## BioLink

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





**Electrofishing Lake Brook** 

(John Hayward Photo)

## **Smallmouth Bass Introduced to the Miramichi**

by Rosemary Curley, with significant editorial assistance from Mary Sabine October 4, 2009

Smallmouth bass were first reported from the 221 hectare Miramichi Lake on Sept 26<sup>th</sup>, 2008 when an angler announced that he had caught one there earlier in August. When the Moncton Times and Transcript broke the news, the reaction was predictabley negative. "It's definitely detrimental to the local fish populations," said Sheri Strickland, spokeswoman for the provincial Department of Natural Resources. "It can be serious. It is serious". Likewise, Debbie Norton of the Miramichi Watershed Management Committee (MWMC) speculated that the introduction of smallmouth bass into the Miramichi River system could be devastating to the salmon and trout populations, as well as to the recreational fishing industry in the Miramichi region. The lake, near Napadogan, drains into the Miramichi River which is world famous for its Atlantic salmon

stocks. Within three days of the stunning report, fisheries biologists from New Brunswick Department of Natural Resources and University of New Brunswick electrofished the lake shoreline and caught five young- of- the- year (YOY) bass. Over the next several weeks additional electrofishing was done in the lake and its outlet, the roughly five- kilometre- long Lake Brook,

## **Acadia Fund Over Halfway Mark**

The Atlantic Society of Fish and Wildlife Biologists Donald G Dodds Scholarship Fund at Acadia University, launched in October of 2007, currently has a balance of \$12,784.29. "This is good news indeed" said ASFWB President Jason LeBlanc, who noted that the fund has grown faster than expected.

And there's more good news! Now that the \$10,000 threshold has been reached, Acadia will be endowing the funds this year and hope to have the first award available for the 2010-2011 academic year. The payout typically varies with the economy, at 3 to 5%. LeBlanc notes "Thanks to all who have donated to make the scholarship a reality. It is important to keep contributing to reach \$25,000 for a robust self- perpetuating fund that will support wildlife students for many years to come."

which enters the main Southwest Miramichi River. Gill nets, trap nets, fyke nets and angling were also employed. A total of 8 YOY bass were captured in the lake along with 6 YOY in the outlet, some as far as 300 meters downstream of the lake. Two older smallmouth bass (estimate 3-4 years) were also caught in the lake.



(Mary Sabine Photo)

In January, 2009 Department of Fisheries and Oceans hosted a meeting in Moncton to discuss the impacts of smallmouth bass on Atlantic salmon populations and the aquatic ecosystem and to conduct a risk analysis on bass impacts o the Gulf rivers.

Among the conclusions:

- ◆ When smallmouth bass are introduced into a water body, they prey heavily on smaller fish, can out-compete other fish species, and can become a dominant component of the food web.
- ◆ The overall risk to the aquatic ecosystem is considered to be high in the lake environment; smallmouth bass is expected to become a dominant component of the food web and to cause significant reductions in existing biota. The uncertainty is low.
- ◆ There is a high likelihood of widespread establishment of smallmouth bass in the Southwest Miramichi River and in the Gulf Region rivers in general.
- ◆ Riverine habitat is used preferentially by Atlantic salmon. Although the overall risk to salmon is considered moderate in the riverine environment, ( albeit with high uncertainty) none of the conse-

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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. Visit our Web site:

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

salmon.

 The highest probability of controlling or eradicating non-native species is through the use of multiple approaches. The likelihood of success of controlling and/or eradicating the target species is reduced when control and eradication actions are delayed.

In 2009 the MWMC was awarded \$25,000 from the Atlantic Salmon Endowment Fund and \$19,550. from the New

quences of smallmouth bass introduc- Brunswick Wildlife Trust Fund to continue tions will be positive for Atlantic containing smallmouth bass in the lake and outlet, assessing the extent of the bass invasion, and to remove any that were located. As of Sept 24th, 2009, they have removed 49 of the interlopers ranging from YOY to five- year-old fish. In the outlet, a total of 12 juvenile bass have been captured in the two years.

> A mitigation committee composed of representatives from government, academia, NGOs, and industry are analyzing the growing data set and reviewing various options for containment and/or removal of smallmouth bass in Miramichi Lake and surrounding waters.

> Since being introduced to waters in NS and NB, smallmouth bass currently known to occupy 188 lakes and rivers in Nova Scotia, and 69 lakes and 34 rivers NB. For more information: http://www.dfo\_mpo.gc.ca/CSAS/Csas/P ublications/SAR\_AS/2009/2009\_003\_e.ht

Sources: MonctonTimes and Transcript, October 15<sup>th</sup>, 2008

Barry LaBillois in Netawek Ikjilum Vol 4 Issue 4, 2009

Canadian Science Advisory Secretariat, Report 2009 003

Atlantic Salmon Conservation Foundation Website



Containment fence at lake outlet.

(John Hayward Photo)



**Purple Finch** 

(Scott McBurney Photo)

#### **Sick and Dying Birds** in Your Yard

By Scott McBurney and Maria Forzan August 7<sup>th</sup>, 2009

Over the past two summers, the Canadian Cooperative Wildlife Health Centre (CCWHC). Atlantic Region has received numerous reports of sick and dying birds around bird feeders and water baths in people's yards throughout the Maritimes. The primary species affected are purple finch and American goldfinch, and a microscopic parasite, Trichomonas gallinae, causes homes. The CCWHC is interested in following information included with

tracking this emerging disease prob- them: lem to better understand its impact on wild bird populations, and would like to examine as many of the dead birds as possible. The CCWHC cannot advise or encourage members of the general • Date found, Location found and public to handle dead birds. However, if an interested individual was inclined to collect a specimen, the following procedure should be practiced:

Place a plastic bag over hand and pick up the dead bird with hand covered by the plastic bag.

Invert the plastic bag over the bird and tie the top of the plastic bag. Wash hands well with warm water and soap. Deliver the dead bird in the bag to the local Department of Natural Resources, Fish and Wildlife or Canadian Wildlife Service office where it will be frozen and held for pick up at a later

Biologists, conservation officers and wildlife technicians have busy schedules and limited freezer space so it is up to their discretion to hold a dead bird for submission. Therefore, in their illness which is known as tricho- Nova Scotia (NS) and Prince Edward moniasis (trichomonosis). This sum- Island (PEI), it is advisable to call the mer has been no different with wide- office prior to handling a dead bird to spread mortality of finches occurring obtain their consent to cooperate. All throughout the region around people's submitted samples should have the

- Submitter's name, address, telephone number and e-mail address (if available).
- Number of dead or sick birds observed.

At this time, New Brunswick (NB) Department of Natural Resources is unable to participate in this targeted surveillance program. Howevver, you can record any mortality that might occur in NB by completing a Garden Bird Health Survey found on the CCWHC, Atlantic Region website http://atlantic.ccwhc.ca/.

This fall, the CCWHC will pick up the birds that have been submitted in NS and PEI and examine them. Subsequently, a full diagnostic report will be sent to the person who submitted the bird(s) as well as the agency that held the specimen(s). This work would not be possible without public participation and the involvement of provincial and federal wildlife agencies. Your assistance is greatly appreciated. For further information, please contact CCWHC directly at 902-628-4314 or email Drs. Scott McBurney ( smcburney@upei.ca) or Maria Forzan mforzan@upei.ca

## Identity of Canada lynx (Lynx canadensis) in Atlantic Canada.

By Howie Huynh

October 5, 2009

The Canada lynx (hereafter lynx), Lynx canadensis, is a wide ranging felid in Canada. However, Lynx are extirpated from PEI and the NS mainland and are considered an endangered species in New Brunswick, and Cape Breton Island (CBI), Nova Scotia. They are faring better in insular Newfoundland (NF). The taxonomy of lynx remains mysterious, and populations in Atlantic Canada are now receiving greater attention. This is important for devising and implementing effective conservation strategies and management plans - the adage "you can't save what you don't know" applies here.

Probably the best mystery is the lynx from NF, L. canaden-



Working with lynx specimens housed at the Smithsonian Institution's National Museum of Natural History. (Howard Huynh Photo)

| ASFWB 2008/09 FY Financial She           | et       | to Sept 18, 09 |
|--|----------|----------------|
| <u>Revenues</u>                          |          | Fiscal Year    |
|  |          | Totals (\$)    |
| Parks Canada Donation                    |          | 200.00         |
| DUC donation                             |          | 150.00         |
| AGM Registration                         |          | 1330.00        |
| Student AGM Registration                 |          | 270.00         |
| Banquet Tickets                          |          | 930.00         |
| Silent Auction                           |          | 660.00         |
| 50 / 50 tickets<br>50/50 winner donation |          | 60.00<br>60.00 |
| Spring Seminar Registration-Reg          |          | 495.00         |
| Spring Seminar Registration student      | t        | 110.00         |
| Regular Membership Fees                  |          | 1000.00        |
| Student Membership Fees                  |          | 80.00          |
| Merchandise                              |          | 150.00         |
|  | Subtotal | 5495.00        |
| <u>Expenses</u>                          |          |                |
| Bank account fees/cheques                |          | -48.23         |
| AGM Banquet                              |          | -1298.16       |
| AGM Facilities/lunch                     |          | -1209.51       |
| AGM Student Award                        |          | -100.00        |
| Newsletter                               |          | -109.73        |
| Don Dodds Scholarship                    |          | -1856.00       |
| Misc expenses (stamps, file box)         |          | -11.87         |

sis subsolanus, with the debate centering on whether the population described in 1897 should indeed be recognized as a distinct subspecies. In January of 2008, I decided to tackle this long-standing issue. On an impecunious budget, Our findings, presented at the 2009 Annual Meeting of the I visited and worked in many mammal collections, with several being housed in some of the world's largest and inter- and soon to be submitted for scientific publication, confirm nationally renowned museums i.e., the Museum of Com- that the lynx from NF are morphologically distinct. Their parative Zoology (Boston); Smithsonian Institution's Na- skulls are relatively smaller than that of their mainland tional Museum of Natural History (Washington, D.C.); counterparts, which is consistent with an "island rule" that American Museum of Natural History (New York City); Cor- seems to govern body size among mammals - i.e., menell University Museum of Vertebrates (Ithaca); Royal On- dium to large-sized mammals are typically smaller on is-

tario Museum (Toronto); Canadian Museum of Nature (CMN) (Ottawa); Carnegie Museum of Natural History (Pittsburgh); the Nova Scotia Museum of Natural History; and the New Brunswick Museum (NBM).

I collated morphological data from lynx voucher specimens spanning their entire geographic range with particular focus on those from Newfoundland. Given their past importance as a furbearer, lynx are relatively well represented in museum collections. Skins and skulls are the best features for identifying and discriminating mammals, with cranial material being most abundant in collections. I examined almost every intact lynx



(Howard Huynh Photo) Lynx pelts deposited at the Canadian Museum of Nature.

skull I could get my hands on, and measured the dimensions of several craniodental characters with digital callipers. Collaborating with Kamal Khidas (CMN) and Johannie Duhaime (MSc candidate at the Univer-

sity of Ottawa), we quickly assembled one of the most comprehensive data sets on lynx skull morphology.

-50.00

-50.00

-1178.59

-5912.09

-417.09

\$1,402.00

Subtotal

Canadian Society of Zoologists at the University of Toronto

Web Site Fees

Spring Seminar Room and Meal

Bank Balance (Sept 18th, 2009)

Balance Sheet 08/09 FY to Sept 18/09

Spring Seminar speaker travel

lands than conspecifics on the been occurring for quite some time. mainland (dwarfism). NF lynx skins also have consistently manifest richer tones to the grizzled colouration on their pelage. Altogether, our results warrant retention of subspecies recognition of the lynx of NF.

unique ecological history. Lynx were life Trust Fund, I am collaborating with once common throughout NS, but Donald McAlpine of the NBM, and Kaoverharvesting quickly resulted in their mal Khidas and Roger Bull of the CMN extirpation on the mainland, with their to develop multivariate statistical modlast stronghold being on CBI. The con- els based on morphometric data from struction of the Canso Causeway from lynx, bobcat and known hybrid specimainland NS to CBI in the mid-1950s mens, and applying them to putatively facilitated the arrival and establishment identified hybrids to determine model of other mesocarnivores such as coyo- efficacy. If it works, it might help traptes (Canis latrans) and bobcats (Lynx pers, wildlife managers and museum rufus) that directly compete with lynx. curators to identify other hybrids in the As a result, the small and geographically disjunct population of lynx on CBI is currently restricted to the Cape Breton Highlands where deep winter snow excludes their competitors. Preliminary results of evaluation of a subset of lynx vouchers for CBI indicates that this population may also exhibit unique traits of morphological divergence. If lynx from CBI are taxonomically different, this makes a stronger case for their conservation.

Lynx in Atlantic Canada may face another, albeit more cryptic, threat as indicated by recently discovered lynxbobcats hybrids in NB. Closely related species naturally hybridize in the wild, but such a union for endangered species like lynx may threaten the integrity of an already small population gene pool. Lynx-bobcat hybrids seem to inherit a mix of morphological characters from both parent species, and so far, all known hybrids are descended from lynx mothers and bobcat fathers. Considering that one voucher of a genetically confirmed hybrid from NB dates back to the 1980s, and that hybridization has been documented from other parts of the lynx's peripheral range where they overlap with bobcats (e.g., Minnesota), hybridization has likely

The only sure-fire way of detecting hybrids is through genetic testing (by looking at several nuclear and mitochondrial DNA markers), but such an approach is not always feasible considering the resources required. With The population of lynx from CBI has a funding from the New Brunswick Wildfuture.

> Conservation and management plans are dependent on correct taxonomy. Hence, the above taxonomic issues need to be resolved in order to justify and maximize resources devoted to protecting lynx in Atlantic Canada.

## 50 Years of Wildlife Education at Acadia.

By Glen Parsons March 5, 2009

Planning is underway for a celebration at Acadia University in October 2011. In Don Dodds' book "Challenge and Response" he writes..." Dr. Chalmers Smith (Acadia) seemed to be offering me an opportunity to come there as a "visiting professor" and to set up the necessary courses which, combined with others, would lead to the equivalent of a wildlife degree. And so the embryo of a wildlife program began in 1961". So far an organizing committee has been formed and has come up in order to keep everyone aware of the 75767CEAC80BDF414 plans for the celebration. All Acadia

Visit the Newfoundland and Labrador Wildlife Division's online newsletter "OurWildlife" at:

http://www.env.gov.nl.ca/env/wildlif e/publications/wildlife%20newslette r/our\_wildlife\_june2009.pdf

Alumni who went through the program are encouraged to contact Glen Parsons parsongi@gov.ns.ca if they are interested in becoming involved.

### Federal Court Weighs in on SARA Critical Habitat

Verbatim from the website of Osler, Hoskin & Harcourt LLP

September 14, 2009

The Federal Court has now delivered two recent decisions concerning the federal Species at Risk Act, S.C. 2002, c. 29 and the identification of critical habitat for species at risk listed in Schedule I of SARA (i.e., a listed species). On July 9, 2009, the Federal Court quashed the Final Recovery Strategy posted by the federal Minister of the Environment for the Greater Sage-Grouse in Alberta Wilderness Association v. Minister of Environment. 2009 FC 710, because the Final Recovery Strategy identified insufficient critical habitat. On September 10, 2009, the Federal Court also quashed the Final Recovery Strategy for the Nooksack Dace by the federal Minister of Fisheries and Oceans in Environmental Defence Canada v. Minister of Fisheries and Oceans, 2009 FC 878 for similar reasons. The decisions demonstrate that ENGOs are fully prepared to enforce the SARA in court. which will have important implications for project proponents.

http://subscription.osler.com/rs/vm.ash x?ct=24F76F1AD4AE4EE0CDD882A5 with a list of graduates and addresses D42E951C91907ABFDA9818CF5AE1

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At Abrams Village salt marsh

## Conservation **Volunteer Program** Summer 2009

By Laurel Bernard

Sept 16<sup>th</sup>, 2009

Over 120 people joined forces with the Nature Conservancy of Canada (NCC) this summer as part of their Conservation Volunteer (CV) program in Atlantic Canada. Thirteen events were hosted in the region with over 600 volunteer hours directed to protection of ecologically significant areas.

The CV program provides Canadians an opportunity to help care for some of Canada's most important natural areas. Because it takes a lot more than just buying land to protect biodiversity, each event is designed to contribute to the long term health of protected areas. Daylong events allow volunteers to contribute to real priority work such as restoration (tree planting, seed collection); inventories and monitoring (birds, plants, insects); threat abatement and mitigation (ie. invasive species removal); and trail building and maintenance. For more information or become involved, visit ww.conservationvolunteers. To sign up for the monthly electronic newsletter, visit MyNCC atd:

www.natureconservancy.ca

## New Brunswick **Biodiversity Strategy** Released

Excerpts from NB Press Release June 18. 2009

(with a short introduction by Rosemary Curlev)

New Brunswick is the first province in Atlantic Canada to prepare a biodiversity strategy, and it has coupled biodiversity conservation with sustainable use as suggested in the Biodiversity Convention. It notes on the one hand the low human population density in the province which has enabled wildlife habitats and populations to survive quite well to date, while at the same time stating that it is time to expand the human population as part of the plan for sustainable use and selfsufficiency. Such a balancing act is grams today.

The comprehensive plan to conserve

the New Brunswick's biological diversity was released in June by Natural Resources Minister Wally Stiles. The Biodiversity Strategy "will be a road map to achieving our twin biodiversity goals: conservation of the genetic, species and ecosystem diversity of New Brunswick; and the sustainable use and development of New Brunswick's biological resources," said Stiles. "With this plan we will be able to use our biological resources in such a way that we live off nature's interest without depleting its capital."

Among other things, the strategy reaffirms New Brunswick's commitment to work to achieve the national goals described in the Canadian Biodiversity Strategy (1995) and the Biodiversity Outcomes Framework for Canada (2006), and it identifies goals and outcomes that government, with willing evident in many conservation pro- partners, will work within its capacity to achieve. It addresses the importance of stewardship in biodiversity conservation, and the role that government can play.



SACKVILLE NB New Plant for Canada: Tall Horned Beakrush (Rhynchospora macrostachya), a new species for Canada, was discovered at Carrigan Lake, Queens County Nova Scotia in August 2009. Prior to the find, this species of Atlantic Coastal Plain affinity was believed to reach its northern limit in southern Maine. It was found by botanist David Mazerolle of the Atlantic Canada Conservation Data Centre in company with fellow worker Sean Blaney, and Sean Basquill and Lawrence Benjamin of Nova Scotia Department of Natural Resources. "It was the coolest thing we found in the last 10 years", said Mr Blaney. A journal note is anticipated. (D. Mazerolle Photo)

"Now is the time to protect biodiversity, while New Brunswick's native plants, animals and ecosystems remain generally healthy. Here in New Brunswick we are still relatively rich in biodiversity as a result of good stewardship, resilient ecosystems and a low human population, so this is the opportune time to be conservation-minded as we work together to achieve selfsufficiency, and tackle challenges such as climate change." The strategy has widespread support within government.

Stiles said that achieving selfsufficiency by the year 2026 will involve increased industrial productivity and competitiveness, increased investment, the development of new markets, the diversification of resourcebased industries, the establishment of an energy hub, and an increased population. "Self-sufficiency will greatly benefit the people of New Brunswick, but it also increases the challenges we face in maintaining biodiversity," said Stiles. "Given the increased risk to biodiversity posed by development, and the relatively good position we still find ourselves in today, the time is right for a biodiversity strategy that will work here, in New Brunswick."

The NB government intends to lead by example. "With the adoption of this strategy, our government will ensure that Crown lands, water and biological resources are used and managed in a sustainable manner to achieve our biodiversity goals," Stiles said.

The strategy was developed by staff from the departments of Natural Resources, Environment, Agriculture and Aquaculture, Local Government and Transportation. A draft version was circulated in 2008 to more than 55 stakeholders for review and input.

A Biodiversity Secretariat has been established within the Department of Natural Resources to provide advisory, logistical, planning and reporting support related to the strategy.

## **Exploding Moose** Population posing **Challenges for Gros** Morne National Park, NL

Adapted from article by Cliff Wells The Western Star 23/06/09

TROUT RIVER - Jeff Anderson, the field unit superintendent for Parks Canada in western Newfoundland addressed the Great Humber Joint Council on June 20th and classified the exploding moose population there as one Fall Hunt For Sea of the greatest ecological challenges to ever face Gros Morne National Park. He said it is a major issue that will need to be tackled in the near future. The regulatory amendment creates a There has been study and debate for density moose population of 4,800 - 12 to 15 per square kilometre in places. But the result of the moose preference for balsam fir browse is well known. Moose are changing the face of the

mandate is to preserve the natural state representative of the west coast. Historically, he said, about 44 per cent tions across the Atlantic Provinces. of the park was boreal forest with about 90 per cent balsam fir. Now, vol 134, No. 14 after large-scale tree kills, such as with bugs or fires, the moose population is grazing on the young regenerating fir, so thistle and coltsfoot are allowed to grow. These plants are invading what Migratory Birds in used to be forest. "In some areas where we should have 20-year-old trees, we don't have any", Anderson Canada seasonally hosts over 500 said. "We're getting large areas of the park that are going from forested areas to non-forested areas and maybe even converting to grasslands and that's not a natural state of things for here. Our job is to protect that natural state." He said the issue is coming to a head where Parks Canada will have to do something about moose, but what that will be hasn't been decided yet.



Red-breasted Merganser (Dwaine Oakley photo)

## **Ducks on PEI**

separate sea duck bag limit for: Comthe past 30 years regarding the high mon Merganser, Red-breasted Merganser, Longtailed Duck, eiders and scoters in Prince Edward Island. This limit is separate from the current reqular inland duck limit.

This amendment also extends the hunting season to December 31st for Anderson told his audience the parks these sea ducks listed above in Prince Edward Island. These amendments are intended to harmonize the Regula-Source: July 8, 2009 Canada Gazette

## Incidental Take of Canada

species of migratory birds, and it is the responsibility of Environment Canada to develop and implement policies and regulations to ensure the protection of migratory birds, their eggs and their

While the Migratory Birds Regulations, under the Migratory Birds Convention Act, 1994, strictly prohibit the harming of migratory birds and the disturbance or destruction of their nests and eggs, many are inadvertently destroyed by activities such as mining, forestry and

infrastructure, and urban development. compliance alternatives for everyone. This inadvertent destruction is called "incidental take" and is illegal. Environment Canada is proposing to a) a clear regulatory strategy; amend the Migratory Birds Regulations to introduce new policy tools to improve the approach to managing incidental take of migratory birds and to conserving migratory bird populations.

The objective in managing "incidental take" is to support the long-term conservation and protection of bird popula-

agriculture, electrical generation and tions with clear, effective and enforcetransmission, fishing, management of able regulations that provide practical

This will involve

- b) an effective implementation strat-
- c) a strong risk management frame-
- d) a conservation framework; and
- e) a broad consultation process.

Bird Conservation plans will be estab-

lished for each Bird Conservation Regions (BCR) based on level 3 ecoregions of Canada. These plans will identify bird population objectives and recommend conservation actions. The plans will be the subject of targeted consultations.

For more in-depth information visit the source of this note:

http://www.cws-scf.ec.gc.ca/mbccom/default.asp?lang=en&n=17F9BC D1-1

### **Piping Plover - Needs for** Research to Support Recovery

By Diane Amirault-Langlais, Canadian Wildlife Service, Atlantic Region Chair, Eastern Canada Piping Plover Recovery Team

As the Piping Plover is currently listed as endangered, a Recovery Strategy has been developed to fulfill obligations for recovery planning under the Species at Risk Act. Recovery Strategies summarize activities needed to recover species but also identify knowledge gaps that should be addressed in order to support recovery of the species. While some of the recommended studies have been initiated, much research remains to be addressed. The main research areas recommended in the Recovery Strategy are as follows:

#### i) Habitat-related research:

- the influence of invertebrate population distribution and abundance on habitat selection by plovers;
- identification of wintering grounds, threats that may exist there and wintering habitat conservation needs;
- characteristics of occupied habitat and comparing occu
  - pied habitat to apparently suitable habitat:
  - the carrying capacity of habitats in eastern Canada and whether there is a currently unoccupied sites in order to meet population recovery objectives.
  - derstanding threats:
  - factors affecting reproduc-



tive success and survival (including adverse weather, oil spills, toxic chemicals, injury, and disease);

- identification of the predators of adults, eggs, and young and factors that may influence predation with the aim of developing management strategies to address predation;
- the impacts of all-terrain vehicles and other motorized traffic on invertebrate prey abundance and availability;
- the impact of sea level rise as a result of climate change on critical habitat designated under the Species at Risk Act,
- but unoccupied the response of plovers to disturbance, harassment, and habitat management.
  - iii) Research to evaluate management techniques:
  - the success of ongoing recovery programs;
- need to protect or manage the relative success of environmental assessment advice, of the accuracy of impact predictions for the purposes of environmental assessments, and of the effectiveness of recommended mitigation measures.

ii) Research related to un- The Piping Plover Recovery Strategy is expected to be posted on the SARA Public Registry in the coming months.

Harlequin Duck Special Issue

Waterbirds Dec 2008 : Volume 31 Issue sp2

Congratulations to the authors!

### No More Free Journals from NRC Research **Press**

by Rosemary Curley

Few things in life are free, but the National Research Council Research Press journals such as Canadian Journal of Fisheries and Aquatic Sciences and the Canadian Journal of Zoology have been free online 'til now. This is soon to change! As a result of a review, the Government of Canada and the NRC have decided that the journals and services of NRCRP will be transferred to the private sector. After a 5% cut to NRC and other government departments, there'll be no more a Grinding Halt free articles on the Atlantic Cod, Atlantic Salmon, or otters in Terra Nova National Park.

A new not-for- profit entity will continue to publish Canadian and international research, and support Canadian scientific societies. The mission and objectives of the new publisher will remain largely the same as before. Since 2001, the journals have been provided electronically, free to all Canadians through support of the Federal Depository Services Program. This is still available in 2009.

However, the Depository Services Program can only provide funding to Federal Government publishers, which is why these journals will no longer be free. It is not known when free electronic access will be terminated, but definitely by the calendar subscription year 2011. Affordability will be a watchword with the new publisher.

#### Source:

http://pubs.nrc\_cnrc.gc.ca/eng/publishi ng/RP%20Transformation%20Commu nique.html



Sandmining at West Point

(Greg Wilson Photo)

## Sand Mining Comes to

PEI Gov't Press Release April 30<sup>th</sup> 2009

CHARLOTTETOWN. PEI - The Department of Environment, Energy and Forestry will no longer issue permits for sand mining on Prince Edward Island's beaches, Minister Richard Brown said today.

Following review of a study that looked at the impact of sand mining on erosion around the West Point lighthouse, the provincial government has decided nent of the operations of many nonthat it can no longer allow the removal of sand from Island beaches, said Minister Brown. Sand mining, the excavation of beach sand, has been linked to the loss of coastal beaches - some- talks! Funded largely by the sale of times in areas well away from the min- duck stamps, WHC has given out over ing site.

"The beaches and dunes of Prince Edward Island are beautiful parts of our Island landscape. But they are more The \$1.2 million grant allocation in

land itself."

The department will continue to issue permits for removal of sand in cases such as when sand has accumulated in a harbour - where the sand poses problems for boat traffic.

#### Wildlife Habitat Canada Celebrates 25 Years

by Rosemary Curley

The organization that made "Stewardship" a mainstream compogovernment conservation organizations (as well as of government agencies) is celebrating 25 years of active encouragement in 2009. And money \$ 57 million dollars for the conservation, restoration and enhancement of wildlife habitat since its inception.

than scenery, these beaches protect 2008-09 has declined somewhat from our shores from ocean erosion and that of the richer days of the mid '80s, provide a buffer against wind storms," but the mission to enlist the stewards said the minister. "Protection of our has come a long way. In 1987, when I Island beaches is protection of the Is- worked for government in the launch of

a WHC- funded wetland stewardship program, it was such habitat a new approach that we spent quite a bit of time trying to angling education (fishing pin down what it all meant. Now, according to Len Uga- basics made easy), and renko of WHC "There is little need to debate the definition outdoor of stewardship, whereas simple recognition that steward- tion/lesson consisting of ship is based on a wide set of intentions is sufficient for a hands-on sportfishing progress".

WHC has redesigned their website www.whc.org. and their logo

### **Declining Aerial** Insectivores

The Society of Canadian Ornithologists held a workshop in Ottawa on Aerial Insectivores in March 2009, the results of which are given in the SCO Bulletin, Picoides Vol 22 (2), June, 2009 (online). The starting premise was that "Populations of aerial insectivorous birds appear to have declined, sometimes dramatically, over the past few decades. Independent analyses have illustrated these declines are a global phenomenon, occurring in Europe, the neotropics, and North America. " A major objective of the workshop was to construct testable hypotheses about the causes of the declines, which seem to be most severe in eastern North American populations.

Four potentially limiting factors were identified: (i) landscape change, (ii) toxic chemicals, (iii) climatic change and weather, and (iv) miscellaneous. Workshop outcomes included two tables of suggested approaches to address how and why aerial insectivore populations are declining. The top ten data-mining approaches, and top ten new research projects are listed.

## L2F (Learn to Fish) Program, 2009 Wrap-Up

By Tara Marshall, Inland Fisheries Division Nova Scotia Department of Fisheries and Aquaculture

The L2F program, presented by the Inland Fisheries Division of the Nova Scotia Department of Fisheries and Aquaculture, has completed a very busy fourth year. Students, youth groups and educators enjoyed the interactive classroom component and were very excited to apply their Wildlife Service (CWS) knowledge in the outdoor fishing workshop. We have received many positive comments from students and teachers and are busy in planning for this upcoming spring session.

The program is geared towards youth aged 8-12 and con-

characteristics, presentaworkshop at а nearby. The angling education program recruits the next generation stewards of aquatic resources, teaching safe and ethical angling skills to youth.

This spring and summer the L2F program was delivered 33 times reaching youth from a variety of different backgrounds.



The majority of the programs were presented in schools but some were done with cubs, scouts, youth at recreation day camps and Big Brothers and Big Sisters. Inland Fisheries Division would like to thank all the supporting partners of the L2F Program. For more information on the Learn to Fish program, contact Tara Marshall at or call (902) 485-7028.

#### Josh Mailhiot Moves to the West Coast

Josh Mailhiot, MSc. a graduate of UPEI, has just begun a job as a biologist with the Department of Fisheries and Oceans. He worked in the trenches as ecologist and environmental policy specialist in the Maritimes and in Ontario since graduation in 2007. Now he has moved to Nanaimo, BC, where he will be developing quantitative methods for as-



sessing critical habitat for aquatic species-at-risk.

Good luck with your new job, Josh.

# **New Appointments At Canadian**

#### **Andrew Boyne**

Andrew Boyne is now Head, Species Recovery, responsible for delivering the species at risk program within the Atlantic Region, with an emphasis on recovery planning and sists of two main components: classroom presentation implementation. He has worked for the CWS - Atlantic Reconsisting of an introduction to freshwater sportfish in Nova gion in the species at risk program since 1997 and has Scotia, conservation education of freshwater resources, been acting as head of the Species at Risk Recovery Unit



since 2006. His work has focused on the recovery the Roseate Tern, Piping Plover and Harlequin Duck. Andrew chairs the Canadian Roseate Tern Recovery Team and the Atlantic Canada Tern Working Group. He was president of the Atlantic Society of Fish and Wildlife Biologists for four years and is currently past-president. Andrew graduated from Mount Allison University in Sackville, NB, where he did his Honours thesis on small mammals. He received his Master of Science degree from McGill University in 1999, studying Herring Gull ecology in the Mingan Archipelago National Park Reserve. He is stationed in Halifax.

#### Paul Chamberland

confirmed as Head of Program Planning and Coordination at CWS, Sackville, NB . A Montrealer, Paul obtained a BSc (Agr) in Wildlife Management from McGill, then worked with Ducks Unlimited and later as a National Park Warden in locales from Ontario to Newfoundland. In Fundy National Park he studied bears, leading to an MSc degree from Acadia University. Afterwards he moved from Terra Nova

National Park to the CWS headquarters where he was the Science Advisor for Wildlife Trade, gaining experience in CITES and Alien Species issues. The call of the Maritimes was impossible to resist and in 2001 he moved to Sackville to work as the Regional Coordinator for the Habitat Stewardship and Ecological Gifts Programs. As Unit Head, Paul is responsible for the management of environmental assessment in the Maritimes, all regional CWS permitting, aboriginal liaison and in assisting the Regional Director on budgeting and reporting.

#### **Kevin Davidson**

Kevin Davidson is Manager of Ecosystem Conservation at CWS- Atlantic. responsible for the species at risk and habitat related programs in the Atlantic Region. Kevin pursued his post secondary education at the Universities of Victoria and Guelph resulting in a BSc in Fisheries and Wildlife Biology and an MSc in marine biology and genetics. He began his career working on white-tailed deer in Ontario, and then Kim received the Governor General's moved to the Huntsman Marine Laboratory, St Andrews, NB, where he specialized in marine invertebrate taxonomy. In 1983.he began work as a salmon technician with the Department of Fisheries and Oceans He held a number of positions at DFO culminating with heading their salmonid hatchery, restoration and enhancement program in the Maritimes. In 1997 Kevin moved to CWS where he has been Paul Chamberland recently has been leading the development and delivery of the Atlantic habitat and species at risk programs for the past 12 years.

#### Dr. Kim Mawhinney

Dr. Kim Mawhinney, newly appointed Manager of Northern Conservation, is responsible for the management of the St. John's and Goose Bay CWS offices, and for the delivery of CWS programs in Newfoundland and Labrador.



Award of Academic Excellence for both her MSc from Acadia University, where she studied Semipalmated Sandpiper migration through the Minas Basin in Nova Scotia, and her PhD from the University of New Brunswick where she researched Common Eiders and Great Black-backed Gulls in the Bay of Fundy and Gulf of Maine. During her student days she was able to receive support from CWS for her research and also undertook contract work to that end. Before joining CWS in a formal capacity in 2003, Kim worked on caribou in Gros Morne National Park and she was the species at risk co-ordinator for Atlantic Parks and National Historic Sites. Her work at CWS has included migratory bird research, species at risk programming and acting assignments as Unit Head for Species at Risk, Chief of Species at

NL.

#### Dr. Martin Raillard

announced as the Manager, Populalantic Region the migratory birds and species at risk

servation. She is located in St. John's, ogy from the University of Toronto. He he worked as chair of an international started his career as an assistant pro- polar program that brought all eight fessor in Environmental Science at U Arctic Nations together in coordinating of T before taking on the job of Arctic their biodiversity monitoring and con-Dr. Martin Raillard has recently been Ecologist for Parks Canada for seven servation activities. He led that project years. tion Conservation Section, CWS- At- months of fieldwork in remote Arctic neva, where he was posted in Located in Sackville, locations, leading research teams con- 2006/07. Before coming to Sackville, NB, Martin is responsible for delivering ducting resource inventories and moni- he spent 18 months in the Wildlife Scitoring. After this he became Chief of ence Division of Environment Canada. assessment programs in the Atlantic Species at Risk Conservation for the Region. He has a degree in Wildlife CWS in Edmonton and then Manager Biology from the Swiss Federal Insti- of the Northern Conservation Division

Risk, and Manager of Population Con- tute of Technology and a PhD in Ecol- in Whitehorse, Yukon. Most recently, This work involved many from the IUCN headquarters in Ge-

## **Nova Scotia's First FUN (Families United with Nature) Event**

By Tara Marshall Fisheries Division

The Nova Scotia Federation of Anglers and Hunters (NSFAH) launched the province's first FUN event on July 18, 2009 in Digby. The local hosts for the FUN day were

Digby East Fish and Game Association. one-day event took place at the Association's club house in North Range with instruction on two family oriented outdoor activities - fishing and camping.

The morning started off with families participating in the province's L2F (Learn to Fish) Program. The classroom component consisted of sportfish identification, freshwater habitat and environment, what fish eat, how old are fish and fishing tackle involving gearing up the rod. The outdoor component involved going to a nearby lake and applying what was learned in the classroom. Families headed to Haines Lake and tried their hand at fishing despite the rainy weather.

All of the families met back at the club house for lunch and then got ready for the afternoon portion of the event. The second half of the day included a hands-on session about the basics of camping. The classroom portion covered campsite selection, seasonal considerations and where to camp in Nova Scotia.

FUN partners include: Nova Scotia Federation of Anglers and Hunters, Nova Scotia Department of Natural Resources, Nova Scotia Department of Fisheries and Aquaculture, Nova Scotia Department of Health Promotion and Protection and The Trail Shop.

For more information on hosting a FUN (Families United Nova Scotia Department of Fisheries and Aquaculture - Inland with Nature) event contact Darlene Caldwell at (902) 798-4036



#### **UPCOMING MEETINGS**

- ◆ October 20-22, 2009. Atlantic Society of Fish and Wildlife Biologists AGM. Kouchibouguac National Park. Contact eric.tremblay@pc.gc.ca
- ◆ Nov 26-28, 2009 Canadian Weed Science Society AGM, Delta Prince Edward, Charlottetown Prince Edward Island
- ◆ December 3-5, 2009. Species at Risk Stewardship Workshop. Old Ordhard Inn and Spa, Wolfville, Nova Scotia. contact Nicolle Davis 902-624-9888, email: nicolle@coastalaction.org, or visit www.coastalaction.org
- ◆ February 23 24, 2010. Nova Scotia Forest Health Conference (NSFHC), Holiday Inn, Truro, Nova Scotia. Look for web site or contact Chrissy Campbell for (902) 758 7238 campbecs@gov.ns.ca
- ◆ July 25\_29 2010. Coastal Zone Canada 2010, Charlottetown, Prince Edward Island, Canada. January 15th, 2010 is the deadline for submitting abstracts to the international conference The theme is Healthy Oceans \_ Strong Coastal Communities.

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