



The Official Newsletter of the Atlantic Society of Fish and Wildlife Biologists

ASFWB Annual General Meeting Review

The Annual General Meeting of the Atlantic Society of Fish & Wildlife Biologists was held on October 24 and 25, 2012, in beautiful Charlottetown, Prince Edward Island. The meeting was exceptionally well attended, with approximately 75 people registered over the two days.

The meeting was kicked off with a talk by Gary Schneider, Manager at Macphail Woods Ecological Forestry Project in Orwell, PEI on varying aspects of forest restoration. His talk was inspirational and set the tone for the two-day meeting.

A number of presenters talked on topics ranging from breeding bird data to animal welfare to a hot debate as to whether beaver are native to PEI.

Students from around the region presented their work on a large variety of topics, including green crab monitoring, rainbow trout movement, mortality events in grey seals, and wetland shrew monitoring.

As part of the AGM a financial report was provided by Nic McLellan, our new Treasurer (see Page 4). Nic reports that we continue to have a healthy bank balance, at just over \$7,200, due to some fundraising activities, such as sale of merchandise and event sponsors. Our financial situation allowed us to complete the donation to Acadia University, to complete the Donald Dodds Scholarship Fund.

The dinner on the evening of the

24th was well attended and raised over \$850 for the ASFWB scholarship fund.

Two events of importance that happened at the dinner include Rosemary Curley's receipt of ASFWB's Award of Merit (see Page 2) and the aforementioned final in-



stallment to the Donald Dodds scholarship (see Page 3).

Winners for the student presentations, and the topics they spoke on, were:

1st Prize: Heather Fenton, Unusual mortality event of young grey seals (*Halichoerus grypus*) associated with Apicomplexan protozoal hepatitis in Nova Scotia, Canada

2nd Prize: Kate Goodale, How do Nova Scotia farmers feel about biodiversity on their properties?

3rd Prize: Julia Whidden, Skating around the drink: preliminary movement patterns, population density and distribution of little skate and winter skate in the Avon estuary

Congratulations to the winners and thank you to all students that presented!

Finally, but definitely not least, is a big thank you to Dr. Maria Forzán and her team at the Canadian Cooperative Wildlife Health Centre, at the Atlantic Veterinary College, for putting together a fantastic AGM. This

was a particular feat as our original location was changed rather abruptly about a month before the meeting!

Thanks to all who came out, all the great presenters, and we look forward to seeing many of you at the upcoming Spring Seminar.

Jason LeBlanc and Nic McLellan with student winners, Heather, Kate, and Julia.

Do you have a research project, wildlife topic, event, or other related information you would like to see included in the Biolin**k? If so, email Jennifer Roma, Newsletter Editor, anytime at jennifer.roma@gmail.com We're always looking for content ideas from our membership!**

Rosemary Curley's Award of Merit



Rosemary, as she receives her award. Pictured here with Kirby Tulk, Jason LeBlanc, and Mark Pulsifer

On October 24th at ASFVB's AGM past presidents Kirby Tulk and Jason LeBlanc, and current president Mark Pulsifer, presented Rosemary Curley with the organization's Award of Merit. Over the course of many years of dedicated service to this organization Rosemary has held every position on the executive, including president, and continues to provide advice and guidance whenever it is required.

Rosemary has undertaken many different roles in her years working in wildlife management, including numerous volunteer efforts, serving as the biologist and lead person for natural areas, biodiversity monitoring, and species status reports at both federal and provincial levels. She has been a manager for Fish and Wildlife lands, played a lead role in the creation of the Natural Areas Protection Act, served on the board of Nature Canada, and is a member of the town of Stratford's Recreation and Environment Committee. In her otherwise "free" time Rosemary has served in a variety of executive positions with the Natural History Society of PEI, has been the Regional Coordinator for both Maritime Breeding Bird Atlases, and has played a major role in botanical surveys and the development of a new

Flora of Prince Edward Island. She is a founding member, and past board member of the Island Nature Trust. She has given numerous presentations to a wide variety of groups, and has authored several natural history articles for the PEI Museum and Heritage Foundation's Island Magazine.

Rosemary has been described by her colleagues as one of the very few pioneering female wildlife biologists working in the Atlantic

region, bringing a high level of professionalism and (rare) common sense approach to her work, that makes her a pleasure to work with. She has worked with, and championed the causes of the Island Nature Trust, provincial parks, fish and wildlife, species at risk, and protected areas, setting the bar high with her standards, and not backing away from tackling critical issues.

Congratulations to Rosemary and, on behalf of everyone at ASFVB, thank you for your longstanding dedication and leadership to this society, and many contributions to wildlife and natural areas in PEI.

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The ASFVB Biolink is published twice a year. Articles and opinions do not necessarily reflect the views of the Society or its members. Thanks to all who have contributed photos and articles.

Visit our website at
<http://www.chebucto.ns.ca/environment/ASFVB/>

Save the date for this year's

ASFVB Spring Seminar

April 18, 2013 at the Crabtree Auditorium,

Mount Allison University, Sackville, NB

The theme this year is "**Change**"

Speaker topics include changes in forest species composition, Maritime breeding birds, and managing wildlife with changing demands on the forest.

**Registration at 9:30am, seminar from 10am—3:30pm
Lunch is included! See web site for more details.**

Donald Dodds Scholarship Reaches \$25,000!

Written by Glen Parsons

The embryo of a university “Wildlife Program” for Nova Scotia began at Acadia University in 1961. Dr. Donald G. Dodds was the first Professor for this emerging program and he was instrumental in setting up, and teaching, the first courses. Dr. Dodds spent 26 years at Acadia and his knowledge, enthusiasm and experience helped to shape the professional careers for many of today’s leaders in natural resource management and conservation. Dr. Dodds is one of the original members of the ASFWB and was inducted into the ASFWB Wall of Fame in 2004 (<http://www.chebucto.ns.ca/Environment/ASFWB/dodds.html>).

In honour of Dr. Dodds and Acadia’s enduring history in fish and wildlife biology, the Atlantic Society of Fish and Wildlife Biologists established a scholarship at Acadia to support the education of future biologists. The official announcement of the scholarship at Acadia took place at the ASFWB 44th AGM banquet, held in 2007 at the Old Orchard Inn in Wolfville, NS. Dr. Dodds and his wife, Pearl Dodds, were in attendance at the announcement and the scholarship balance at the time was just over \$8,800. The original goal for the “**Atlantic Society of Fish and Wildlife Biologists Donald G. Dodds Scholarship**” was an endowment of \$25,000 that would enable an annual scholarship of approximately \$1,000, on recommendation of the Acadia Department of Biology, to a graduate or honours student in Biology that have a demonstrated academic focus on fish and wildlife biology. Acadia celebrated 50 Years of Wildlife Biology in July 2012 with a reunion and held several fundraisers for the ASFWB Dodds scholar-

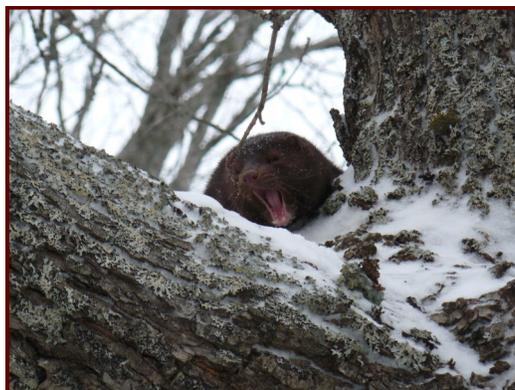
ship. At the October 2012 ASFWB AGM, Dr. Soren Bondrup-Nielsen (Head of Biology) of Acadia University announced that over \$3,000 was raised at the Acadia “Wildlife Reunion”, and the ASFWB Dodds scholarship endowment goal of \$25,000 was reached. Thanks to all of the ASFWB members that made this possible.

Wildlife Adventures in PEI

Written by Jesse Francis

On the morning of February 10th in the snowstorm, we let our cat outside and sat down to a family breakfast. I happened to look outside and saw a mink running around the yard. We live beside the river in Wellington, so it was a very nice view of the animal, but perhaps not unusual. My children and my wife and I moved from window to window enjoying the view of the mink and following its progress, as it made its way around our house. After a few minutes, it seemed that the mink was searching for something, purposefully, as it went under our cars, under the porch of our house, on our porch, etc.

The mink returned to the north side of our house and began to climb a large maple tree. It got well up into the tree when we noticed that our cat was in some small branches near the top. Apparently, our cat, Lily, and the mink had had an altercation,



Mark Pulsifer presenting the cheque to Soren Bondrup-Nielsen

and the mink had then followed her to the tree. The mink got about halfway up the tree to where the cat was, and seemed to be trying to get higher, so I decided to intervene. My son and I headed outside to help our cat; I grabbed a hockey stick on the way. I climbed a short distance up the tree, (yes, the mink, the cat and I were all in the tree!) hoping to dislodge the mink. I could now see that both my cat and the mink had blood on their faces. I nudged and pushed the mink several times with the stick, but couldn't get him out of the tree.

Since I couldn't get the mink out of the tree, I decided to back away and give him some room. The mink then came down but stayed very close. I then climbed higher up the tree and managed to get hold of my cat. I got down, with the cat in my arms, and the mink stayed close to us - followed us, really - as I took the cat back into the house. As soon as the mink saw that the cat was inside the house, it slid down the riverbank and ran off on the river ice.

American Mink (*Neovison vison*), showing his displeasure at being prodded with a hockey stick!

Changes to the Executive of ASFWB

At the 2012 AGM Mark Pulsifer, previously the VP Membership, was voted in as the new President of the ASFWB, Nic McLellan became our new Secretary/Treasurer, and Stephanie Walsh is now the VP Membership. We also have coVPs of Programs this year: Becky Whittam and David Lieske. For those new to the executive, welcome, and congratulations to Mark on his new role! Bios for all new members are below:

Stephanie Walsh

Growing up in the fields and valleys of England, and later the mountains of Wales, Stephanie always had a love for the countryside and yearned for the wilderness of Canada. After many years of volunteering with wildlife surveys she graduated with a BSc in Geography from the University of Wales in 1998, followed by a Masters in Countryside Management (Rural planning and development) in 2003. The volunteering continued (as it tends to) and she also worked for the UK government as a National Park ecologist and Welsh Assembly ecologist/project manager. She finally made it to Canada and after some pretty cool volunteering in the Rockies (she was lucky enough to work with cougars) Stephanie went to work as a wildlife biologist in Alberta before moving to Nova Scotia with her husband, a native Nova Scotian. Stephanie is now the Senior Ecologist – Terrestrial, with Nova Scotia Power where she mainly



looks after wildlife issues related to development such as wind farms and hydro facilities, and maintenance work including vegetation management on power line rights of way.

Nic McLellan

Nic grew up in Sackville, NB where he developed a keen interest in biology and the outdoors. He completed an honours degree in biology at Mount Allison University and a M.Sc. in biology from Acadia University.



Prior to his current job at Ducks Unlimited Canada (DUC), Nic worked on several research projects with the Canadian Wildlife Service (CWS) and the Nova Scotia Department of Natural Resources. These projects involved a variety of bird species including shorebirds, songbirds, seabirds and waterfowl, and a project to reintroduce American marten into Cape Breton.

Nic has been working for DUC since 2007 and is currently the Conservation Programs Specialist for Nova Scotia. He is responsible for the provincial conservation program, research partnerships in the Maritimes, and research projects at Beaubassin Research Station.

Nic currently resides in Sackville, NB with his wife Amanda and their daughter Elsa, son Camden, and black lab "Flash".

David Lieske

David has been an Assistant Professor at Mount Allison University since 2007, where he teaches courses in GIS, data analysis, and biogeography. His research interests center on species distribution modelling, mapping, and conservation planning, with recent projects

including an analysis of the breeding distribution of American Black Ducks. David's Masters research involved a long-term mark-recapture study of Saskatoon-nesting Merlin falcons, but since hitting his 40's he's climbing a lot fewer trees and prefers to observe Merlins from the ground with binoculars.



Becky Whittam

Becky Whittam grew up in Ontario, with winters spent on the shores of Georgian Bay and summers on a small lake on the Canadian Shield. She did her undergraduate degree at Queen's University, spending two summers in Churchill, Manitoba, assisting with work on Smith's Longspurs, and conducting Honour's research on song variation in Yellow Warblers. She did her Master's degree at Dalhousie University, studying the effects of gull predation on Roseate, Arctic and Common terns. She then spent 12 years working for Bird Studies Canada, primarily in the Atlantic Region where she launched a number of bird monitoring and conservation projects including the Atlantic Canada Nocturnal Owl Survey, the Maritimes Breeding Bird Atlas, and the High Elevation Landbird Program. She currently works as Landbird Biologist for the Canadian Wildlife Service in Sackville, NB, concentrating primarily on bird monitoring and issues of conservation concern such as the decline of aerial insectivores.



New Confidentiality Rules Proving Controversial

A full excerpt of this article can be found at <http://www.canada.com/news/Scien-tist+calls+confidentiality+rules+Arctic+project+chilling/7960894/story.html>

A bid by the federal government to impose sweeping confidentiality rules on an Arctic science project has run into serious resistance in the United States.

DFO's proposed confidentiality provisions say all technology and "other information" related to the Arctic project "shall be deemed to be confidential and neither party may release any such information to others in any way whatsoever without the prior written authorization of the other party."

Researchers are dismayed at "new" publication procedures sent to many federal fisheries scientists weeks ago and published online by an anonymous federal researcher.

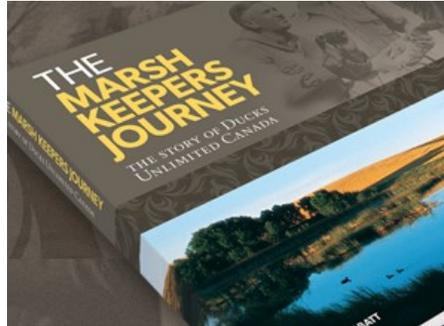
The Jan. 29 memo to scientists in DFO's central and Arctic science sector says the rules apply to "all" – the all in bold italics – studies involving DFO scientists, who have a long history of collaborating with researchers at universities in Canada and abroad to assess everything from sea ice to contamination levels in wildlife.

Kevin Stringer, assistant deputy minister of DFO's ecosystems and ocean science sector, defended the new procedures in a recent telephone interview. He said the "adjustments" streamline and clarify the department's publication procedure that has been in place for many years.

Fisheries scientist Jeffrey Hutchings, of Dalhousie University, said having a manager assess studies for policy impacts is sure to have "a chilling

effect" and could prevent important scientific findings from being made public.

He said DFO's confidentiality provisions will be interpreted "by non-DFO scientists, indeed non-Canadian scientists, as an infringement on their right to publish the results of their research and, thus, to communicate their science."



The Natural History of Canadian Mammals by Donna Naughton

For those of you interested in the natural history of mammals in Canada, this book, very recently published in 2012, is the book for you.

The book features comprehensive information on 215 species, from 10 different orders, all of which have either had a viable, naturally occurring wild population in Canada, its continental islands or marine waters, or were introduced species that have established a self-sustaining wild population.

From the tiniest of shrews to the largest whales, each species account, with very little exception, includes at least one colour illustration, a distribution map, skull illustrations, signs and track patterns, a general description, similar species, size/measurements,

DUC Celebrates 75 Years

Written by Nic McLellan

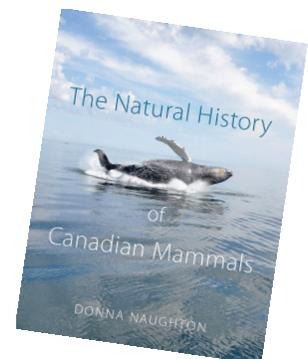
Ducks Unlimited Canada (DUC) is celebrating its 75th anniversary this year. Since their inception in 1938, DUC has conserved 6.3 million acres across Canada, with 120,000 of those in Atlantic Canada.

Celebrations are occurring in each region of the country with Diamond Signature Galas, including the Atlantic Gala in Moncton. They are also lauding conservation champions throughout Canada who are doing their part to help conserve and enjoy DUC's wetlands. In conjunction with this anniversary, DUC has released "The Marsh Keepers Journey", a history of DUC written by Dr. Bruce Batt. It can be viewed and purchased at www.ducks.ca/store.

abundance, ecology, diet, reproduction, behaviour, and vocalizations.

Each order is also introduced, with unique features highlighted, and families found within the order are briefly described.

All of the information provided is taken from literature dated from 1990-present, and so is at its most current. The book is published by the Canadian Museum of Nature and the University of Toronto Press. It sells in bookstores for about \$70 but can be found cheaper online. It is well worth the money as it is an excellent and well put-together reference book that will remain so for years to come.



Arctic Tern Mystery

Written by Rosemary Curley

The recent saga of Arctic terns (ARTE), *Sterna paradisaea*, in the Gulf of Maine has elicited much concern from seabird researchers, and there are many theories as to why the terns are exhibiting atypical



behaviour. The Machias Seal Island ARTE colony had been the largest in the Gulf for decades, roughly 2000-3000 pairs in this century, and long-term stability had been the norm. But in 2006, the terns abandoned their island for the first time since 1944, and only the second time since monitoring began in the late 1800's. Now, the terns will return to the island every year and initiate nesting, but abandon their eggs only weeks into breeding.

Following a recent peak of 5,634 breeding pairs in the Gulf in 2004, the regional population of ARTE has steadily declined; in 2011 it was estimated at 2,887 pairs, a decline of nearly 50%. Unexpectedly intense predatory events are the suspected cause of temporary failure on at least one other island, as recently as 2012. Coupled with declining fish availability for chicks provisioning

(most notably the energy-rich Atlantic Herring), these ecosystem changes indicate more difficult times for terns, leaving the stability and longevity of the Gulf of Maine population in doubt. The ARTE haven't successfully raised a chick on Machias Seal Island since 2005, though they come back to the colony each year and lay eggs. Common terns have also left Machias Seal, but they are much more widespread throughout the Gulf.

Lauren Scopel is one of the researchers in Dr. Tony Diamond's lab at University of New Brunswick who is following the regional Arctic tern population.

Her job is to figure out where the terns go and what they do after they leave Machias Seal. There are several ARTE colonies in Maine, and this regional population is thought of as a metapopulation with some long-term exchange among the various colonies. She is also interested in how the birds within the metapopulation are dispersing now that the major colony on Machias Seal is failing.

Seabirds and their populations are considered good indicators of changes in the marine environment. The many researchers in the Gulf have a history of cooperation in their long-term monitoring program and Lauren is regularly in touch with National Audubon Society and US Fish and Wildlife Service biologists who are, like her, banding ARTE and placing field-readable bands as well as standard bands. She will analyze capture-mark-recapture data to

investigate breeding dispersal rates before and after 2006, particularly as they relate to productivity, predation pressure, and food quality.

A native of Grosse Pointe Park in Michigan, Lauren got her start in tern research with the Audubon Society, then decided to pursue a Master's Degree at UNB. "It is a real privilege to handle the birds" says Lauren. "Some of them are 30 years old." There is also humour in the way the adults fit nicely into a Pringles can for weighing. Chicks are likewise banded and measurements taken, but not at Machias Seal. Lauren is anticipating another year of data analysis, and hoping for a better outlook for the Arctic terns.



State of the Scotian Shelf

A new theme paper titled "**Ocean Acidification**" is now available on the State of the Scotian Shelf website. Ocean acidification is a term used to describe a broad suite of changes in ocean chemistry due to increases in atmospheric carbon dioxide and its absorption by the ocean. These changes have implications for marine life; for example, the ability of shellfish to form shells and cold-water corals to develop skeletons. Ocean acidification is expected to impact human activities such as fisheries and aquaculture. See more at <http://coinatlantic.ca/index.php/state-of-coast-and-ocean/state-of-the-scotian-shelf/222>.

RECENT LITERATURE:

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Partnership for Fish Stock Enhancement on P.E.I.

Taken from PEI Angling Summary

Restoring quality fish habitat is the first step towards improving the sport fishery in P.E.I. However, fish stocking is also an important tool in fisheries management. In 2012, the Province entered into an agreement with Abegweit First Nation to produce brook trout and Atlantic salmon for stocking Island rivers.

Abegweit First Nation is comprised of three reserves: Scotchfort, Rocky Point and Morell. Having been involved in watershed enhancement



Broodstock collection of Brook Trout (*Salvelinus fontinalis*) and Atlantic Salmon (*Salmo salar*) in the Morell River, PEI.

Beaubassin Research Station

DUC, with its partners Acadia University and Irving Oil Ltd., officially opened the Beaubassin Research Station on Aug. 29, 2012, in Aulac, NB. Located on the New Brunswick and Nova Scotia border, the centre will provide DUC and Maritime-region university students the opportunity to study the area's diverse wetland ecosystems and rich history. Prime Minister Stephen Harper and the Honourable David Alward, Premier of New Brunswick congratulated DUC and its partners at the opening.



for several years, the move to develop an enhancement hatchery was a natural progression. The Abegweit Biodiversity Enhancement hatchery will be a new construction in Red Head, near Morell. The hatchery will initially have the capacity to grow up to 100,000 speckled trout fry and up to 250,000 Atlantic salmon fry. The hatchery will also grow adult trout for put-and-take fisheries across P.E.I.

The hatchery construction is fully funded by the Abegweit First Nation. Funding for Prince Edward Island's salmonid enhancement program is currently provided by the provincial government and the P.E.I. Wildlife Conservation Fund. Abegweit First Nation will be looking for partnerships with watershed groups and corporate entities to expand stock enhancement initiatives on P.E.I.

Although officially opened in 2012, the research station has had growing use since 2010. Several university researchers from University of New Brunswick, Mount Allison University, and Acadia University have had on-going research projects at Beaubassin. These research projects have focused on the ecology and geology of wetland ecosystems. Examples of research include salt marsh restoration monitoring, spatial and temporal productivity of wetlands, community structure of salt marshes, historic changes in wetlands, wetland dependent birds, and heavy metals. The 2013 field season promises to be another exciting one.

Bat Ecology Expert Receives Alumni Award

See more at: <http://www.viu.ca/mainly/page.asp?ID=2352#sthash.V8Eaap88.dpuf>

Lynne Burns, a Vancouver Island University (VIU) graduate is one of Canada's leading experts in bat ecology and conservation. Burns recently received an Alumni Horizon Award from VIU for outstanding achievements.

"Rather quickly after graduating, I realized that biology courses in high school were what I really enjoyed," she says." Burns completed a Bachelor of Science degree at VIU, where she had a unique opportunity to conduct research in the tropics on bats.

Burns' pursuit of wildlife research, particularly on bats, continued when in 2007 she completed a Master of Science in Applied Science at Saint Mary's University in Halifax. Her thesis research investigated the effects of forest fragmentation on a forest-dependent bat species on Prince Edward Island.

Following her graduate degree, Burns worked as a Wildlife Biologist in Prince George, and is currently a PhD candidate at Dalhousie University, under the supervision of Dr. Hugh Broders, at Saint Mary's University. Her research seeks to explore some of the many unknowns surrounding the autumn bat mating and migration period (called swarming).



Wind Project Wildlife Find

Written by Stephanie Walsh

The South Canoe Wind Project is located on the New Ross Road in Lunenburg County, NS. The project plans to erect 34 wind turbines to a capacity of 102MW. The property is mainly owned by Minas Basin Pulp and Power and has been used for forest harvesting activities. There are a variety of habitat types at this site including coniferous and mixed woods, wetlands and various-age regenerating clear-cut.

As part of a project of this scale the team submitted an Environmental Assessment (EA) to the various government departments in Nova Scotia. This EA was approved on July 13, 2012 with conditions, one of which was a moose monitoring program. The full EA and conditions can be found at <http://www.gov.ns.ca/nse/ea/south-canoe-wind-power-project.asp>

In discussions with Department of Natural Resources (DNR) and reviewing moose monitoring protocols it was considered that in addition to snow tracking, the use of trail cameras to observe activity

on the site may be a valuable resource in determining use of the wetlands and water bodies by moose, deer and other species of interest. In late 2012 the Project Team installed four trail cams at South Canoe to monitor game trails, linear developments and wetland areas and to potentially identify use of the site by moose.

The cameras were installed on December 4th and first checked on December 13th. The results? Camera 4 (set on a road leading away from South Canoe Lake)

photographed some hunters and a beagle. None of the other cameras had any activity on them, despite being on game trails. Not surprising since they were not left up for long, but disappointing all the same.

Not to be defeated, and with a longer 'soak' in mind, they were re-set and this time left until January 9, 2013 (four weeks). There were more results this time: two cameras, one by a stream crossing (#1) and one on a game trail leading away from a large wetland (#3) had deer, another in a wetland (#2) had two bobcats (cool!) and the fourth (#4) had a hunter.

The latest check on February 8th showed some snowshoe hares at Camera 4, however there was no activity recorded at any other camera location. The cameras are due to be checked again at the end of February.



Two Bobcats (*Lynx rufus*) at Camera 2

During the time these cameras have been up, snow tracking has taken place, as the weather has allowed, and has confirmed these findings – so far no moose! The plan is to leave the cameras in place for as long as possible until construction begins and potentially to replace them post-construction to see if there are differences in locations and numbers of species observed.

Hunting Ban on Caribou Herd

See the full press release at <http://www.releases.gov.nl.ca/releases/2013/env/0128n08.htm>

As a follow-up to an article that was in the October 2012 Biolink, on the George River Caribou Herd, an announcement by the government of Newfoundland and Labrador recently banned the hunting of the species in Labrador.

The ban, implemented for conservation purposes, is immediate and for a period of five years, with a review after two years. Recent information puts the George River Caribou Herd at approximately 20,000 which is a decline of more than 70% in the last three years.

"The George River herd continues to experience a very serious decline and strong action is required by our government to address the immediate and long-term protection of this important resource," said the Honourable Tom Hedderson, Minister of Environment and Conservation "Our first priority is conservation of these animals, and that is why we are imposing a total ban on this herd. George River caribou have shown a continued steep decline in the latest survey results, and a continued harvest is simply not sustainable at this point in time."

While migratory caribou populations are known to cycle naturally over a period of 50 to 70 years, the cause of the current and continued decline of the George River caribou herd is not clear. Information acquired through the province's ongoing Caribou Health Monitoring Program indicate low pregnancy rates, and tracking of radio-collared caribou continues to suggest high adult mortality, estimated at approximately 30 per cent annually.

UPCOMING MEETINGS/EVENTS

March 18, 2013 - An Applied Workshop on Coastal Erosion in Truro, Nova Scotia. See <http://www.ecologyaction.ca/content/coastal-issues-committee-publications>

April 18, 2013 – **ASFWB Spring Seminar**, at Crabtree Auditorium, Mount Allison University in Sackville, NB. Information and registration at <http://www.chebucto.ns.ca/environment/ASFWB/springseminar.html>

May 9-12, 2013 - **ACCESS 2013 Conference**, at the Centre of Geographic Services (COGS), Nova Scotia Community College, in Lawrencetown, NS. More information at <http://meeting1.mathstat.dal.ca/?q=about-2012>. Abstract submission deadline is April 1, 2013.

June 16-19, 2013 – **7th Canadian River Heritage Conference**, in Charlottetown, Prince Edward Island. Learn more at <http://www.riversconference.ca>

July 8-12, 2013 – **Marine Biology** (students 15-18 years old) and July 15-19, 2013 – **All Things Marine** (adults and teachers) in St. Andrews, NB. For more information visit <http://www.huntsmanmarine.ca>

ASFWB MEMBERSHIP APPLICATION / RENEWAL FORM

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