BioLink

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Wolfville NS March 3, 2009. Marlene Snyder, Acadia Biology Department Head accepts a cheque for $780.00 from Glen Parsons (VP Membership) to bolster the ASFWB Donald G Dodds Scholarship at Acadia University. The money was raised by a silent auction and a 50:50 draw at the 2008 ASFWB Annual General Meeting banquet in Charlottetown.

Radio Collars Are Handy

(Abbreviated from CBC News January 29, 2009)

Hunters from Labrador's Innu Nation headed out Thursday to kill caribou in an area that is closed because of concern for an endangered herd. The Newfoundland and Labrador government restricts hunting in the zone east of Churchill Falls, because it says the endangered Red Wine caribou herd uses the area. A recent estimate put the herd at just 85 animals.

Peter Penashue, deputy grand chief of the Innu Nation, disputes that claim. He said the Red Wine caribou are farther east of where Innu hunters will be. While visual identification cannot be made to distinguish between that herd and other caribou, the hunters will rely on radio collars that Penashue says show that endangered animals are not in the area.

Join us and celebrate Earth Day. April 22, 2009 at the ASFWB Spring Seminar titled "Using technological advances to study Atlantic Canadian wildlife." It will be hosted at the Crabtree Auditorium, Mount Allison University. Watch our website for more details :

http://www.chebucto.ns.ca/Environment/ASFWB/

Nova Scotia Law Encourages Land Conservation and Good Municipal Relations

The Conservation Property Tax Exemption Act was introduced in into the Nova Scotia Legislature in November 2008 and came into effect on February 17th, 2009. Through the Act, landowners opting to protect their land will be eligible for a property tax exemption, removing any financial disadvantage from a property tax perspective.

In addition, the province will help ensure that municipalities see no loss in revenue by providing them with grants in lieu of property taxes for property exempted under the act.

"Our vision is to have one of the healthiest, cleanest environments in the world by 2020 and increasing land conservation efforts is an important part of this," said Jamie Muir, Minister of Service Nova Scotia and Municipal Relations.

The legislation introduced today follows through on government's commitment to the environment, which is laid out in the very forward-thinking **Environmental Goals and Sustainable Prosperity Act**, proclaimed in 2007. That act sets out 21 far-reaching goals for the province, such as reduced air emissions and increased protection of land and water.

President Jason LeBlanc presented the award for best student paper at the AGM to Rebecca Jeppesen. Her presentation was titled "Catching mother nature with its branches down: Predicting the quantity of coarse woody debris in Cape Breton's Acadian forests as it relates to the American marten (Martes americana)recovery efforts."

"We are removing a significant barrier to private land conservation to encourage owners of ecologically significant lands to protect them," said Mark Parent, Minister of Environment. "This will help us reach our goal of protecting 12 per cent of Nova Scotia by the year 2015."

Source: November 5, 2008 NS Press Release, with some editorial comment.

BIOLINK PUBLICATION

The ASFWB 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 contributed photos and articles.

Jacques Whitford Employees Approve Acquisition by Stantec

Adapted from Stantec Press Release Jan 2, 2009

North American design firm Stantec announced that it has completed the acquisition of Jacques Whitford, an environmental consulting services firm with more than 1,700 employees , 800 of which are in Atlantic Canada. Jacques Whitford was 100% employee owned and the transaction received a 98% approval from the company's shareholders.

According to Tony Franceschini, Stantec President & CEO. "Jacques Whitford is a great addition which significantly strengthens our Environment practice across Canada, expands our presence in Atlantic Canada, and increases the depth and breadth of services we can offer our clients."

Founded in 1972 and headquartered in Halifax, Nova Scotia, Jacques Whitford has been a recognized leader in engineering, environmental, and earth sciences solutions across Canada.

"[The employees] recognize the opportunity that exists as part of Stantec," says Bob Youden, Jacques Whitford CEO who will continue with Stantec as a Senior Vice President. "Our employees are excited about the technical resources and the network of people we now gain access to. We have worked with Stantec on a number of successful projects in the past."

Jacques Whitford provides services in Environmental Sciences, Environmental Site Assessment and Remediation, and Geotechnical Materials. The company's trailing twelve month gross revenue is approximately C$230.0 million and net revenue is about C$170.0 million. Stantec provides professional consulting services in planning, engineering, environmental sciences, project management, and more. Stantec trades on the TSX and the NYSE under the symbol STN.

As of March 2009, Jacques Whitford is operating in Atlantic Canada as Jacques Whitford Stantec. Over the coming months Stantec signage will take the the place of all Jacques Whitford signs and the transition will be completed when the Stantec name has fully replaced Jacques Whitford.

President Jason LeBlanc

President's Message:

I recently Googled "Wildlife in Atlantic Canada" and got hits on moose near Western Brook Pond in Gros Morne, waterfowl in Sackville, the graceful Monarch butterfly, Northern Gannets at Cape St. Mary's (which I experienced myself for the first time last summer - AWESOME !!), Bald Eagles in Sheffield Mills, seals in Montague Harbour and the Semipalmated Sandpiper on a beach in the upper Bay of Fundy. I quickly realized that if we discuss almost any species of mammal, fish, plant or bird in our region, a member of ASFWB has some connection to it through his or her research, management or biological interests. I am so pleased to be involved in an organization with such a diverse and dedicated membership that transverses so many interesting and important topics. This diversity and excellence was very evident at both our annual spring seminar and annual meeting.

The spring seminar, which focused on renewable energy projects and their interactions with wildlife, fostered several interesting discussions around current energy problems and solutions, with emphasis on wind farms, tidal power and hydroelectric operations. Clearly there are regional innovations in this field, and I left the seminar forced to rethink what I can do at the local and personal level to contribute solutions to a global issue.

One highlight (of many) from our 45th

Annual Meeting in Charlottetown was that, of the twenty great presentations, eleven were given by students. A presentation entitled, “Catching Mother Nature with its branches down” by Rebecca Jeppesen won best student presentation for documenting the importance of course woody debris to the recovery efforts of the American marten. Sarah Collins received honourable mention for her project that studied the effects of salt exposure on the early life history stages of amphibians.

Also at our AGM, the position VP Website Manager was created -- Greg Johnson is the new executive member, though he has looked after the site for many years. I was very pleased to celebrate our history by providing a complimentary breakfast during the AGM for our past-presidents in attendance. I enjoyed the first breakfast in Charlottetown and look forward to hosting even more past-presidents this fall in Kouchibouguac. Our banquet and silent auction was very entertaining and I understand that the Cheverie, Parsons, Dibblee Trio is already taking requests for our 46th AGM in New Brunswick. Finally, congratulations to VP Program, Kirby Tulk and the many others for organizing an excellent meeting. Good luck to Kirby in his new position back on the rock. I hope you all have a successful 2009 and I encourage your continued participation in the Society.

Glen Parsons, Randy Dibblee and Jana Cheverie warm up the pre-banquet crowd in Charlottetown, November 2008.

ASFWB Not Rich But in the Black

Membership Fees Increasing
by Deanne Meadus - Treasurer
March 10, 2009

There is $1338.96 left in the bank after disbursing the 2008 contribution of $780 to the ASFWB Donald G Dodds Scholarship.

The membership fee for regular members will be increasing to $20 per year this spring, so if you need to renew at the Spring Seminar please bring cash or a personal cheque. The student membership will remain at $5

There were 56 people registered for the Fall AGM in Charlottetown (38 regular members and 18 student members). With member registration fees and the banquet tickets and donations from Ducks Unlimited Canada ($150) and Parks Canada ($200) towards the AGM, we recouped our full meeting costs and gained $100. The membership renewals and the sale of merchandise are keeping the ASFWB bank account in the black.

Next AGM in Kouch

Eric Tremblay of Kouchibouguac National Park of Canada has taken on the task of hosting the October 20-22, 2009 AGM in or near that Park. He notes “Trails are accessible for walking outside at breaks and lunch time”. Kouchibouguac National Park offers 60 kilometers of trails that you can explore by bicycle (Equipment can be made available for those who don’t have a bicycle but still want to go out).

There will be some interesting field trips as well (Salmon trap in Richibucto River, and potentially others if there is interest). A nature walk will be offered with a Park Naturalist at Kellys Beach during the early morning (7h00am to 8h30am) before the first day of the meeting on October 21st (to oxygenate your brain before the meeting). The Kouchibouguac Resort (http://kouch.com/) has been booked to accommodate participants. They have 7 motel rooms, 12 condo-Chalets and 3 cottages. When you visit their website, remember that we will have a group rate for the meeting . You can bike from the motel to the meeting place in the park. For those hard cores who would like to camp, we can make arrangements at the park for you. More to come on details of the meeting and accommodation.

Parks Canada Photo

Tick Spread Monitored

Based on articles by Jeff Ogden in Insectary Notes, Fall 2008

According to Jeff Ogden in his October article in the Insectary News, the NS Dept of Natural Resources is examining the potential risk of blacklegged tick-infested hides from deer shot in areas of Lunenburg County being transported throughout the province. Working with Dr. Robbin Lindsay of the Public Health Agency of Canada in Winnipeg, Jeff hopes to determine how long ticks remain on the dead animals, how many fall off and how long they can survive away from the host. The aim is to quantify the risk of the spread of the black-legged tick as a carrier of Lyme disease in Nova Scotia.

In the November edition of Insectary Notes, Ogden noted his tick ID program was showing new establishments of the Black-legged Ticks in Pictou County, Antigonish County and a small area in Yarmouth County, as well as from the known areas in Lunenburg, Bedford and Gunning Cove and previously surveyed sites in Queens County. Stay tuned to the Insectary Notes if you are looking for future updates on this interesting project.

When Two Become One:

The Loss of a Canadian Endemic

By Aaron Shafer
March 6, 2009.

It would be safe to say that most of you have never seen (or even heard of) the Gaspé shrew. This inconspicuous insectivore is slate grey in colour and makes its living in the talus slopes of the Gaspé peninsula, New Brunswick, and Cape Breton Island. Once considered a species of special concern by COSEWIC, this little critter is among the least studied and most difficult mammal to catch in the wild.

Aaron Shafer and Don Stewart studied the elusive Gaspé shrew

For my MSc at Acadia University, under the guidance of Don Stewart, we decided to study the elusive Gaspé shrew. Questions had arisen about the taxonomic validity of the Gaspé shrew; and a recent study suggested the closely related long-tailed shrew was in fact its conspecific. Therefore, using molecular data we set out to re-

Top to bottom, Sorex dispar, Sorex fumeus and Sorex cinereus

evaluate the taxonomic status of the long-tailed and Gaspé shrews.

Thanks to our collaborators we had many samples on hand; however, Don and I aspired to collect additional specimens from Nova Scotia. With our good luck charm (John Gilhen of the Nova Scotia Museum who has been capturing these rare shrews for nearly three decades!), we successfully collected 6 specimens of the long-tailed and Gaspé shrew in total. These trapping data improved our knowledge on the range, density, and ecology of these shrews.

Back in the lab at Acadia, we utilized two molecular markers to assess the degree of genetic differences between these two species, and whether a separate species status was warranted. Looking at approximately 30 samples from across the entire range of both shrews, we found evidence that the long-tailed and Gaspé shrew belonged to the same, genetically indistinguishable group. These data, accompanied by morphological evidence from our collaborator Judith Rhymer, led us to recommend merging these two taxa into a single species. Our findings also provided valuable insights into the historical biogeography of Atlantic Canada. Therefore, it is with some despondency, that our results report the loss of species status for Atlantic Canada's Gaspé shrew.

For a more in-depth read of our study see:

Shafer, A.B.A., Scott, F.W., Petersen, S.D., Rhymer, J.M. and D.T. Stewart. 2008. Following the SINEs: a taxonomic revision of the of the long-tailed shrew complex, *Sorex dispar* and *S. gaspensis*. Journal of Mammalogy 89: 1421-1427.

Shafer, A.B.A. and D.T. Stewart. 2008. A population crash of the red-backed vole (*Myodes gapperi*) in Nova Scotia inferred from bycatch of the long-tailed shrew (*Sorex dispar*). Northeastern Naturalist 15: 626-629.

Shafer, A.B.A. and D.T. Stewart. 2006. A disjunct population of *Sorex dispar* (long-tailed shrew) in Nova Scotia. Northeastern Naturalist 13: 603-608.

NB Crown Forest Biomass Harvest

by Rosemary Curley
March 10, 2009

The New Brunswick government has issued a request for proposals from parties interested in gaining access to biomass material from Crown forests. According to Natural Resources Minister Wally Stiles "Industry has expressed a great deal of interest in acquiring access to forest biomass for green energy projects." An estimated 550,000 oven-dry metric tonnes of biomass material can be allocated, with the volume of material available in any given year dependent on the amount of wood harvested that year. Forest biomass consists of the parts of a tree not traditionally used such as branches, tops and foliage A forest biomass harvesting policy and tools to ensure sustainability of the harvest are part of the plan.

Mark Arsenault, president of the New Brunswick Forest Products Association welcomed the announcement saying "This is an important step in helping

turn the industry around."

David Coon, Executive Director of the Conservation Council of NB has stated that "New Brunswick's public forest should not be opened to biomass removal until we have a clear and comprehensive bioenergy strategy for the province. The provincial government must ensure that biomass removal is firmly regulated and limited so as not to harm the health of our forest." He indicated that biomass removal has the potential to harm species that depend on dead or decaying trees, saying at least one-quarter of wildlife species in the Acadian forest depend on this woody debris.

Sources: NB gov't press release Feb 25th
Telegraph Journal Feb 26th, 2009
NB Conservation Council, Nov 2008

More Reflections on White Nose Syndrome

By Lynne Burns,
Feb 17, 2009

In the winter of 2006 people began to report hibernating bats with white noses from caves in the northeastern United States. Dubbed White Nose Syndrome (WNS) because of its most striking appearance on the muzzles of affected bats, this problem stands to be one of the greatest threats to hibernating bats in North America.

Wildlife managers who regularly monitor hibernating bats in caves or mines of the NE US have noted a staggering 70 to 97% mortality in the bat population at affected sites. Little brown bat (*Myotis lucifugus*) , northern long-eared myotis (*Myotis septentrionalis*) and eastern pipistrelles (*Perimyotis subflavus*) have suffered the greatest declines from WNS. All three have resident populations in Atlantic Canada with the two Myotis species comprising the core bat community. Thus, WNS is a serious emerging threat to bats of our region

To step back though, where did this all begin? Ground zero for WNS is located in a commercial cave outside of Albany, New York. After this initial occurrence in February of 2006, there was apparent rapid spread to other sites in NY by the following winter, and by the third winter WNS had spread in an approximate 300 km radius from the index cave. As of February 2009 it has been confirmed in NY, VT, CT, PA, NJ, and MA with possible additional sites in WV, VA and NH. WNS seems readily transmitted within bat populations; and take note that the NB border is a similar distance from Albany as is WV.

White fungus on the noses, wings, tails and ears of bats is diagnostic of WNS as is atypical behaviour of bats

Northern Long-eared Myotis , PEI (Photo by Joe Poissant)

flying outside of hibernacula during the day in winter. There also appears to be an internal shift inside hibernacula where bats are roosting close to cave entrances whereas typically they are found deeper in the cave to take advantage of more thermally buffered areas. Sadly, often bats are found dead, and those still alive are close to death because they are starving and emaciated (little to no fat reserves), leaving little hope of their survival through to spring.

Currently, bat researchers remain puzzled as to if the fungus actually kills the bats. We know it is a cold-loving fungus best growing at low temperatures (5-10°C) and it is a member of the *Geomyces* genus; fungi known to colonize the skin of animals in cold climates. Frustratingly, necropsies of WNS infected bats indicate the fungal infection is limited to the outermost layers of the skin. Apparently the fungal infection elicits little in the way of an inflammatory response in the hibernating bats suggesting the possibility that other factors are also at play. During hibernation, bats' immune system functions decline as their body temperatures lower and stabilize. At low temperatures bats are normally safeguarded during hibernation from disease-causing organisms. But, because the WNS fungus grows well at low temperatures, it can persist and thrive on the bodies of bats throughout the winter. It may be that the presence of the fungus, in conjunction with other still unknown factors, act in concert to alter the normal active-hibernate cycle of the bats. This in turn may cause bats to prematurely burn off their energy reserves and die.

Scientists across North America are actively researching different facets of bat hibernation biology and ecology. Very little is known bat movements between summering grounds and wintering sites or bat behaviours during the fall when they mate and prepare for hibernation. Both of these could be important in the transmission of WNS. We also wonder what effects from exposure to WNS in winter carry forward into the summer? Bats that do survive WNS may emerge from hibernation in such poor body condition that they don't feed and/or reproduce properly in the summer.

It is increasingly important for us to monitor our own bat hibernacula here

Little Brown Bat (photo by Lynne Burns)

in Atlantic Canada. A meeting at Saint Mary's University (Halifax, NS) in November 2008 brought together regional experts from diverse disciplines to discuss the issue, the current state of knowledge of our hibernating bats, and

how to proceed in monitoring for WNS. The major hibernacula of the region appear to be concentrated in NS and NB, in karst and gypsum formations, and in abandoned mines. Many potential sites are unexplored but the significant mortality of bats in US states close to our borders is a call to find out more.

Concerned about Climate Change ?

Most of the Canadian Journal of Forest Research (Volume 39, Number 2, February 2009) is devoted to the issue "*NE Forests* 2100: A Synthesis of Climate Change Impacts on Forests of the Northeastern US and Eastern Canada "

NL Invasive Plants Online

MUN Botanical Garden has been mapping invasive alien plants on NL for the past two years.

See www.mun.ca/botgarden

Bear Story from Maine: http://www.crownofmaine.com/paulcyr/stories/bear-monitoring-2009/

RECENT LITERATURE:

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NCC Land Open for Research

by Laurel Bernard
March 18, 2009

The Nature Conservancy of Canada (NCC) is a national non-profit land conservation organization whose vision is to protect areas of biological diversity for their intrinsic value and for the benefit of future generations. NCC currently almost 18,000 acres at 53 sites within the 4 Atlantic Provinces. Habitats found in these nature preserves include: old growth Red Spruce forests; saltmarsh and eelgrass beds; coastal and inland bogs; sand dunes and barrier beaches; coastal islands; coastal barrens; estuaries and associated uplands; steep slopes; and large tracts of inland forests.

NCC welcomes the use of their lands for research. Some research projects that have occurred in an around NCC land include a variety of shorebird research projects that were completed around our Johnson's Mills shorebird reserve in the Upper Bay of Fundy in NB. There have been research requests to study the use of pheromone traps in old growth red spruce, and there has also been a university study on forest birds in a forested landscape. In other NCC regions, partnerships with universities have resulted in studies on such things as restoration of forests, and rare plant biology within rare ecosystems.

Potential Restoration Projects?

NCC is always looking for more information about the species present, breeding species data, indicators of ecosystem health (effectiveness monitoring), potential restoration projects, and any research that could direct management of the property.

What NCC can offer researchers is a variety of nature preserve sites and habitats to work on either as a reference site or entire study site. As a non-profit organization, NCC also may have access to project funds not available to researchers. NCC may be able to provide funds for summer staff, and depending on the location may be able to provide accommodations (such as our researcher cabin at Johnson's Mills, NB).

For more information about the potential for doing research on NCC land, contact Laurel Bernard, Director of Stewardship at1-877-231-4400 or laurel.bernard@natureconservancy.ca.

Fall and Winter Diet of Coastal Bald Eagles in New Brunswick

by Rudy Stocek (Fredericton) and Ralph Eldridge (St. George)
March 17, 2009

Bald eagles are opportunistic feeders, surviving on live or dead animal matter. Much of New Brunswick waters during the winter months are ice-covered, but Passamoquoddy Bay (part of the Bay of Fundy) allows the use of open salt water for winter feeding by eagles. Random observations of eagles using the Bay were made for 10 years from October to March, 1999-2008. Both aquatic and non-aquatic habitats were observed and 8714 bald eagles observations were recorded.

Eagle abundance in the Passamoquoddy Bay area increased over the years from about 200 eagles in 2000 to over 300 birds in 2008. The majority were less than five years old.

An average of 11% of the birds (919 feeding occurrences) were feeding, defined as one eagle feeding on one food item at a particular site on any one day. (Feeding includes an eagle pursuing, catching, restraining, killing or consuming a prey item and includes carrion or offal consumption). Salmon that were culled from local fish pens and dumped at a composting site were a good source of food, but wild fish in the fall and winter diet along the coast was very limited (2%) and apparently not that appealing to eagles.

A great variety of aquatic birds contributed to the eagle diet (38%). Gulls (herring and ring-billed mostly) made up 53% of the birds preyed upon. Gannets, fulmars, harlequin ducks and a variety of alcids were also eaten.

White-tailed deer was consumed at a high rate, (46% of the food items taken) which contributed to the 49% mammal value in the overall eagle diet. Deer either had died naturally during the winter, or were legally shot and butchered in the field, or had been killed by a vehicle and then put out by forest rangers at local depots. Other mammals consumed included moose, otter, snowshoe hare, muskrat, and seal. Miscellaneous and unidentified animal matter represented 5% of the diet and included a snapping turtle.

A considerable number of attacks on birds by eagles were recorded but only 8.76% of 856 winter attacks were successful. 422 of the attacks were on gulls which contributed 55% of the food items taken in this manner. Common mergansers were attacked in 207 cases and provided 16% of the food taken this way. While common eiders were attacked 128 times, only eight were taken as food (13%). Other birds (loon, harlequin duck, black duck, cormorant, alcids, fulmar, murre) contributed to a lesser degree (16%) to food acquisition by the bald eagle.

The results of this study suggest that:

1. only an average of 11% of the 8714 eagles were seen feeding during the 10 years,

2. the great variety of food items eaten by coastal bald eagles do not include fish,

3. aquatic birds are a common source of protein here,

4. dead white-tailed deer provide a good portion of the diet, and

5. less than 10% of the birds attacked by eagles contributed to their diet.

Eel Bladder Parasite Workshop

by Martha Jones
March 10, 2009

I hosted an eel parasite workshop entitled "Let's be early birds and stop the worm!" at Cape Breton University on Wednesday, February 18th. The invasive swim bladder nematode *Anguillicoloides crassus* was recently detected in Cape Breton and St. Mary's River on mainland Nova Scotia. It originates from eastern Asia, and causes damage to the swim bladders and decreased energy and immune response in the American eel.

(Martha Jones photo)

There were 40 participants, with representatives from First Nations (Eskasoni/Unama'ki Institute of Natural Resources, and Waycobah Fisheries and Wildlife), Parks Canada, Department of Fisheries and Oceans, Provincial Fisheries, Atlantic Elver Fishery, South Shore Trading Company, Saint Mary''s University, Cape Breton University, Salmon River Salmon Association, Department of Natural Resources, and Louisbourg Seafoods.

The three key objectives of the workshop were:

1. information dissemination. The parasite is 5 cm long! and numerous with up to 32 worms per swim bladder!, with a live demonstration of how to find it,

2. fostering collaborative partnerships and ensuring standardized protocols if possible, and

3. discussing research priorities.

Shelley Denny, Biologist with Unama'ki Institute of Natural Resources noted

Renee Wissink looks on as Livia Goodbrand begins the eel dissection (Marie Stradeski photo)

that the eel swim bladder parasite was not found in surveys done by Eskasoni Fish and Wildlife in 2000, but was found in 2008/2009 surveys. Dr. Cheryl Bartlett of CBU gave an excellent overview of parasites and relevant terminology. A number of workshop participants felt that genetics research would be insightful. It would be good to know where our nematodes came from (was it a "leap frog" from the eastern United States (bilge/ballast), or a new introduction from Europe (sea chests/ballast)). Cheryl Wall will be doing some molecular work at Saint Mary's University for her Masters degree to investigate this. There are essentially three things we are concerned about regarding the invasive worm: 1) the mechanism of introduction into our region, 2) how it spreads through the population, and 3) the effect on production of eels in our region. For a complete review of the workshop see: **http://www.projectufo.ca/drupal/Eel_Workshop**. There is a great list of pertinent literature if you want to find out more.

(Martha Jones photo)

Two Eelgrass Workshops

by Dr. Alan R. Hanson
March 18, 2009

Eelgrass (Zostera marina L.) is an important primary producer and provides three dimensional structure considered important to biodiversity and productivity. Recently two important meetings were held to discuss the status and conservation of eelgrass in northeastern North America A regional conference on "Status, Trends, and Conservation of Eelgrass in Atlantic Canada and the Northeastern United States", held February 24-25, 2009, in Portland, ME was organized.by the Co-Chairs of the Habitat Monitoring Subcommittee of the Gulf of Maine Council (GOMC) on the Marine Environment. About 100 participants were in attendance representing all sectors involved in eelgrass conservation on both sides of the border - research institutions; federal, state, and provincial agencies with habitat protection and permitting responsibilities; local zoning and natural-resource decision makers; consulting firms; and regional and local non-governmental conservation organizations. Presentations focussed on the wide range of issues surrounding eelgrass conservation, including causes for changes in eelgrass status around the region, protecting habitat functions and values from direct impacts, setting nutrient and habitat criteria, emerging issues such as invasive species and climate change, and programs and partnerships for conservation.

Presentations and discussions brought science to bear on management issues. Participants reported that the workshop left them more informed about approaches to eelgrass conservation and energized to implement various conservation measures. Results from the Workshop will be posted on the GOMC Web Site.

DFO Oceans requested advice on whether eelgrass meets the criteria as an Ecologically Significant Species. A science review of the advisory request was conducted during March 4-5, 2009. The objectives of the meeting were to review the functional role of eelgrass within the estuarine and coastal ecosystem. The review included an assessment of the quantity

of the species present, the temporal variation in distribution and abundance, the quality of the structural habitat being provided, and the significance of the structural habitat to the overall ecosystem structure and function. The output from the science review was a science advisory report that drew conclusions on whether eelgrass met the criteria as an ESS. Participants at the review included DFO Science and Oceans, Environment Canada, aboriginal peoples, provincial governments, academia and external experts from the US. A Scientific Advisory Report, and Research documents will be made available through DFO.

To see outcomes of For Our Birds Workshop, Nov 2008, see
http://ecologyaction.ca/files/images/file/Coastal/4RBirds08%20Workshop%20Summary.pdf

Chignecto –Isthmus in the News

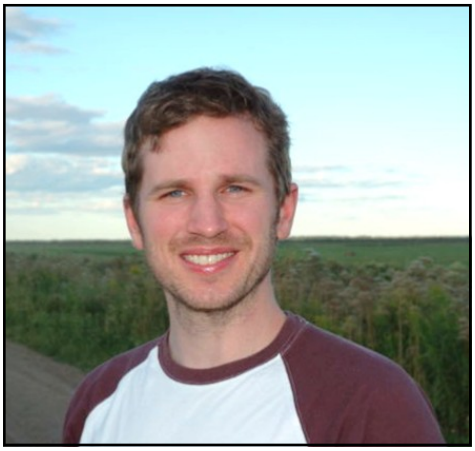
By Chantal Gagnon
chantal.gagnon@2c1forest.org
Feb 13, 2009

The Chignecto Game Sanctuary has been making headlines in Nova Scotia. Recently the provincial government permitted oil and gas exploration in the Chignecto Game Sanctuary and is considering opening the Sanctuary to more development and resource extraction.

Conservation organizations, tourism industry representatives, local groups and fishing associations are working to educate the public and the provincial government about the important conservation and recreational values in the area and the contribution they make to the economy and quality of life in the region. The current level of protection for the Chignecto Game Sanctuary is considered insufficient by many in the area. 2Countries1Forest has identified the Sanctuary as an important part of the greater conservation landscape that connects NB and NS.

There is good news in another part of the Isthmus; the province designated the 970-hectare Tyndal Well Field as the Chignecto Isthmus Wilderness Area - the 34th wilderness area in Nova Scotia. This designation will help protect nearby water supplies in the Town of Amherst and is a positive step forward for connectivity between New Brunswick and Nova Scotia. The New Chignecto Isthmus Wilderness Area is situated 20km NE of the Chignecto Game Sanctuary.

For more information on this issue please contact the Ecology Action Center (902) 442-5008 CPAWS Nova Scotia Office (902) 446-4155 or the Sierra Club of Canada- Atlantic Chapter (902) 444-3113



New Ecosystem and Habitat Biologist in NS

by Glen Parsons
Feb 16, 2009

Sean Basquill joined the Nova Scotia Department of Natural Resources - Wildlife Division today as the new Provincial Ecosystem and Habitat Biologist. Sean brings over 13 years of experience, including work with Parks Canada, and most recently as Ecologist, Atlantic Canada Conservation Data Centre (Sackville, NB) and Part-time Professor, Department of Geography and Environment, Mount Allison University. Sean's most recent work included classifying and developing conservation status ranks for plant communities across the Maritimes. This work emphasized forest, salt marsh, sand dune, and barren vegetation. Sean is also applying outputs of the Maritime forest classification [National Vegetation Classification System] to help redefine the Acadian Forest concept. He is looking forward to developing new working relationships and pursing a wide range of interesting projects with the Wildlife Division.

Adam Campbell Now NB DUC Conservation Program Specialist

Adam Campbell grew up on the marsh in Sackville, NB, graduated with a BSc. in Biology from Mount Allison University in 1999 and specialized in ornithology at Acadia University to receive his MSc. in 2005. He recently accepted the position of New Brunswick **Conservation Program Specialist** for Ducks Unlimited Canada, responsible for the delivery of the complete suite of DUC conservation programs in NB, including land acquisition, wetland restoration and infrastructure management. He and his wife Jen are planning to relocate to Fredericton where his job is based.

Adam has been employed on contract basis with Ducks Unlimited Canada since 2007 investigating cattail control measures and working as a maintenance contractor. Prior to that he was employed with the Canadian Wildlife Service as a maintenance technician, wildlife technician, research assistant and biologist since 1995. Most of his career has been related to waterfowl research and he is committed to increasing his understanding to benefit local waterfowl populations.

Veterinarians Train Sealers to Kill Humanely

Abbreviated from CBC News Story, March 20, 2009

Two veterinarians from the Atlantic Veterinary College in Charlottetown spent two weeks this year teaching sealers in N.L. how to kill seals humanely. The workshops were offered to ensure hunters understand the DFO's new rules to ensure a clean a kill of the seals. Hunters have to kill the animals by first smashing the skull, then feeling the skull to make sure it is crushed, and then bleeding the animal.

Pierre-Yves Daoust, a wildlife pathologist with the vet college, travelled with graduate student Charles Caraguel to seven N.L. communities over the course of two weeks holding day-long information sessions. Daoust has collected skulls, some completely crushed and others with only a few fractures, and shows them to the sealers. Other Canadian vets presented workshops in ÎÎles de la Madeleine and the lower north shore of Quebec.

Daoust was part of an international panel of veterinarians that looked into humane sealing practices, and recommended these new procedures. He said about a quarter to a third of all sealers attended the voluntary workshops, which were sponsored by the governments of N.L. and Quebec and organized by the Fur Institute of Canada.

NCC Conservation Volunteers Program

by Laurel Bernard
March 18, 2009

This summer, the Nature Conservancy of Canada (NCC) will be encouraging people to get out on the land and lend a helping hand through *Conservation Volunteer* (CV) events. CV is a national program that engages the public in biodiversity conservation while providing a hands-on, educational experience in ecologically significant natural areas owned by NCC. Volunteers can learn new skills, meet like-minded people and visit extraordinary natural areas. Events are generally a day in length and involve anywhere from five to 30 volunteers

In the Atlantic Region, 13 will be offered, including one in the beautiful Codroy Valley of Newfoundland where participants can learn to identify birds, then take part alongside expert birders in the Birding Bonanza – a 24 hour bird count to see how many species can be found in the area.

In New Brunswick, volunteers will be planting native trees and shrubs at Johnson's Mills, to restore former cottage sites and provide a buffer to the shorebird migration beaches. There will be an opportunity to view the impressive flocks of shorebirds from the NCC Shorebird Interpretive Centre, and to learn how experts count them.

At their Twin Lakes property in Nova Scotia, NCC will ask volunteers to help remove an old lakeshore dock, and campsite debris. A common loon survey will also be completed. In Prince Edward Island, experienced birders are needed to undertake a June bird survey on a property near Abrams Village on Egmont Bay.

Other projects involve restoration (tree planting or seed collection); inventories and monitoring (birds, plants, insects); and threat abatement and mitigation (invasive species removal, fencing, trail building). The CV program fits with NCCs plan for partnership-building and creative deal-making with any individual, corporation, community group, conservation group, or government body that shares its passion. To view the roster of events, check out www.conservationvolunteers.ca, or call Laurel Bernard at 1-877-231-4400.

Atlantic Flyway Council to Meet in Atlantic Canada for a Change

The Atlantic Flyway Technical Section and Council will be holding their summer meeting in Charlottetown, PE, July 20-24th. The Council is composed of the Provinces of Newfoundland & Labrador, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, and Quebec; and the states of Connecticut, Delaware, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia; plus Puerto Rico and U.S. Virgin Islands.

The Atlantic Flyway Council is made up of representatives (usually administrators) from all the agencies that have management responsibility for migratory bird resources in the Flyway. Council is supported by both gamebird and non-game Technical Sections, which are composed primarily of biologists from the State and Provincial agencies, as well as the responsible U.S. and Canadian Federal agencies (CWS and the USFWS).

The Council determines actions required for sound migratory game bird management and makes recommendations to the U.S. Fish and Wildlife Service. The Meetings of the Technical Section and Council rotates through the various member jurisdictions, but since there are 25 jurisidictions the opportunity to host it is rare. The meeting should provide insight into the mechanics behind migratory bird management in North America, and is open to the public. For more information contact:

rldibblee@gov.pe.ca, or

pollard.bruce@ec.gc.ca

UPCOMING MEETINGS

April 22, 2009. ASFWB Spring Seminar. Using technological advances to study Atlantic wildlife. Crabtree Auditorium, Mount Allison University. Join us and celebrate Earth Day.

May 26-29th, 2009. 8th Bay of Fundy Science Workshop, " Resource Development and its implications in the Bay of Fundy and Gulf of Maine, Acadia University, Wolfville. Sponsored by Bay of Fundy Ecosystem Partnership.http://www.bofep.org/workshop2009.htm.

31 May - 4 June 2009 43rd Congress of the Canadian Meteorological and Oceanographic Society (CMOS), Halifax, Nova Scotia - http://www.cmos.ca/Congress2009/index.htm.

13-15 May 2009: "Annual Conference of the Atlantic Canada Coastal and Estuarine Science Society (ACCESS)", UPEI, Charlottetown, Prince Edward Island - http://www.cerf-access.ca.

June 9-11, 2009. 22nd Annual Geomatics Atlantic Conference, Acadia University, Wolfville, Nova Scotia http://www.geomaticsatlantic.com/sponsors.html

June 14-17, 2009 The 7th International Conference on the Fate and Effects of Pulp and Paper Mill Effluents Fredericton, N B, Canada held jointly with The 9th International Water Association's meeting on Forest Industry Wastewaters http://www.unb.ca/cri/pulpmillconference

July 20th-24th. Atlantic Flyway Technical Section and Council. Rodd Charlottetown, Charlottetown PE. Contact rldibblee@gov.pe.ca or pollard.bruce@ec.gc.ca

October 20-22, 2009 Atlantic Society of Fish and Wildlife Biologists AGM. Kouchibouguac National Park. Contact eric.tremblay@pc.gc.ca

ASFWB MEMBERSHIP APPLICATION / RENEWAL FORM

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Please remit your cheque or money order to the Treasurer, Deanne Meadus, Ducks Unlimited Canada

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