invitation to bring marine life education to young children. As always the green crabs, common periwinkles and barnacles were popular performers but this year small shrimp, Northern Moonsnail, Common Dog Whelks and Slippershell Limpets were popular as well. In all there were over twenty different animal species on display for morning and afternoon sessions. Each child was encouraged to touch and observe all but a few of the creatures and of course to ask questions. They even made some artistic renditions of the critters they saw. Our Association is grateful to the wonderful staff and the amazing young people for being interested in our Bay of Fundy critters!



Nature Conservancy of Canada working to Protect Eastern Mountain Avens on Brier Island By Craig Smith

The Nature Conservancy of Canada, along with a wide group of partners, has launched an ambitious 3 year project aimed at protecting the Eastern Mountain Avens. This rare and endangered plant is found in two places in the world - the Digby Neck and Islands and the White Mountains of New Hampshire. Over 90% of the Canadian population is found on Brier Island, the vast majority within close proximity to Big Meadow

thousands of plants it is now only capable of supporting the plant along

Meadow would have once

Bog. While the Big

been home to many

its periphery. In the 1950's three large drainage ditches were dug in the wetland in an attempt to grow vegetables. The ditching resulted in a significant lowering of the water table and the Bog subsequently dried up, which invited an emerging gull population to begin

nesting there. The Big Meadow Bog is now home to the largest colony of gulls anywhere in Nova Scotia!

The cumulative impact of the ditching and the invasion of gulls have taken a serious toll on the Big Meadow. Vegetation communities here have

changed significantly with species like Jewelweed and Raspberry and even woody species like Wild Raisin and Spruce trees now found in the middle of the Big Meadow. It is believed that gull guano is seriously altering the chemistry of the soil. All of these



Students from the Digby Neck/Islands Gulf Of Maine Institute Team help collect water samples in the Big Meadow



changes mean that the Eastern Mountain Avens is now having a very hard time finding suitable habitat. While population counts are not exact, it is believed the population has declined by as much as 40% since the mid 1980's.

In an attempt to start addressing some of the major problems; NCC is leading a project in partnership with Dr. Nick Hill of the Fern Hill Institute for Plant Conservation and the Mersey Tobeatic Research Institute which is being supported by

the Canadian Wildlife
Service, the Department
of Natural Resources and
funded by the
Government of Canada's
Habitat Stewardship
Program. The three year
project is focused on
maintaining existing
habitat for Avens and

assessing the potential for restoration and recovery of the degraded habitat.

We are working locally with the Gulf of Maine Institute and will soon form a local advisory committee.

The project partners will be conducting activities such as monitoring all threatened occurrences of the Avens, experimenting with

removal of competing vegetation, assessing the plant's reproductive capacity, modelling hydrology and testing groundwater quality in the Big Meadow. The primary goal of the project is to assess the feasibility of restoring habitat conditions in

NCC work with Eastern Mountain Avens, continued

the Big Meadow to a state that will permit the reestablishment of Avens
populations and a return to a
condition similar to what
people who played, picked
berries and hunted in the Big
Meadow remember.
To understand what the Big
Meadow used to be like, the
Gulf of Maine Institute
students, under Roger
Outhouse will be conducting

interviews with people who remember the Big Meadow prior to and within the 10 years or so after the ditching. If you are old enough to remember and would like to take part, please contact Roger!

NCC and the project partners will hold an Open House in Westport in November to share more information about the project and results from the field activities this summer and fall.

The Open House will be advertised in *Passages* and around the islands. Please come out and see us. We will also publish updates and information in *Passages* a couple times every year. If you have questions or comments you may contact Craig Smith, Program Manager at (902) 405-4334.

Me to We: Young Community Leaders Become Socially Conscious



Sustainable Blue - Aquaculture with a Difference

By Roger Outhouse

While all Canadians were in the midst of July 1st Canada Day celebrations and patriotic Americans were making preparations for July 4th the Gulf of Maine Institute (GOMI) Teams from New England and Maritime Provinces were starting a bus trip from their international conference base at Acadia University to Windsor, NS area to visit **Sustainable Blue** which raises fish for market in a totally enclosed land based system.

Company President Dr. Lee

was on hand with his two sons to explain the operations and how enclosed aquaculture is done. Lee explained that the water is taken from the nearby estuary and cleaned and sterilized in an

elaborate system which carefully monitors and controls

the water quality at all times. The goal is to continuously reuse the same water. Because the fish are kept separate from the natural habitat there is no opportunity to catch viruses or diseases from wild stocks or develop other diseases which occur is open operations. This also means that no materials or viruses can be released into wild populations.

Isolation techniques mean there is no use of pesticides, herbicides and antibiotics in the large tanks where the fish are raised. That also means the wastes that are filtered out of the water can be reduced to ash and used as fertilizer on nearby farmers' fields. The tanks are housed in buildings to help control climate and temperature. It is obvious that the company never has to worry about any escaped fish as they have no access to water other than the tanks.



Summer GOMI students listen to Dr. Lee and his sons at Sustainable Blue

There have been several species of fish grown successfully in this system that have been well received in the restaurant markets as a high quality sustainable product. Currently they are raising salmon in the tanks and adding a very large structure which would serve as a hatchery that would start with eggs and grow through all the stages of development till reaching

market size. The fish are progressively moved easily from tank to tank carefully controlling the water quality, ph, and temperature to optimal requirements of the fish at the various stages of growth and development.

While traditional open net operations typically have dormant periods of growth during cold water temperatures, the enclosed operations are able to grow their fish at optimal rates reaching market size much sooner. Dr. Lee says

aquaculture operations are not perfect but the investors in this enclosed type of environment believe that this will be a growing sector as it has numerous advantages in the long term. While the rate of return on investment is not as high as more common open ocean fish cages, the

owners remain confident that there is a fair return on their investment and that in

the long term the path they are on is more controllable and hence more sustainable. GOMI participants were very interested in learning about this cutting edge enterprise in a small rural community.

Shortly after returning from the week long GOMI Summer Conference/Workshop it was really interesting to see that Dr. Lee and **Sustainable Blue** were featured on the evening news.

Creature of the Cove – Mourning Dove (Zenaida macrooura)

By Roger Outhouse

Back in the late 1960s, the Mourning Dove was showing up in this area seasonally in greater numbers which have now established themselves as common year round residents. Their pigeon looks, long pointed tail, white wing tips, pinkish top of the head and underparts, black spot on each cheek and brownish pink underbelly make them unique. Males and females look alike. We are now familiar with the male's mournful call (hence the name) that we hear throughout the breeding season. That can happen for a good portion of the

of Canada these birds can have up to three broods while in the southern US states a mating pair can have six broods.

vear because

southern range

even in its

They are real dynamos when it comes to reproduction. Males are very aggressive during the breeding season and these Mourning Doves are monogamous throughout the breeding season. There is some evidence that suggests they mate for life. The male finds and delivers the nest building materials of sticks and twigs to the female who then designs and constructs the nest. It usually takes on the shape of a shallow platform in a shrub or tree. Sometimes the Morning Dove female will occupy a borrowed songbird nest. Once the female lays the usual two white eggs in the nest, both parents share in the fourteen days of incubating the eggs. Once hatched the parents both feed the young till they are ready to leave in another fourteen days. The parents secrete pigeon milk to nourish the offspring. This is formed in the crop and mixed with seeds before this highly nutritious formula is

Mourning Doves are unique in that they can drink water by sucking it up like a straw while other birds must hold water in their mouth and tip their bill skyward so that water can be swallowed.

regurgitated to the young.

These birds carry a host of nicknames including Turtle Doves (from the "Twelve Days of Christmas"), Rain Doves, and Carolina Pigeons. The Mourning Dove has the distinction of being the most abundant and widespread of all North American birds. They are the leading game bird

hunted and on average 20 to 30 million are shot annually in the United States with up to 70 million taken in some vears. These birds blend in while on the ground foraging for seeds and can take off with a sharp whistling that can startle hunters and fly straight and fast with speeds in excess of 55 miles per hour; this challenge to shooters has earned this dove the dubious honour of being the most frequently hunted species in all of North America. Other

than humans the biggest threat to adult Mourning

Doves come from falcons and hawks while the nesting young are prey for crows, grackles and house cats.

Despite these threats

they can still live up to 10 years in the wild while captive birds have lasted up to 17 years.

Overall, this handsome bird has adapted well to living in urban, suburban, and agricultural areas and seems to hold a bright future as its numbers and range increase. Biologists have little doubt that these birds are economically important to farmers as their voracious appetite for weed seeds contributes to much needed weed control.

The Sky's the Limit

By Helen Ivens and Roger Outhouse

Mary Grace Hawkes and her team: Sarah, Chelsey, Hannah, Emily, Rebecca and Jaden, from First Cornwallis Baptist Church were able to come to the Tiverton Baptist Church again this year from July 8-12 for "Sky" VBC (Vacation Bible Camp). About 10 children joined them each morning to learn about trusting God. They played lots of fun games, did crafts and science experiments. We learned that no matter who you are, what people do, what happens or where you go you can trust God to be there and help you. We learned that everything is possible with God--the Sky's the limit!

While here, the group wanted to do some community service projects. Even though the weather was not great, they were able to work in the Loyalist Park gardens at the Lent House in Freeport for three afternoons. The whole team worked well together and by the end of the last day they had weeded, dug out roots, pruned ornamental apple trees, and cleaned up three large green carts of debris. Because of their dedicated attitude and physical labour the Loyalist Park has never looked better and the Freeport Community

Development association members wish to thank the entire group for their contribution to the Loyalist Park! This team of young people blessed our Island in more than one way during their time here.

Many thanks go to the Tiverton and Freeport Baptist Churches for sponsoring the Camp and the ladies who helped cook for the team as well. Hopefully, we will see Mary Grace and her team again next summer.



VBS team members are as follows (left to right): Back Row - Mary Grace Hawkes, Chelsey Jackson, Emily Lohnes, Sarah Cannon Front Row - Rebecca Cannon, Jaden Kaizer, Hannah Fraser.

Share Your Story at GOMI

By Taylor Barnaby

During the 2013 summer conference I, was involved in the *Share Your Story* photography group. We learned much about ourselves as photographers. We got to use both nature and architecture to help us do just that. The one place that I enjoyed the most was the K.C. Irving Centre that

is a beautiful piece of architecture that has a taste of both modern and European elements. The GOMI team and I had the privilege to use this building for many of our events. Architecture has always caught my eye and I enjoy photographing it, so the Irving Centre was my own

personal playground.

I had a wonderful time at the 2013 conference and I'm so excited to say that I'm involved with GOMI again for this year.

GOMI's Climate Change Theme Team

By Jessica Balser

I enjoyed the summer GOMI conference at Acadia University. I was in the Climate Change Theme Team and learned a lot about how climate change has impacted the town of Wolfville itself. We also related some of the things we saw to back home which I liked

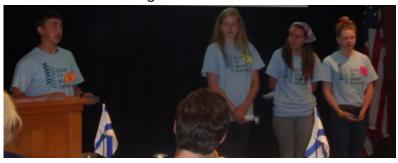
In addition, we examined what we could do ourselves to help reduce our footprint. We created and performed a role play to a panel and audience. It was about a town meeting and how we would make discussions based on a career we were given (mayor, farmer, business owner, environmentalist, etc.) so we could see all the important things we need to cover before

making big decisions on what to do. For our example, we used rebuilding the dykes.

I had a great time in the group, learning about the issues, and taking a field trip to the beach. It was a pretty good week. I had a great week making new friends and seeing old friends and

learning along the way. GOMI is a great thing to do!

Jessica's team presenting their 'Town Hall Meeting' to the panel.



My GOMI Experience

By Page Ivens

This year's GOMI summer conference was really great! I met a lot of new people, made memories and learned a lot. Since I was in the Community Garden Group, we got to work in Acadia University's gardens where we planted vegetables that would be used at the cafeteria later this year. We also planted some flowers.

My group learned a lot about the importance of buying local and where the food that we eat comes from. Our group also toured the Irving Gardens that were beautiful and are open to students and visitors free of charge.

Being in this group was a lot of hard work. We worked a lot of hours in really hot weather, but it was very educational for me, as I don't do much gardening. I gained an appreciation for the hard work that farmers do.

While we were staying at Acadia we got to go mud sliding which was the highlight of my time there. If you ever get a chance to try it, be sure to go, but wear old clothes (my shirt still has mud stains—now it's a souvenir).

By the end of the week it's always sad to see people go, but I'm looking forward to be seeing them again next year.



I spy with my little eye... take a peek at what Roger saw while waiting for the ferry one bright summer day...



Top to bottom, left to right: Bittersweet nightshade Berries (poisonous), Bittersweet Nightshade Flowers (poisonous), New York Aster, Common St. John's-wort, Narrow-leaved Goldenrod, Bull Thistle and Queen Anne's lace.

Have an advertisement concerning a local adventure? Why not share it with us.





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The Bay of Fundy Discovery Center Association

PO Box 66 Freeport, NS B0V 1B0

routhouse51@gmail.com

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