

PICOIDES

Bulletin of the Society of Canadian Ornithologists
Bulletin de la Société des Ornithologistes du Canada

Picoides, October 2006
Volume 19, Number 3/4



Whooping Crane and Canada Goose. Photo by David Raitt



Table of Contents

Table of Contents	2
Editor's Message	4
President's Report	5
News from Ornithological Council	6
2006-07 SCO/SOC Council	7
Poetry Corner - WHEN PIGEONS FLY LIKE FALCONS By Bob Nero	7
2006 D.H. Speirs Award Recipient - Allan Baker	8
2006 Jamie Smith Memorial Award for Mentoring in Ornithology Winner - Marty Leonard	9
2006 SCO/SOC Student Research Award Winners	10
Canadian Students Take 4 NAOC Awards in Veracruz	11
SCO/SOC Membership Report	12
2007 SCO/SOC Student Research Awards Competition	16
Doricha: An Introduction to the Birds of Veracruz	17
2007 Kelly Research Fund Call for Requests	18
2007 AOU Student Membership Awards Competition	19
White Common Ravens	20
Avian Research in an Otter Lab	21
Report of the 24 th IOC, Hamburg Germany	25
Avian Conservation and Ecology Call for Papers	26
The Biodiversity Centre for Wildlife Studies	27
Recent Marine Bird Research in the Canadian High Arctic	28
A National Boreal Bird Habitat Modelling Project for Canada	32
Theses in Canadian Ornithology	34
Atlas of Breeding Birds of Ontario, 2001-2005	36
Ontario Nest Records Scheme 37 th Report 1956-2005	38
Book Review – Animal Communication Networks	43
Book Review – The Rockies: A Natural History	45



Table of Contents continued

McGill Bird Observatory Donation Request	47
SCO/SOC Contact Information	48
SCO/SOC Committees and Working Groups	49
Findings on SCO/SOC Website	49
SCO/SOC Membership Form	50



Snow Geese. Photo by George Tosh.



Editor's Message

How was your summer? I hope it was a safe, fun and productive summer for everyone.

At least twice a year, I go birding for fun. On the weekend of the September 29-October 1, I went to the Nature Saskatchewan Fall Meet in Saskatoon. On the Saturday field trip, I saw my first whooping cranes in the wild— a family group of 3 migrating to Aransas Wildlife Refuge in Texas from Wood Buffalo National Park. They were so cool to see! They were seen foraging in a field at Blaine Lake northwest of Saskatoon. Some of other species seen or heard during the field trip included Sandhill Crane, Common Loon, Eared Grebe, Pied-billed Grebe, Horned Grebe, Red-necked Grebe; Snow, Ross, White fronted and Canada geese; Bufflehead, Gadwall, Mallard, Blue-winged Teal, Redhead, White-wing Scoter, Common Goldeneye, Ruddy Duck, Common Merganser, Lesser Scaup, Northern Shoveler, Sharp-tailed Grouse, Hungarian Partridge, Ring-billed Gull, Franklin's Gull, Bonaparte's Gull, Cooper Hawk, Red-tailed Hawk, Northern Harrier, Bald Eagle, Tree Swallow, Western Meadowlark, Raven, American Crow, Black-billed Magpie, Rusty Blackbird, Lapland Longspur, Cedar Waxwing, European Starling and White Throated Sparrow. Weather was fabulous (22 C by afternoon, sunny and little wind) as well as the fellowship among naturalists.

Sorry to have missed in the meeting in Veracruz because of a work-related conference and meetings that week. I am sure it was a great meeting. Please find numerous reports from Veracruz and check out the other ornithological articles and notices as well in this issue.

Please note new submission deadlines although submissions are welcomed anytime. On a final note, I need all members to continue to submit material and I welcome your feedback to improve *Picoides*. After all, it is your publication. I look forward to hearing from you.

Cheers,

Rob Warnock
Editor of *Picoides*



**PLEASE NOTE NEW
PICOIDES DEADLINES!
Deadlines are now
February 15, May 15 and
October 15.**

Cedar Waxwing. Photo by David Raitt.



President's Report October 2006

By Charles M. Francis, (Past-) President, SCO/SOC

As I write this, my two years term as president has just wrapped up, and it is time to pass the helm to Susan Hannon, our incoming president. This term has been exceptionally busy, with many major milestones for SCO, including launching of our journal *ACE-ECO*, moving *Picoides* to an electronic format, expansion of the website, a very successful stand-alone meeting of the society last year in Halifax, and most recently, participation in the largest ornithological meeting that has ever been held in the Americas. I would like to take this opportunity to thank everybody in SCO who has helped to make these things happen. We are increasingly gaining recognition both nationally and internationally as one of the major ornithological societies in the Americas.

Preparations for the 4th North American Ornithological Conference (NAOC) started two years ago, with a planning meeting in Veracruz that I attended on behalf of the SCO, along with representatives from the other 7 societies that decided to participate as full partners in the conference (American Ornithologists' Union, Cooper Ornithological Society, Association of Field Ornithologists, Raptor Research Foundation, Wilson Ornithological Society, Waterbird Society and the Mexican Ornithological Society, CIPAMEX). The venue looked good, the birding was spectacular, especially the raptor migration, and we all agreed to move forward. I had the dubious distinction of being elected chair of the Steering Committee, with the assurance that it would be largely a nominal position, providing liaison from the local committee to the societies....

Of course, nothing is ever so simple, and I found myself closely involved in negotiations over selecting a professional conference organizer, agreeing on budgets, dealing with communication challenges with Mexican organizations, including changes in ownership or management of nearly every organization we dealt with, organizing workshops, and helping to coordinate the various committees. Over 3000 E-mails and many conference calls later, we were very pleased when we finally arrived in Veracruz and everything went off successfully. I would like to take this opportunity to thank the remainder of the core management team: Ernesto Ruelas and Juan Martinez who ran the local committee, Bonnie Bowen who managed the budgets, Helen Schneider Lemay whose company dealt with all the finances, and John Faaborg who led the scientific program committee and had the challenging task of sorting all those abstracts!

We had well over 1700 people registered, with 1200 abstracts on the scientific program. The plenary speakers were excellent, the parallel sessions went smoothly and the poster sessions were extremely well attended. There were well-organized social activities every evening, including special events for students, and a street party laid on by the mayor of Boca del Rio, the town at the southern edge of Veracruz where we were based. The conference was extremely well attended by Mexicans, leading to unprecedented interaction between U.S., Canadian and Mexican ornithologists. Several of the associated workshops helped to foster significant advances in collaborative ventures, including plans to expand the Breeding Bird Survey to Mexico, to develop bird-ringing programs in Latin America, as well as the possibility of developing bird atlases as monitoring tools in the Caribbean and Mexico.

Many people also took advantage of their visit to Mexico to do some birding, either before or after the conference, or taking a few hours break in the middle of the conference. The raptor migration was particularly spectacular, with huge movements nearly every day. Few people were not awed by the sight of enormous kettles of Broad-winged Hawks, Swainson's Hawks and Turkey Vultures



gliding past, as well as smaller numbers of many other species. Daily migration counts frequently exceeded 50,000 with some days topping 200,000 raptors.

We hope that the many interactions developed at this conference will foster long-lasting collaborations with our Latin American colleagues – conservation of so many of our birds is critically dependent on good conservation in their wintering and migration areas in Mexico, the Caribbean, Central and South America.

Next year, the SCO plans to have a smaller meeting in Canada, in conjunction with the Canadian Wildlife Service bird groups, following the success of the Halifax meeting in 2005 and Saskatoon in 2003 – details are still being worked out and should be announced soon. In 2008, we have tentatively planned to meet jointly with the AOU and Cooper Ornithological Societies in Portland, Oregon. However, for those interested in continued collaborations with Latin Americans, there are meetings of the Neotropical Ornithological Society in Venezuela in May 2007, and the Society for the Conservation and Study of Caribbean Birds in July 2007. Why not see whether you can fit one of those into your schedule?



News from the Ornithological Council

By Lesley Evans Ogden

A fact sheet on avian influenza, entitled "Avian Influenza: what ornithologists and bird banders should know" is currently in preparation and will be available on the OC web site soon. The fact sheet details what is currently known about this disease in wild birds, noting the gaps in knowledge, and outlines the implications for ornithological researchers, such as what safety precautions can be taken to avoid infection.



Lark Buntings. Photo by Nicola Koper



The 2006-07 SCO/SOC Council

By Susan Hannon

Congratulations to the following recently elected people who officially took office at SCO-SOC meeting in Veracruz: Here is the current list of Council -- the additions say "elected 2006":

Officers:

President: Sue Hannon
Vice-President: David Bird - elected 2006 (formerly a council member)
Past-President: Charles Francis
Treasurer: Pierre Lamothe
Membership Secretary: Therese Beaudet
Picoides Editor: Rob Warnock
Recording Secretary: Greg Robertson

Councillors:

Jean-Francois Giroux
Ken Otter
Ian Warkentin
Leslie Evans-Ogden
Jean-Michel DeVink
John Chardine - elected 2006
Nicola Koper - elected 2006
Joe Nocera - elected 2006
Ryan Norris - elected 2006
Andrea Pomeroy - elected 2006



Ibis. Artwork by Hans Blokpoel

Those leaving council, we thank them for their hard work:

Councillors:

Marc-Andre Villard
Rob Butler
Bob Clark
Marc Belisle

Past President:

Jean-Pierre Savard



Sharp-tailed Grouse. Photo by David Raitt

Poetry Corner

WHEN PIGEONS FLY LIKE FALCONS

By Bob Nero

Strong wind blowing
and cold enough to keep
my parka hood up
yet six pigeons seemingly immune
to late January chill
drift our way on steady course
one bold bird right overhead
lowered wings stiffly set
like sharp fins
remindful of coursing falcon
so I'm musing...of course
peregrines gained their prowess
and keen lines
in pursuit of swift pigeons.



**2006 Doris Huestis Speirs Award
For Outstanding Contributions to Canadian Ornithology**

Dr. Allan Baker

Submitted by The D.H. Speirs Award Selection Committee for 2006 (David Bird, chair; Mark Brigham; Bob Clark; and Marty Leonard).

The Doris Huestis Speirs Award is the most prestigious award of the Society of Canadian Ornithologists and is presented annually to an individual who has made an outstanding lifetime contribution to Canadian ornithology. **The SCO/SOC is happy to present the 2006 Doris Huestis Speirs Award to Dr. Allan Baker for his contributions to research and training in ornithology and for his service to the field, both in Canada and abroad.**



Allan Baker with tarsometarsus of the largest moa

Allan is Senior Curator of Ornithology and Head of the Department of Natural History at the Royal Ontario Museum and a professor in the Department of Ecology and Evolution at the University of Toronto. He began his scientific career at the University of Canterbury in New Zealand, where he studied the evolutionary history and historical biogeography of the world's oystercatchers. Shortly after completing his PhD, Allan moved to Canada where he has spent the last 30 years working on the population genetics, molecular systematics and biogeography of birds, but also mammals and fish. During his career, Allan has produced an edited book on Molecular Methods in Ecology and over 130 papers on topics including patterns and processes of differentiation in introduced bird populations, cultural evolution of bird song, molecular genetics and phylogeography of shorebirds, and population structure and phylogeny of birds ranging from parrots to seabirds.

Allan's contributions to ornithology also extend beyond his many research publications. Over his career, he has trained 39 graduate students and post-docs, with many holding academic positions in universities throughout the world. He has served as Associate Editor for the Auk and Systematic Biology, and is a member of the Editorial Board of BMC Evolutionary Biology. He is the co-chair of the All Birds Bar-coding Initiative, which aims to identify all the world's bird species with unique DNA sequences and he is a co-founder of the Global Flyway Network, which provides an early warning system for identifying migratory shorebirds at risk. Amazingly, he has also convened a symposium at every IOC held in the last 20 years.



Short-billed Dowitcher. Photo by Alex Bond

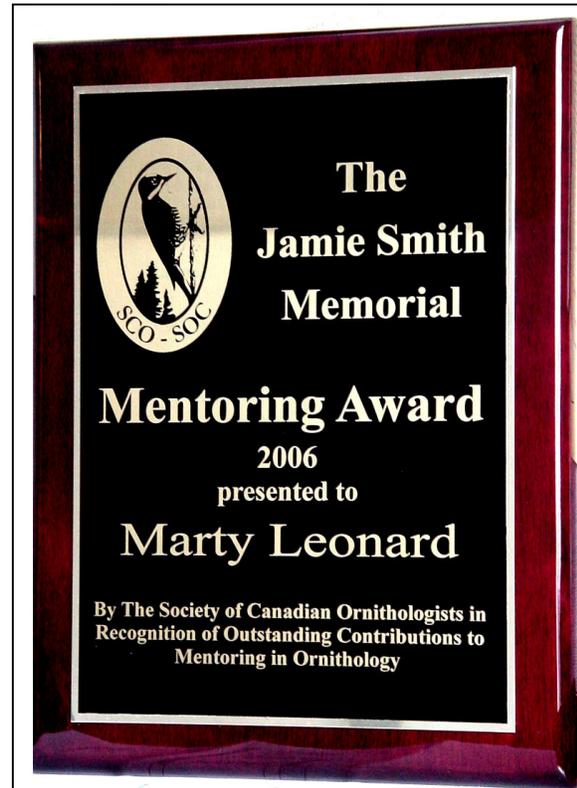


**The Jamie Smith Memorial
Award for Mentoring in Ornithology**

By Ken Otter, Chair,
Jamie Smith Memorial Mentoring Award
Committee

It is with great pleasure that the Society of
Canadian Ornithologists presented the
inaugural Jamie Smith Memorial Mentoring
Award to:

**Dr. Marty Leonard,
Professor, Dalhousie
University.**



Marty had tremendous support from the many former students who nominated her. All spoke highly of Marty's ability to inspire and motivate them to think creatively and critically about their work. She was described as having an "uncanny ability to know exactly how much supervision to provide and how much free rein to give", allowing students to design their own experiments while providing guidance to ensure scientific rigour and potential for success.

Her passion and enthusiasm for ornithology and conservation were described as captivating, and she was noted by several as instrumental for inspiring young women to consider biology as a career. All her support letters also commented on her willingness to take the time to listen and help resolve problems that students encountered during any stage of their field studies, analysis or writing. One former student described her as "one of the best mentors of prospective young scientists that I have encountered in my years in the field of conservation".

Marty's suitability as the inaugural recipient of this award is, however, summed up beautifully in the letter provided by her nominator, who had actually sought Jamie Smith's advice on graduate supervisors. His response had been "if you want a really great mentor, you should contact Marty Leonard"

On behalf of the award committee, I would like to congratulate Marty on her achievements and encourage others to consider making nominations of supervisors and peers for next year's awards.



Society of Canadian Ornithologists/
Société des ornithologistes du Canada
2006 Student Research Award Winners

The Student Awards Committee members were:

- Joël Béty, Univ. de Québec a Rimouski
- Russ Dawson, Univ. of Northern British Columbia
- Rodger Titman, McGill Univ.
- Liana Zanette, Univ. of Western Ontario
- Bob Clark, Environment Canada (Chair)

The Applicant pool - 2006

There were 16 applicants from Universities across Canada and were evaluated by 4-5 committee members (avoiding conflicts of interest) using set criteria shown on the SCO/SOC web site.

2006 Award Winners

Percy A. Taverner (\$500.00 each)

Jennifer Foote (Queen's Univ.), Ph.D.

Is the dawn chorus of black-capped chickadees an interactive communication network?

Sarah Jamieson (Simon Fraser Univ.), Ph.D.

Variation in parental care strategies of female western sandpipers and dunlin: A test of the predation danger hypothesis.

James L. Baillie (\$1,000.00)

Neil Goodenough (Univ. Western Ontario), M.Sc.

Does raising a Cowbird nestling exhaust a song sparrow parent?

Fred Cooke (\$500.00)

Stephanie Topp (Univ. Windsor), M.Sc.

Patterns and social contexts of duet song and repertoire use in rufous-and-white wrens



Canadian Students Take 4 NAOC Awards in Veracruz

By Greg Robertson

Canadian students had a strong showing at the 4th NAOC meeting in Veracruz, submitting 32 talks and 20 posters eligible for the presentation awards. On behalf of SCO-SOC, 2 awards were given specifically to Canadian students. The winners were Kelly Jewell (talk) and Matthew Reudink (poster). Additional Canadian winners included Mark Bidwell, who won a general NAOC best student presentation award, and Emilie Berthiaume who won for the best raptor presentation (on behalf of the Raptor Research Foundation). A full citation of these presentations are below. Congratulations to the winners and to all the students who participated.

The award winning Canadian NAOC student presentations are follows:

Jewell, K.J. and Arcese, P., University of British Columbia, Vancouver, BC
COWBIRDS AND SONG SPARROW POPULATION DYNAMICS: PREDICTION OF REFUGES FROM PARASITISM IN THE SOUTHERN GULF ISLANDS, BC

Reudink, M. W., Queen's University, Kingston, ON, Marra, P. P., Smithsonian Institution, Washington, D.C., USA, Kyser, T. K., and Ratcliffe, L. M., Queen's University, Kingston, ON
DOES PLUMAGE INFLUENCE WINTER TERRITORY ACQUISITION IN AMERICAN REDSTARTS?

Bidwell, M. T., University of Saskatchewan, Saskatoon, SK, Wasson, M. F., Appalachian Voices NGO, Boone, United States, and Dawson, R. D., University of Northern British Columbia, Prince George, BC
CALCIUM LIMITATION IN NORTH AMERICAN SWALLOWS

Berthiaume, E., and Bélisle, M., Sherbrooke University, Sherbrooke, and Savard, J.-P. L., Canadian Wildlife Service, Quebec.
SHOULD DETECTABILITY BE INCLUDED IN HAWK COUNT POPULATION TREND ANALYSES?



Brown-headed Cowbird. Photo by Jean-Sebastien Guenette



**SOCIETY OF CANADIAN ORNITHOLOGISTS
REPORT ON MEMBERSHIP – AS OF DECEMBER 2005**

by **Thérèse Beaudet**, Membership Secretary, SCO

This report gives the picture of SCO membership on December 31st, 2005. Following recommendation by the Auditor, the Membership report should follow the fiscal year, which goes from January 1st to December 31st. Since no report was filled on 31 December 2004, comparisons cannot be done between the status of membership at the end of 2004 with the status at the end of 2005. In this report, we are comparing the situation at the end of December 2005 with August 2004 (meeting in Laval University) and September 2005 (Halifax). Next year, for the fiscal year 2006, we will be able to compare membership on 31 December 2006 with membership on 31 December 2005.

At the end of December 2005, the number of SCO members has reached 394 (Table 1), with 59 new members who joined when registering for the SCO meeting in Halifax, in addition to the 30 who joined before the meeting. This is a net increase of 59 members (17,6%) from the 335 who were on the membership rolls at the time of reporting in October 2005 at the AGM in Halifax. As is true every year, this list includes those who have paid dues for 2005 and beyond, as well as those who have not yet renewed for 2005 (but have paid for 2004) (Table 2). We had to archive a total of 28 members who did not pay for 2004; 12 members reactivated their memberships later on. Before last year meeting in Halifax in October 2005, 101 members (only 30%) had renewed for 2005; at the end of 2005, 311 (78,9%) members had paid their 2005 membership.

Table 1. Affiliation of SCO members
(Those working for the Canadian Wildlife Service (CWS)
in a University are listed as CWS, in Category #2)

Affiliation (Category)	<i>Members in Aug 2004</i>	<i>%</i>	<i>Members in Sep 2005</i>	<i>%</i>	Members in Dec 2005	%
None (0)	38	12,4	28	8,4	32	8,1
University (1)	127	41,5	158	47,2	186	47,2
Canadian Wildlife Service (2)	61	19,9	66	19,7	87	22,1
Other Fed. Gov. Agencies (3)	7	2,3	5	1,5	8	2,0
Museum (4)	7	2,3	6	1,8	5	1,3
Non Gov. Agencies (e.g. DU) (5)	14	4,6	15	4,5	20	5,1
Prov. Gov., Hydro-Québec (6)	16	5,2	20	6,0	17	4,3
Clubs, Societies (7)	9	2,9	10	3,0	10	2,5
Private Consultants (8)	20	6,5	19	5,7	21	5,3
Libraries (9)	7	2,3	8	2,4	8	2,0
TOTAL NUMBER OF MEMBERS	306	100	335	100	394	100



Table 2. Renewal Status of members

Paid through	<i>Members in Aug 04</i>	<i>%</i>	<i>Members in Sep 2005</i>	<i>%</i>	Members in Dec 2005	%
2003	44	14,5	78	23,5		
2004	176	57,9	153	46,1	83	21,1
2005	62	20,4	70	21,1	132	33,5
2006	12	4,0	16	4,8	144	36,5
2007	4	1,3	11	3,3	17	4,3
2008	6	2,0	4	1,2	12	3,0
2009					3	0,8
Complimentary	2		3		3	0,8
TOTAL NUMBER OF MEMBERS	306	100	335	100	394	100

Contrary to last year, the number of members increased this year, even if 28 non-renewers were deleted, raising the total number of archived names at 236, including deceased. Concerning renewals, the trend seems similar to what is usually observed: new members, mainly students, seem to be harder to hold on than those who have been around for a while. This is despite reminders and final notices sent by e-mail to members who had not paid dues for 2003. The students typically move and do not send new addresses. However, a new trend seems to be emerging: faithful members are retiring and do not automatically remain members as retirees.

Table 3. Year when members joined

Year joined	Number of members	%	Number of non-renewers	RM/STM
1983 (founders)	19	4,8		
1983-1989	65	16,5	5	5 RM
1990-1995	27	6,9	1	1 RM
1995-1999	34	8,6	4	4 RM
2000-2004	157	39,8	18	6 RM/12 STM
2005	89	22,6		
Unknown	3	0,8		
TOTAL NUMBER OF MEMBERS	394	100		

Allowing people to renew for more than one year probably increases retention; it also reduces time spent by the Treasurer and the Membership Secretary, and bank and postage costs for members. As Table 4 shows, 44,8 % of the membership have renewed for more than one year at a time. The number that commits for more than one year has decreased slightly, due to the new members who all joined for only one year when registering for the meeting in Halifax.



Table 4. Renewal pattern of members

Number of years paid when renewing/joining	<i>Members in Aug 2004</i>	<i>%</i>	<i>Members in Sep 2005</i>	<i>%</i>	Members in Dec 05	%
1	134	43,8	150	45,2	216	55,2
2	99	32,4	109	32,8	101	25,8
3	44	14,4	39	11,7	40	10,2
4	8	2,6	12	3,6	11	2,8
5	20	6,5	20	6,0	21	5,4
6	1	0,3	2	0,6	2	0,5
TOTAL NUMBER OF MEMBERS	306	100	332	100	391	100

A breakdown of the membership by category is shown in table 5. The number of sustaining members has decreased from 20 to 13 from 2004 to December 2005, even if the SCO gives a Charity receipt of \$25 for sustaining memberships. The number of Student members has increased in 2005, likely following the obligation to be a member in order to apply for awards.

Table 5. Breakdown of SCO membership by categories

<i>Membership Category in 2004</i>	<i>Members in Aug 2004</i>	<i>%</i>	Membership Category in 2005	Members in Sep 2005	%	Members in Dec 2005	%
<i>Regular (\$15/year)</i>	220	71,9	Regular (\$25/year)	235	70,0	273	69,3
<i>Sustaining (\$30/year)</i>	20	6,5	Sustaining (\$50/year)	13	3,9	13	3,3
<i>Student (\$10/year)</i>	58	18,9	Student (\$10/year)	82	24,5	102	25,9
<i>Student Award Membership</i>	5	1,6	Student Award Membership	2	0,6	3	0,8
<i>Complimentary</i>	3	1,0	Complimentary	3	0,9	3	0,8
TOTAL NUMBER OF MEMBERS	306	100		335	100	394	100,0

As usual, SCO membership has been broken down geographically (Table 6); the SCO is truly a national body, represented in every province and territory. This year's provincial and territorial representation is slightly different from previous years, because there has been an increase in membership in Nova Scotia and New Brunswick following the meeting in Halifax. Typically, membership increases in a province following a meeting in that province, i.e. in Québec following the meeting in Laval University, and in the Maritimes provinces following the meeting in Halifax. An increase in members from Ontario is also observed this year, likely due to the CWS meeting that preceded the SCO meeting in Halifax. Abroad membership (many of these are, of course, actually Canadians living elsewhere, mainly in the U.S.) seems more or less stable from year to year (34 in 2003, 29 in 2004, 36 in 2005).



Table 6. Geographical breakdown of SCO membership

Geographical area	<i>Members in Aug 2004</i>	<i>Members in Sep 2005</i>	Members in Dec 2005
Newfoundland	9	7	7
Nova Scotia	8	11	27
New Brunswick	17	16	24
Prince Edward Island	1	1	2
Québec	35	50	58
Ontario	72	77	90
Manitoba	12	13	13
Saskatchewan	43	43	43
Alberta	31	33	35
British Columbia	44	46	51
Yukon	2	2	3
North West Territories	2	2	4
Nunavut	1	1	1
Unites States	22	24	28
Mexico	1	1	1
Australia and New Zealand	2	3	3
Europe	4	5	4
TOTAL NUMBER OF MEMBERS	306	335	394

The existence of the SCO webpage, and the fact that a membership application form can be downloaded, has proved useful; this year again a few individuals have joined using the form, at least some of whom undoubtedly discovered the existence of the SCO from the web. Membership might be further increased by interesting additions and more varied and regularly updated information on the webpage.

Finally, I have to mention that SCO members were sent several collective electronic messages since the last meeting, a good number of them in relation to *Picooides* (sending the bulletin itself, but also sending calls for papers) and others sending notices to members who had to renew their memberships. Varied announcements were also sent: meetings, fundraising for Jamie Smith Award, NOAC meeting). Out of the 394 members, we have functioning e-mail addresses for 376 of them. Only 18 members do not have e-mail access, do not want to communicate electronically with the SCO, or for whom we do not have correct e-mail and postal addresses.

It has been my pleasure to serve as Membership Secretary for the third year. I have to thank the Treasurer, Pierre Lamothe, with whom I worked closely on the membership file, Dorothy McFarlane Diamond, with whom I am still exchanging e-mails every time she is sending paper issues of *Picooides* to a few members and libraries, and also Ken Otter and Rob Warnock, who provide me with most of the electronic material I regularly had to send the members.

Thanks to all.

Thérèse Beaudet
Membership Secretary, SCO
25 September 2006



2007 SCO-SOC Student Research Awards Competition

The SCO-SOC administers three different student research awards - the [Taverner Awards](#), [James L. Baillie Award](#), and the [Fred Cooke Award](#).

Applicants must be [members](#) of the SCO-SOC to be eligible.

A single [application](#) can be made to apply for all three types of Student Research Awards. The deadline for application is [15 February 2007](#). Applications are available online at: <http://www.sco-soc.ca/awards.html>

Successful applicants are strongly urged to submit brief project reports (3-4 pages) within 1 year of receipt of award to *Picoides* so the membership can learn about your award winning research.

Applications should be emailed to:

Robert Clark
Chair, SCO-SOC Student Awards Committee
Canadian Wildlife Service, Saskatoon
e-mail: bob.clark@ec.gc.ca
Phone: 306-975-4110

Taverner Awards

Taverner Awards are offered by The Society of Canadian Ornithologists to honor Percy A. Taverner and to further his accomplishments in increasing the knowledge of Canadian birds through research, conservation and public education. The awards are aimed at people with limited or no access to major funding, regardless of professional status, who are undertaking ornithological work in Canada. Two awards of up to \$750 each are made annually.

James L. Baillie Student Research Award

The James L. Baillie Student Research Award is open to any student conducting ornithological research at a Canadian university. It honors the memory of James L. Baillie and shall be for research that is consistent with the objectives of the James L. Baillie Memorial Fund. These are to support: studies of Canadian birds in their natural environment; projects which contribute to preservation of birds; and projects which disseminate knowledge of birds. The James L. Baillie Student Research Award is funded by Long Point Bird Observatory / Bird Studies Canada from proceeds of the Baillie Birdathon, and is administered by The Society of Canadian Ornithologists. A single award of up to \$1000 is made annually.

Fred Cooke Student Research Award

The Fred Cooke Student Award is offered jointly by the SCO and Bird Studies Canada to honour the contributions of Professor Fred Cooke to Canadian ornithology by supporting ornithological conference travel or research activities by a student at a Canadian university. The Award shall be open to any student conducting ornithological research at a Canadian university, except that previous recipients of the Award shall not be eligible. The Award shall be for travel to ornithological conferences at which the student will make a verbal or poster presentation, or research in any aspect of ornithology anywhere in the world. A single award of up to \$1000 is made annually.



Doricha: An Introduction to the Birds of Veracruz



This CD-ROM was developed as a bird-song training tool for distribution at the NAOC, with support from the Canadian Wildlife Service of Environment Canada. The authors, Fernando González García, Antonio Salvadori, Charles M. Francis, Antonio Celis Murillo and Margaret Campbell, brought together over 400 recordings of 200 species of birds in Veracruz, as well as about 1000 photographs of 430 species of Mexican birds to provide a tool to introduce people to the tremendous diversity of birds in Mexico, and to help them learn some of the bird songs.

The program is named after the Mexican Sheartail, *Doricha eliza*, a spectacular hummingbird known only from Veracruz and the Yucatan. It includes features that allow you to browse through the photographs while listening to the bird songs, and then to quiz yourself afterwards, either based just on the songs, or on the songs and photos together.

In the future, we plan to expand this to include recordings and photographs for as many as possible of the 1000 species of birds known from Mexico. As much as possible, we would like to use recordings or photographs of birds taken in Mexico. We believe that this will be an extremely valuable tool to help Mexican birders and ornithologists increase their skills, and thus participate more fully in bird surveys and monitoring programs, and become more fully engaged in conservation activities. If you have made sound recordings of birds in Mexico or if you have a collection of photographs that you would be interested in contributing to this project, please contact Charles Francis: charles.francis@ec.gc.ca.



Kelly Research Fund Requests Now Being Accepted for 2007

Fonds commémoratifs de recherche Alfred B. Kelly, Protection des oiseaux du Québec

Des subventions d'une somme maximale de 3 000 \$ sont disponibles pour la recherche visant directement l'étude des oiseaux du Québec. Ce concours est ouvert à tous, quelque soit le lieu de résidence ou le niveau de scolarité, ainsi qu'à toute la gamme de projets, qu'il soit académique (ex. thèse de doctorat), ou pratique comme un inventaire d'un marécage. Toute soumission sera évaluée selon son mérite et comparée aux autres soumissions reçues. Enfin, pour raison d'impôts, le numéro d'assurance sociale de l'auteur ou un numéro d'enregistrement d'organisation à but non lucratif doit être indiqué sur la soumission.

Pour obtenir les formulaires de soumission contactez:
Protection des oiseaux du Québec: Comité de recherche CP 43, Succ. B
Montréal, Québec H3B 3J5
ou: lance_laviolette@lmco.com

Date limite pour les formulaires complétés: le 16 février 2007

The Alfred B. Kelly Memorial Research Fund of Bird Protection Quebec

Research grants for amounts up to a maximum of \$3,000 are available for studies pertaining directly to Quebec ornithology. Projects which have been funded in the past have covered a wide range of research levels, from doctoral theses to much less formal wetland inventories. Applications will be accepted from any interested persons regardless of place of residence or educational background and will be evaluated based on their merits and ranked in accordance with other applications received. For income tax purposes, a social insurance number or a charitable organization number must be supplied on all applications.

Requests for application forms should be sent to:
Bird Protection Quebec: Research Committee PO Box 43, Station B
Montreal, Quebec H3B 3J5
or: lance.laviolette@lmco.com

Deadline for completed applications: 16 February 2007



2007 A.O.U. STUDENT MEMBERSHIP AWARDS COMPETITION

Are you a student interested in joining the American Ornithologists' Union (AOU)? The Council of the AOU has voted to provide one-year student membership awards to qualified undergraduate or graduate students interested in pursuing a career in ornithology.

There are many benefits to becoming a member of the AOU:

- (1) You will receive *The Auk*, the leading journal of ornithology.
- (2) You will receive *Ornithological Monographs* a venue for longer ornithological publications.
- (3) You will have access to the online membership directory, providing contact information for all members of the Ornithological Societies of North America.
- (4) You will be eligible to apply for travel awards to attend annual meetings and research grants to support high quality research.
- (5) You will become part of a forward-looking organization that promotes participation of professionals and amateurs in the mission of understanding and conserving birds.

To qualify, students must:

1. Have no current or prior membership in the AOU
2. Provide a resume or curriculum vitae describing the current degree program, the expected date of completion and the candidate's academic and/or work experience, and interests in ornithology.
3. Provide a brief letter of sponsorship from an academic advisor on letterhead from the institution in which the student is currently enrolled.

Awards are not renewable, but recipients can continue to be AOU members at the reduced student rate for four additional years, as long as they retain student or post-doctoral status.

To apply, send materials by mail or email to: Dr. Daniel Mennill, AOU Student Membership Awards Committee, Department of Biological Sciences, University of Windsor, Windsor, ON N9B3P4, Canada. Email: membershipawards@aou.org (please use subject heading "AOU Student Membership Award" if submitting by email).

Applications are accepted at any time of year, although students are encouraged to send materials prior to January 1 to receive their first issues of the publications in January.

More information on the AOU website: <http://www.aou.org/>





White Common Raven

By Larry Halverson

"White" ravens. These young white Common Ravens were photographed in the spring of 2005 with their black parents at Brisco, British Columbia. They had been feeding on a grizzly bear carcass. They are not true albinos as Barry Lancaster explains -

"Firstly, it is possible to get white feathering in almost any coloured bird but especially noticeable in black birds of course, due to damage to growing feathers (particularly juveniles) or, sometimes, feathers removed as a result of injury will grow white - similar to the grey hair phenomenon in humans? As I mentioned, diet deficiency can also cause normally black feathers to grow white - definitely a well-known effect produced in youngsters. Although distinctly different from genetics (perse) they could of course be under the influence of genes associated with feather production. I dislike the term 'partial albinism' as it is somewhat of an anachronism and would be quite difficult to demonstrate anyway.



Black and white Ravens. Photo by Don Wolfenden

Albino is the production of an all white individual with COMPLETE lack of melanin(s). Thus, not only will the feathers be white, but also the bare parts will lack blacks and browns. It is possible to have a bird - like these Ravens, which have white feathers BUT have normal colouration of the bare parts. Therefore, the eye is black, as is the bill, and the legs. With albino, the eye would be red, the legs and bill might be yellowish. This is because the colours yellow (and red) - especially of bare parts, are produced by a different mechanism employing carotenes, which are acquired with food. House Finch

is a good example. If kept in captivity, unless fed with carotenes, the red colour will be yellow. Flamingos are

another example. Until carotenes became an item of trade for bird keepers, zoos had to feed Flamingos with shrimp to keep them red. Further more, this had to be done as long as the birds were growing feathers.

The parents of these two youngsters almost certainly carry the same set of recessive genes and as a result all white-FEATHERED youngsters are produced when a set is received from each parent.

The terms leucism and dilute are also associated with the 'white' phenomenon although generally, the results are, quite literally a dilute version of the full colour. Pastel is used in aviculture to describe the same or similar effect."

Larry Halverson

Naturalist, Kootenay National Park

Box 220, Radium Hot Springs, BC V0A 1M0

250 347 2207 phone, 250 347 9980 fax, e-mail, larry.halverson@pc.gc.ca



Avian Research in an Otter Lab

By Ken A. Otter

Chickadee Research at UNBC

Since 2000, my students and I have been studying the effect of habitat on reproduction and behaviour in black-capped chickadees. From 2000-2005, this research was conducted in the University's endowment lands located immediately behind campus – the University holds approximately 600 ha of mature (>80 years old) sub-boreal forest on the same hillside on which the University resides. Adjacent to this mature forest is a land that was completely cleared for logging and agriculture in the late 1960s, and was left to go feral in the early 1980s. In 1986, this 200 ha area was donated to the city, sections were cleared, replanted and trail networks established in what was to become a demonstration of a model working forest to showcase the forestry industry. The park was named "Forest for the World" in reference to the World Expo being hosted in Vancouver the same year. This park, which includes a 30ha lake, is typical of the young, regenerating forests common in northern British Columbia, with non-managed areas a mixture of conifers and aspens, and managed areas dominated by firs and pines. The contrast with the neighbouring unlogged forest is dramatic. Although similar in species composition - with interior Douglas Fir and Lodgepole Pine the primary conifer component, and Trembling Aspen, Paper Birch, Green Alder and various willow species dominating the deciduous - the relative abundance of individual species shifts between sites, with earlier successional species like pine and alder dominating the young forests, and later successional species (firs and aspens) dominating the mature forest. The mature forest has a fairly continuous canopy of 25-30m, whereas the young forest has a sparse canopy of between 5-15m. Despite these differences, the relative abundance of settling black-capped chickadees in the two forests was similar. Our goal was to determine whether this persistence in young forest (although habitat generalists, black-capped chickadees are naturally associated with mature mixed-wood forest) masked an underlying and subtle effects on reproduction and behavior that typically went unnoticed. Selecting two 100 ha areas (one in either habitat), we initiated detailed banding and population monitoring studies on chickadees in either habitats.

Kevin Fort was the first student on this project (MSc 2003) followed by Harry van Oort (MSc 2004). Kevin found that birds in the young forests had unusually low territorial behaviour, tolerating frequent intrusions by neighbouring pairs, and having high degrees of territorial overlap compared to birds in adjacent mature forest. Further, pairs in young forest, especially socially subordinate pairs (as determined by watching dominance interactions in winter flocks), had very high rates of nest abandonment, meaning that breeding success of pairs in these forests was much lower than in mature forest. Harry's work extended this theme, documenting that birds in young forest appeared to have higher metabolic rates and reduced nestling provisioning rates compared to counterparts in mature forest – again the effect of these seemed to hit the subordinate pairs in young forest hardest. Harry's next result was more surprising – Harry recorded the dawn singing behaviour of chickadees, which we had previously shown to be correlated with the social rank of males (dominants sing more than subordinates, and this may mean the signal is honestly reflecting differences in conditions of the males). As we suspected birds sing less in young forests than in mature forests, something that we would predict if these young forests are poorer quality habitat. However, it was the DOMINANT males in these young forests that sang the least, rather than the subordinate males as we had predicted. These result suggest that the dominant birds in these poor habitats may face a trade-off – if you have limited access to resources, you may not be able to sing a lot at dawn (which appears to be a means of advertising one's availability for extra-pair copulations from neighbouring females) and simultaneously be able to provide your mate with the resources to make your own nesting successful.



This idea was corroborated when Sarah Atherton joined the project as an undergraduate research assistant in 2004. Harry, Sarah and I addressed another signal that appeared to be energy dependent – female food solicitation calling during the egg laying period. During this time of energetic demand, females call frequently with a characteristic vocalization (called a “broken dee”). In response, males feed them. To determine if females that are hungry call more, we followed pairs monitoring their calling rates and corresponding feeding behaviour. We then presented feeders with meal worms to half the pairs and let the males feed their mates. As predicted if calling is hunger-related, female calling rate drops dramatically in the periods after supplemental feedings. We then tracked unmanipulated pairs and found that females mated to dominant males call less than those mated to subordinate pairs. In addition, pairs in young forests call more than those in mature forests, suggesting that these females may be hungrier. As with Harry’s chick provisioning data, the effect of habitat was stronger among subordinate pairs than among dominant pairs. This further suggests that males may trade off singing at dawn during this period to make sure their own mates are happily fed!

In 2006, several factors prompted the relocation of our study site. First, I was on sabbatical working on editing a book (Ecology and Behavior of Chickadees and Titmice, Oxford University Press) and wanted a change of scenery. Second, the massive expansion of UNBC in the past few years started to encroach on our study area - imagine my surprise to return from a three week stint away to discover a 50m wide transmission line running through the middle of our mature forest site! All-in-all, the time seemed right to chart a new course. I took advantage of the arrival of two visiting graduate students from France – Thibault Grava and Angelique Roux – who along with our research technician, Eileen Brunsch began the establishment of a new research site at the John Prince Research Forest in Fort St. James 200 km away. This 13 000 ha working forest and its associated field station are co-managed between the T’lazten First Nation and UNBC. The advantage of this area was that we have greater access to habitat of varying ages, as well as the new ability to test whether patterns seen in Prince George could be generalized to similar habitats throughout Northern BC.

Angelique and Thibault embarked on a study to confirm that dawn singing in chickadees is related to their ability to acquire food resources. By supplementally feeding some males and comparing them with control males of similar rank in the same kind of habitats, Thibault and Angelique confirmed that males with greater food access sing more at dawn. This finding, coupled with our work on natural variation in singing behavior further suggests that young forests may have a deficit in resource availability. Further, through tracking birds throughout the spring breeding period, Angelique, Thibault and Eileen confirmed similar patterns of territorial breakdown and nest abandonment among pairs breeding in young forests in Fort St. James that had been seen in Prince George.

Several new graduate students are gearing up to continue this work at the JPRF in 2007.



Black capped Chickadee. Photo by David Raitt



Kevin Fort



Harry van Oort and Inge Hansen (research assistant)



Eileen Brunsch & Sarah Atherton



Angelique Roux and Thibault Grava – two Southern French students prepared for Northern Canadian Winters



Angelique Roux. Photo by Thibault Grava



Thibault Grava Photo by Angelique Roux

Other Photos by Ken Otter



Bird Movement and Wind Farms

In 2005, we embarked on a new avenue of research in the lab – addressing questions about how birds (and to a lesser extent bats, at least until we can get more expertise on this subject!) react to wind farm development. Collisions of birds and bats into wind towers, and what causes such collisions, is currently one of the hottest topics in wind farm development. Yet, despite decades of wind farms on landscapes there is surprisingly little detailed behavioural work on how birds respond to these structures. No wind farms currently exist in British Columbia, so we had the unique opportunity to develop before and after research projects on proposed sites.

Five faculty at UNBC are now involved in the newly initiated *Centre for Wind Energy and the Environment* which is a joint partnership between UNBC, the Canadian Wildlife Service and the wind energy industry. The faculty have a broad expertise range, from avian behavior (myself), wind meteorology (Peter Jackson), environmental assessment planning (Eric Rapaport), conservation genetics (Brent Murray) and GIS/remote sensing cartography (Roger Wheate). Through several successful grant applications, we have purchased a mobile radar system consisting of two radars (vertical and horizontal spanning) transported in a covered trailer. The trailer can be dragged by either truck or ATV, allowing for access onto the ridgetops in BC's Peace River region where one of the first wind farms in the province has just received EA approval (Dokie Wind Energy's proposed site occupying ridge tops near Chetwynd, BC). In the fall, we began a partnership with XENEX technologies in Vancouver, who produce an image capture interface for radars, allowing us to save radar data for later analysis of bird tracking. We will be working with XENEX this winter to develop customized software to enhance the ability of the system to function for wildlife tracking.

Two graduate students, Adrienne (Age) Labrosse and Phil Thomas began work on the project in fall 2005, formally starting MSc degrees on pre-construction monitoring of bird behavior on the Wartenbe and Dokie Ridges that will constitute the sites for the wind farm. Age and Phil completed a successful spring migration tracking field season which was punctuated by some very exciting - and hopefully not repeated - logistics issues (such as being emergency airlifted by helicopter when the ridge they were working on caught on fire!).

Now half way through their fall migration field work, Adrienne's project focuses on assessing some of the methodology used for environmental assessments with respect to birds. Specifically,



Adrienne (Age) Labrosse and Phil Thomas. Photo by Ken Otter.

she is assessing what attributes of birds influence whether they are detected in searches (the standard technique used to determine collision rates in wind farms), and whether these bias influence our assessment of risk-sensitive species. Further, she will be assessing the levels of tracking intensity required to accurately characterize bird migratory behaviour during pre-site monitoring for wind development. Phil's thesis focuses on tracking movement patterns of nocturnal and diurnal migrations. By using radar and visual

tracking of birds, and superimposing these on satellite imagery of the sites, he will be assessing the consistency of flight patterns with respect to landscape features, such as ridge edges. High

winds characterize these ridges, and several have the ridge edge facing obliquely into the wind, creating updrafts that raptors and other birds could use in migration. Phil's thesis will look at determining whether such features and weather patterns can be used to develop predictive models of movement patterns, and whether these can then be extrapolated to other areas. Age and Phil will also be tapping into Env Can weather radars in the region to look at broad-scale timing of migration movement, and comparing these to the data they are getting from fine-scale tracking on individual ridges.



This work will continue through the construction phases of the wind development at Dokie Wind Energy, as we continue to work with AXYS/Jacques Whitford consulting on the ongoing biological monitoring of the post-construction phase. In addition, the centre has applied for NSERC Strategic Grant funding to expand this work onto other western ridges, as well as partner with Dan Esler and Sean Boyd on monitoring potential offshore wind farm development on Haida Gwaii (formally the Queen Charlotte Islands). Results of this application will be announced in Oct, and so hopefully we will be reporting on a major gearing up of activities in the years to come.



**Report on the 24th International Ornithological Congress,
Hamburg, Germany, Aug 13-19, 2006**

The IOC this summer was a great success, with 1300 attendees and close to 1000 presentations: 10 plenary lectures, 48 symposia (240 papers), 32 oral sessions (160 papers), 4 afternoons of poster presentations (535 posters), an evening of presentations by German ornithologists, two evenings of round table discussions (19 RTD's), and a presidential forum and a panel discussion in the evenings on the topic of "Bird science and bird conservation: have we lost our way?". Many of the delegates from 71 different countries were traveling to the congress during the terrorist alarms at Heathrow airport and some horrific tales of delays and lost luggage provided entertainment during the congress. The program ran flawlessly due to the superb organizational skills of Franz Bairlein. We instituted an automatic timing system, consisting of bird calls to denote the end of presentations and 3 minutes of music to allow time for room changes. This kept all concurrent sessions on time and allowed a breather in between talks. The Proceedings will be published in Journal of Ornithology and more information on the program can be obtained from the website: <http://www.i-o-c.org/>

Submitted by Susan Hannon, Chair of the Scientific Program Committee, IOC.



Semipalmated Sandpiper. Photo by David Raitt



Editors-in-Chief: Thomas D. Nudds, University of Guelph, Canada and Marc-André Villard, Université de Moncton, Canada

Publisher: The Resilience Alliance on behalf of the Society of Canadian Ornithologists and Bird Studies Canada

Journal URL: <http://www.ace-eco.org>

Publication Announcement

SCO is pleased to announce publication of the second issue of Avian Conservation and Ecology - Écologie et Conservation des Oiseaux (ACE-ECO). ACE-ECO is an open-access, fully electronic scientific journal, sponsored by the Society of Canadian Ornithologists and Bird Studies Canada. The first issue has now been published: please check the website to see the articles. You can also register on the web site to receive automatic notification every time a new issue is published (twice a year).

Call for Papers

Editors-in-Chief Thomas Nudds and Marc-André Villard would like to invite authors to submit articles to ACE-ECO. The journal publishes peer-reviewed, scientific papers pertaining to the conservation, ecology, and status of birds. In focusing on research that is simultaneously pure and applied avian ecology, the journal will complement other publications, such as traditional ornithological journals, conservation publications, general ecology journals and those focused on specific groups of birds. Although ACE-ECO is intended in part to enhance the international profile of Canadian ornithology and applied avian science, contributions will be welcomed from all over the world. Authors are invited to submit their original work under any of the following manuscript categories:

Research Papers

Standard papers reporting research results using the classical format (Introduction, Methods, Results, Discussion, Literature Cited). Length restricted to 6000 words exclusive of tables, figures and literature cited.

Letters

Relatively short papers designed to attract attention to innovative concepts or techniques which have the potential to strongly influence the research area. Letters will be of interest to a broader audience than topics addressed in standard research papers. For example, a letter describing a major advance in the estimation of juvenile survival using an innovative method to track bird movements over long time intervals and/or distances is likely to be of interest to avian ecologists generally. Statistical analyses supporting the concept or technique may be preliminary, but nevertheless robust with respect to the inferences drawn. Letters describing innovative concepts or techniques accompanied by too few data, or inappropriately analyzed, will not be accepted. Length is restricted to 3000 words, exclusive of tables, figures and literature cited.

Essays

In-depth reflection on an issue with major implications for avian conservation. Even though no original data are required for this manuscript type, the article must present an original, insightful perspective. Maximum length: 3000 words.



Forum

Short papers (1000 word limit) designed to respond/follow up on papers published in recent issues, or to reply to such commentaries. Short commentaries can also raise attention on issues that were not specifically addressed in the journal.

Publication fees are \$750 CDN for all articles except forum papers which are \$375 CDN. Note that these fees are the only way that we can afford to publish this journal and still make it fully open access, so that everybody, anywhere in the world can reach it. This is a small investment relative to the cost of doing your research.

Manuscripts are submitted electronically using a user-friendly online submission upload interface. Authors are asked first to register as an author (<http://www.ace-eco.org/login.php>) to obtain the pass codes that are needed to access the online submission upload interface. Submission details and manuscript formatting guidelines are available online at <http://www.ace-eco.org/submissions.php>.

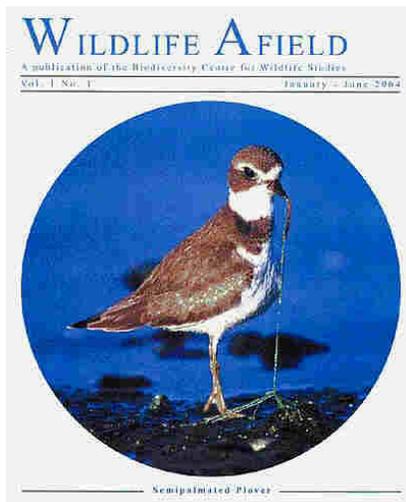
For more information, please check the web site.

The Biodiversity Centre for Wildlife Studies

The Biodiversity Centre for Wildlife Studies has established Canada's first regional **Wildlife Data Centre** in British Columbia. It is a "one-stop" source for information on British Columbia's amphibians, reptiles, birds and mammals. The information, gathered from naturalist, birdwatchers, professional biologists, universities, libraries, and museum collections, is stored in a set of newly designed databases. The advanced programs and queries allow for information to be summarized quickly and accurately for conservation and preservation initiatives.

The center situated in Victoria, has the largest regional wildlife library in Canada (65,000 articles), the largest computerized databases (5 million records), a wildlife image bank (over 100,000 images) and the largest and most actively used nest record scheme (180,000 records). The center also publishes "Wildlife Afield" bi-annual journal. Past issues have included feature articles like "Food Habits of the Barn Owl in the Southern Interior of British Columbia" and "Migratory Occurrence and Status of Select Shorebirds in the Vicinity of Fort St. John, British Columbia."

For more information go to <http://www.wildlifebc.org> or contact Biodiversity Centre for Wildlife Studies, Box 6218, Station C, Victoria, BC V8P 5L5



Larry Halverson
Naturalist
Kootenay National Park
Box 220
Radium Hot Springs, BC V0A 1M0
250 347 2207 phone
250 347 9980 fax
larry.halverson@pc.gc.ca



Recent marine bird research in the Canadian High Arctic

Mark L. Mallory¹, H. Grant Gilchrist², Birgit M. Braune², and Anthony J. Gaston²

¹Environment Canada, Canadian Wildlife Service, P.O. Box 1714, Iqaluit, NU, X0A 0H0 Canada, E-Mail: mark.mallory@ec.gc.ca

²Environment Canada, National Wildlife Research Centre, Raven Road, Carleton University, Ottawa, ON, K1A 0H3, Canada

In the last issue of *Picoides* (Volume 19(2), June 2006), Kyle Elliott described some of his research as part of the long-term studies on Thick-billed Murres (*Uria lomvia*) at Coats Island, Nunavut, led by Tony Gaston. In this paper, we highlight some other recent research on marine birds from the Canadian High Arctic.

Sea-Ice and Seabird Reproduction

Marine birds are a ubiquitous feature of polar environments, typically feeding at upper trophic levels, and thus are sensitive indicators of the condition of marine ecosystems because they are affected by changes in many levels of the marine food web. Many also rely on features of sea-ice for feeding (edges, polynyas, underside of ice). In years when marine food resources are reduced, aspects of marine bird reproduction are concordantly reduced. Between 2000-2003, we investigated how the extent and timing of sea-ice break-up affected reproduction of four seabird species breeding at Prince Leopold Island, Nunavut (74°N, 90°W).



Tony Gaston (with helmet) and Jo Nakoolak band a Thick-billed Murre. Photo by Mark Mallory

In 2001 and 2002 (late ice years), the edge of the sea-ice was approximately 200 km east of the Prince Leopold Island seabird colony, but the edge was < 20 km from the colony in late June of 2000 and 2003 (early ice years).

These contrasting ice conditions corresponded to marked differences in reproductive parameters for breeding marine birds (Gaston et al. 2005a,b). In late ice years, egg-laying by Thick-billed Murres, Black-legged Kittiwakes (*Rissa tridactyla*) and Glaucous Gulls (*Larus hyperboreus*) was delayed. Similarly, murre eggs were up to 5% smaller, chicks grew slower and weighed 42% less at 10 d old, and chick feedings were 1.6 – 3.3 times less frequent per day in late ice years compared to early ice years.

Kittiwake reproductive effort was reduced; significantly fewer 2-egg clutches were laid in late ice years, resulting in fewer chicks produced. In late ice years, foraging trips by adult northern fulmars (*Fulmarus glacialis*) were 29% longer than in early ice years, and significantly fewer fulmar chicks that hatched survived to fledging, suggesting lingering effects into the chick-rearing period after the ice had broken up.

Marine birds should incur higher energetic costs in years with more extensive sea-ice due to higher commuting costs to and from the colony to feeding areas, and perhaps increased costs of finding food during less productive seasons (i.e., lower marine productivity). Our results supported this hypothesis, in that many reproductive parameters for marine birds were reduced in years when ice cover was more extensive in Lancaster Sound, and these directly or indirectly



translated into lower reproductive success (Gaston et al. 2005a,b). What does this mean for marine birds breeding at Prince Leopold Island? In the short term, this research suggests that current trends towards earlier ice break-up in the Arctic may be beneficial for local marine birds, because commuting times should be relatively short and food more predictably available. However, the longer term consequences, such as changes in the location and timing of local food production, increased storm frequency, altered contaminant deposition or release into food webs, and invasion of new, more southern species into Arctic marine ecosystems remain to be determined.

Population surveys and monitoring

The High Arctic has a relatively low diversity of seabird species (1 petrel, 5 gulls, 4 auks) but supports very large colonies. Most of the Canadian population of Northern Fulmars, and large numbers of Black Guillemots (*Cepphus grylle*) and Thick-billed Murres, as well as the entire Canadian populations of Ivory gulls and Dovekies (*Alle alle*), breed in this region. The Northern Conservation Division of Environment Canada maintains a long-term programme to monitor population changes for all these species. This involved periodic counts, either direct or from photos, of selected colonies throughout the Arctic. Although most species either have been stable, or have shown modest increase, over the past two decades, recent trends in large gulls, especially the Glaucous Gull suggest population declines across much of the Arctic. These trends have triggered increased survey activity for the species. Recent reviews for High Arctic seabird populations have been produced for the Thick-billed Murre (Gaston 2002) and the Northern Fulmar (Gaston et al. 2006).

Declining Ivory Gull Populations

The Ivory Gull (*Pagophila eburnea*) is a true Arctic marine bird, breeding in the remote nunataks, plateaus and small islands of the High Arctic, and wintering in the pack ice of Davis Strait. Inuit local ecological knowledge alerted us to perceived declines in local gull populations (Mallory et al. 2001), and subsequent surveys at sea (Chardine et al. 2005) and at colonies (Gilchrist and Mallory 2005) confirmed that this species appears to have undergone an 80% decline in population since the 1980s. However, the causes of this decline are unclear.



There have been few noticeable changes at breeding colonies or nearby feeding areas, except for recent mining activity on the Brodeur Peninsula of northern Baffin Island, so we suspect that factors leading to declines have probably occurred in migration or wintering areas. One potential influence is hunting: Canadian Ivory Gulls have been harvested during migration along Greenland (Stenhouse et al. 2004). As well, sea-ice thickness, extent, distribution and timing are all changing in the bird's wintering grounds, which may be affecting the availability of essential winter foods. Finally, recent evidence shows that Ivory Gulls have some of the highest recorded mercury

The Ivory Gull population in the High Arctic has declined in the past 25 years. Photo by Mark Mallory

concentrations in their eggs of any seabird species in the circumpolar Arctic (Braune et al. 2006), at levels sufficient to potentially cause reproductive problems.

Based on the results above, COSEWIC uplisted the Ivory Gull to *Endangered* in May 2006. Our research will continue to try and isolate, and hopefully reverse, the factors contributing to this species' troubles.



Contaminants in High Arctic Seabirds

Long-range transport of contaminants emitted into the atmosphere in temperate regions and deposited in the Arctic continues as a well-recognized environmental issue. Levels of contaminants in Arctic marine birds have been monitored for 30 years at Prince Leopold Island (Braune et al. 2001, 2002, Braune and Simon 2003, 2004), and provide one of the best datasets available to show how changing trends and patterns of various contaminants deposited into the Arctic environment manifest themselves in wildlife. At Prince Leopold Island, Glaucous Gulls eggs have roughly an order of magnitude greater concentrations of PCB and DDT than is found in kittiwake, murre or fulmar eggs, consistent with the pattern of highest contamination in top predators. Encouragingly, levels of well-known culprits like DDT and certain PCBs continue to decline in marine bird eggs (Braune et al. 2001), and most contaminants studied do not seem to be affecting reproduction in the birds.



However, the news is not all positive. Contaminant concentrations vary by species and colony location (Braune et al. 2002), and many colonies have never been sampled. As well, concentrations of mercury and certain organochlorines appear to be increasing in eggs at Prince Leopold Island (Braune et al. 2001, unpubl. data), and research on fulmars suggests some detectable effects of existing contaminant burdens on fulmar physiology (Braune, unpubl. data). Finally, mercury concentrations in Ivory Gull eggs are above threshold levels known to have reproductive effects on other birds (Braune et al. 2006). Thus, while contaminants in Arctic marine birds are low compared to levels found in other sites like the Canadian Great Lakes, the jury is still “out” on how these low but increasing levels may be affecting species living in the harsh Arctic environment.

Conclusions

Because of its remote and inhospitable nature, the Arctic is often thought of as a pristine region of Canada. However, the integrity of ecosystems in the Canadian Arctic is threatened by anthropogenically-induced changes from developed regions to the south,

Ilya Storm collecting murre and kittiwake eggs at Prince Leopold Island for contaminant analysis. Photo by Mark Mallory

including long-range transport of pollutants, climate change, increasing ecotourism, and resource development. Because marine birds integrate and reflect the conditions of Arctic marine ecosystems (e.g., productivity, ice conditions, contaminant levels, community harvest), continued research and monitoring of this group will contribute to effective tracking of environmental changes occurring in Canada’s northernmost regions.

Acknowledgements

We extend our sincere gratitude to the agencies that supported the studies described in this paper: the Northern Ecosystem Initiative (Environment Canada), the Canadian Wildlife Service (Environment Canada), the Polar Continental Shelf Project (Natural Resources Canada), the Nunavut Wildlife Research Trust (Nunavut Wildlife Management Board), the Northern Contaminants Program (Indian and Northern Affairs Canada), and the Environmental Capacity Development Initiative (Indian and Northern Affairs Canada). Thanks as well to the numerous technicians, students and contractors who braved challenging field conditions to help gather these data.



References

- Braune, B.M., and Simon, M. 2003. Dioxins, furans, and non-ortho PCBs in Canadian Arctic seabirds. *Environ. Sci. Technol.* 37: 3071-3077.
- Braune, B.M., and Simon, M. 2004. Trace elements and halogenated organic compounds in Canadian Arctic seabirds. *Mar. Pollut. Bull.* 48: 986-992.
- Braune, B.M., Donaldson, G.M. and Hobson, K.A. 2001. Contaminant residues in seabird eggs from the Canadian Arctic. I. Temporal trends 1975 – 1998. *Environ. Pollut.* 114, 39-54.
- Braune, B.M., Donaldson, G.M., and Hobson, K.A. 2002. Contaminant residues in seabird eggs from the Canadian Arctic. II. Spatial trends and evidence from stable isotopes for intercolony differences. *Environ. Pollut.* 117: 133-145.
- Braune, B.M., Mallory, M.L., and Gilchrist, H.G. 2006. Elevated mercury levels in declining population of ivory gulls. *Marine Pollution Bulletin* 52: 969-987.
- Chardine, J.W., Fontaine, A.J., Blokpoel, H., Mallory, M.L., and Hoffman, T. 2004. At-sea observations of ivory gulls (*Pagophila eburnea*) in the eastern Canadian High Arctic in 1993 and 2002 indicate a population decline. *Polar Record* 40: 355-359.
- Gaston, A.J. 2002. Results of monitoring Thick-billed Murre populations in the Eastern Canadian Arctic, 1976-2000. CWS Occasional Paper No. 106: 13-50.
- Gaston, A.J., Gilchrist, H.G., and Mallory, M.L. 2005a. Variation in ice conditions has strong effects on the breeding of marine birds at Prince Leopold Island, Nunavut. *Ecography* 28: 331-344.
- Gaston, A.J., Gilchrist, H.G., and Hipfner, J.M. 2005b. Climate change, ice conditions and reproduction in an Arctic nesting marine bird: Brunnich's guillemot (*Uria lomvia* L.). *J. Anim. Ecol.* 74: 832-841.
- Gaston, A.J., Mallory, M., Gilchrist, H.G. and O'Donovan, K. 2006. Status, trends and attendance patterns of the Northern Fulmar *Fulmarus glacialis* in Nunavut, Canada. *Arctic* 59: 165-178.
- Gilchrist, H.G., and Mallory, M.L. 2005. Declines in abundance and distribution of the Ivory Gull (*Pagophila eburnea*) in Arctic Canada. *Biol. Conserv.* 121: 303-309.
- Mallory, M.L., Gilchrist, H.G. Fontaine, A.J. and Akearok, J.A. 2003. Local ecological knowledge of ivory gull declines in Arctic Canada. *Arctic* 56: 293-298.
- Stenhouse, I.J., Robertson, G.J., and Gilchrist, H.G. 2004. Recoveries and survival rate of ivory gulls banded in Nunavut, Canada, 1971-1999. *Waterbirds* 27: 486-492.



Northern Fulmars have been the focus of recent contaminant effect studies. Photo by Mark Mallory

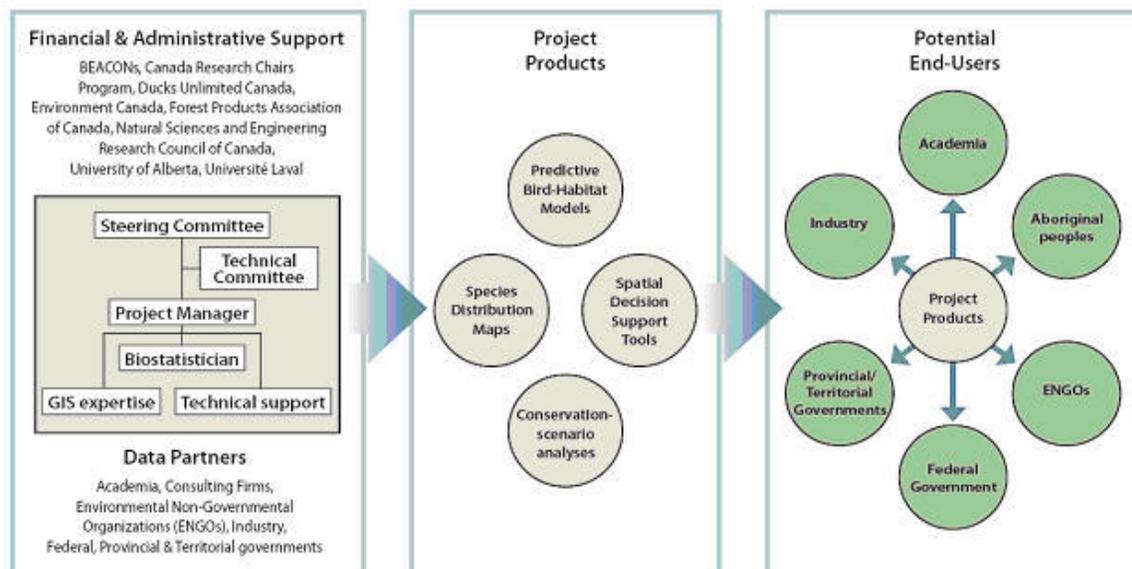


A NATIONAL BOREAL BIRD-HABITAT MODELLING PROJECT FOR CANADA

The boreal region of Canada hosts one of the most diverse bird communities in North America, comprised of more than 300 species. During the summer, as many as five billion birds breed in this region. Currently, we have little detailed knowledge of the habitat requirements of these species, or of how they are distributed across the boreal. Thus, we lack adequate information to support management decisions in the boreal, to conduct environmental assessments or plan for biological conservation. Our goal is to develop the best predictive bird-habitat models possible from existing data in order meet immediate needs and to inform future research and monitoring efforts.

Our Objectives

1. Assemble the best and most complete available data on boreal birds and their habitats.
2. Apply state-of-the art analytical methods to provide reliable information on boreal bird habitat associations, describe patterns in their distribution, and generate testable hypothesis about key mechanisms generating these patterns (e.g. climate, land use, latitude).
3. Build support in academia, industry and governments for further development and testing of these models, and their proactive application to the management of boreal forests and biodiversity conservation. The first phase of the project focuses on the western boreal forest of Canada, i.e. the boreal region west of ON-MB border (Available summer 2006). The second phase of the project encompasses the full geographic scope of the Canadian boreal forest (Available spring 2008).





Our Approach

Using data on boreal birds and their habitats compiled from data sets from existing boreal bird studies, our project is developing spatially-explicit, predictive models that link habitat conditions to bird species responses. The analytical techniques employed depend on the nature of data compiled. A multi-scale approach incorporating biophysical data at local, landscape and regional levels is being pursued. Internal cross-validation methods will assess models overall predictive abilities and identify regions of high uncertainty. This will guide future collaborations with field researchers to collect new data to further test and refine the models. Predictive models and maps of boreal bird distribution and abundance will then be used to develop decision-support tools for forest management and conservation planning. The relevance and application of the information resulting from this project are manifold to agencies concerned with conservation of boreal birds and forests:

1. Information on habitat associations and habitat use by boreal birds to inform strategic planning for migratory bird programs;
2. Information for the assessment of environmental impacts of development. Project products can also aid in reporting and prediction of environmental impacts;
3. As a foundation for conservation planning, including setting of conservation priorities and objectives within forest management plans, and compliance with the Migratory Birds Convention Act;
4. Generation of hypotheses of the ecology and conservation of boreal birds;
5. As an education tool for scientists, planners, land managers, decision-makers, partners and the broader public.

Our Partners

Environment Canada's Western Boreal Conservation Initiative and the University of Alberta's Boreal Ecosystems Assessment for Conservation Networks (BEACONS) have initiated and funded this project. Additional support is provided by the Canada Research Chairs Program, Environment Canada's Canadian Wildlife Service, Ducks Unlimited Canada, the Forest Products Association of Canada, and the Natural Sciences and Engineering Research Council of Canada. We have over 50 data partners currently, including boreal researchers from academic institutions, consulting firms, environmental non-governmental organizations, federal government, forestry companies, mining companies, oil and gas companies, and provincial governments.

Contacts and Links:

Western Boreal Conservation Initiative
Environment Canada
Rm 200, 4999-98 Ave 751
Edmonton, AB T6B 2X3
<http://www.pnr-rpn.ec.gc.ca/boreal>
E-Mail: boreal@ec.gc.ca
Tel: (780) 951-8600

The BEACONS Project
Dept. Renewable Resources
University of Alberta
751 General Services Building
Edmonton, AB T6G 2H1
<http://www.rr.ualberta.ca/Research/BEACONS/index.htm>
E-Mail: dan.mazerolle@afhe.ualberta.ca
Tel: (780) 492-8061



Theses in Canadian Ornithology

Cabrera-Garcia, L. 2006. Linking Social and Ecological Dynamics for Bird Conservation: Protecting the Endangered Sierra Madre Sparrow in Chichinautzin, Mexico. Ph.D Dissertation, Department of Geography, McGill University, Montreal, QC.

Birds are one of the best studied animal groups in the world but are also amongst the most endangered. The wealth of ecological information has shown habitat protection to be vital to bird biodiversity, but habitat loss and degradation continue to defeat conservationists.

Community-based biodiversity conservation efforts have been recently recognized as an important option for safeguarding ecosystems while reducing land use conflicts arising from the material, cultural and spiritual needs of local inhabitants. Community involvement is particularly critical for conservation in anthropogenic habitats. Few studies have linked the ecological impacts of community land use practices with the auto-ecological requirements of dependent bird species. In this study I examine the conservation possibilities for the endangered Sierra Madre Sparrow (*Xenospiza baileyi*) by considering three basic elements: the ecological requirements of the bird, the effects of traditional land use practices in shaping the habitat, and the economic and social conditions that influence current and future land use decisions. I draw on ecological field studies, on traditional ecological knowledge systems, and studies of the political ecological context that influences local practices.

The studies were carried out from 2000-2003 and employed a combination of ethnographic, participative and spatial-ecological approaches to address human-land interactions and their impacts on the sparrow habitat. Social data were obtained through nine workshops, which included site visits, transect walks, participatory mapping, oral histories and semi-structured interviews. Ecological data were obtained from landscape ecology analysis, vegetation post-disturbance assessments and detailed bird's nest-site selection analysis.



Sierra Madre Sparrow. Photo by Leonardo Cabrera

Results indicate that local people, principally herders, hold a rich knowledge of fire use to achieve diverse purposes, including pasture renewal, grassland maintenance, grass species selection, renewal of mushrooms and medicinal plants, and prevention of dangerous fires. In order to accomplish their goals, herders have established rotational fire and grazing regimes that consider timing, frequency, location and

extent of these disturbance-based practices. This rotational system was found to benefit the Sierra Madre Sparrow by maintaining the grassland at the scales needed by the sparrow for nesting. Multiscale habitat recommendations for the species' conservation were derived from this socio-ecological

interaction and dynamics.

Unfortunately, external conservation perspectives and interests and internal land tenure conflicts have altered this rotational regime and local perspectives on resource management that threaten the resilience of this social-ecological system. Consequently, traditional ecological knowledge on grassland management can be on risk of disappearing and, with it, important native grasses and grasslands are being made vulnerable. The survival of the Sierra Madre Sparrow in particular and of associated biodiversity in general, is in peril if these conflicts are not solved in a relatively short time.



A community-based fire co-management program is recommended to promote integrative bird conservation-local development scenarios.

Leston, L. 2006. Are Urban Forests Ecological Traps for Understory Birds? An Examination Using Northern Cardinals. M.Sc. Thesis. University of Manitoba, Winnipeg, MB.



Northern Cardinal. Photo by Jean - Sebastien Guenette

Although increasing urbanization has been associated in many studies with declines in populations of many native birds (e.g. Neotropical migrants) and increases in exotic species and a few native species, the mechanisms through which urbanization causes these population changes is not well understood. A variety of explanations for these patterns have been proposed, such as habitat loss that usually accompanies urbanization, changes in the land surrounding remaining habitat (e.g. agriculture or urban development), disturbance by

human activity, and changes in nesting substrates, food resources, predator communities, or competitors. Although many studies have focused on the negative ecological consequences of urbanization upon species, a few native

birds such as Northern Cardinals (*Cardinalis cardinalis*) often exhibit high densities in urban habitats. Cardinals are thought to increase in cities because they benefit from the warmer winter temperatures, food sources (e.g. bird feeders) and nest substrates (e.g. ornamental trees and shrubs) to be found there. However, cardinals nesting in urban forests often experience greater rates of nest depredation than those in more-rural forests. In fact, urban forests may represent an ecological trap for Northern Cardinals, whereby birds actively select habitats that ultimately reduce their fitness, especially if repeated nesting attempts do not compensate for predation. Fruiting exotic shrubs that increase with urbanization (e.g. honeysuckles *Lonicera*) are frequently used as nesting substrate and food by cardinals, and may provide a "false" cue for quality habitat. Cardinals and potential habitat cues (nest sites, winter temperatures, food) were surveyed within rural and urban forest sites (6 each) in central Ohio, 2003 – 2005. Fate and productivity of 288 cardinal nests were monitored over both years and hourly provisioning rates were recorded at 24 nests in 2003 and 96 nests in 2004. Not only were cardinals more abundant in urban forests (1.67x in breeding season, 5x in winter), but results suggest that these differences in abundance stem from urban-associated changes in habitat features used by cardinals to select habitats. Cardinals were most abundant in riparian forest sites with warmer winters, lower canopy heights with more exotic shrubs, and more nearby bird feeders - all features more typical of the urban forest sites. Interestingly, there were some mismatches between the habitat features that cardinals used to select habitat and how those features affected reproductive success. In particular, cardinals strongly selected for exotic shrubs as nest sites and urban forests with lower canopy heights where such shrubs were common, even though nests in exotic shrubs were over twice as likely to fail as nests in native trees and shrubs. However, there were no significant differences in productivity and return rates of adults between urban and rural forests as a whole. Thus, these findings provide little support for the idea that urban forests represent ecological traps for native understory birds. Many, species of interest within the study system, such as cardinals, other native understory birds and plants, and exotic honeysuckles, also occur in Canada as well and the existence of an ecological trap would have serious implications for how and where we manage and maintain habitat for wildlife around Canadian cities.



Atlas of the Breeding Birds of Ontario, 2001-2005

By Gregor Beck, Chair, Management Board, Ontario Breeding Bird Atlas

Massive project yields important results... upcoming book available at special pre-sale prices

After several years of upfront planning and five years of fieldwork (2001-2005), the second Ontario Breeding Bird Atlas project is nearing completion. The five atlas partners – Bird Studies Canada, Canadian Wildlife Service, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature – are very excited to announce that the second *Atlas of the Breeding Birds of Ontario* will be published on schedule in September 2007. Over the coming months, atlas staff and over 100 volunteers are writing, reviewing, and editing species accounts, writing other chapters for the book, preparing maps and tables, selecting photographs, and designing the book, and the printing presses are expected to be running next summer.

The second Ontario Breeding Bird Atlas ranks among the most exciting and important bird research and conservation projects undertaken in the Western Hemisphere. It is a stellar example of volunteerism and an exemplary demonstration of how multiple partners can successfully combine their strengths and resources to deliver a massive, collaborative undertaking. All told, about 2,400 project participants logged an incredible 150,000 hours of time in the field actively searching for evidence of breeding birds in every corner of the province, from Pelee Island in the extreme south to the Hudson Bay Lowlands in the far north.

A major change and advancement since the first atlas (1981-1985) was the addition of point counts, during which birders counted all birds and bird species during a standard five-minute period. These counts were conducted at nearly 69,000 points across the entire province. Because the exact location of each point count is known, the compiled results allow us to map and analyze the relative abundance of most species.

Together, atlas participants submitted an astonishing 1.2 million individual breeding bird records, making it a powerful foundation not only for the upcoming book itself, but for innumerable bird research and environmental management applications for many years to come. The combined breeding evidence and point-count data will significantly increase the conservation value of the project, since biologists will be able to detect changes not only in the breeding distribution of species, but also in species abundance.

The new atlas will be an essential environmental and resource management tool, helping to assess and demonstrate how regional and global environmental changes are affecting Ontario's bird populations. Atlas results will be used for species at risk recovery efforts, for numerous conservation-planning efforts across the Americas, for educational and research applications by people of all ages, and to inform environmental assessments, land-use planning, and resource management decisions.

Atlas data are showing significant changes since the first atlas was conducted 20 years earlier. For example, many "Carolinian" species, including Red-bellied Woodpecker, Carolina Wren, and Northern Mockingbird have expanded northward significantly. At the same time, quite a few "northern" species (e.g. Merlin, Common Raven) demonstrate significant southward range shifts. Some species, such as Bald Eagle and Peregrine Falcon, have responded favourably to conservation efforts and are making strong comebacks. Other species, however, are in serious decline, including several grassland species, such as Henslow Sparrow and Loggerhead Shrike, as well as many "aerial foragers," including Common Nighthawk, Whip-poor-will, Chimney Swift, and most swallows. Are these changes



the result of habitat loss, climate change, pollution, or other factors? These are just some of the questions that the atlas (and atlas database) will be addressing.

The book itself will be beautifully designed, with full-colour, state-of-the-art maps and photographs accompanying each of the more than 300 species accounts, each written by selected experts in the field. Bound in hard cover, the book will be over 700 pages long. Each species account will include an overview of the species' breeding range and habitat, distribution and population status in Ontario (and changes from the first atlas), plus information on breeding biology and abundance. In addition, the atlas will contain information on the biogeography of Ontario, overall changes in bird populations, ranges, and trends, and an overview of atlas results. Last but not least, all participants and contributors will be mentioned by name.

The *Atlas of the Breeding Birds of Ontario, 2001-2005*, will be an invaluable resource for researchers, planners, birders and nature lovers not just in Ontario, but across the country, the United States, and beyond. It will be an essential addition to your library, not to mention the libraries of your birding friends and relatives, whether you live in Ontario or elsewhere.

Advance orders for the Atlas are now being taken, with special, time-limited, pre-publication discount prices. The first atlas was a national best seller, and we expect that the new atlas will exceed the 6000 copies sold last time. To reserve your copy (or copies) of this useful and attractive resource, place your advance order today.



To order advance copies of the *Atlas of the Breeding Birds of Ontario, 2001-2005*:

- Visit: www.birdsontario.org/atlas/atlasmain.html
- Call: 1-866-900-7100 or 519-826-2092 (Guelph, Ontario)

Advance price, atlas participants – \$67.00
(includes shipping, handling, GST)

Advance price, general purchasers – \$79.00
(includes shipping, handling, GST)

Anticipated post-publication price – \$92.00

- Deadline for pre-sale orders: February 28, 2007 to qualify for the special price.

Boreal Owl. Photo by Jean-Sébastien Guénette



ONTARIO NEST RECORDS SCHEME Thirty-Seventh Report: 1956 - 2005

OUR 50th ANNIVERSARY!!!

By George K. Peck and Mark K. Peck

The Ontario Nest Records Scheme (ONRS) at the close of 2005 has been operative for 50 nesting seasons. Thus, in our semi-centennial year, we continue to be one of the longest-running avian: monitoring programs in Ontario. Begun in 1956 by George Francis and James Woodford, we were the second nest record program in Canada, after the British Columbia Nest Record Scheme, initiated in 1955 by M.T. Myres. Unlike the British Columbia scheme we do not consider broods away from the nest in our database. Our volunteer program is based in Ornithology, Department of Natural History, Royal Ontario Museum (ROM), Toronto, Ontario, where the nest record cards and the computer database are stored. The ONRS is, essentially, a collection of data records, each detailing one or more visits to an occupied bird's nest, a nest under active construction, or to an active nesting colony, in Ontario. The majority of the current nest records are submitted annually by field volunteers who find active bird nests and record and submit the significant data on nest cards, or on-line by computer. In regard to nest record entry, hard-copy cards are preferred to on-line entry for purposes of processing and summarizing this data. However, if on-line entry is chosen, contributors are urged to carefully enter all known fields and to always supply their observer numbers, provincial region codes (4 letters, not numbers), coordinates or written location, visit dates, nest contents and/or nest activity, and habitat particulars for each nest record.

Again, in this final year of the Ontario Breeding Bird Atlas, our cooperative association has resulted in a steady increase in valued nest records, as nests discovered by atlasers are submitted to the ONRS. In addition to the nests reported by our regular ONRS contributors, these atlas records are greatly appreciated and are a valued asset to our database, especially the records from the little-worked areas in northern Ontario. We urge all atlasers to submit all of their nest finds, and also, to continue to work their squares for this purpose, after 2005. The ONRS is a continuing program and the gathering of this 'best-of-all' breeding evidence, the active nest with its accompanying data, can be of vital importance to all our efforts to conserve the biodiversity *or* birdlife.

NEST DATA SUBMISSION

All nest records from both current and previous years, should now only be entered on-line or on the pre-numbered scannable nest cards, now in their sixth year of use. Earlier-version cards cannot be scanned directly into our database and require laborious and time consuming entry. On-line entry is available at www.birdsontario.org/onrs/onrsmain.html. From this same website the instructional *Ontario Nest Records Handbook*, and the blue, four-fold *ONRS Coding Ssystem* field card can be down-loaded. The *ONRS Annual Report* and the up-to-date six-part *Revisions* of the two volumes of the *Breeding Birds of Ontario* and Volume 1 *Appendix*, can also be down-loaded from the Ontario Nest Records Scheme website: www.birdsontario.org/onrs/nidiology.html.

MAKING OUT NEST CARDS (important points to remember).

1. County/Region codes: Because each species' cards are tracked and filed alphabetically by region, it is wry important that these 4-letter codes be entered in the provided space. Do not write the atlas region number in this space. See in the *Handbook* or Table 2 of this report for the 4-letter regional codes.

2. Observer Number: Always include your number because it may be our only access to your



address. If you do not have a number, please advise and one will be supplied. This number is the same as that is supplied to atlas participants.

3. Coordinates: If possible, list coordinates for the nest location. These may be either latitude/longitude (degrees, minutes, seconds - not decimals) or, preferably, UTM (northing/easting) points, and both can be determined by the use of topographical/atlas maps or GPS units. If no method for determining coordinates is available, write in a location in the provided space on the card. When using UTM coordinates please include the 2-number UTM ZONE (e.g. 15, 16, 17, 18).

4. Species Codes: Always include these 4-letter codes, which are found on the Blue Coding System Card.

5. Colony Cards: A single card will suffice for colony visits; nest numbers and contents can be written in the Comments section.

6. Brown-headed Cowbird: Please indicate cowbird eggs/young when present, and do not remove these from the nest as removal often causes nest desertion. A second card for cowbird is no longer necessary.

7. Nest Visit Dates: Correct visit dates are vital, and should always be included. They enable the determination of egg dates, incubation periods, fledging times, etc.

8. Comments: Bear in mind that written comments, although encouraged, are not read by the computer and have to be entered by hand in to the database. They should not replace the proper Visit Status Codes or Habitat Codes, but should only amplify them or provide information not covered by these codes. However, it should be stressed that shrub and tree names, nest positions, nest materials, nest measurements, surrounding vegetation, habitat descriptions etc. are all important, useful and welcome items of information.

SEND US YOUR NEST IMAGES



Nest photographs can provide documentation for nestings and, in addition, can add useful information, when accompanying a nest record. We would encourage you to submit your nest photographs, particularly for less common species or extralimital records. Simply send your digital images to onrs@rom.on.ca. Name the files using the prefix 4 letter species code followed by the ONRS card number. Files should be sent as medium resolution jpegs. If you are sending hard copies please record the species code and ONRS card number on the back of the print or the edge of the slide. If you are sending multiple images of the same nest please use a lettered suffix.

Contents of Pileated Woodpecker nest cavity. Photo by M. K. Peck

CURRENT YEAR RECORDS ENTRY

In 2005, ONRS and OBBA volunteers submitted another outstanding total of 3,491 nest records in time for inclusion in this report. The increased totals over the past five years indicate the welcome addition of atlas records to those of our ONRS Nest contributors. The ONRS records listing more than one nest are added, we have an



approximate total of 4,500,000 nests in our database. We continue to maintain a large file of breeding records that do not involve actual nests, but these records are not included in the above totals. Thus, many confirmed Atlas records are not included in our nest totals, although they are included in the species' summaries in the two volumes of the *Breeding Birds of Ontario* and their *Revisions* and *Appendices*, and these current breeding records will be included in future revisions.

We are continuing to enter all current nest records in our database, and to geo-reference those records, so that all our data, including mapped nest locations will be available on computer for study purposes.

Some of the larger submissions for this report include the following:

1. OMNR London - forest bird study - 996 nest records.
2. Bird, G. & H. - historical records - 478 nest records.
3. Clements, B. - 167 nest records.
4. Peck, M.K. - 155 nest records



Sixth reported nest of Northern Hawk Owl, Manitoulin Island. Photo by G. K. Peck

For this report, contributors added eight new species for Grenville, and three new species for each of Glengarry, Haldimand, Leeds, and Niagara.

In the breeding season of 2005, two new nesting species were documented for Ontario. Those species were:

1. **Ross's Goose** Breeding of this goose was first documented in 1975, near the mouth of the Brant River, and near where the two 2005 nests were found and photographed on Ontario's Hudson Bay coast.

2. **Bufflehead** The first documented nest of this species was found and photographed on 10 June 2005 at Black Birch Lake near the Manitoba/Ontario border north of Woodland Caribou Provincial Park. The first documented breeding involved the collection of a female with young in 1938 at Favourable Lake, Kenora District, and later reports were undocumented sightings of females entering cavities in 1973 (Cochrane District), and in 1983 in Kenora District.

CURRENT ONTARIO BREEDING BIRD LIST

The current (2005) Ontario breeding bird list total, including hypothetical and undocumented nesting and breeding species remains at 296, of which 289 are represented by nest cards in the ONRS database. Included in the total of 296 are seven (7) species arbitrarily designated as hypothetical (without documented evidence of nesting or breeding), and another four (4) breeding species whose nests have not yet been found, but whose breeding has been documented by specimen collection and/or the photography of flightless or recently-fledged young. The seven hypothetical species are Brant, Yellow-crowned Night-Heron, Swainson's Hawk, Eurasian Collared Dove, Kirtland's Warbler, Connecticut Warbler, and Snow Bunting. The four breeding species still awaiting nest discovery and documentation are Surf Scoter,

American Avocet, Pectoral Sandpiper, and Northern Shrike. We have undocumented nest records of the nesting of three of the above-named 11 species, and these are Swainson's Hawk, Eurasian Collared Dove, and Connecticut Warbler. Nest cards of these latter three species are in the ONRS files.



BOOK SALE - below 1/2 PRICE

Breeding Birds of Ontario: Nidiology and Distribution, Volume 1: Nonpasserines

Breeding Birds of Ontario: Nidiology and Distribution, Volume 2: Passerines

We continue to offer these books, now at less than half price, as long as our dwindling supply lasts.

All proceeds go to the ONRS:

\$35.00 a set of both volumes

\$ 3.10 postage and handling

\$ 2.10 GST.

\$40.60 -- Total

To order, mail a cheque made out to the Royal Ontario Museum and send to:

ONRS/Ornithology, Dept. of Natural History, Royal Ontario Museum,

100 Queen's Park, Toronto, ON M5S2C6

Telephone: (416) 586-5523

E-mail: onrs@rom.on.ca

Six-part revisions to both volumes of *Breeding Birds* and an Appendix to Volume 1 were published in the Ontario Field Ornithologists' journal *Ontario Birds*, and these have updated the volumes to 1999. The text of these update papers can be downloaded from the Ontario Nest Records Scheme website <http://www.birdsontario.org/onrs/nidiology.html>. Hard copy versions with their photographs can be purchased from the Ontario Field Ornithologists, Box 455, Station R, Toronto, ON M4G 4E1.

ONRS AS AN INFORMATION SOURCE

Some of the individuals and organizations who have recently used and/or are using our database for conservation and research purposes, and others who have cited our publications, include:

1. Bird Life International & Lynx Edicions, Barcelona, publishers of *Handbook of the Birds of the World*.
2. Sandilands, A., author of *Birds of Ontario: Habitat Requirements, Limiting Factors & Status*.
3. Authors/editors of *Birds of North America*. The Academy of Natural Sciences, Philadelphia, P A, and the American Ornithologists' Union, Washington, DC.
4. Curry, Robert, for *Birds of Hamilton and Surrounding Areas* (Publication date - September, 2006).
5. Rising, J.D. and D.D. Beadle, authors of *The Sparrows of the United States and Canada*. Academic Press.
6. Canadian Wildlife Service.
7. Bird Studies Canada, Port Rowan, ON
8. *Atlas of the Breeding Birds of Ontario* (2001-5) (Publication date - September, 2007).
9. Global Biodiversity Information Facility international organization using ONRS data worldwide.
10. Campbell, R.W. et al, authors of *The Birds of British Columbia*. UBC Press.
11. Authors/editors of *Birds of Simcoe County* (in progress).
12. Naturalists of Elgin County for *Birds of Elgin County*.
13. Elder, D.H., for *The Black-billed Magpie in Ontario*. Ontario Birds 24 (1).
14. Peck, G.K., for *Breeding Status and Nest Site Selection of Common Raven in Ontario*. Ontario Birds 23(2).
15. Torti, V.M. and P.O. Dunn. for Variable effects of climate change on six species of North American birds. *Oecologia* 145: 486-495.

NEST CARDS

Completed nest cards, requests for blank cards and regional nesting lists should be sent to the



address or Email on page XX. Coding cards, handbooks, and annual reports can also be requested or can be downloaded from; <http://www.birdsontario.org/onrs/onrsmain.html>.

Please notify us of mailing address changes so we can continue to mail out annual reports to all active contributors. If you do not have an observer number please let us know and one will be supplied. This number is the same one that was used for the Ontario Breeding Bird Atlas.

ACKNOWLEDGEMENTS

We continue to be grateful to our regular ONRS contributors, and also to the Ontario Breeding Bird Atlas volunteers, in its final year, who have submitted nest records to the ONRS. The atlas records have been an especially valuable contribution because many of their records were from little-worked areas of the province. We also again urge atlasers to retain their squares in the future and to continue to search for and submit records of all the nests they find. We would like to thank Mike Cadman, Angela Darwin of CWS and their support staff, and the regional atlas coordinators for their support of the ONRS. We look forward to the publishing result of the second provincial atlas.

We wish to express our gratitude to the staff of the Ornithology division of the Department of Natural History, Royal Ontario Museum: Brad Mille Departmental Technician, for his expert assistance **with** data entry and geo-referencing; Cathy Ayle Administrative Coordinator; Sue Chopra, Accounting Officer; volunteer John Brett for data entry; and to Ron James, Departmental Associate, for his valued advice (ONRS matters and published papers using ONRS data).

Bird Studies Canada (BSC) and its staff (Den Lepage, Jon McCracken, Rosie Kirton, Susan Debrechin have been a valuable source of assistance in nest card scanning, website maintenance for online card entry and the downloading of ONRS-related material, assignment of observer numbers, and for their annual submission. nest records to the ONRS of such special-interest species as Bald Eagle, Prothonotary Warbler and others. The: card submissions have helped keep our files on the~ signal species complete and up-to-date.

We wish to thank the Ontario Division of the Canadian Wildlife Service for their interest and annual financial support of the ONRS, which has ensured that our important monitoring program continues to flourish and become the valuable environmental database it is.

For copies of the full 2005 report, contact:

George K. Peck and Mark K. Peck, ONRS/Ornithology,
Department of Natural History, Royal Ontario Museum,
100 Queen's Park,
Toronto, ON M5S 2C6



Book Review

Animal Communication Networks. – Edited by Peter McGregor. 2005. Cambridge University Press, New York. xiv + 657 pp., text figures and tables. ISBN 0-521-82361-7. Hardback - \$130.00 (USD). –

Anyone interested in animal communication and behaviour, whether they are researchers or students must give *Animal Communication Networks* a read. This 26 chapter book is truly a groundbreaking volume – not only for the field of animal communication, but also for other scientific disciplines (e.g. evolutionary biologists, modelers, physiologists). The primary reason for this is that the book, which is broken down into four sections, covers a perspective that provides new insight on communication in the animal kingdom, and will greatly enhance our current understanding of how communication transpires and evolves across all taxa and signaling modalities.

What is a network perspective and how is it different from the traditional view of communication in animals? Traditional studies associated with animal communication with a few exceptions (e.g. frog choruses), have focused on the dyad (i.e. signaler – receiver interaction). A dyadic approach has allowed researchers to simplify interactions, and has provided us with our current understanding, assumptions, and theories associated with animal communication. With the dyadic approach, the influences or effects of the ‘social context’, such as unintended receivers, audiences, and eavesdroppers, on the behaviour of the signaler and receiver do not get addressed. In reality the inferences that we make from the traditional approach are limited due to the simplicity of design, and at times can be misleading (Ch 13). Therefore, what makes the network perspective exciting and different from the traditional approach is that it recognizes that “communication cannot occur in isolation; it is an inherently social behaviour” (pg 1), and as such tries to consider the ‘social context’ of communication. Given this, a communication network has been defined as “a group of several animals within signaling and receiving range of each other” (pg 2). Therefore, a network perspective offers a better understanding into the evolution of signals and signaling modalities and conspecific interactions by providing us with greater insight into the complexities of communication systems.

The four main parts of the text are meant to be independent of one another, such that the reader can move through the volume with their own sense of order, addressing chapters of interest at will. The four sections are: behaviours specific to communication networks, the effects of particular contexts, communication networks in different taxa, and interfaces with other disciplines. In theory, this appears to be a logical and interesting format for which to display what is currently known, future directions, and to show how interdisciplinary the subject matter really is. In reality, for the first formal volume on the subject matter, the editor was probably a little over-ambitious in presenting the information in this way. As a result the text is at times repetitive and contradictory, and sometimes based on preliminary results, non peer-reviewed data (Ch 8, 22, 26). Some of this repetition stems from the fact that only a few model systems or species have been studied in detail using a communication network approach (e.g. fish, birds), and because the text does not have to be read sequentially. Contradictions arise because it is the first introduction of formal definitions and concepts for a communication network and it is evident that some chapter authors have slightly differing views on how concepts associated with communication networks should be defined and addressed (Ch 17, 22). Regardless, sections two and three present us with very interesting and thought-provoking chapters, providing the reader with insight and direction for future work across all disciplines (10, 12, 13, 11 & 16, 18). Section four, interfaces with other disciplines, is a little far-reaching on its own. It addresses some interesting and important points to consider when studying organisms in a communication network – such as the interplay of hormones (Ch 21), and cognitive aspects (Ch. 24, 25), however it may have been more effective for a first edition if the ideas and concepts here could have been integrated with earlier chapters, leaving this section out (e.g. include content from Ch 25 in with Ch 10).



For individuals interested in avian research and communication, this text is extremely insightful, as avian systems have been more highly studied in terms of a communication network perspective. It quickly becomes apparent from reading this text that a communication network perspective opens up a wide-range of study opportunities and offers to provide greater insight into avian communication systems, particularly for individuals who look at the form, function, mechanism, and evolution of signals. The general birder will also find the text of interest, as there are many examples and informative sections on bird communication. Chapters with sections on Great Tits (*Parus major*) or the Black Capped Chickadee (*Poecile atricapillus*) are highly informative and are definite highlights of the book, providing some of the best evidence to date for the communication network perspective (Ch 3, 7, 9, 14, 15). Looking to the future it will be extremely interesting to see what comes out of research associated with bird song, dawn chorus behaviour, mate choice, nestling begging, plumage colouration and signal evolution, just to name a few, in terms of a communication network approach.

In the end the benefits of this text far outweigh any costs, such that behavioural ecologists, evolutionary biologists, geneticists, and physiologists alike, will find the concepts and direction of future research possibilities in terms of a network perspective very refreshing and exciting for new avenues which will appear.

Reviewed by Stephanie Topp, Department of Biological Sciences, University of Windsor, 401Sunset Ave, Windsor, ON N9B 3P4.



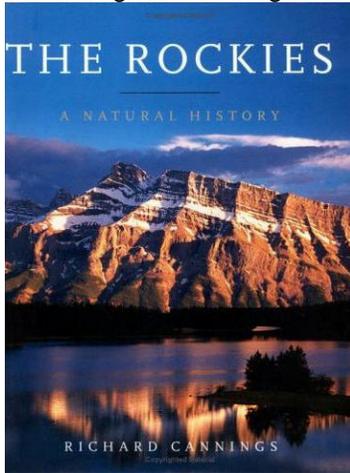
Baird's Sparrow. Photo by Nicola Koper



Book Review

The Rockies: A Natural History. Richard J. Cannings. 2005. Greystone Books, Vancouver BC. , 320 pages, 120 full-colour photos, 100 black and white illustrations, 5 maps. ISBN 1553651146 . 7.5 x 10 inches Cloth \$60 (CAN), \$40 US (USD).

“The Rocky Mountains: A Natural History” provides a comprehensive, detailed, and scientifically up-to-date look at the biology and the ecology of the Rocky Mountains. Dick Cannings has done an excellent job with his new book. Students, naturalists and biologists will find this book a very interesting read and a great reference of the natural history of the Rocky Mountains.



- The reader will find lots of interesting facts like: “For every 100 meters you ascend, under normal conditions the temperature of dry air will decrease by 1C”, and Orange Sunburst Lichens mark the favorite lookout post of pikas or song posts of horned larks.
 - Text often shows the connections in nature for instance how wolves can reduce the damage to aspen.
 - Dick also gives information on indicators like “Trailing Raspberry indicate moist, nitrogen-rich sites, while the small dogwood flowers and red berries of the Bunchberry cover areas of nitrogen-poor soil”
 - I really like Dick’s style of writing his descriptions are so “fresh” (not cliché) and are easily related to like “puncture the earth’s crust like perforations around a stamp”. “size of a glacier acts like a giant ice-cream scoop”, “wrinkling like a rug” and “snowfields can look like barber shop floors” · Terms are minimal (like the fact that no glossary is needed). Any unfamiliar words are explained right in the text
- There is a good explanation of Ecoregional classification and the geological time line is one of the clearest descriptions I’ve read.
 - The book gives things for the reader to do like looking at old gave stones to age lichen rosettes, checking out flies eyes for spots or strips to determine if they are horse or deer flies and imitating a Northern Pygmy-Owl to attract small forest birds.
 - But most important chapter 10 gives some action items to help maintain the Rocky Mountain ecosystem.

Reviewed by Larry Halverson, Naturalist, Kootenay National Park, Box 220, Radium Hot Springs, BC V0A 1M0 250 347 2207 phone, 250 347 9980 fax, email, larry.halverson@pc.gc.ca



McGill Bird Observatory

A research and training center in the West Island of Montreal dedicated to the study and conservation of Canadian birds

The McGill Bird Observatory (MBO) needs your help to continue its research in support of the conservation of Canadian birds. MBO was founded by the Migration Research Foundation (charitable registration #89916 3505 RR0001) with support from McGill University's Avian Science and Conservation Centre (ASCC). All donors will be issued tax receipts by the Migration Research Foundation.

Mission Statement

Established in 2004, MBO uses banding, daily census and other techniques to monitor bird populations. MBO was created to collect vital data to allow for continued monitoring of birds breeding in the boreal forest.

Achievements

To date, MBO has been run entirely by volunteers. We have banded and collected data on over 5000 birds and have observed 170 species on-site. To view our checklist and photo library, please visit our website www.migrationresearch.org/mbo.html.

Your donation will allow MBO to make a significant scientific contribution to research, education, and the conservation of Canadian birds. Donors will be recognized on our website and will receive weekly or monthly e-reports.



I would like to support the McGill Bird Observatory:

Personal Information

Name: _____

Address: _____

City: _____ Province: _____

Telephone number: () _____ - _____

Company Name: _____

Email Address: _____

Please make cheque payable to **Migration Research Foundation**

I would like to donate:

15\$ 25\$ 50\$ 100\$

_____ \$ (other)

I would like my name and/or company logo to appear on the MBO website

I would like to receive the MBO e-reports

Please send detached portion and cheque or money order to:

McGill Bird Observatory
McGill University
Dept. of Natural Resource Sciences MS3-039
21,111 Lakeshore Road
Ste-Anne-de-Bellevue, Québec H9X 3V9



Observatoire d'Oiseaux de McGill

Un centre de recherche et d'éducation situé dans l'Ouest de l'île de Montréal et consacré à la recherche et la préservation des espèces d'oiseaux canadiennes

L'Observatoire d'Oiseaux de McGill (OOM) a besoin de votre aide pour continuer nos recherches envers la préservation des espèces d'oiseaux canadiennes. L'OOM a été fondé par le <<Migration Research Foundation>> (établissement charitable # 89916 3505 RR0001) avec l'appui du Centre de Conservation et de Recherche d'Oiseaux de l'Université McGill. Le Migration Research Foundation enverra une recette fiscale pour chaque don reçu.

Énoncé de Mission

Établi en 2004, l'OOM utilise le baguage, un recensement quotidien et plusieurs autres techniques pour surveiller les différentes populations d'oiseaux. L'OOM a été créé pour rassembler des données essentielles qui permettront une surveillance continue des populations d'oiseaux qui se reproduisent dans la forêt boréale.

Réalisations

Jusqu'à date, l'OOM a été soutenu que par des bénévoles. Nous avons bagué plus de 5000 individus et nous avons observé 170 espèces sur place. Pour voir notre bilan d'espèces et notre bibliothèque de photo, veuillez visiter notre site web www.migrationresearch.org/mbo.html

Votre don permettra à l'OOM de contribuer à l'éducation du grand public, à la recherche, et à la préservation des oiseaux canadiens. Les donateurs seront remerciés sur notre site web et recevront les bilans électroniques de façon hebdomadaire ou mensuelle.



J'aimerais appuyer l'OOM:

Information personnelle

Nom: _____

Adresse: _____

Ville: _____ Province: _____

Numéro de téléphone: () _____ - _____

Nom de compagnie: _____

Courriel électronique: _____

S'il vous plaît, veuillez rendre le chèque payable au:

<<Migration Research Foundation>>

J'aimerais donner:

15\$ 25\$ 50\$ 100\$

_____ \$ (autre)

J'aimerais que mon nom ou le nom de ma compagnie apparaisse sur le site web de l'OOM

J'aimerais recevoir les bilans électroniques d'OOM

Veuillez envoyer cette portion découpée et le chèque à :

McGill Bird Observatory
McGill University
Dept. of Natural Resource Sciences MS3-039
21,111 Lakeshore Road
Ste-Anne-de-Bellevue, Québec H9X 3V9



**Society of Canadian Ornithologists/
Société des Ornithologistes du Canada**

Officers for 2006/2007:

President: Dr. Susan Hannon, Voice: 780-492-7544; Fax: 780-492-9234; Email: shannon@ualberta.ca

Vice-President/President-elect: Dr. David Bird, Voice: 514-398-7760; Fax: 514-398-7990; Email: david.bird@mcgill.ca

Membership Secretary: Thérèse Beaudet, Voice: (418) 829-0379; Cell: (418) 956-8541; Fax: (418) 829-0584; Email: beaudet.lamothe@sympatico.ca

Recording Secretary: Dr. Greg Robertson, Voice: 709-772-2778; Fax: 709-772-5097; Email: greg.robertson@ec.gc.ca

Treasurer: Dr. Pierre Lamothe, Voice: (418) 829-0379; Cell: (418) 956-8541; Fax: (418) 829-0584; Email: beaudet.lamothe@sympatico.ca

Editor of Picoïdes: Rob Warnock, Voice: 306-586-2492; Email: warnockr@accesscomm.ca TO ADVERTISE IN PICOIDES PLEASE SEND OR WRITE TO EDITOR.

(Voting) Members of Council: *second term

*Dr. Ken Otter, Email: otterk@unbc.ca

*Dr. Ian Warkentin, Email: iwarkent@swgc.mun.ca

*Dr. Jean-François Giroux, Courriel: giroux.jean-francois@ugam.ca

*Dr. Lesley Evans Ogden, Email: lesleyje@interchange.ubc.ca,

*Mr. Jean-Michel DeVink, Email: Jean-Michel.Devink@ec.gc.ca

Ms. Andrea Pomeroy, Voice: (604) 940-4724, E-mail: apomeroy@sfu.ca

Dr. Ryan Norris, Voice: 519-824-4120 ext. 56300, Fax: 519-767-1656. E-mail: rnorris@uguelph.ca

Dr. John Chardine, Voice: 506-364-5046, Fax: 506-364-5062, E-mail: john.chardine@ec.gc.ca

Dr. Joe Nocera, Voice: (902) 542-3440, E-mail: j.nocera@unb.ca

Dr. Nicola Koper, Voice: (204) 474-8768/261-0038, E-mail: koper@cc.umanitoba.ca

Dr. Charles Francis Past President (05-06), Voice: 613-998-0332; Fax: 613-998-0458; Email: charles.francis@ec.gc.ca.

(Non-voting) Past Presidents:

M. Ross Lein (1982-85), Spencer G. Sealy (86-87), Erica H. Dunn (88-89), Jon C. Barlow (90-91), J. Bruce Falls (92-93), Henri R. Ouellet (94-95), David N. Nettleship (96-97), Antony W. Diamond (98-99), Kathy Martin (00-01), Dr. Jean-Pierre Savard (02-03), Charles Francis (05-06).



**Society of Canadian Ornithologists/
Soci t  des Ornithologistes du Canada**

Standing Committees and Work Groups

See Page 48 for contact information for those with # beside name.

Doris Huestis Speirs Award Committee (annual award for excellence in Canadian Ornithology): David Bird, chair, #

Research Awards Committee (mandate: annual selection of research candidates, fall call for applications, selection and announcement by April of following year, members appointed and rotated) Four awards: James L. Baillie IKS, Taverner (2 awards) 0.5K\$. Fred Cooke Travel Award. Bob Clark, E-mail: bob.clark@ec.gc.ca

Meetings Committee: Charles Francis #, Sue Hannon #

Picoides Committee: Rob Warnock (chair) #, Ken Otter #, Jean-Pierre Savard, E-mail: pierre.savard@ec.gc.ca Dorothy Diamond, 247 English Settlement Road, Stanley, NB E6B 2E9, Voice (506) 367-3181, E-mail: doroth@nbnet.nb.ca; Andrea Pomeroy, Centre for Wildlife Ecology, Simon Fraser University, Burnaby, British Columbia, V5A 1S6, Voice: (604) 940-4724, E-mail: apomeroy@sfu.ca

Journal Committee: Charles Francis, chair, #, Jean-Pierre Savard, Erica Nol

Editors of ACE-ECO: Tom Nudds and Marc-Andr  Villard Voice: 506-858-4334 (direct: 4292); Fax: 506-858-4541; Courriel: villarm@umoncton.ca

Finance and Investment Committee: Pierre Lamothe #

Bird Studies Canada Representatives: Richard Elliot, Email: richard.elliott@ec.gc.ca, Jon McCracken, James Duncan

Ornithological Council Representatives Lesley Evans Ogden, Email: lesleyje@interchange.ubc.ca, Liana Zanette Email: lzanette@uwo.ca

North American Banding Council Representative Brenda Dale, Voice: 780-951-8686; Fax: 780-495-2615; Email: brenda.dale@ec.gc.ca

Findings on the SCO/SOC website

WEBSITE: www.sco-soc.ca/index.html

Membership Application form

Notes about Annual Meetings

SCO/SOC Award information

Officers of SCO/SOC

Picoides Submission Guidelines

For Jobs and to post job openings see our link to the Ornithological Newsletter:

www.ornith.comell.edu/OSNA/ornjobs.htm



Society of Canadian Ornithologists

Société des Ornithologistes du Canada

**RENOUVELLEMENT / RENEWAL
ADHÉSION / APPLICATION FORM**

Ce formulaire peut être utilisé lors d'un renouvellement ou pour adhérer à la SOC. N'hésitez pas à le copier ou à l'afficher pour assurer une plus grande diffusion et de nouvelles adhésions. Les dons sont acceptés (la SOC a le statut d'organisation à but non lucratif et peut émettre des reçus pour fins d'impôt). Les renouvellements pour plus d'une année sont privilégiés; cela réduit les frais de poste, d'administration, et l'envoi de lettres de rappel. Pour en savoir plus sur la SOC, vous pouvez visiter le site <http://www.sco-soc.ca/>.

This form is provided for you to use when renewing and/or to copy and post or pass along to others who might be interested in joining. Donations are also gratefully accepted (the SCO is a registered non-profit society and issues tax receipts). Please feel free to renew for more than one year if desired: this will cut down on postage, administration, and the need to send you a reminder next year. For more on the SCO, please visit our website <http://www.sco-soc.ca/>.

Nom/Name: _____
Renouvellement/Renewal? _____ Nouveau membre/New member? _____
Adresse/Address: _____ Postal code : _____
Tel.: _____ Fax: _____ Courriel/e-mail _____
Affiliation: _____

Catégorie de membres/Membership Category

Etudiant/Student: _____ ans/years @ \$10.00 par an/per year Total= _____
Régulier/Regular: _____ ans/years @ \$25.00 par an/per year Total= _____
De soutien/Sustaining: _____ ans/years @ \$50.00 par an/per year Total= _____
Membre à l'extérieur du Canada /Membership outside Canada \$ 35.00 par an / per year Total= _____

Les membres de soutien recevront un reçu d'impôt de \$25.00 par année de participation /. Sustaining members will receive a \$25.00 receipt for tax purposes for each year of sustaining membership.

S.V.P. Faire les chèques au nom de la **Société des Ornithologistes du Canada**.
Please make cheques payable to **The Society of Canadian Ornithologists**.

Don/Donation _____ (La SOC est une société à but non lucratif et toutes les personnes qui font un don de 10\$ et plus recevront un reçu pour fins d'impôt. The SCO is a registered non-profit society and all donors of 10\$ or more will receive a receipt for tax purposes.)

Faire parvenir à/Mail to: **Thérèse Beudet**
Secrétaire aux membres de la SOC / SCO Membership
Secretary
128, Chemin des Lièges
St-Jean de l'île d'Orléans (QC)
Canada G0A 3W0
beudet.lamothe@sympatico.ca