BioLink

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

April 2004

Spring Seminar: An Overview of Endangered Species Legislation in Atlantic Canada

Plan to attend the ASFWB's spring seminar. This year's topic, endangered species legislation, is certainly relevant to wildlife managers in all Atlantic provinces. The seminar is to be held on April 22 from 9:30 AM to 3:00 PM in the Crabtree Auditorium at Mount Allison University. The cost of the seminar is only $10 (which includes lunch and coffee). Please email Andrew Boyne (andrew.boyne@ec.gc.ca) with your intention to attend prior to April 19, 2004.

Tentative Agenda

9:30-10:00 AM Registration and coffee
10:00-11:30 AM Overview of the federal Species at Risk Act (SARA) - Marc Bernier
11:30-12 PM Programs under the PEI Wildlife Conservation Act - Rosemary Curley
12:00-1:00 PM Lunch
1:00-2:00 PM Programs under the NS Endangered Species Act - Sherman Boates/ Mark Elderkin
2:00-3:00 PM Programs under the NB Endangered Species Act - Pascal Giasson/ TBD

AGM 2003

The 40th Annual General Meeting of our Society was held in Dartmouth, NS on October 29-31. By all accounts, the meeting was a success, with approximately 75 representatives from Provincial and Federal levels of government, consultants, students, and university faculty. There were 29 presentations given, including 17 from students. Amanda Lavers of Acadia University (Supervisor: Dr. T. Herman) won the award for best student presentation for her presentation entitled, "Winter nests of southern flying squirrels, Glaucomys volans, in Nova Scotia". Another highlight of the meeting was the presentation of the Merit Award to Dr. Joseph Kerekes who wasn't present at the 2003 AGM to receive his award at that time. Once again, a silent auction was held to raise money for the ASFWB scholarship fund, with a total of $938 raised. The 2004 AGM was held in conjunction with a workshop organized by the Canadian Wildlife Service to establish a volunteer-based marsh monitoring program.

For a complete list of presentations from the 2004 meeting and their associated abstracts, please visit out website. Also, watch the website for updates for next year's meeting to be held on Prince Edward Island.

Lynx-Bobcat Hybrid Confirmed in New Brunswick

New Brunswick now has its first confirmed lynx-bobcat hybrid. The cat was caught in North-western New Brunswick (in known lynx territory). In December 2003, a "bobcat" was incidentally killed in Wildlife Management Zone 2 outside of Edmundston. The carcass was given to the Department of Natural Resources' (DNR) District staff and forwarded to the Fish and Wildlife Branch.

Upon closer examination, the cat appeared to have some physical characteristics that are associated with Canada lynx. More specifically, the cat had large black ear tufts (approx. 2 inches in length), larger than normal paws and a nearly black tipped tail (only a few white hairs on the ventral side). Given that two lynx-bobcat hybrids were confirmed in Maine and three lynx-bobcat hybrids were confirmed in Minnesota during the spring and summer of 2003, tissue and hair samples of the cat were sent to the Rocky Mountain Research Station (RMRS) of the United States Forest Service in Missoula, Montana.

Within two weeks, the lab sent a report of the results stating, "The sample you sent was a hybrid.

This is confirmed on both of our nuclear DNA assays. Second, the hybridization was from a male bobcat and a female lynx, consistent with all other hybrids that we have identified to date."

Further to these results, the biological data collected from the hybrid by NBDNR indicated the hybrid was a female. In addition, it had two placental scars in the reproductive tract; therefore, it is assumed the hybrid reproduced successfully.

This is the first confirmed lynx-bobcat hybrid in Canada and the sixth confirmed lynx-bobcat hybrid in North America. Given that a hybrid has been confirmed in New Brunswick, fur harvesters may ask questions regarding the harvest, possession and/or trade of these hybrid cats.

Canada lynx is a regionally endangered species in New Brunswick and is also listed on Appendix II of the Convention on International Trade in Endangered Species (CITES). As such, the harvest, possession and trade of wild Canada lynx in New Brunswick are prohibited.

Currently hybrids in international trade are considered to be the more restrictive species, depending on the species crossed. For example, if two species were crossed and one species is more protected (has a higher restrictive or regulated status) then the other, the hybrid offspring would be considered as the same species as the most protected (restricted) parent.

Remaining consistent with international trade regulations, New Brunswick fur harvesters are to be instructed that if a harvested cat has physical characteristics representative of a bobcat it will be considered to be a bobcat. However, if the cat in question has physical characteristics of a bobcat and a Canada lynx, the animal should be given to DNR for further analysis. If DNR concludes the cat is a bobcat the animal will be returned to the fur harvester, but if DNR concludes the cat is a hybrid or a possible Canada lynx the animal will be kept by DNR. Furthermore, fur auction companies in Ontario will also be providing DNR with a list of any Canada lynx pelts received from New Brunswick, in case some pelts get misidentified.

Cade Libby
Furbearer Management Biologist
Fish & Wildlife Branch
Department of Natural Resources and Energy
Fredericton, NB
E3B 5H1

Grassland Bird Research - Project Update

Agricultural systems can provide habitat for wildlife as “agro-ecosystems”. Several bird species make use of agro-ecosystems, especially agricultural hayfields in eastern North America, such as Bobolink, Savannah Sparrow, and the eastern allopatric subspecies of Nelson’s Sharp-tailed sparrow. The value of agro-ecosystems managed for wildlife is considerable when only a small portion of land can ever be protected through reserves. However, even under national management programs, severe declines in many populations of North American grassland birds have continued over the last few decades. The reasons for the decline may involve the loss of hayfields and changes in timing and frequency of hay cutting.

For species and systems of such conservation concern, we know surprisingly little about which agricultural management practices best support populations of grassland birds. Likewise, little is known of habitat selection processes that dictate distributional patterns. Study of habitat selection in these species is important to effective management of grasslands and agro-ecosystems. Determining the process behind habitat selection for these species is indispensable to identifying what constitutes high quality habitat for them in managed agro-ecosystems.

To better understand these processes, I began research in 2002 to determine how habitat quality parameters guide these selection processes. These data will serve to support stewardship activities in agricultural grassland and wet meadow habitats, but addressing the direct demographic and behavioural responses of birds to agro-ecosystem management. This will in part be accomplished through modelling habitat selection for breeding grassland birds in small-medium scale managed and non-managed agricultural landscapes.

All surveys were conducted in 2002 and 2003 in hayfields of the Annapolis Valley, Nova Scotia, across four study sites: Belleisle, Upper Belleisle, Queen Anne, and Pea Round. These sites are marshes that were dyked and drained to a state suitable for agriculture.

Birds were counted visually and mist nets were used to capture birds for banding. Pitfall traps

and sweep netting were used to collect insects. Vegetation was measured in each plot and 15 variables of likely importance to habitat selection of the three study species were used to develop models.

Peak fledging for all species, with the exception of Savannah sparrows in 2002, occurred after the allowable hay harvest date in Belleisle, but before harvest began in Upper Belleisle and Queen Anne. The peak fledging date for bobolinks in 2003 is well past the 1 July harvest opening. It is notable that both bobolinks and savannah sparrows showed a later phenology of breeding events in 2003, by almost a week in most cases. Most breeding behaviours of Nelson's sharp-tailed sparrow appeared earlier in 2003 than in 2002.

Little change was observed in reproductive activity of bobolinks between years and sites. However, savannah sparrows experienced a reduction in breeding activity. Causes for these reproduction declines are unknown but related to a later arrival and clutch initiation date, which is under direct climatic influence. Nelson's sharp-tailed sparrow experienced an increase in reproduction, presumably for the same reasons.

Prey sampling was again particularly successful in 2003. All plots were sampled at regular intervals throughout both summers, and over 111,608 insects have been collected and identified. As expected, the majority of arthropods captured in pitfall traps were terrestrial: spiders, isopods, millipedes, centipedes, and earwigs. Likewise, sweep-netting offered the most reliable means of capturing aerial arthropods: dragonflies and damselflies, lacewings, grasshoppers, flies, butterflies, moths, and tree bugs. The abundance of Lepidopterans (butterflies and moths) has been identified as important to several habitat models.

Although not much variability was observed between years, habitat measures will need to be taken on an annual basis to better determine patterns, trends, and growth rates. However, the typical habitat patch across study sites represents adequate vegetation structure (e.g. ~20% forb cover) for breeding in grassland birds.

Habitat variables incorporated into the logistic regression model showed that litter depth and visual obstruction measurements (grass density: height) were important variables to the best-fit models for all three species. Therefore, it is not surprising that the contribution of those two variables is strongest to increase model fit. In 2004, the importance of these variables now needs to be tested in another setting to determine predictive ability. In addition, it will be important to test the contributions of other variables included in those best-fit models.

Joseph Nocera works out of the NBCFWRU at UNB in Fredericton. He received the ASFWB Research Award in 2003 to continue his study on grassland bird habitat selection: benefits and risks of agro-ecosystem management in Nova Scotia. His complete progress report can be found at the ASFWB website.

AFWB Contributes Letter to Select Committee on Wood Supply

Thanks to the efforts of ASFWB member Ramsey Hart, I was able to write a letter (below) on behalf of the Society to the Select Committee on Wood Supply in New Brunswick. I was extremely happy with the response that I received from members, as I received over 20 e-mails with comments on the draft letter. The comments were positive and people felt that this was a worthwhile endeavour. Going through old records, the Society has been involved in writing position statements since its inception. The earliest record I found was of a letter written in 1969 supporting the seal hunt (some issues do not go away). The letter appears to have been written by then president and now member of our Wall of Fame, Bruce Wright (although the signature was somewhat illegible). If there are other issues that you feel the Society should address, please contact me. Andrew Boyne (902-426-1900), andrew.boyne@ec.gc.ca

12 December 2003

Select Committee on Wood Supply
Office of the Clerk, Legislative Assembly of New Brunswick
P.O. Box 6000
Fredericton, N.B.
E3B 5H1

Re: Status of sustainable wood supply from Crown lands in New Brunswick.

The Atlantic Society of Fish and Wildlife Biologists represents approximately 150 professional biologists

in Atlantic Canada. One of the objectives of the organization is to promote the wise use and management of fish and wildlife resources in Atlantic Canada. It is in this capacity that I write to you on behalf of the ASFWB with respect to the public consultations of the Select Committee on Wood Supply.

The focus of the Jaakko Pöyry Consulting report is on increasing wood supply to those industries that require wood fibre. The ASFWB is concerned that this report does not give adequate attention to the full range of ecological services which come from our forests. These services include but are not limited to: habitat for fish and wildlife populations, maintenance of water quality, mitigation of climate change, and recreational opportunities. The ASFWB encourages the Select Committee to consider wood supply as only one of many management objectives for public forests.

Conservation of New Brunswick's forests and attendant fish and wildlife must be at the population, species and genetic scales. Public forests should better represent the natural mature forest cover types in the province. The ASFWB recommends that mature forest types typical of the ecodistrict be maintained and that forestry practices be conducted in such a way that ensures the maintenance of ecosystem integrity which includes healthy fish and wildlife populations.

Special management zones have been designated based on sound science and management practices. The ASFWB believes that changes to commercial timber harvesting in these areas should only occur if negative impacts to ecosystem integrity including fish and wildlife populations are evaluated and deemed to be negligible.

We believe that it is government's responsiblity to oversee the management of New Brunswick's forests for the public good. Government agencies responsible for the management of public forests should be given the necessary resources to scientifically assess the environmental impacts of forestry activities. Cuts to these government agencies will further restrict the ability of government and erode the public's confidence in the ability of the government to ensure that proper management is taking place. The ASFWB does not support the reduction of staff or funding to these agencies.

The ASFWB supports the conservation of fish and wildlife populations and their habitats which include the forests of New Brunswick. We look forward to the findings and conclusions of the public hearings of the Select Committee on Wood Supply.

Sincerely yours,

Andrew Boyne
President, Atlantic Society of Fish and Wildlife Biologists

Watershed Management Workshop held on Prince Edward Island

The Watershed Management Section of the Department of Environment and Energy has developed a "PEI Watershed Initiative " which seeks to employ watershed planning and management techniques to achieve long term protection and restoration of the environment - including water quality.

To launch this initiative, the Department of Environment and Energy recently sponsored a workshop entitled "Watershed Management on PEI: It's Where We Live". The March 27th workshop was supported by Delta Waterfowl and presented by AVC Inc. More than one hundred people attended the workshop, representing community based watershed organizations, agricultural organizations, government, municipalities, academia and the general public.

Dr. Hans Schreier, Institute for Resources and Environment, UBC, delivered the keynote address, "A Global Need for Watershed Management Innovations and Basic Elements of a Watershed Management Plan". Charley Worte, Conservation Ontario, Dr. John Fitzgibbon, University of Guelph School of Environmental Design and Rural Development, and local government representatives also made presentations.

A panel discussion featuring Robert MacDonald (PEI Federation of Agriculture), and Terry Perry (Trout River Environmental Committee) and the above mentioned speakers was held at the end of the presentations.

ASFWB Financial Statement

Kevin Connor, Treasurer, has released the financial statement for the period 01 January 2003 to 29 February 2004.

Balance Forward from 31 December 2002		**$3,974.17**
ASFWB 2003 Spring Seminar - Sackville NB "Exploring the Genuine Progress Indes (GPI): Assigning Economic Value to Wetland Ecosystems."		
The seminar was jointly presented by the BoFEP's Salt Marsh and Restricted Tidal Systems Working Group (SmaRTS), ASFWB, and Mount Allison's Coastal Wetlands Institute (MACWI). The cost was $30.00 for professionals and $15.00 for students. No revenues were collected by the ASFWB for this seminar.		
OTHER REVENUE FOR PERIOD		
Memberships	$260.00	
	$ 30.00	
	$ 75.00	
Provincial Support	$ 57.04	
CWS Support	$114.26	**$4,910.47**
OTHER EXPENDITURES FOR PERIOD		
Awards	$100.00	
	$250.00	
	$250.00	
Graduate Student Conference	$100.00	
Newsletter	$ 40.35	
	$ 94.11	
Annual Website fees	$ 50.00	
NS Reimbursement for Genetics Workshop		
	$869.43	**$3,156.58**
Overall Balance as of 29 February 2004		**$3,156.58**

ASFWB 2003 - October 29-31, 2003
Statement of Revenue and Expenditures
Submitted by: Hugh G. Broders, AGM Organizer

Revenues:		
David Cartwright Memorial Scholarship		
Silent Auction	$918.00	
Donation by Gary Corbett	$ 20.00	
		$ 938.00
Memberships		$ 730.00
Registration/Banquet Fees		
(Net HST collected & remitted of $350.49)		$2,271.51
Less: 2 cheques made payable to ASFWB		
sent to K. Connor (shown in above figures)		($145.00)
Total Revenue:		**$3,794.51**
Expenses:		
Student Award (Amanda Lavers)		$ 100.00
Photocopying		$ 2.40
Registration Room Rental		$ 50.00
Catering (banquet-Ramada)		$1,220.44
Catering (breaks at B.I.O.)		$ 336.00
Total Expenses:		**$1,708.84**
Excess Revenue over Expenses		**$2,085.67**
TOTAL	**$2,085.67**	**$5,242.25**
OTHER REVENUE FOR PERIOD		
Memberships	$ 35.00	
Other Revenue	$ 145.00	
Balance Forward to 02 March 2004		**$5,422.25**

On 30 October 2001, a payment of $2,551.25 was made to top up the existing capital of the David Cartwright Scholarship Fund at UNB to $20,000.00. The total balance generated speficially for the David Cartwright Scholarship Fund through silent auctions since the 30 October 2001 payment is as follows:

AGM 2001 - Sackville, NB	$ 544.50
AGM 2002 - Rocky Harbour, NF	$ 302.00
AGM 2003 - Dartmouth, NS	$ 918.00
TOTAL*	$1,764.50

(*Total is included in the above "balance forward to 02 March 2004 of $5,422.25)

Current Executive of the Atlantic Society of Fish & Wildlife Biologists

Andrew Boyne	President
Mary Beth Benedict	Past President
Kevin Connor	Secretary/Treasurer
Sarah Chisolm	VP Student Affairs
Tony Nette	VP Membership
Rosie MacFarlane	Newsletter Editor
Rosemary Curley	VP Program

Become a Member of the ASFWB

If you are interested in becoming a member of the Atlantic Society of Fish and Wildlife Biologists, please contact Kevin Connor at: Kevin.Connor@gnb.ca

We are always looking for articles to include in our newsletter. Articles can be emailed to Rosie MacFarlane at: remacfarlane@gov.pe.ca

ASFWB website: ASFWBweb@chebucto.ns.ca

Diane Griffin Retires...

On April 2, 2004, Diane F. Griffin retired from her position as Assistant Deputy Minister of the PEI Department of Environment and Energy. Diane is best known to many members of the ASFWB for her active participation in our organization while she served as Executive Director of the Island Nature Trust. She was presented with the ASFWB Merit Award in 1990.

Diane began her career in environmental science with the 1973 completion of a Masters Thesis, " An Ecological Study of the Basin Head Sand Dunes" and received her degree from Acadia University. She quickly secured a position with the PEI Parks Divison and 4 years later moved to Edmonton for an 8 year stint with the Alberta Department of Energy and Natural Resources where she was the Natural Areas Coordinator. Like many Islanders, Diane returned to PEI, and in 1984, she took the job of the first Executive Director of the Island Nature Trust, bringing the fledgling organization into the national eye as one of the first and most successful land trusts in Canada. Many later Trusts used the Island Nature Trust as a model. On June 20th, 1995, Diane received a call from Premier Catherine Callbeck and accepted a job as Deputy Minister of the PEI Department of Environmental Resources.

Looking back at her career, Diane has some good memories of seeing environment come first, and of substantial strides in habitat protection. In Alberta, she took great satisfaction in getting the landmark legislation, the Wilderness Areas, Ecological Reserves and Natural Areas Act moved along for consideration of the legislature. The Act passed. On PEI, while with the Island Nature Trust, Diane put the Trust on a relatively secure financial footing and was careful to keep the vision of protecting the remaining fragments of natural habitat on the Island, not getting sidetracked by sometimes controversial and less important issues. She did find time in her busy career to assume presidency of the Canadian Nature Federation and to co-author a book, " Atlantic Wildflowers".

Diane fought one of the great conservation battles in Island history, bringing the proposed development of the Greenwich sand dunes before the Land Use Commission and having it denied. She followed up by promoting a land swap in which agricultural land suitable for development would be made available to the developer in exchange for the significant dune system; the trade was eventually completed. When the Greenwich dunes were secured by the Province and protected under the Provincial Natural Areas Act, Diane continued to lobby for even better protection from her Deputy Minister's office and was successful in having Parks Canada and Federal MP Lawrence MacAulay evince an interest in her proposal. Greenwich was added to PEI National Park in 1998.

Diane enjoyed her stint with the National Round Table on Environment and Economy, and is pleased to see the concept of "natural capital" being used in some government thought processes. She remains disappointed that the Province has been unable to make changes to the Lands Protection Act which would allow the Island Nature Trust to own more than 3000 acres of land. This was recommended by the PEI Round Table on Resource Land Use and Stewardship.

In the category "advice to others" Diane sees one of the big challenges for the wildlife professional as patience. "Its hard to be patient. We often see an urgency to get something done, and find we have to work within the system to get legislation or policy in place. This is very slow in the Federal system; in a small province there are often fewer resources but it can be much quicker." She acknowledges too that it helps to have dedicated staff to move things along, and feels she has been fortunate to have had assistance from "great folks and good allies" throughout her career.

Diane has some retirement goals:

1. Break the 100 in golf;
2. Make more use of her custom made fly rod;
3. Spend more time hunting Canada geese;
4. Leave PEI behind in winter for somewhere with better downhill skiing

Diane plans to continue as Chair of Bird Studies Canada and retains her spot on the regional Board of the Nature Conservancy of Canada. She will

remain involved with the Charlottetown Rotary and will continue to lobby for a big green space in Charlottetown on the Agriculture Canada Research Station lands. She'll also continue to collect data for the new Flora of PEI under supervision of Island Nature Trust. Diane is not likely to slow down, but she'll be able to golf, travel, hunt , fish, consult and lobby as she pleases, full steam ahead!

Submitted by Rosemary Curley

Bald Eagles Kill Caribou Calves

Bald eagles have started attacking caribou calves in Newfoundland and Labrador, according to the province's executive director of science, Shane Mahoney.

Overall caribou calf mortality on the island has doubled in the last year, said the province's executive director of science, Shane Mahoney.

He said eagles that would normally forage on fish species on the coast such as capelin, but the traditional food source may have been disrupted.

"As we all know, many of these marine systems have been jeopardized and many of the patterns are off kilter," said Mahoney.

"It's possible eagles, in the absence of that food source, have begun to forage more inland and have found these very vulnerable one- to three-day-old caribou which they are proving to be quite capable of killing."

While the proportion of caribou deaths from eagles are not significant overall, Mahoney called it a new dimension scientists had not previously considered.

The number of eagles on the inland has increased thanks to conservation measures and it's possible predation by eagles may intensify.

The eagles kill the calves by pushing their talons into their backs and rib cages, causing the mammals to hemorrhage, the biologist said.

Other caribou predators include coyotes, black bear and lynx.

Written by CBC News Online staff
<http://cbc.ca/bios.html>

Upcoming Conferences/Workshops/FYI

23RD ANNUAL SUBMERGED LANDS MANAGEMENT CONFERENCE
The SLM Conference is scheduled for 19-24 September 2004 in Halifax, Nova Scotia. Conference themes include: jurisdiction and ownership of submerged lands; surveying, mapping and legal issues; public trust doctrine; commercial and recreational uses; fish habitat and aquaculture issues; navigation and shipwrecks; marine protected areas; hazard mitigation and coastal planning. For information, access http://www.gov.ns.ca/natr/land/slmc

ADDRESSING THE DEPLETION OF THE ATLANTIC SALMON IN MAINE
A new report from the National Academies' National Research Council states that urgent actions are needed if the once-abundant Atlantic salmon in Maine are to be replenished. Rehabilitation efforts are needed statewide to preserve Maine's population of the fish, which constitutes most of the Atlantic salmon population in the Unites States. For information, access http://www4.nationalacademies.org/news.nsf/isbn/0309091357?OpenDocument

PUBLIC CONSULTATIONS: SPECIES AT RISK ACT
The Species at Risk Act (SARA) was proclaimed in June 2003, and is one of a three-part Government of Canada strategy for the protection of wildlife species at risk. The Act provides the public with a consultation process. The current public consultation documents are: Consultation on Amending the List of Species Under the Species At Risk Act; and Federal Policy Discussion Paper: Critical Habitat. 14 May 2004 is the deadline for commenting. For information and to download the documents, access http://www.sararegistry.gc.ca/public/default_e.cfm

2 April 2004 is the deadline for submitting abstracts to the "6th Bay of Fundy Ecosystem Workshop", scheduled for 29 September - 2 October 2004 in Cornwallis, Nova Scotia. Topics include: Physical, chemical and biological oceanography; Ecology and natural history of the region; Fisheries; Wildlife biology; Resource use by humans; Ecosystem health or integrity; Marine protected areas, wildlife reserves or parks; and Coastal or watershed issues around the Bay. For information, access http://www.bofep.org/2004_workshop.htm

AGM 2004 on P.E.I.

The 41st Annual General Meeting of the Atlantic Society of Fish and Wildlife Biologists will be held October 25th - 27, 2004 at the Stanley Bridge Country Resort, Prince Edward Island. Please circle the date on your calendars and think about how you can contribute to the meeting. Watch for a call for papers in your e-mail and/ or snail mail. Conference organizers are Rosemary Curley, Rosanne MacFarlane and Randy Dibblee. All can be contacted at 902-368-5000. Email: frcurley@gov.pe.ca