



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



Canadian Wildlife Service wildlife technicians, Randy Hicks and Andrew Hicks walked away bruised and with a broken foot respectively from this 4- seater Cessna 172 on March 07, 2010 after engine problems forced an emergency landing at Argyle, about 10 km from Yarmouth, Nova Scotia . They were conducting low altitude coastal bird surveys in good weather on a Sunday. Their 26 year old pilot was treated in Halifax for severe head injuries. (Tina Comeau - Yarmouth Vanguard Photo)

Join us and celebrate Earth Day, April 22, 2010 ,0930-1530h for the ASFWB Spring Seminar titled "Aboriginal Perspectives on Fish & Wildlife Management". It will be hosted at the Crabtree Auditorium, Mount Allison University. Check our website for more details <http://www.chebucto.ns.ca/Environment/ASFWB/>

there have been others. Gerry Parker reported several cases of tourists being nipped as they fed coyotes near Cheticamp. Parks Canada has not released information on all incidents of coyote attacks.

Now more people are noticing coyotes in strange places and they are feeling wary. In Bedford NS, coyotes were spotted on school property and parents were warned via a newsletter to keep their children safe. In Port Hawkesbury coyotes were spotted near a wooded area adjacent to Tamarac Education Centre on the morning of March 8, 2010, leading a local parent to approach school officials. Such stories can get people on edge. Bob Bancroft told of when a coyote persisted in charging him. A rather large Cape Breton University student met with coyotes when walking home in the dark and was relieved to find a house nearby. A resident near Cape North tells of several instances over the years when people on the Cabot Trail have been threatened by coyotes.

Coyotes Stay In the News

By Rosemary Curley
April 10, 2010

Coyotes have been very much in the news in the Maritimes since they attacked folk singer Taylor (Mitchell) Luciw on the Skyline Trail in Cape Breton Highlands National Park (CBHNP) on October 27th, 2009. Biologists heard the news of her death on October 29th with a sense of disbelief. Coyotes causing the death of an adult person is very unusual. As more details emerged it became apparent that coyotes in the corner of the park near Cheticamp are habituated to human presence and have lost their fear of people.

Parks Canada Staff immediately closed the trail and hunted for the coyotes, killing a healthy female which they submitted to Atlantic Veterinary College and trapping several others in the area. Derek Quann, CBHNP Resource Conservation Manager, indicated that in the past when they had aggressive coyotes submitted for examination, none were rabid, though some were emaciated. Yes, there were other attacks in CBHNP in the past; in 1988 a young girl was bitten, another year a man in a wheelchair was attacked. And



ASFWB President Jason LeBlanc presented Eddie Halfyard of Dalhousie University with a \$100 cheque for best student paper at the Society's AGM at Kouchibouguac National Park in October 2009. The winning presentation was titled "Acoustic tracking of Atlantic Salmon smolts and anadromous Brook Trout of Nova Scotia's Southern Upland."

In Cheticamp, people are certainly on edge. As of April, 2010, residents are petitioning their County Councillors to allow them to take flare guns, BB guns, or pellet guns as they walk in the Margaree and Cheticamp areas. Carrying such weapons is prohibited by local by-laws at present. The CBH National Park staff are being similarly lobbied. Mike O'Brien of NS Department of Natural Resource has advised the local populace to stop feeding, touching, or photographing the coyotes, and to clean up any food garbage and secure their bins. He recommends that pets be fed indoors and walked on a leash. If facing aggressive animals, Mike suggests trying to appear larger, raising hands in air, as well as throwing sticks and rocks.

Coyote threat stories are not confined to Nova Scotia. On February 10th at 0230h, Marie Simon of Saint-Charles, NB let her puppy into the backyard and was snarled at by a coyote, It tried biting her and after a prolonged fight when it went for her neck and jaw, she connected a left hand with its mouth, driving it off. On March 7th a young teen walking home from school in St Andrews NB met a coyote which bared its teeth at her, prompting the mayor to advise people to carry a whistle for personal safety.

In Newfoundland the RCMP advised Birchy Bay citizens, after coyotes took a dog, to protect their pets and children. In Prince Edward Island the PEI Wildlife Federation organized a panel discussion about coyotes featuring Randy Dibblee, PE Fish and Wildlife, Carl Balsor, the PEI Trappers Association, and Dr. Simon Gadbois of Dalhousie University. The meeting was advised that coyotes should not become too comfortable around humans and that the best way to limit problems is to keep hunting, trapping and harassing them. Numerous papers (for instance, see Timm et al , 2004) recommend hunting and trapping, particularly the latter, in managing habituated coyotes.

ASFWB EXECUTIVE

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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.

You can bet all the local coyote biologists were busy fielding calls from the public this winter. On March 11th Nova Scotia Department of Natural Resources issued a press release with



advice at:

(<http://www.gov.ns.ca/news/details.asp?id=20100311003>), and also highlighting their coyote FAQ website:

(<http://www.gov.ns.ca/natr/wildlife/nuisance/coyotes-faq.asp>)

NL Environment and Conservation has a similar web site:

http://www.env.gov.nl.ca/env/wildlife/ourwildlife/living_With_coyotes/living_wit

[h_coyotes.htm](#)

The numbers of calls will likely escalate as three new incidents with coyotes were reported on the Nova Scotia mainland during the week of April 4th, one where a woman was bitten on the leg.

The bottom line from the coyote biologists -- Eastern coyote attacks on people are still extremely rare and most likely to happen when coyotes habituate to people.

Sources:

CBC News, Oct 27th and 29th, Feb 12th, March 7th, April 9th

Cape Breton Post January 13, 2010

Bedford Beacon Neighbourhood News Feb 9, 2010

Port Hawkesbury Reporter April 3, 2010.

The Guardian, March 30, 2010

Gerry Parker 1995. Eastern Coyote, Nimbus Publishing

R M Timm, RO Baker, JR Bennett, CC Coolahan. 2004. Coyote attacks: an increasing suburban problem. Proc. 21st Vertebrate Pest Conference, Lincoln, NE

Mealy Mountains Parks in the Works; Traditional Land Uses to Continue

The Honourable Jim Prentice, Canada's Environment Minister and Minister Responsible for Parks Canada, and the Honourable Charlene Johnson, Newfoundland and Labrador's Minister of Environment and Conservation, announced on Feb 5th, 2010 that they have agreed to take the necessary steps to establish a new National Park Reserve in the Mealy Mountains area of Labrador. The park reserve will protect roughly 10,700 square kilometres, which will make it the largest National Park in eastern Canada. The Provincial Government also announced its intent to establish a Waterway Provincial Park to protect the Eagle River, adjacent to the proposed National Park Reserve. Together, these areas will protect over 13,000 square kilometres.

The governments recognized both the ecological and cultural importance of the area in this International Year of Biodiversity, and Minister Prentice said "We are committed to moving forward in a way that recognizes and respects the traditional connections people have with the land." Minister Johnson noted "This initiative demonstrates our understanding of the importance of our ecosystems and our commitment to biodiversity conservation. We are very happy to work toward establishing this national park in our province, and we are most thankful to the steering committee that helped make this a reality."

The boundary for the National Park Reserve has been established, along with a conceptual boundary for an adjacent Waterway Provincial Park. The ministers accepted the consensus recommendations of the Steering Committee for the National Park Feasibility Study (begun in March 2001), and signed a memorandum of understanding outlining the next steps the two governments will take to establish the National Park Reserve,



Gary Pittman, Parks Canada Photo

including the negotiation of a federal-provincial land transfer agreement.

Additionally, a Waterway Provincial Park will encompass some 3,000 square kilometres of wilderness and include almost the entire length of the Eagle River from the headwaters to the sea. When established, the two Mealy Mountains parks will protect a stunning array of boreal ecosystems and wildlife, along with landscapes of great cultural significance.

Consultations with Aboriginal groups will continue throughout the National Park Reserve establishment process. As recommended by the steering committee for the feasibility study, traditional land use activities by Labradorians will be permitted to continue within the National Park Reserve, managed to emphasize ecological integrity and conservation measures.

Nature Canada congratulated the governments, noting that the eastern population of Harlequin Duck nests along wild rivers throughout the region and the Mealy Mountain population of 2000 boreal Woodland Caribou will gain urgently needed protection of its habitat within the national park's boundaries. They added "Caribou need large areas of undisturbed old growth woodland, as these forests

not only provide a necessary food source, but protection from predators such as wolves and bears."

Modified from Press Releases by NL Environment and Conservation, Nature Canada Feb 5, 2010

ASFWB SOCIETY NEWS

Kouchibouquac AGM

The 46th Annual General Meeting of the Atlantic Society of Fish and Wildlife



Biologists was held October 20th – 22nd, 2009 at Kouchibouguac National Park, NB with 52 wildlifers in attendance. Host Eric Tremblay and a crew of helpers made sure everything rolled smoothly along, from gray jays outside the door to stimulating presentations inside, including a number of outstanding student presentations. Eddie Halfyard of Dalhousie University was awarded the prize for best student presentation. Moose burgers and alternative vegetarian foods were available on “day one”. As promised there was time for biking on trails and an opportunity to explore some of the Park at the end of each day. At the silent auction and banquet, \$ 681.00 was raised for the ASFWB Donald G Dodds Scholarship at Acadia University.

2010 ASFWB AGM in Corner Brook, NL



The Newfoundland and Labrador Fish and Wildlife Division will be hosting the 47th ASFWB Annual General Meeting in October 2011 in Corner Brook NL. Cas Dyke, Vice-President, Program, notes that details are still being firmed up, but basic information will be made available shortly. Feel free to contact Cas at CasidheDyke@gov.nl.ca should you like to help out or find out more.

ASFWB Research Grant Awarded

Following a request for submissions on the ASFWB website, the Executive provided \$500.00 to Edmund Halfyard, PhD candidate at Dalhousie University, to assist in his project to use acoustic telemetry to assess migration and survival in Atlantic Salmon.

The Proposal:

Atlantic salmon populations of the Northwest Atlantic Ocean have experienced reduced abundance, with many populations now extirpated. Identifying the cause(s) is difficult as the plastic life history of anadromous salmon encompasses multiple ecosystems; from first order streams to the vast expanse of the North Atlantic Ocean. Of the hypotheses most likely to explain these declines, issues affecting salmon during the marine phase of their lifecycle are most widely accepted. Supporting this assumption are the major declines in smolt-to-spawner (marine) survival rates. Our project is a four part study to examine salmon smolt survival and ecology during the early phase of marine migration, examine what influences early phase survival, how early phase survival affects the remainder of



Biologist Eddie Halfyard prepares to surgically implant an acoustic tag into a wild Atlantic salmon smolt. In this typical set-up for surgery, smolts are held in a streamside flow-through tank (bottom left) until surgery.

smolt-to-spawner survival, and also to look for a strategy to offset low marine return rates.

Technological advances now permit the tracking of aquatic animals on scales never before possible. To examine the factors affecting salmon at sea, a sound understanding of their spatial and temporal ecology within the marine environment is critical.

First, we will use acoustic telemetry to follow salmon smolts as they leave rivers, migrate through estuaries and begin their journey along the coast. We hope to expand our understanding of their migration patterns, habitat selection, marine ecology and most importantly, the timing and location of mortality. The study location we've chosen is the Southern Upland (SU) of Nova Scotia. This area has been heavily impacted by the effects of acid precipitation and as a result, many populations within SU rivers are now extirpated. Furthermore, the SU salmon are currently being assessed by COSEWIC.

Secondly, we will add the data we collect from the SU to the existing body of salmon smolt telemetry data and con-



Deploying an acoustic receiver in a Southern Upland estuary

struct meta-analytic models describing how geographical, physical and biological correlates affect salmon survival through estuaries and in the coastal near-shore.

The third part of our research will combine estimates of survival during the early phase of marine migration with estimates of smolt-to-spawner survival (return rates) to examine how the former influences the latter.

Finally, our study will examine the behaviour, survival, habitat selection and ecology of salmon which have been subjected to a grow-out operation. We will also examine the above parameters for wild salmon to investigate differences between the two groups. Grow out operations, unlike traditional hatchery practices, capture wild salmon smolts and rear them to maturity in captivity. This directly off-sets low



marine survival and reduces domestication-related loss of fitness at the juvenile stage. Furthermore, the subsequent progeny are exposed to wild conditions from the egg-stage onward. While loss of selection in the marine environment is an inevitable downside of this program, under current marine mortality regimes, an argument can be made that marine mortality is largely stochastic, that fitness-related selection has been reduced and that the

effects of a grow-out operation are therefore dampened.

In summary, our research aims to examine early-phase salmon migration, what influences survival during this period, and how overall survival is affected. We'll also evaluate the potential of programs designed to offset low marine survival.

Eddie Halfyard

David J Cartwright Memorial Scholarship, UNB

The scholarship is pooled with many others in the UNB Trust and Endowment Fund. After the market plunged in 2008 the fund was at \$144 million but, by Dec 31, 2009, it had risen to \$168 million. Indeed, the fund lost only 1.37 % over the 2 years, and the University has continued to award their scholarships at previous levels. This year the recipient was Lacey O'Toole of the Biology Department and she expresses her appreciation below:

Feb 18th, 2010

Atlantic Society of Fish and Wildlife Biologists

C/o Gerald Redmond, Keswick Ridge NB

Dear Mr Redmond,

This past summer I was notified that I was the recipient of the David J Cartwright Memorial Scholarship for the 2009-10 academic year. I wanted to thank you for your contribution to the award and to the University of New Brunswick.

I am currently a fourth year student in the Bachelor of Science program and am doing my Honours in Biology and a minor in Wildlife Conservation. I am from St John where I graduated sixth in my class with High Honours from Saint Malachy's Memorial High School. Throughout my years at university I have been a member of the Biology,

Wildlife and Health Science Societies. I have worked at St. John Animal Hospital to gain veterinary-related experience and have also been a Laboratory and Teaching Assistant for the first year Biology labs at UNB.

I chose to attend UNB so that I could receive an excellent education while feeling part of a tight knit community. Attending UNB has aided in me in achieving my future goal of being accepted into the Doctor of Veterinary Medicine Program offered at UPEI. If however, I do not gain admittance into the DVM program, I hope to pursue Graduate Studies at UNB to further my education.

Receiving the Alumnae Undergraduate Scholarship has immensely helped in achieving my goals because it has eased my financial responsibilities and has enabled me to enjoy and concentrate more time on my studies.

Sincerely

Lacey O'Toole

St John, NB

RECENT LITERATURE:

- Beazley, Karen, Helen Kwan, and Tony Nette. 2008. An examination of the absence of established moose (*Alces alces*) populations in southeastern Cape Breton Island, Nova Scotia, Canada.. *Alces* 44: 81-100.
- Berninger, Kati , Daniel Kneeshaw, Wiktor Adamowicz and Christian Messier. 2009. Effects of Showing Forest Simulation Results on SFM Preferences of Forest Users in Central Labrador. *The Open Forest Science Journal* 2: 9-16.
- Bridger, Kimberly E., Eric M. Baggs and Jean Finney-Crawley. 2009. Endoparasites of the Coyote (*Canis latrans*), a Recent Migrant to Insular Newfoundland. *Journal of Wildlife Diseases* 45(4):1221-1226
- Brown, T.M., Sheldon, T.A., Burgess, N.M., and Reimer, K.J. 2009. Reduction of PCB contamination in an Arctic coastal ecosystem: a first step in assessing ecosystem recovery after the removal of a point source. *Environ. Sci. Technol.* 43: 7635-7642.
- Burgher-MacLellan KL, Williams GR, Shutler D, MacKenzie K, Rogers REL, 2010. Detection of the microsporidian parasites *Nosema apis* and *Nosema ceranae* in *Apis mellifera* using SYBR Green I real-time PCR with melting curve analysis. *Can Ent: accepted Feb 2010*.
- Chin KS, and PD Taylor. 2009. Interactive effects of distance and matrix on the movements of a peatland dragonfly. *Ecography* 32:715-722.
- Cole HA, SG Newmaster, L Lanteigne and D Pitt. 2008. Long-term outcome of precommercial thinning on floristic diversity in north western New Brunswick, Canada. *iForest* 1: 145-156 [online: 2008-11-25] URL:
- Delgado-Fernandez, Irene, Robin Davidson-Arnott and Jeff Ollerhead. 2009. Application of a Remote Sensing Technique to the Study of Coastal Dunes. *Journal of Coastal Research* 25 (5):1160-1167
- Dempson , Brian, Victoria A. Braithwaite , Denis Doherty , and Michael Power. 2010. Stable isotope analysis of marine feeding signatures of Atlantic salmon in the North Atlantic. *ICES J. Mar. Sci.* 67: 52-61.
- Evers, D.C., Mason, R.P., Kamman, N.C., Chen, C.Y., Bogomolni, A.L., Taylor, D.L., Hammerschmidt, C.R., Jones, S.H., Burgess, N.M., Munney, K., and Parsons, K. 2008. An integrated mercury monitoring program for temperate estuarine and marine ecosystems on the North American Atlantic Coast. *EcoHealth*, 5: 426-441.
- Farid, HA, P Rupasinghe, JL Mitchell and K Rouvinen-Watt. 2010. A survey of Aleutian mink disease virus infection of feral American mink in Nova Scotia. *Canadian Veterinary Journal* 51(1):75-77
- Forzán, M.J., Vanderstichel, R.V., Melekhovets, Y. F., and McBurney, S. 2010 Trichomoniasis in finches from the Canadian Maritime provinces, an emerging disease. *Canadian Veterinary Journal*, (in press)
- Gaston, Anthony J., Douglas F. Bertram, Andrew W. Boyne, John W. Chardine, Gail Davoren, Antony W. Diamond, April Hedd, William A. Montevecchi, J. Mark Hipfner, Moira J.F. Lemon, Mark L. Mallory, Jean-François Rail and Gregory J. Robertson. 2009. Changes in Canadian seabird populations and ecology since 1970 in relation to changes in oceanography and food webs . *Environmental Reviews* 17: 267-286
- Gibson, A. Jamie F; Ross A. Jones and Heather D. Bowlby 2009. Equilibrium Analyses of a Population's Response to Recovery Activities: A Case Study with Atlantic Salmon. *North American Journal of Fisheries Management* 29:4, 958-974
- Gibson, R. J. and J. Erkinaro. 2009. The influence of water depths and inter-specific interactions on cover responses of juvenile Atlantic salmon. *Ecology of Freshwater Fish* 18 (4):629-639
- Gilliland, Scott G. and Gregory J. Robertson 2009. Composition of Eiders Harvested in Newfoundland. *Northeastern Naturalist* 16 (4), 501-518
- Goodale, M.W., Evers, D.C., Mierzykowski, S.E., Bond, A.L., Burgess, N.M., Otorowski, C.I., Welch, L.J., Hall, C.S., Ellis, J.C., Allen, R.B., Diamond, A.W., Kress, S.W., and Taylor, R.J. 2008. Marine foraging birds as bioindicators of mercury in the Gulf of Maine. *EcoHealth*, 5: 409-425.
- Hainstock MH, Smith MC, Carr J, Shutler D, 2010. Parental investment and brood value in tree swallows, *Tachycineta bicolor*. *Behaviour* 147:441-464.
- Harrison, K J. 2010. Forest disease records on white pine in Atlantic Canada: 1950 to 1996. *Forestry Chronicle*: Vol 85 (4): 604-608.
- Heard, Stephen B, Linley K Jesson and Kirby Tulk. 2009. Population genetic structure of the Gulf of St Lawrence aster, *Symphiotrichum laurentianum* (Asteraceae), a threatened coastal endemic. *Botany* 87: 1089-1095.

- Hecht, Anne, and Scott M Melvin. 2009. Population trends of Atlantic Coast Piping Plovers, 1986-2006. *Waterbirds* 52(1): 64-72.
- Jardine, Timothy D., Karen A. Kidd and Richard A. Cunjak. 2009. An evaluation of deuterium as a food source tracer in temperate streams of eastern Canada. *Journal of the North American Benthological Society* 28 (4), 885-893
- Jessop, B.M.. 2010. Geographic effects on American eel (*Anguilla rostrata*) life history characteristics and strategies *Can. J. Fish. Aquat. Sci.* 67(2): 326—346
- Jung, Thomas S., Tony E. Chubbs, Colin G. Jones, Frank R. Phillips and Robert D. Otto. 2009. Winter Habitat Associations of a Low-Density Moose (*Alces americanus*) Population in Central Labrador. *Northeastern Naturalist* 16 (3), 471-480
- Lavers, J. L., I. L. Jones, G. J. Robertson, and A. W. Diamond. 2009. Contrasting population trends at two razorbill colonies in Atlantic Canada: additive effects of fox predation and hunting mortality? *Avian Conservation and Ecology* 4(2): 3. <http://www.aceeco.org/vol4/iss2/art3/>
- Livezey, Kent B., Mark F. Elderkin, Peter A. Cott, Jared Hobbs, and John P. Hudson. 2008. Barred Owls Eating Worms and Slugs: The Advantage in not Being Picky Eaters. *Northwestern Naturalist* 89(3):185-190. 2008
- King, Stanley D. and David K. Cone. 2009. Morphological and Molecular Taxonomy of a New Species of *Fundulotrema* and Comments on *Gyrodactylus stephanus* (Monogenea: Gyrodactylidae) from *Fundulus heteroclitus* (Actinopterygii: Cyprinodontiformes) in Nova Scotia, Canada. *Journal of Parasitology* 95 (4), 846-849
- Kraichak, Ekaphan, Ralph Pope and Nathaniel T Wheelwright. 2009. Habitat associations of macrolichens on a boreal island in the Bay of Fundy, New Brunswick, Canada. *The Bryologist* 112(4):762-772.
- Lei, Xiangdong, Weifeng Wang, and Changhui Peng. 2009. Relationships between stand growth and structural diversity in spruce-dominated forests in New Brunswick, Canada. *Canadian Journal of Forest Research* 39 (10):1835-1847.
- MacKinnon, Colin M and Andrew C Kennedy. 2008. Canada Lynx, *Lynx canadensis*, use of the Chignecto Isthmus and the possibility of gene flow between populations in New Brunswick and Nova Scotia. *Can Field-Naturalist*: 122(2): 166-168.
- McAlpine, Donald, James D Martin and Cade Libby. 2008. First Occurrence of the Grey Fox, *Urocyon cinereoargenteus*, in New Brunswick: a climate change mediated range expansion? *Can Field-Naturalist*: 122(2): 169-171.
- Moss, Melissa and Luise Hermanutz. 2009. Postfire seedling recruitment at the southern limit of lichen woodland. *Can. J Forest Research* 39(2):2299-2306
- Olson, Amber, Jennifer Paul and Joanna R. Freeland 2009. Habitat preferences of cattail species and hybrids (*Typha* spp.) in eastern Canada. *Aquatic Botany* 91 (2): 67-70.
- Palstra, Friso P. and Daniel E. Ruzzante 2010 A temporal perspective on population structure and gene flow in Atlantic salmon (*Salmo salar*) in Newfoundland, Canada. *Can. J. Fish. Aquat. Sci.* 67: 225–242.
- Pérot, Aurore, and Marc-André Villard. 2009. Putting Density Back into the Habitat-Quality Equation: Case Study of an Open-Nesting Forest Bird. *Conservation Biology* 23(6):1550-1557
- Pollock, B., Penashue, B., McBurney, S., Vanleeuwen, J., Daoust, P.-Y., Burgess, N.M., and Tasker, A.R. 2009. Liver parasites and body condition in relation to environmental contaminants in caribou (*Rangifer tarandus*) from Labrador, Canada. *Arctic*, 62: 1-12.
- Scheuhammer, A.M., Basu, N., Burgess, N.M., Elliott, J.E., Campbell, G.D., Wayland, M., Champoux, L., and Rodrigue, J. 2008. Relationships among mercury, selenium, and neurochemical parameters in common loons (*Gavia immer*) and bald eagles (*Haliaeetus leucocephalus*). *Ecotoxicology*, 17: 93-101.
- Shier, C. J. and M. S. Boyce 2009. Mink Prey Diversity Correlates with Mink—muskrat Dynamics. *Journal of Mammalogy* (4), 897-905
- Shutler D, Lowe AG, Robinson SR, 2010. Relationships between leucocytes and *Leucocytozoon simondi* in mallards, *Anas platyrhynchos*. *Comp Biochem Physiol*: *in press*.
- Steeves, R, V Nazari, JF Landry, and CR Lacroix. 2008. Predispersal seed predation by a coleophorid on the threatened Gulf of St Lawrence Aster. *Can Entomologist* 140: 297-305.
- Tittler, Rebecca, Marc-André Villard and Lenore Fahrig. 2009 How far do songbirds disperse? *Ecography* 32 (6):1051-1061

Voss M, Shutler D, Werner J, 2010. A hard look at blood-sampling of birds. *Auk* 127: tentative acceptance Sep 09.

Williams GR, Shutler D, Little CM, Burgher-MacLellan K, Rogers REL, 2010. The microsporidian *Nosema ceranae*, the antibiotic Fumagilin-B®, and western honey bee (*Apis mellifera*) colony strength. *Apidologie*: accepted Jan 2010.

Williams GR, Shutler D, Rogers REL, 2010. Effect at temperate latitudes of indoor versus outdoor overwintering on fumagillin-treated microsporidian parasites *Nosema ceranae*, and on western honey bee (*Apis mellifera*) colony mortality. *J Invertebr Pathol*: accepted Jan 2010.

Chance of a Lifetime

Have you been referring to the willow as *Salix sp.* for many a year? An opportunity provided by the New Brunswick Botany Club in association with Nature NB is too good to miss. Read on!

Date : May 22, 2010 (Saturday) Topic : Willow Walk

Leader : Rick Fournier Location : Gagetown, along the Saint John River, Start Time : 8 : 30 am

Come and learn how to identify the 22 willow species in New Brunswick using leaves, flowers and fruits. This is an activity during the Nature NB Annual General Meeting. You must register at www.naturenb.ca in order to participate. Degree of difficulty : easy. ("Easy" probably refers to the walking, not to identifying willows. Nevertheless, it seems one can learn 22 species in one day!)

You should be a member of the club to attend. Either bring \$10 to the outing or send it in advance to NB Botany Club c/o Rick Fournier, Faculty of Forestry, U de M, Edmundston Campus, 165 Hebert Blvd, E3V 2S8.



Pussy Willow, male catkins (Martin Turgeon Photo)

The Botany Club has lined up several good outings over the summer. Here is a trip where it may pay to carry a fishing rod.

Crocker Lake and Big Plain

(NB Atlas page 42 : N 46.89 W 65.73) Leader : Rick Fournier Time : 10 am (meeting place to be determined)

Crocker Lake and Big Plain are situated near the confluence of the Southwest and Northwest Miramichi Rivers in wet coniferous forests. Access to the two sites will be from Route 8.

Degree of difficulty : moderate to hard. Pre-registration for this event would be appreciated, please contact Rick Fournier (RFOURNIE@UMCE.CA).

Maritimes Breeding Bird Atlas Monitors Biodiversity

by Becky Whittam & Becky Stewart
Bird Studies Canada

Bird species are a conspicuous and integral component of Canadian biodiversity. Maintaining healthy bird populations is important to maintaining healthy ecosystems as well as the numerous ecological processes of which birds are a part. Over the past 40 years, bird populations have undergone severe declines in various parts of the country, primarily because of habitat loss and some resource use practices.

Knowing where birds are, and in what abundance, is a crucial first step to conserving biodiversity. This step is being taken in the Maritimes via the second Maritimes Breeding Bird Atlas. Between 2006 and 2009, with one year of field work remaining in 2010, over



Bank Swallow Nest

1,000 volunteers, many of them members of Maritime birding and naturalist societies, have amassed a large and comprehensive dataset of breeding bird distribution and abundance. The information contained in the Atlas database has enormous potential to inform and direct conservation action, including biodiversity conservation. For example, by comparing with data from the first Maritimes Breeding Bird Atlas, which took place between 1986 and 1990, Atlas data has already informed the 2010 assignment of General Status of Wildlife ranks for birds in the three Maritime provinces (see www.wildspecies.ca/). Similarly, Maritimes Breeding Bird Atlas data played a crucial role in the assignment of a recommended status of Threatened by the Committee on the Status of Endangered Wildlife in Canada for the Bicknell's Thrush, due to a 65% loss in distribution of this species over the 20 years between Atlases. Finally, an analysis of the change in the probability of detection of bird species between the first and second Atlases has recently been incorporated into the Bird Conservation Region planning process, led by Environment Canada, for the three Maritime provinces. These Bird Conservation Region plans will guide many processes over the next

decades, with a goal of conserving the diversity of bird populations in the Maritimes.

The Atlas is also tasked with making other potential users aware that this valuable and comprehensive database exists. In 2010, the Maritimes Breeding Bird Atlas will complete its final year of data collection and begin the process of developing and implementing a communications strategy to disseminate Atlas information to the greater Maritimes community in a way that will provide individuals and agencies with the much-needed tools to make informed management decisions and advance conservation action to maintain ecosystems and bird species diversity. For example, Atlas staff are working with the forest industry to provide lists of bird species as well as specific locations of species- at -risk that have been found by Atlassers on relevant land management units (including provincial crown forest leases and private landholdings). Ideally, a link will be made between bird abundance and presence/absence data from the Atlas with habitat at the landscape scale in order to examine impacts of habitat change on Maritime bird populations. This information will ultimately help companies develop long-term management plans that include a consideration of habitat requirements of Maritime bird populations.

The Atlas is a volunteer-driven project, and as such, is always looking for new volunteers. In particular, the Atlas needs records of bird species that, in the first four years, have largely been under-represented due to a focus on point counts (which are now completed). Under-represented species guilds include ducks, marsh birds, and raptors. You can visit the Atlas website www.mba-aom.ca to learn more about the project, to sign up as a volunteer, and to learn what 10 x 10 km squares most need your help, or contact the Atlas Coordinator, Becky Stewart (email bstewart@bsc-eoc.org , toll-free phone 1-866-5-ATLAS-5).

Improving Moose Management in NL

March 22, 2010

The Newfoundland and Labrador Provincial government has decided to abandon the principle of managing moose on the basis of maximum sustainable yield and will instead maximize the number of moose harvested in insular NL..



(Emilie Kessler Photo)

One goal is to reduce the number of moose vehicle accidents. The addition of new resident licences, along with the extension of the hunting season, will also help address concerns regarding forest health in remote regions of the province. Increased hunting pressure in these areas will assist in controlling habitat degradation caused by the moose over-browsing forest vegetation. Environment and Conservation Minister Johnson also confirmed that Sunday hunting will begin on the first Sunday in October. In the western/central Newfoundland Moose Management Areas (MMAs), the season will now close January 2. In the eastern MMAs, the season will now close January 23.

“Overall, island moose populations are healthy, with total island estimates at approximately 120,000,” said Minister Johnson. “We want to ensure that we continue to employ the proper measures to balance the sustainability of this species with the social, cultural and economic status that it has in our province, particularly in rural areas. That is why we

have also made a commitment to develop a five-year moose management plan to assist in our efforts to continue to effectively manage moose populations on the island.” Moose are an introduced species on The Rock.

Earlier in 2010 there was a verbal announcement by the Superintendent Jeff Anderson of Gros Morne National Park that harvest would be allowed in the Park to reduce moose browsing impacts on vegetation, the actual ways and means to be determined.

Sources: Modified from NL Press Release

plus CBC Radio report on Gros Morne

White-Nose Syndrome Spreads To Canada

by Lynne Burns

April 7, 2010

With winter winding down, recent bat hibernacula surveys have confirmed White-Nose Syndrome (WNS) in Ontario. As of April 1, seven sites in five counties of southern Ontario have confirmed cases. The Ontario Ministry of Natural Resources will continue monitoring for the syndrome until bats emerge from hibernation for the summer in May. Monitoring in neighbouring Quebec has determined the spread to the Outaouais and Temiskaming regions over the 2009-2010 winter season. WNS is a condition named for the appearance of a white fungus that grows on the face, ears, and wings of hibernating bats. Other symptoms include poor body condition (emaciation and dehydration), and changes in the behaviour of affected bats including flying during the daylight in winter. The spread to Ontario is not unexpected as WNS was first discovered just over the border at a cave in Albany, New York. Since the initial finding in 2006, WNS spread south to Tennessee, east to New Hampshire and now north to Ontario and Quebec. For general information on the syndrome and protocols to help reduce the spread, see the following website maintained by the NE

US Fish and Wildlife Service at http://www.fws.gov/northeast/white_noise.html . Also, visit the Ontario MNR site for more local information <http://www.mnr.gov.on.ca/en/Business/FW/2ColumnSubPage/278166.html>

More on NRC Press

mostly verbatim from website

On March 25, 2010, a new corporation was born, when "Canadian Science Publishing" received its incorporation papers from Corporations Canada. This step paves the way for the new company to prepare for the transfer of the NRC Research Press titles and publishing operations later in the year. The trade name "NRC Research Press" will be licenced to the company by the National Research Council of Canada at that time. At present it is still possible to access current NRC Journals online.

NRC Research Press has embarked on an ambitious project to move decades of paper copies of its journals from library shelves to the World Wide Web. As scientists and engineers turn more and more to the Web for information, the legacy of past research can be forgotten. To prevent this from happening, the paper articles are being scanned into a readable, searchable format (PDF), while the abstracts and tables of contents will be compiled in HTML format. The result will be a wealth of information that can be found through current search engines and reference links on other sites, thanks to our partnerships with the major players in this field.. Back issues of *Botany*, the *Canadian Journals of Fisheries and Aquatic Sciences*, *Forest Research*, and *Zoology*, among others, are being made available.

Watch this spring for 57 piping plovers colour banded and flagged in the Bahamas last winter. They are suspected to be Atlantic Canada breeders.

<http://cvwofirstlandingspk.blogspot.com/2010/02/piping-plovers-of-bahamas.html>



Look! Baby Kittens!

NS Large Land Purchase

Abbreviated from NS Gov't Press Release, March 24th, 2010

Nova Scotia has finalized its unprecedented Large Land Purchase Program, acquiring in this fiscal year more than 140,000 acres of land -- equivalent to one-and-a-half times the size of Kejimikujik National Park. The Program, valued at \$75 million, was a highlight of the 2009 Budget. It was established to enrich Nova Scotia's environment, boost the economy and help the province reach its goal of protecting 12 per cent of Nova Scotia's land mass by 2015.

"I'm proud to say that thanks to these strategic and impressive land purchases, future generations of Nova Scotians will have significantly more land to enjoy and government will have further opportunities to grow the economy," said John MacDonell, Minister of Natural Resources. "In the span of just

a few months we seized rare opportunities to put land, some of it high-conservation quality, back in the hands of Nova Scotians at a great price."

The most significant final purchases include nearly \$2.5 million for about 4,000 acres of land from J.D. Irving Limited in Yarmouth, Shelburne and Annapolis counties and nearly 10,000 acres of NewPage land in Antigonish, Guysborough, Pictou, Inverness and Victoria counties with \$5 million it previously loaned the company. A highlight of that agreement is a parcel at Kelly's Mountain in Cape Breton which has cultural and heritage significance to the Mi'kmaq and the province.

"Once these lands are reviewed through our public consultation process, they will move us significantly closer to our provincial goal of protecting 12 per cent of Nova Scotia's land base by 2015," said Sterling Belliveau, Minister of Environment. "This Large Land Purchase Program has been very successful for conservation in our province."

The province also invested \$1.39 million through the Forestry Transition Land Acquisition Program to buy 2,324 acres of land in Pictou, Halifax, Antigonish, Guysborough and Cumberland counties.

All land purchases are consistent with the Canada-US Softwood Lumber Agreement. In instances where land is

being purchased from a company that ensures that the price paid is no higher than fair market value. Maps of the land purchases are available at www.gov.ns.ca/natr

St Marys Student Combines Chemistry and Wildlife Biology

By Lynne Burns

It all began at the University of New Brunswick with completion of a certificate in Health, Safety and Environmental Processes. Cynthia Kendall moved around with her military family when she was growing up, but returning to her Fredericton hometown inspired her eclectic education. She began studies toward a Bachelor of Science degree by spending a year at the University of Southern Maine in Portland, cultivating an interest in environmental toxicology. Cynthia returned to the Maritimes and in 2008 completed her Environmental Science degree, (concentrating on Chemistry) at Dalhousie University in Halifax, NS. Her Honours thesis is titled "A comparison of the occurrence of tributyltin-induced imposex in dogwhelks (*Nucella lapillus*) in Halifax Harbour (1995-2006)".

Onward and upward! In 2009, Cynthia initiated work to link her interests in environmental chemistry with wildlife biology in her Masters work at Saint Mary's University in Halifax. Her thesis investigation focuses on characterizing the spatial patterns of breakage and chemical composition of incisor teeth in Atlantic Canadian moose. Building on a study initiated by MSc student Michael Clough at Saint Mary's (2005-2007), which quantified tooth breakage from moose populations ranging from the Yukon and Alaska to the north-eastern United States and Atlantic Canada, Cynthia's work focusses in on Atlantic Canada with larger sample sizes across all management zones.

To generate a measure of "incisal depth", Cynthia has



Caption: Moose teeth in epoxy resin



Cynthia Kendall (Erik Mjanes Photo)

quantified breakage and wearing in approximately 4500 moose incisors collected from hunters in Newfoundland, New Brunswick and Nova Scotia. By analysing tooth breakage as a function of the age of the animal, she has determined that areas in Cape Breton and Newfoundland have much higher breakage frequencies relative to other areas sampled throughout North America. In November 2009, Cynthia travelled to the Inco Innovation Centre at Memorial University in St. John's, NL. There she used Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICPMS) to quantify a wide array of chemical elements present in moose teeth, by region. Cynthia ran an impressive 900 teeth in just 9 days earning her the title of "Laser-Master" among her lab-mates. She is currently analysing these chemical data and hopes to supplement them with micro-hardness tests on a subset of the moose teeth.

While at Saint Mary's, Cynthia sat on the organising committee for the Northeastern Biological Graduate Student Conference which was held from March 27th-29th, 2009. She currently co-organizes the Biology Department seminar series with another graduate student.

Cynthia studies in the Applied Science program at Saint Mary's and is conducting a directed studies course with Environment Canada in Dartmouth, Nova Scotia. This collaboration relates back to Cynthia's interest in environmental toxicology that was fostered by her Honours and undergraduate work. For her Master's work, Cynthia was awarded a 1-year National Science and Engineering Research Council Canada Graduate Scholarship at the Master's level. She anticipates graduating in the fall of 2010.

Newfoundland and Labrador Government Calls on Quebec Innu to Respect Conservation Principles

The recurring threat to the Red Wine Caribou Herd of Labrador by Quebec Innu harvesting caribou in its core range prompted the Government of Newfoundland and Labrador to take the unusual step on Sunday, Feb 21st, 2010 of publicly calling upon the Quebec Innu to put conservation first and politics second, and to withdraw from a closed hunting zone of Labrador that is home to the threatened Red Wine caribou herd. Information collected by the Department of Natural Resources indicated that approximately 100-150 Innu hunters from Quebec were camped in an area populated by the George River caribou herd. It was however closed to hunting because it is the core range of the threatened Red Wine Caribou herd.

"We ask the Quebec Innu leadership to put conservation practices first and instead of risking killing the last of the Red Wine caribou to make a political point, accept our offer to sit down and work through these conservation issues as leaders do," said the Honourable Felix Collins, Minister of Justice and Attorney General. "It will be truly devastating if this action by the Quebec Innu wipes out this protected woodland herd, but those most negatively impacted by this blatant disregard for conservation principles will be future generations, for whom the Red Wine caribou will exist as nothing

more than a picture in a history book." Plain speaking indeed!

The protected Red Wine caribou herd is intermingled with the George River animals at this time of year and animals from the two herds are not visually distinct. Therefore any hunting in this area is a direct threat to the remaining Red Wine caribou. Conservation officers with the Department of Natural Resources confirmed that some animals have been killed, however, it is not possible to determine at this time if the animals were George River caribou or the protected Red Wine caribou.

The Provincial Government has made two written requests to Chief Georges-Ernest Gregoire of the Uashat Mak Mani-Utenam so far this year to come to the table and open a dialogue on conservation rather than take to the land and hunt an endangered herd. Government officials also attempted to outline to a group of Quebec Innu hunters on February 20th the caribou management zones that were open to legal hunting and populated with caribou. Quebec Innu indicated that their presence was to protest the initialing that week of the formal documents for the New Dawn Agreement reached between the Government of Newfoundland and Labrador and the Labrador Innu Nation.

"Killing the last of the Red Wine caribou herd is not the way to go to raise issues of concern," said Minister Collins. "I once again call upon the Quebec Innu leadership to work with us in a collaborative fashion for the conservation of this herd."

Conservation officers with the Department of Natural Resources said evidence would be collected and charges laid, where warranted and when safe to do so, in the event of illegal activities.

Source: Modified from Gov't of NL Press Release, Feb 21, 2010



Bicknell's Thrush (T. Brandt Ryder Photo)

Public Learn to Help Bicknell's Thrush

From BSC News, 23 February 2010

Bird Studies Canada's Atlantic Canada Program Manager Becky Whittam recently gave a presentation in Plaster Rock, NB for 19 staff and members of Acadian Timber's Tobique Forest Advisory Committee. The talk, "Forest Management Options for the Bicknell's Thrush: Reducing Incidental Take of a Bird Species at Risk," included information about habitat requirements of the Bicknell's Thrush, an elusive songbird that nests in the high elevation coniferous forests of New Brunswick. The Bicknell's Thrush, federally listed by COSEWIC as a threatened species, uses regenerating industrial private and public forests about five to fifteen years post-harvest, coinciding with the period during which pre-commercial thinning is often scheduled.

Whittam presented the current habitat model for this species in NB, including specifics on the age and composition of industrial stands coinciding with the habitat model. Her presentation covered best management practices



Bicknell's habitat (Greg Campbell Photo)



(David Elliot Photo)

<http://www.birdscanada.org/library/ACHELPforestflyer-en.pdf> to reduce incidental take of this species, and long-term forest management options to maintain its habitat. She also raised awareness about how to identify this species while working in the forest. The Tobique Forest Advisory Committee consists of representatives of trapping, ATV, and snowmobile clubs, local town councils, forest industry, the NB DNR, naturalists, and conservationists.

Whittam gave a similar talk to New-Page, Port Hawkesbury in November 2009 concerning Bicknell's Thrush in Cape Breton.

Al Hanson - At the Landscape Level

Dec 4th, 2009

Dr. Alan Hanson has been appointed to the position of Head, Landscape Conservation Unit, Canadian Wildlife Service (CWS), Sackville NB effective immediately. Al received his BSc. in Biology from Mount Allison University, and his MSc. and Ph.D degrees from the University of Western Ontario. He



started his career as a wildlife biologist with Environment Canada - CWS as a summer student in 1980, working on forestry habitat issues and coyotes. Al joined the CWS habitat program in Sackville as a full time habitat research biologist in 1990. Since then, he has been involved in numerous habitat research, management, policy and conservation initiatives with a wide range of partners. As Unit head, Landscape Conservation, Al is now responsible for the delivery of habitat conservation, landscape monitoring, and landscape planning programs including stewardship promotion and funding, protected areas planning and management, wetland and habitat policy, and the Eastern Habitat Joint Venture.

Bird Studies Canada and Acadia Establish Chair of Ornithology

Abbreviated From BSC News
8 January 2010 -

After a period of 2 ½ years at Bird Studies Canada's Port Rowan headquarters as Chief Scientist, Dr. Phil Taylor has returned to his position as a professor at Acadia University. Through an arrangement negotiated between the University and BSC, he will continue his affiliation with BSC programs and staff through the establishment of the BSC Chair of Ornithology at Acadia, a unique arrangement for both institutions.

Dr. Taylor will continue to undertake research and graduate teaching and continue programs at BSC in Port Rowan, spending part of each year there. He will continue to advise on BSC's Maritime programs.

New Staff At Atlantic Canada Conservation Data Centre



Sarah Robinson is now the landscape ecologist at the Atlantic Canada Conservation Data Centre in Sackville, NB. She completed her post secondary education in Halifax with a BSc in environmental studies from Saint Mary's University and a MSc in biology from Dalhousie University. As an undergrad, Sarah studied the regeneration of an urban forest in Halifax after Hurricane Juan in 2003; as a graduate she described urban plant communities in vacant and derelict areas around Halifax. While obtaining her education, Sarah has been involved with a variety of other projects including field work in salt marshes of the Bay of Fundy, coastal sand dunes in PEI National Park, and coastal barrens around Nova Scotia. She was also involved with the Green Roof Testing Facility at Saint Mary's. She is currently developing community classifications for non-forested ecosystems in the Maritimes.



John Klymko recently became the Zoologist at the Atlantic Canada Conservation Data Centre in Sackville, NB. He attended the University of Guelph for his BSc in biological sciences. He then stayed on to complete an MSc in entomology, studying Dipteran taxonomy. This involved revising the genus *Curtonotum* (Family Curtonotidae), and researching Lonchopterid flies (describing three new Canadian species). Originally from Kitchener, Ontario, John has worked as a naturalist for Ontario Provincial Parks and a biologist for Jacques Whitford. He moved to Sackville in fall 2009, and is leading the Maritimes Butterfly Atlas and several other projects related to dragonflies, butterflies, bees and flower flies.

Ducks Unlimited Canada Announces Restructuring in Atlantic Canada

Ducks Unlimited Canada (DUC) recently announced a series of promotions and structural changes to their conservation program in Atlantic Canada. The changes reflect how their program is evolving, with more emphasis on maintaining managed wetlands and adding more capacity to deliver wetland restoration projects as a result of provincial and federal wetland and

fishery policies. In addition to the positions described below, DUC plans to staff a Conservation Program Specialist in NL and one other Conservation Program Specialist to work from the Amherst Office. These positions will be staffed as funding is secured.

The conservation program is now divided into four business lines with **Deanne Meadus** managing the core Conservation Program as she has done for the past 5 years. **Geoff Harding** continues as the Manager of Major Projects.

Wade Lewis has been promoted to Manager of Restoration Service. His



work will focus on aligning clients who need to restore wetlands for compensation credits with restoration projects. Wade will have Atlantic-wide responsibilities and will work from the Charlottetown DUC office.

Jodie Hambrook is the Manager of Outreach, Atlantic which will bring under her management unit all education programs, interpretive centres and communications. The Outreach Program will direct significant resources toward the development of a new extension program for the 3,000 landowners who have DUC wetland projects on their property. She will work from the Amherst, NS office and have Atlantic responsibilities.

Within the conservation team, a number of role changes have been implemented:

Rob Fraser is Head, Wetland Asset Management, responsible for overseeing all management and budget responsibilities relating to the maintenance of DUC-managed wetlands across Atlantic Canada. He will deliver the Atlantic Habitat Partnership Initiative, facilitate Eastern Habitat Joint Venture management actions, and enhance management of fishways. Rob will continue to work from the Amherst, NS office.

Jana Cheverie is now the Head of Habitat Retention and Planning. She will be responsible for managing DUC's spatial inventory of habitat projects and associated databases. This will facilitate planning and management activities of conservation staff, and support marketing to Canadian and USA supporters. She will develop and maintain tracking databases to facilitate ongoing contact with Atlantic Canada's 3,000 signatories to DUC Conservation Agreements, and develop and utilize geospatial modeling techniques for long range conservation planning and targeting. Jana will continue to work from the Charlottetown office.

Nic McLellan has been promoted to Conservation Program Specialist II (



Nic and Elsa

full time) for Nova Scotia. Nic will be responsible for overseeing all aspects of the conservation program in NS and will represent DUC on the Eastern Habitat Joint Venture Technical Committee. Nic can be the first point on contact for conservation delivery in Nova Scotia.

Jonathan Platts has been promoted

to Conservation Program Specialist II (full time) for Prince Edward Island. Jonathan will be responsible for overseeing all aspects of the conservation program on PEI and will represent DU on the Eastern Habitat Joint Venture Technical Committee. Jonathan can be considered the first point on contact for conservation delivery in PEI. He will

work from the Charlottetown Office.



Chris Majka, a research associate at the Nova Scotia Museum and a review editor of several entomological journals, takes his inspiration from Charles Darwin who said "Whenever I hear of the capture of rare beetles, I feel like an old war-horse at the sound of a trumpet." (Yves Poussart Photo)

Describing Atlantic Canada Coleoptera

by Rosemary Curley

Christopher Majka is on a mission to find out a whole lot more about beetles in Atlantic Canada. His Coleoptera website :

http://www.chebucto.ns.ca/Environment/NHR/atlantic_coleoptera.html is a handy reference to the beetle families and the many newly recorded species he and others have found regionally. Pictures are provided such as this one of a rove beetle.

Scroll down to link to over 100 papers that Chris and his co-conspirators have published in a variety of journals. He notes "The aim of this site is to highlight

particularly fascinating species of beetles found in Atlantic Canada. While the focus is primarily on the Maritime Provinces (Nova Scotia, New Brunswick, and Prince Edward Island) some attention is also given to Newfoundland and Maine. The intention is to both profile the fauna for the general layperson, as well as providing resources and tools of assistance to researchers who are interested in Coleoptera"



The head and mouthparts of a specimen of *Stenus (Hypostenus) r. reconditus* (Casey), a rove beetle (Staphylinidae) in the subfamily Steninae. *Stenus* species are specialist predators of springtails (Collembola) and other small arthropods. Adults have a unique extensible labium which they use to capture prey. Some species also have special pygidial glands that allow them to skim across water surfaces, much like water striders (Gerridae). These rove beetles are common in many moist habitats in the region and throughout the country; at least 47 species have been recorded in Atlantic Canada. (Christopher Majka Photo)

UPCOMING MEETINGS

April 21, 2010 2-4 pm. Workshop on Field Botany Methods, the Maritimes Butterfly Atlas & the Maritimes Breeding Bird Atlas, offered by Atlantic Canada Conservation Data Centre and Bird Studies Canada, Canadian Wildlife Service Office, Sackville NB. rlautenschlager@mta.ca

April 22, 2010. 930-1530h Atlantic Society of Fish and Wildlife Biologists Spring Seminar. "Aboriginal Perspectives on Fish & Wildlife Management". Crabtree Auditorium, Mount Allison University. Sackville NB. <http://www.chebucto.ns.ca/Environment/ASFWB>

May 13-16th 2010. Joint meeting of the Atlantic Canada Coastal and Estuarine Science Society (ACCESS) and the New England Estuarine Research Society (NEERS) in St. Andrews, New Brunswick. Overall theme: "Trans-boundary issues" <http://www.cerf-access.ca/>

July 25-29th, 2010. Coastal Zone Canada International Conference, Charlottetown, PE. "Healthy Oceans - Strong Coastal Communities". <http://www.gov.pe.ca/czc2010>

September 5th-9th, 2010. International Mine Water Association "Mine Water and Innovative Thinking" Sydney, Nova Scotia. Contact : amy@IMWA2010.info

September 17- 20th, 2010. Canadian Amphibian and Reptile Conservation Network. Acadia University, Wolfville, NS

September 19-21st, 2010. Atlantic International Chapter, American Fisheries Society. Stanhope Beach and Conference Centre, PE. Contact Rosanne MacFarlane remacfarlane@gov.pe.ca

October ?????, 2010. Atlantic Society of Fish and Wildlife Biologists Annual General Meeting. Corner Brook NL. Contact Cas Dyke CasidheDyke@gov.nl.ca

October ?????, 2010. Atlantic Canada Association of Parasitologists, Pictou NS. Contact Russell Easy reasy@dal.ca

ASFWB MEMBERSHIP APPLICATION / RENEWAL FORM

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AFFILIATION:.....

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