



PICOIDES

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Pileated Woodpeckers. Photo by Brigitte Noel.

PICOIDES July 2009



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Editor's Message

Welcome to the second issue of *Picoides* of 2009! I hope everyone is having a good spring in spite of the wacky weather in parts of Canada this spring and summer (snow in June?!!!).

I congratulate members Andre Cyr and Louise Gratton on their well-deserved awards and the 2009 winners of the Taverner, Baillie and Fred Cooke Student Research Awards. Congratulations to David Christie in completing over 100 BBS routes. We have interesting notices on Turkey Vultures, aerial insectivores, Short-eared Owls and reports from the 2008 SCO-SOC Student Award winners. Also inside this issue are several other ornithological notices and features. Don't forget to mark your calendar for the 2009 SCO-SOC AGM in Edmonton on August 20-23, 2009.

I had the opportunity to participate in the Baillie Birdathon at Last Mountain Bird Observatory and nearby National Wildlife Area on May 23. Weather was ideal, great company and lots of interesting birds. I tallied 76 bird species for the day and our Birdathon leader Joseph Kotlar got 108 species in a 24-hour period. We also witnessed some bird banding as well and raised over \$1,000 for the Baillie Birdathon.

A week later, I attended the 60th Anniversary Nature Saskatchewan Spring Meet. The Friday evening was a gala fundraiser at the Conexus Arts Centre in Regina for the Last Mountain Bird Observatory. Over 300 people attended. Saturday was all day field trips to Last Mountain Regional Park, Last Mountain Lake and Stalwart National Wildlife Areas with about 150 participants. Lots of birds were seen and heard. Weather conditions were warm (high 28 C), breezy and mostly sunny with brief showers in late afternoon. After lunch at the Regional Park, Last Mountain Bird Observatory was rededicated as a Nature Saskatchewan facility with unveiling of a new interpretative sign. That evening, we had a second banquet at Govan School with about 200 attendees. Stuart Houston gave an informative and highly entertaining presentation on the Saskatchewan Vulture Tracking project and \$6,000 was raised for the Last Mountain Bird Observatory. The only major disappointment was that Robert Bateman was not able to come as the Friday gala evening speaker due to a serious illness. I wish him a speedy recovery. The Spring Meet closed with Nature Saskatchewan AGM in Regina Sunday morning. All had a good time.

Before I close, I would like to remind everyone that i) *Picoides* is not a peer-reviewed journal, (ii) publication of an article in *Picoides* does not imply endorsement by the Society of Canadian Ornithologists and iii) the editor relies on authors to submit accurate, honest and error-free (as much as possible) submissions.

Please take note of photo submission guidelines and the disclaimer on page 4. 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. Have a safe, wonderful summer!

Cheers,

Rob Warnock
Picoides
Editor



Willets. Photo by Brigitte Noel.



Attention Photographers- Submission Guidelines!



To assist the Picoides editor with managing photo submissions, please do following

- Use tiff or jpeg file format
- Minimize file size while maintaining photo quality. This helps keep overall file size down and speed up downloads
- Use descriptive file names. Generic file names from photo software are not very helpful.
- Supply captions for all photos. Good captions include common names of species, names of people, locations, activities, behaviours and dates and very importantly photo credit.

Your submissions are greatly appreciated and always welcome.

Rob Warnock, Editor of Picoides



Bald Eagle. Photo by Brigitte Noel.

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Rob Warnock, Picoides Editor

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

Submit submissions to warnockr@accesscomm.ca



2009 SCO Student Awards Winners

Taverner Award (2 winners)

Morgan Gilmour, MSc Candidate, Bucknell University. Investigating the relationships of winter corticosteroid levels, stable isotope signatures, and reproductive effort of a long-lived seabird, Leach's storm-petrel.

Biography:

Morgan Gilmour grew up in rural Connecticut, a landscape that helped foster her interest in nature at an early age. After graduating from the University of Rhode Island with a B.Sc. in Wildlife and Conservation Biology, and a minor in International Development, Morgan began an exciting field research career that took her to the Northwestern Hawaiian Islands, where she discovered a passion for marine birds, as well as the main Hawaiian islands, California, North Carolina, the Caribbean, and the island of Mauritius, in the Indian Ocean. In addition to research and birds, she enjoys sports, photography, reading, and anything ocean-related.

Project Summary:

Seabirds such as Leach's storm-petrel, *Oceanodroma leucorhoa*, spend only a few months per year on land. How oceanographic factors during the rest of the year affect physiological stress and their reproductive effort the following summer remains unknown. Heightened stress, reflected by corticosterone, is detrimental to overall body condition, and can decrease annual fecundity. It is now possible to detect previous periods of stress by measuring corticosterone in feathers. Feathers can also be used for stable isotope analysis to infer habitat characteristics and to estimate trophic levels by tracing isotopic signatures through the food chain. This study will use these techniques by measuring corticosterone levels and stable isotopic signatures of winter-grown feathers of Leach's storm-petrels breeding on Kent Island, New Brunswick. The results of this study will investigate relationships of these factors with reproductive effort, and will present a more detailed picture of the non-breeding season of Leach's storm-petrels.



Morgan Gilmour with a white-tailed tropicbird during banding operations on Round Island, Mauritius. Photo by Jennifer Wilcox.



Mélanie Guigueno, MSc Student, University of Manitoba. Acceptance or rejection of cowbird parasitism: cues used in decision-making in Yellow Warblers (*Dendroica petechia*).



Mélanie Guigueno holding a banded male Yellow Warbler (*Dendroica petechia*). Photo by Nicole Bilinsky.

Biography:

I completed my Honours degree in Zoology at the Collège Universitaire de Saint-Boniface and the University of Manitoba, with an undergraduate thesis entitled: Role of nest sanitation in the egg rejection behaviour of the Yellow Warbler (*Dendroica petechia*). I am currently in the second year of my Master of Science degree in the Department of Biological Sciences at the University of Manitoba, under the supervision of Dr. Spencer G. Sealy. I have participated in Christmas Bird Counts, volunteered as a bird bander, and was involved in a side project in Costa Rica. I also enjoy photography, swimming, and camping.

Project Summary:

I am studying the cues that elicit clutch abandonment in the Yellow Warbler (*D. p.*), a host of the Brown-headed Cowbird (*Molothrus ater*) that abandons parasitized clutches via egg burial or nest desertion. My research is being conducted at Delta Marsh, Manitoba, where cowbirds and warblers have co-existed for hundreds of years. In 2008, I investigated the importance of clutch manipulations and cowbird model presentations on the probability of clutch abandonment. In 2009, I propose to demonstrate the difference in abandonment frequency between nests parasitized before sunrise (predicted to be high) versus after sunrise (predicted to be low). I also will investigate the importance of visual/tactile cues. This study is enhancing our understanding of the decision-making process involved in clutch abandonment, which imposes reproductive costs for birds in terms of lost time and energy.



James L. Baillie Award

David Swan, PhD Candidate, University of Western Ontario. Do cowbirds 'farm' their hosts?



David Swan in the field holding his first female brown-headed cowbird. Photo by Michael Clinchy.

Biography:

I am currently working towards a Ph.D. at the University of Western Ontario under the supervision of Liana Zanette and Michael Clinchy. My research focuses on brown-headed cowbird (*Molothrus ater*) 'farming' behaviour, specifically testing whether acts of nest depredation increases future cowbird reproductive success. I received my B.Sc. (honours) and Master's from the University of Manitoba, where I studied under James Hare. Dr. Hare and I had two papers derived from my undergraduate thesis published in the Journal of Mammalogy and Animal Behaviour. One paper examined the effect of signaler and receiver age on the perceived response urgency of Richardson's ground squirrel (RGS) alarm calls, while the latter examined the importance of syntax in RGS repeated alarm vocalizations. For my Master's degree I studied larval recognition in two host species (*Temnothorax longispinosus* and *T. ambiguus*) of the slave-making ant *Protomognathus americanus*. During my academic career I have received several commendations including NSERC USRA, PGS and CGS awards, a Manitoba Graduate Scholarship, and the H.E. Welch award for highest standing in an undergraduate Zoology program. Generally, my research interests include the ecology and evolution of sociality, alarm communication, and social parasitism.

Project Summary:

I am experimentally testing whether individual female brown-headed cowbirds (*Molothrus ater*) that depredate the nest of a specific host individual are more likely to parasitize that individual host's subsequent re-nesting attempt— a critical assumption of the cowbird 'farming' hypothesis. The cowbird 'farming' hypothesis suggests that cowbirds destroy nests found too late in the nesting cycle for successful parasitism, driving hosts to re-nest. Nest depredation may increase cowbird reproductive opportunities and allow individuals to coordinate their egg laying with that of their hosts. To this end I am radio-tracking individual female cowbirds to determine their breeding territories. Within each cowbird territory, nests of their song sparrow (*Melospiza melodia*) hosts are then subjected to either depredation by a cowbird or egg removal by myself, simulating non-cowbird depredation. After destroying a host nest a cowbird is presumably 'aware' of the general timing and proximity of that host's re-nesting attempt. We may therefore expect that the re-nesting attempts following cowbird depredation will more likely be parasitized than the re-nesting attempts following non-cowbird depredation. Such a result would suggest that cowbirds derive reproductive benefit from their acts of nest depredation and would strongly support the farming hypothesis. By establishing whether farming is adaptive, my research will advance our understanding of brood parasitism, and have significant conservation implications as depredation by cowbirds may thus be inferred to affect many host species.



Fred Cooke Award

Calandra Stanley, MSc Candidate, York University. Tropical Deforestation and the Wood Thrush (*Hylocichla mustelina*): Exploring the consequences of winter habitat quality and determining migratory connectivity.



Calandra Stanley attaching a geolocator onto a Wood Thrush at La Selva Biological Station, Costa Rica. Photo by Johanna Wiefiaert.

Biography:

I am currently a MSc candidate at York University working under the supervision of Dr. Bridget Stutchbury. I am interested in the behaviour and conservation of tropical songbirds, specifically in respects to the impacts of human habitat modification. My interest in tropical ecology began during my undergraduate degree, which I completed at York University. For my honours thesis I looked at the role of coffee agrosystems in resident songbird conservation in the Alexander Skutch Biological Corridor in Costa Rica.

Project Summary:

Until now it has been impossible to track individual songbirds to their wintering areas, which is essential for predicting the demographic consequences of habitat loss and climate change in tropical regions. It is critical to focus conservation efforts in regions where they are needed most. Wood thrush (*Hylocichla mustelina*), for instance, have declined by over 30% in the past four decades, but it is unknown

how wintering versus breeding habitat loss is driving this decline. For the first time ever on a wintering songbird, I will use geolocators to determine the breeding locations of wood thrush populations wintering in Costa Rica, including juvenile birds that have not yet bred, and determine migratory connectivity. To explore the consequences of winter habitat occupancy, I will use physiological techniques and behavioural cues to monitor wood thrush populations in a range of tropical habitats.



2008 Taverner Award Report

Geographic and individual variation in the crown coloration of golden-crowned kinglets

Celia K.S. Chui

Carotenoid coloration (red, orange, and yellow plumage) is an honest indicator of quality and an important sexually selected trait for mate choice (Hill, 2006a), and colour variation has been observed for various taxa. In the summer of 2008, I received the Taverner Award from the Society of Canadian Ornithologists to investigate the geographic and individual variation in carotenoid coloration in golden-crowned kinglets (*Regulus satrapa*).

Geographic variation (Chui and Doucet In press): Research on geographic variation in body size and coloration has often focused on Bergmann's rule (animals should be larger in colder climates) and Gloger's rule (animals should have darker coloration in more humid environments). In addition to testing these rules in kinglets, we were also interested in examining geographic variation in sexual dimorphism and dichromatism.

Using 511 museum specimens, we quantified crown (carotenoid-based) and mantle (melanin-based) coloration using reflectance spectrometry, and measured wing-chord and tarsus length to approximate body size. Geographic and climatic data were obtained from online databases.

Golden-crowned kinglets showed mixed support for Bergmann's rule: wing-chord became longer as winters became colder but was not associated with variation in either latitude or elevation. Wing-chord trends may be confounded by this species' variable migration patterns (Ingold and Galati 1997). In contrast, tarsus length decreased in areas with colder winters and at higher latitudes, which supports Allen's rule (animals should have shorter appendages in colder climates) rather than Bergmann's. Kinglet mantle coloration became lighter with increasing humidity, which contradicts Gloger's rule. Other factors, such as genetic drift, may be contributing to the observed variation.



Photo 1. Male (left & centre) and female (right) golden-crowned kinglet museum specimens. Photo by Celia Chui.

Interestingly, sexual dimorphism in crown and mantle coloration decreased in colder climates (Fig. 1), which supports a previously observed pattern. Badyaev (1997) proposed that the intensity of sexual selection for exaggerated male traits should be reduced in colder climates where the need for bi-parental care is greater. With further research in other taxa, this trend may reveal a previously unrecognized ecogeographic rule.

Individual variation (in progress): Carotenoid coloration depends on pigment access, nutritional condition, parasitic infection, and immunocompetence (Hill 2006b), as well as the types and concentrations of pigments deposited (McGraw 2006). My current work focuses on the condition-dependent and pigmentary bases of variation in crown coloration in a migrating population of golden-crowned kinglets. Migration is a very stressful activity, and differences in individual health may be especially apparent at this time.

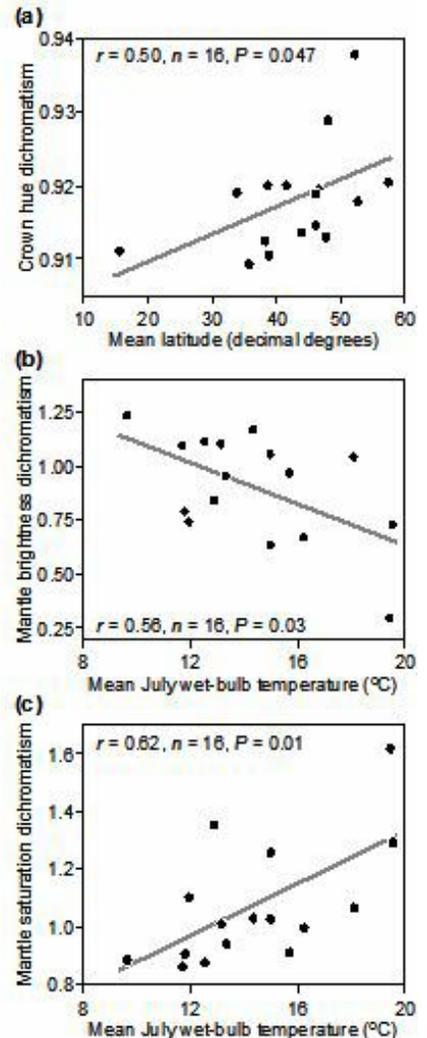


Figure 1. The effects of variation in geographic and climatic variables on sexual dimorphism in golden-crowned kinglet populations. Dimorphism scores are calculated as female/male values



During fall migration of 2008 in Amherstburg, Ontario, we collected condition data on 186 kinglets, including arrival date, body condition index, fat and pectoral muscle scores, ectoparasites, and feather growth rate. We also collected 10 crown feathers from each individual for reflectance spectrometry and high-performance liquid chromatography (HPLC) analyses.

Variation in crown hue was greater in male kinglets than in females, and males with 'redder' (longer-wavelength) and more saturated crown coloration were found to be earlier migrants. However, condition-dependence of this trait was more apparent for females, where individuals with 'redder' hues arrived at the stopover site earlier, were infested with fewer wing mites, and had higher body condition indices.

Red carotenoids are thought to be less abundant in the wild than yellow pigments and may be more 'valuable' as plumage colorants. In addition, only healthy individuals may be able to metabolize common dietary carotenoids into more colourful pigments (McGraw, 2006). HPLC analyses are currently pending to determine the carotenoid composition in golden-crowned kinglet feathers.

We thank the curators and collection managers at the University of Michigan Museum of Zoology and the Harvard Museum of Comparative Zoology, the dedicated passerine banders at the Holiday Beach Migration Observatory, various museum and field assistants, R. Montgomerie for access to his CLR colour analysis program, manuscript comments by reviewers and peers, and the SCO and NSERC for financial support of this research.

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Photo 2. Celia Chui holding a male golden-crowned kinglet. Photo courtesy of Celia Chui.



2008 Taverner Award Report
Female ornamentation in the American Robin

Lori Parker

Male ornamentation in animals has been subject to intensive research for decades, while females have received far less attention. However, recent models predict that the evolution of honest signals



American Robin (*Turdus migratorius*) female. Photo: L. Parker

in females occurs under certain circumstances where male investment in offspring is high and males would benefit from selecting a high quality mate (Johnstone et al 1996). The American Robin (*Turdus migratorius*) is a socially monogamous species in which both males and females provide for offspring. Males and females also both display conspicuous colouration with considerable variation between individuals. I predicted that in this species, ornamentation could signal female quality. Specifically, I'm investigating whether colour traits in female robins reflect individual capacity to invest resources into reproduction. My study focuses on measures of reproductive investment such as clutch size, egg size, yolk investment in terms of hormone and antioxidant deposition, nest defense and parental care.

I received the Taverner Award from the Society of Canadian Ornithologists and Bird Studies Canada to explore these questions in the spring of 2008. From April through July, my team and I monitored 128 robin nests. Where possible, male and female adults associated with each nest were captured using mist nets (93 females and 39 males). We took colour measurements in the field using a reflectance spectrometer to investigate multiple traits including the bill, breast, and head, age, body size and mass measurements, parasite load, and DNA data were also collected for each bird. Similar data plus survival and growth rate were collected for the nestlings in each nest. Predator defense tests were administered with a mounted Blue Jay during late incubation, and 2-hour video recordings were taken during the morning of days 3, 6 and 9 after hatch to determine both male and female nestling feeding rates.

For each nest phenology, egg number, egg size, and fresh egg mass were recorded in the field (460 eggs). Whole clutches of fresh eggs were collected from 25 nests. Yolk, albumen and shell were separated, weighed and frozen at -20C. Yolks were homogenized in liquid nitrogen and divided into separate powdered samples for analysis of lipid, carotenoid and testosterone concentration in the yolks. These assays are currently underway. So far, we have found a 5 fold variation in the amount of testosterone deposited in egg yolk laid by different females.



American Robin (*Turdus migratorius*) eggs in nest. Photo: L. Parker.

Further analysis is needed to determine whether colour traits are acting as a signal of female reproductive potential.

Preliminary analyses suggest female robins are at least investing differentially, with a proportion of the variation in average egg mass being explained by female body condition (Figure 1). Graphical evaluation of reflectance data indicates consistency within individual females and considerable variation between females. An example of the variation in bill colour between 5 females is displayed in Figure 2. Analysis of feeding rate videos suggest that male post-hatch investment is higher than that of females in this species and that female feeding rate ($R^2 = 0.55$, $F = 14$, $p = 0.0006$, $DF = 34$), and female body condition ($R^2 = 0.32$, $F = 3.1$, $p = 0.03$, $DF = 4$, 26) both significantly predict male feeding rate early in the nestling stage (day 3).

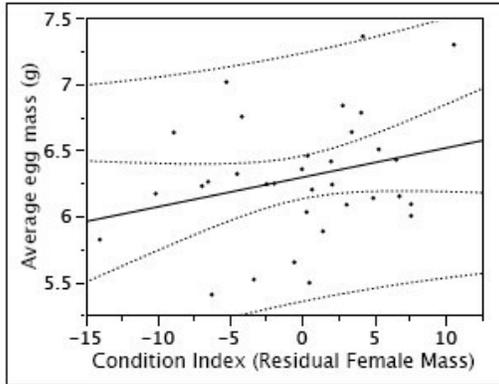


Figure 1: Female condition (Residuals from tarsus vs body mass linear regression) vs. average egg mass (g). ($6.2927121 + 0.022$ *Residuals. $R^2 = 7.8\%$. $p = 0.001$)

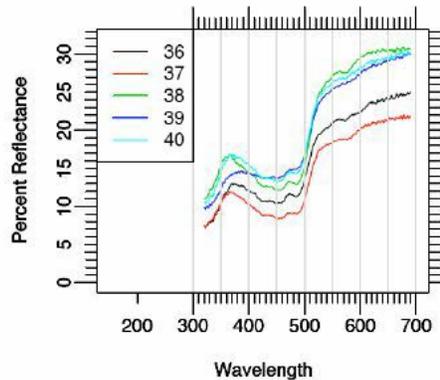


Figure 2: Bill colour % Reflectance curves for 5 individual females (5 readings per female).



American Robin (*Turdus migratorius*) 9 day old nestling. Photo: S. Calhim.

Future avenues:

We collected reflectance data of all eggs, and manipulated egg colour in collaboration with a project on the evolution of eggshell colour as a sexual signal. Depending on patterns elucidated between female ornamentation and investment, future research may involve male mate choice trials involving colour manipulated females.

Acknowledgements:

I am indebted to managers of the Prince Edward Point National Wildlife Area and Queen's University Biology Station, the Society of Canadian Ornithologists and Bird Studies Canada for support through the Taverner Award, and the Saskatchewan Wildlife Federation and Queen's University for additional financial support. Sara Calhim and Fraser Cameron provided invaluable field assistance.

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2008 James L. Baillie Award Report

Do cowbirds cause sex ratio skew in song sparrow nests because they are large?

Robert DeCaire



Brown-headed Cowbird. Photo by Frode Jacobsen

The Brown-headed Cowbird (*Molothrus ater*) is a brood parasite that, like cuckoos, lays its eggs in the nests of other bird species, including our study species, the song sparrow (*Melospiza melodia*). Unlike cuckoos, cowbird nestlings do not eject the other occupants of the nest, but are raised by the host parents along with the host nestlings. While the cowbird nestling is not directly responsible for harm to its adopted siblings like a cuckoo would be, it still causes indirect harm by competing with these nestlings for the food that the parents provide. The cowbird is well prepared for this task, since it grows faster than sparrow nestlings, and quickly comes to dominate the nest by virtue of its ability to reach higher for food. It seems that the parents, being more likely to stuff food into a mouth that is close by than one that is more distant, preferentially feed the cowbird.

The presence of a big, greedy cowbird nestling causes problems for the sparrow nestlings, which are put into competition for limited resources with both the cowbird, and with each other. Female sparrow nestlings, being smaller than their brothers, get the worst of it, because they cannot reach as high as either

cowbirds or male sparrows. Our previous research has shown that female sparrows in nests with cowbirds suffer approximately 50% mortality, skewing the sex ratio of cowbird-parasitized nests toward the males.

Since females are usually the limiting sex in a population, this finding may have important ecological significance. If this effect is common among cowbird hosts, then cowbirds might have a profound degree of influence over the success of the species they parasitize.

Being big isn't the only thing the cowbird has going for it. Its mouth is broad and brightly coloured. It calls loudly when begging. It begs earlier and for a longer duration than sparrows do. These factors may also influence the parents' choice of which mouth to feed. We wanted to test the hypothesis that the cowbird's success, and consequently the female sparrows' failure, is due primarily to their size advantage.

We designed a cross-fostering experiment in which we moved 2-day-old nestlings into just-hatched nests. The added nestlings were visibly larger than the host nestlings but lack the cowbird-specific behaviours that might influence their competitive ability in other ways than just gross size. If size is the most important factor influencing intra-nest competition, then we should see similar increases in female mortality. We measured the nestlings on the first day after hatching, and then again on day 6 of brooding. We looked at a number of morphometric measurements, and took blood samples to evaluate stress hormone levels and red blood cell volume. We collected audio and video of the nestlings on day 5 to evaluate their begging behaviour, and to see who was being fed by the parents, and how often.

While complete results are still pending, we did learn some interesting things. Having an added sparrow nestling decreased the size of host nestlings (measured in terms of mass and tarsus length). An extra sparrow also increased the overall mortality of host nestlings. However, we have not observed sex-specific mortality. It seems that having a large competitor in the nest is bad for the other nestlings, but the females do no worse than the males.



We are currently combing through our videos to collect data on begging behaviour, parental provisioning, and the relative success of each nestling in a nest. When the video analysis is done, we should have a more complete picture of how the added nestling is affecting host nestling success. However, it seems that the sex-specific mortality that we observed in cowbird-parasitized nests is not occurring in sparrow-added nests. It may be that size is not in fact the determining factor in intra-nest competition. The females, despite being small, are getting enough food to survive. Adding a large nestling is likely to reduce the overall amount of food available to each nestling, since there are more of them to feed. If the parents are not providing adequate food to feed the extra mouth, but competition between nestlings is fairly equal, we could expect to see both males and females suffer. It is likely that some behavioural trait possessed by cowbirds is making the difference between life and death for the female sparrow nestlings.

Call for Short-eared Owl Feathers

Kristen Keyes, under the supervision of Dr. Marcel Gahbauer and Dr. David Bird, is investigating Short-eared Owl movement patterns in North America. She is asking for feathers for stable isotope analysis from anyone who may be conducting Short-eared Owl research, or who may experience incidental encounters through banding or road kills. Based on inspection of museum specimens and consultation of several North American and European references, it appears that P1 is the first feather molted, and therefore would have the highest probability of recording the isotopic signature of the summer location. Thus, a small sample of vane tissue (i.e. 1-2 cm²) from the lagging, proximal edge of P1 would be ideal, so as to limit impacts on flight. If a molt limit is obvious, samples from all apparent generations would be valuable, as would photo documentation, as this may allow for the determination of up to three previous summer locations. Samples from juveniles are particularly valuable to verify the Short-eared Owl isotopic signature against existing maps, and while P1 is again preferable, the age of the owl may dictate that a contour feather be collected instead. If you are interested in providing feather samples for this study, please contact Kristen (kristen@migrationresearch.org).



Short-eared Owl. Photo by Frode Jacobsen.



2008 Fred Cooke Award - Project Summary

The signal content of colour in the peacock's train: Testing the role of feather nanostructure

Roslyn Dakin, c/o Montgomerie Lab, Department of Biology, Queen's University
Kingston, Ontario, K7L3N6. E-mail: 2rd@queensu.ca.

1. Report on Proposed Research

In this study, my aim is to examine the mechanisms behind individual variation in iridescent plumage ornaments. Specifically, I am interested in testing the role of feather nanostructure in producing individual-level variation in the multi-coloured iridescent eyespot feathers of peacocks (*Pavo cristatus*). I will assess whether variation among males in both the static and iridescent aspects of feather colour is due to the morphology of the colour-producing nanostructures within each feather. In addition, to test the hypothesis that only the highest quality males can produce highly ordered nanostructures, I will assess whether variation among males in body condition is also related to variation in feather nanostructure.

In February-April of 2008, I collected morphological and behavioural data on the peafowl at the Los Angeles Arboretum in California. This site is home to a free-range population of approximately 100 peafowl. I captured 18 adult males and took several measures of body condition from these birds (e.g., skeletal size, body mass, ectoparasite counts and blood samples for the measure of hematological health). I also sampled 5 iridescent eyespot feathers from each male. Next, I observed their lekking activity throughout the breeding season to quantify male mating success. I have similar data for an additional 21 males from two other peafowl populations, collected in 2007, that I will also include in this project.

In October-December of 2008, I developed an apparatus that allows me to measure feather colour with reflectance spectrometry under a number of different viewing configurations. This enables me to quantify both static and iridescent aspects of the colours in each eyespot. To date, I have completed colour measurements for all feathers sampled from the 39 adult males described above, measuring the dark blue, green and brown region of each feather under 2 different viewing configurations. In June of 2009, I will begin sectioning these feathers for transmission electron microscopy. This will allow me to measure the morphology and dimensions of the feather nanostructures produced by individual males. I will perform this work at Queen's University, where I am currently a PhD student in Bob Montgomerie's lab. I plan to complete these analyses and submit results for publication in September of 2009.

2. Additional Research Supported by the Fred Cooke Award

Funding from the SCO research award has contributed to a number of other studies of iridescent colour, visual signaling and mate choice in peafowl. For example, contrary to some previous reports (Petrie et al. 1991, Loyau et al. 2005), I have found that peahens in feral and zoo populations do not choose mates based on the number of eyespots in the males' trains (Dakin 2008). Currently, I am completing a manuscript on eyespot number and female mate preferences that includes data collected in California in 2008, which should be submitted for publication in May of 2009. In addition, my 2008 data provides evidence that the colour and iridescence of peacocks' eyespots are important in female mate choice. For instance, I have found that experimentally manipulating eyespot colour reduces male mating success (Dakin and Montgomerie, unpublished data). I plan to submit a manuscript on eyespot colour and female mate preferences for publication in June of 2009.

Finally, the SCO award funding was vital to an intriguing study of peacock courtship behaviour and male orientation relative to the sun during courtship display. Using data collected in 2008, I have shown that the courtship display dances performed by peacocks are directional with respect to the sun (Dakin and Montgomerie 2009; SCO contributions acknowledged therein). For example, the "train-rattling" display (performed by males prior to copulation) is directed at about 45° relative to the sun. The preliminary "wing-shaking" display, on the other hand, is not directional relative to the sun. Instead, my observations suggest that the "wing-shaking" display might allow males to manipulate the



position of female observers, so that females will view courting males from a particular position on the sunlit side of the male.

My next goal is to look at how the particular 45° orientation of the “train-rattling” display might allow males to enhance the appearance of their iridescent eyespots. Does this viewing configuration allow males to maximize some aspect of colour that females prefer? If iridescent eyespot colour is an honest signal of male body condition and health, does this behaviour allow males to enhance their colourful displays dishonestly? These are both questions that I can address using data from my 2008 work supported by the SCO Fred Cooke Award.

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Science Takes Flight

Larry Halvorson

Turning birders into “Citizens for Science” was the focus for this year’s Wings Over the Rockies Bird Festival www.wingsovertherockies.org. And what better way do that than by highlighting and demonstrating how people can participate in the BC Breeding Bird Atlas.

It began with Dick Cannings for Bird Studies Canada giving a workshop on the whys and hows of atlasing. Field trips into the wetlands and open forests of the Columbia Valley followed the workshop. Dick along with atlas regional coordinators Cam Gillies and Larry Halvorson were able demonstrate how valuable information on the distribution and relative abundance of birds across British Columbia can be gathered while out enjoying and watching the birds.

The importance of the BC Breeding Bird Atlas was reinforced at a sold out gala banquet when Dick spoke on the “World Needs More Birders” and as Dick pointed out this fun activity of bird atlasing can be very addictive.



The Crimson Honeycreeper, first sketched in the highlands of northern Malaysia in 1990 by Roland Clement, former vice president, National Audubon and contributor to Clyde Todd's "*Birds of the Labrador Peninsula*." Mr. Clement is, as a very young ninety six year old, still fascinated with birds and traveling to paint them in many places. He is an inspiration to many students of birds.



2008 Junco Technologies Award Report How Resource Pulses Influence Regulation of Cavity Nesting Bird Populations

Andrea Norris

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<http://www.forestry.ubc.ca/alpine/home/therestofthelab/Nestweb/tabid/1503/Default.aspx>

Project summary

The goal of my PhD is to understand how populations of cavity-nesting birds are regulated, and examine how population dynamics are influenced by forest insect outbreaks. Outbreaks of two forest insect species, mountain pine beetle (*Dendroctonus ponderosae*) and western spruce budworm (*Choristoneura occidentalis*), provided pulses of food for insectivorous birds in Interior British Columbia, from 1999-2008 (Figure 1). In a cavity-nesting community, where excavator species provide cavities for non-excavator species, a secondary resource pulse of cavities may occur if excavator populations increase (Aitken et al. 2002). Any such temporal fluxes in cavity availability can change the direction and strength of interspecific interactions within the community, and may change the regulatory mechanisms of populations (Aitken and Martin 2008). In my study, I use one insectivorous excavator species, red-breasted nuthatch (*Sitta canadensis*) and one insectivorous non-excavator species, mountain chickadee (*Poecile gambeli*), as model species with which to examine how temporal variability in food and nest-site availability influence fecundity and population growth (λ) of cavity-nesters. To address this objective, I pose the following questions: **I.** How is annual fecundity influenced by: a) Food availability?, and, b) Nest-site availability? Via excavators, and intra- and interspecific competition?; **II.** Which components of fecundity have the greatest influence on λ ?, and; **III.** How do direct and indirect effects influence λ ?

In my MSc, I found that increases in woodpecker, nuthatch and chickadee populations correlated with an increase in mountain pine beetle (Norris 2007). However, when abundant resources become depleted as trees die, declining habitat quality may result in increased competition for food and nest sites, contributing to population collapses. Indeed, population densities of nuthatches and chickadees declined in 2006 to levels not previously reported, but the mechanisms of these changes in populations remain unknown. For my PhD, I use existing long-term project data and new observational and experimental data on cavity-nester communities to examine how annual changes in availability of food and nest-sites, and competition, and predation contribute to population change.

Preliminary results

Preliminary results indicate that clutch sizes of both red-breasted nuthatches and mountain chickadees changed between 2000 and 2007 (Figure 2). For nuthatches, the largest clutches were produced in 2003, the first year of the mountain pine beetle outbreak. This may be weak evidence to support the hypothesis that the pulse of beetles increased fecundity for nuthatches (Part Ia). For chickadees, the most number of nests and the largest clutches occurred in 2005, the year that nuthatch populations collapsed (Figures 1 and 2 next page). This may support the hypothesis that the fecundity of mountain chickadees is influenced by interspecific competition with nuthatches (Part Ib). However, fecundity can be affected by many other components, thus multivariate analyses that incorporate all possible covariates of fecundity are needed (Part II).

Scientific contributions and research activities

In the past year, I participated in two scientific meetings, prepared two manuscripts, and conducted field research on two cavity-nester projects. In August 2008, I attended the joint meeting of the American Ornithologists Union, Society of Canadian Ornithologists, and the Cooper Ornithological Society in Portland, Oregon, where I presented a paper, "Pulses in food and cavities lead to boom and bust for mountain chickadees." This manuscript examines how population densities of mountain chickadees respond to increases in availability of both food and nest-sites as a result of the mountain pine beetle outbreak. Currently, I am preparing this paper for publication in a peer-reviewed journal.

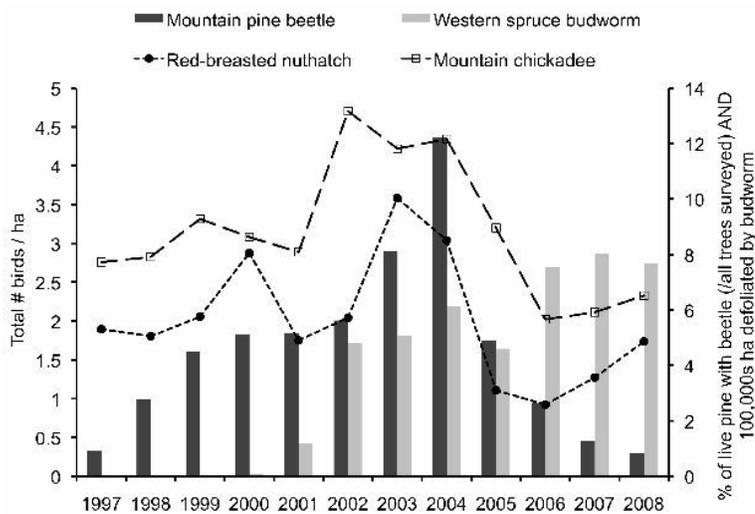


Figure 1. Population densities of red-breasted nuthatches and mountain chickadees detected on point count surveys, percent live lodgepole pine trees with mountain pine beetles of all standing trees surveyed across 27 sites (Nestweb project data), and hundreds of thousands of hectares defoliated by western spruce budworm in the southern interior forest region of British Columbia (Ministry of forests data). Arrowed brackets indicate approximate duration of the outbreaks of mountain pine beetle (1999-2004) and western spruce budworm (2002-2008).

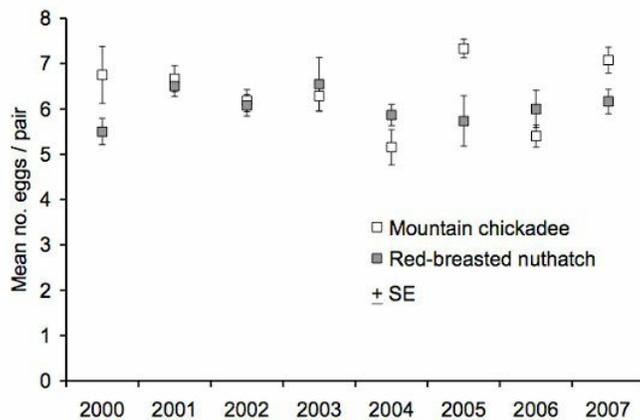


Figure 2. Mean number of eggs produced per nest for red-breasted nuthatches and mountain chickadees, in interior British Columbia. Even though nests were found previous to 2000, only these data (shown) allowed accurate estimations of standard errors.

Also, I am preparing a second paper for publication, "Community interactions influence erratic population fluctuations during a resource pulse." This paper

examines how populations of red-breasted nuthatches respond to the bark beetle outbreak and changes in interspecific interactions with other excavating species in the community. In September 2008, I attended the International Grouse Symposium in Whitehorse, Yukon Territory, where I assisted with field trip logistics and with other general duties during the meetings. From May through July 2008, I conducted field research for my PhD thesis on the Nestweb project in Riske Creek, British Columbia. From October 2008 through January 2009, I conducted field research on cavity-nesting birds in the subtropical Atlantic forest of northern Argentina, in collaboration with a fellow PhD student, Kristina Cockle. With assistance from the Junco technologies award, I was able to purchase a new cavity-monitoring camera that enabled me to accurately monitor the fecundity of cavity-nesting birds in both field sites in Canada and Argentina.

Literature cited

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**SCO-SOC
Annual Meeting/Réunion annuelle
EDMONTON 2009
August 20-23 Août
University of Alberta/Université d'Alberta**

The Society of Canadian Ornithologists will be hosting its 2009 annual conference at the University of Alberta in Edmonton, AB from Thursday August 20 to Sunday August 23, 2009. The conference will take place at the TELUS Centre for Professional Development on the University of Alberta campus. The conference social will be held on Thursday in the atrium of the Telus Centre with presentations Friday and Saturday in Telus Centre

–Room 150. A poster session is planned for Friday evening in the Telus Centre Atrium. A barbeque-style banquet will occur at Fort Edmonton Park on Saturday evening. Field trips are arranged for Sunday for interested participants as well as early morning bird walks on Friday and Saturday.

The University of Alberta campus is located in central Edmonton near the beautiful North Saskatchewan River. The Telus centre is located on the East-Central section of the U of A campus (Corner of 111 Street and 87 Avenue – Building 93). Underground parking is available in the Telus Centre as well as surface parking in Lots N & U (111 Street and 89 Avenue). Registration will begin on April 15, 2009. Online submission and registration can be found at <http://sco.biology.ualberta.ca>.

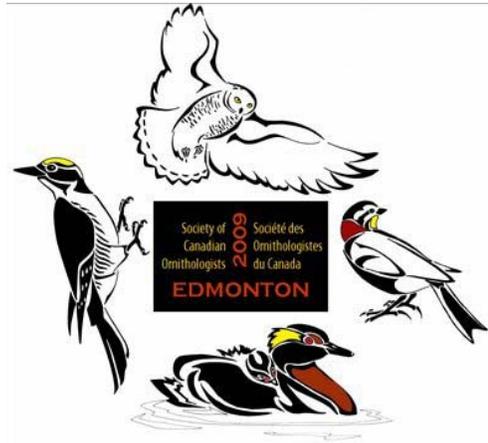
Program:

Plenary lectures will be given by Dr. Spencer Sealy and Dr. Grant Gilchrist that will highlight the incredible breadth of Canadian ornithology and our contributions to international bird understanding and conservation.

Dr. Sealy is a professor in the Department of Zoology at the University of Manitoba and will speak on what he has learned from more than 30 years of ongoing research at Delta Marsh, Manitoba that has fundamentally structured the way we think about passerine ecology. His talk is entitled “Cowbirds and Their Hosts: Warblers to Catbirds”.

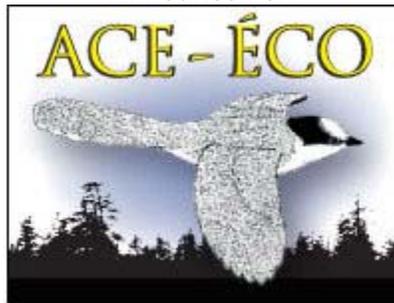
Dr. Gilchrist is a research scientist with the National Wildlife Research Centre in Ottawa. Grant’s work on the population dynamics of birds in remote northern ecosystems has provided critical insights into the interrelationships between climate change, human hunting, and northern conservation. He will speak on the “Conservation Biology of the Northern Eider in Arctic Canada and West Greenland”.

The remainder of the program will be made up of submitted papers and posters that will be selected by the organizing committee.





**Avian Conservation and Ecology - Écologie et conservation des oiseaux: New Issue
Announcement**



Editors-in-Chief, Tom Nudds and Marc-André Villard are pleased to announce the publication of Volume 4, Issue 1 of Avian Conservation and Ecology (ACE-ÉCO). In their editorial, "Is Monitoring Growing Up?" Nudds and Villard discuss the current status of monitoring and point to opportunities for improvement in existing Canadian monitoring protocols. Also in this issue, a guest editorial by Schmiegelow and Villard offers a synthesis of the articles published in the now closed special feature "Bird Conservation in the Boreal Forest: Is there a Case for Resilience" in which contributors evaluated the potential resilience of boreal birds to forest harvesting. We invite you to peruse these and other articles in our newest issue by visiting selecting the HTML or PDF links from the online Table of Contents at <http://www.ace-eco.org/>.

As a final reminder, authors are encouraged to submit manuscripts to the special feature: Conservation of Prairie Birds: Causes and Consequences of Population Declines, edited by Nicola Koper and Tom Nudds. Submissions will be accepted until December 31, 2009.

Chers abonnés, chères abonnées,

Les rédacteurs en chef Tom Nudds et Marc-André Villard sont fiers d'annoncer la publication du volume 4, numéro 1 d'Écologie et conservation des oiseaux (ACE-ÉCO). Dans leur éditorial, " Le suivi écologique prend-t-il de la maturité? ", Nudds et Villard se penchent sur le statut actuel des programmes de suivi et signalent des options pour l'amélioration des protocoles actuellement utilisés au Canada. Également dans ce numéro, un éditorial invité de Schmiegelow et Villard présente une synthèse des articles publiés dans la section spéciale maintenant complétée intitulée " Conservation des oiseaux de la forêt boréale : la résilience est-elle un enjeu? ". Nous vous invitons à prendre connaissance de ces articles et des autres qui sont inclus dans ce nouveau numéro en cliquant sur les liens HTML ou PDF de la table des matières (<http://www.ace-eco.org/>).

Dernier rappel : les auteures et auteurs sont invités à soumettre des manuscrits pour publication dans la nouvelle section spéciale intitulée " Conservation des oiseaux des prairies : causes et conséquences des déclin d'effectifs ", co-dirigée par Nicola Koper et Tom Nudds. Les nouveaux manuscrits seront acceptés jusqu'au 31 décembre 2009.

Afin d'accéder aux articles plein-texte du nouveau numéro, cliquez sur le lien HTML ou PDF de la table des matières <http://www.ace-eco.org/>.



Theses in Canadian Ornithology

Artuso, Christian. 2009. Life on the Edge: The Eastern Screech-Owl in Winnipeg. PhD Dissertation. University of Manitoba, Winnipeg, MB. E-mail: cartuso@bsc-eoc.org.

Cavity-nesting birds may be sensitive to urbanization due to changes in the availability of breeding resources. Nonetheless, the Eastern Screech-Owl has higher productivity and survival in suburbs than rural areas in the southern portion of its range (Texas). Densities and life-history traits of birds may differ in range peripheral areas, rendering generalization about the effect of urbanization difficult. I examined the population density, reproduction, habitat selection, and diet of Eastern Screech-Owls



Eastern Screech Owl. Photo by Jean Sébastien Guénette.

in Manitoba to test whether the patterns observed in Texas held at the northern periphery of the range, and whether such patterns would be more or less pronounced. I conducted a random-stratified survey across a rural to urban gradient and monitored nests in natural cavities and nest boxes. I collected data on diet and measured variables related to the cavity tree and at the habitat level at nests and unused cavities.

Eastern Screech-Owl density was positively correlated with human density, peaking in medium to high-density suburbs. Screech-owls preferred riparian habitat but densities and breeding in residential areas versus greenspace did not differ. Brood sizes peaked in suburban areas, where fledging averaged five days in advance of rural areas. Owls selected habitat where canopy cover was relatively high, and with sufficient potential nest-sites close to some coniferous trees. They selected nest sites in taller trees, closer to water and with lower shrub density below the nest

than unused cavities. They avoided potential nest sites with more buildings and higher domestic cat activity. Screech-owls had a more diverse diet with more vertebrate prey in low-density suburban areas as

opposed to rural and high-density suburban areas. The mechanisms behind this pattern appear to be the urban heat island, reduced predation, greater diversity of prey, and favorable habitat alteration including planted conifers and buildings for roosting and more open vegetation. The percentage of rufous morph screech-owls in Manitoba has fallen from 6-11% in the 1920s to <1% today, whereas no decline has occurred in Minnesota or North Dakota. I argue that, based on differences in survival rates between color morphs in extreme cold, this is evidence of a northward range expansion facilitated by the anthropogenic influences noted above.

The differences in density, reproductivity, and breeding phenology between suburban and rural areas, as well as the mechanisms involved, are similar to those found in Texas, suggesting that, at least in this case, the influence of urbanization is not strongly mitigated by latitude.



Aerial Insectivore Workshop – Summary of meeting held March 9-11, 2009 Conservation Committee of the SCO-SOC

Populations of aerial insectivorous birds appear to have declined, sometimes dramatically, over the past few decades. Independent analyses have illustrated these declines are a global phenomenon, occurring in Europe (Evans et al. 2007), the neotropics (Şekercioğlu et al. 2002), and North America (Nebel et al. In Review).

To discuss how and why these declines are occurring, a workshop was held in Ottawa during March 9-11, 2009, attended by 27 individuals with an interest in aerial insectivores. The workshop started with individual presentations, to introduce a few key background topics. The agenda was varied and included presentations on population trends, pesticides, weather, mammalian insectivores, and population trends of blackflies and mosquitoes. This article is a brief summary of the discussions that followed.

A major objective for the following day, in which we broke into discussion groups, was to construct testable hypotheses about the causes of the declines. Because the declines seem to be most severe in eastern North American populations, discovering the cause will surely involve an examination of species with continent-wide ranges where declines are more marked in one area than another. This comparative approach lends itself well to generating numerous hypotheses.

However, generating a list of testable hypotheses proved more difficult than it at first appeared, as each hypothesis seemed to engage a string of contingent complexities. Therefore, the products of the day's discussions were more like action items largely aimed at answering one question: are there common factors causing declines in aerial insectivores? If the answer is 'yes', then the question becomes "what are they?"

A nearly intractable problem arises if the answer to the above question is "no", which indicates each species could have different problems, or only sub-sets of species might share a common problem. If different species are in decline for different reasons, different strategies will be required to remedy the situation. The only way to tackle this, as many group members felt, was to use a piecemeal approach and encourage individual species investigations so as to determine causes of species-specific problems. These problems could then be investigated to determine if they apply to other species. This approach has both positive and negative aspects relating to the fact that all aerial insectivore species differ in their habitat use and diet (to a degree).

The declines in aerial insectivore populations must be due to either reduced productivity (which would occur during the breeding season) or mortality (which could occur any time of year). A major question is therefore whether processes occurring during breeding, migration, or over-wintering limit many/most of the declining species. Bearing this in mind, the participants focused on discussing four potentially limiting factors: (i) landscape change, (ii) toxic chemicals, (iii) climatic change and weather, and (iv) miscellaneous. In discussing these four topics, it became clear that to address important questions we would need to investigate data that already exist (a data-mining approach) as well as initiate new research projects.

Well over 100 hypotheses and action items were created. To synthesize these ideas and reduce them to a more manageable list, the participants ranked the items in order of importance. These lists are presented in Tables 1 and 2.



Table1. Top ten factors to assess, through **data-mining approaches**, to address how and why aerial insectivore populations are declining.

Rank	Factor to assess
1	Changes in breeding distribution over space, time and species in relation to lake acidity, land use changes, loss of wetlands and marshes, increased forest cover, east vs. west factors
2	Temporal trends in spring-summer cold snaps on breeding grounds
3	Declines in productivity in long-term studies over space and time and species
4	Are there data (other than atlases and BBS) to corroborate the population declines?
5	Spring vs. autumn differences in body condition and arrival timing of aerial insectivores at migration-monitoring sites
6	Increases in pesticide use in Latin America from agricultural intensification
7	Habitat loss along migratory routes
8	Patterns of land use change in winter range in Latin America
9	Extreme weather events, such as hurricanes (timing and frequency) inhibiting migration success
10	Did any weather patterns change in mid-1980s that might match insect declines?

Table2. Top ten factors to assess, through **new research projects**, to address how and why aerial insectivore populations are declining.

Rank	Factor to assess
1	Change in phenology of emergence and peaks in insect numbers and potential mismatch with aerial insectivore breeding
2	Insect food web effects - such as decreases in mosquitoes resulting in decreased Odonates
3	Acid rain effects studies – such as examining tree swallow productivity in paired ecosystems (high and low acid)
4	Collect diet data for other species such as common nighthawk, whip-poor-will, and chimney swift
5	Repeat historical studies of productivity and diet, if data are no longer being collected – such as studies that have been done on foraging of kingbirds, swallows, and martins
6	Long-term habitat change studies
7	Survey techniques for poorly surveyed species: common nighthawk, whip-poor-will, and chimney swift
8	Find other historical data sets
9	Fault / growth bars comparison in flight feathers in long distance migrants (ptilochronology)
10	Basic life history parameters for key species, across parts of their range

The workshop concluded with a discussion of questions related to recovery and management. There was agreement that there is a need for an ongoing working group, to be drawn from those attending this meeting and other interested parties. The working group should also link with entomologists, bat and amphibian researchers, those working on multi-disciplinary topics, and tropical biologists. The next step is to consider a prospectus of problems *and* their possible solutions.

For those interested in joining the working group, or obtaining a complete copy of the workshop minutes, contact the compilers: Geoff Holroyd; geoffrey.holroyd@ec.gc.ca or Mike Cadman; mike.cadman@ec.gc.ca

References

Evans, K.L., J.D. Wilson, and R.B. Bradbury. 2007. Effects of crop type and aerial invertebrate abundance on foraging barn swallows *Hirundo rustica*. *Agriculture, Ecosystems & Environment* 122: 267-273.

Şekercioğlu, C. P.R. Ehrlich, G.C. Daily, D. Aygen, D. Goehring, and R.F. Sandí. 2007. Disappearance of insectivorous birds from tropical forest fragments. *Proceedings of the National Academy of Sciences of the USA* 99: 263-267.



Letter to the Editor of *Picoides*

I would like to respond to the comments of Robert Askins and Chris Elphick that appeared in the last issue:

Dr. Askins has questioned the validity of conclusions made by highly-esteemed former Royal Ontario Museum and University of Toronto scientists. Published data pertaining to that material, is documented in "Birds from the Ground" authored by Howard Savage, PhD, MD, Department of Ornithology and Archeozoology at ROM, who headed the Howard Savage Faunal Laboratory at the University of Toronto. It clearly mentions and maps where mute swan remains were found, and is dated to a period in which there was no European colonization in that area, which became Fort Albany. Dr. C.S. Churcher, Professor emeritus at University of Toronto, was the faunalist on that find.)

One has to assume neither Askins nor Elphick ever read "Birds from the Ground," before responding to it.

Askins also suggests, "the knob on the swan is too small and it's black." in the John White painting. Again, that is addressed in the Introduction, on the first page of the paper. The mute swan has a black bill, because it was painted with a leaded paint that has degraded over the past four hundred years, according to the Curator of the John White collection at the British Museum, and it's size is in keeping with the knobs in works by Willoughby and Ray, Latham and other ornithologists of the period.

Catesby did not paint any species of swans, although many early diaries and journals say there were many swans, neither did Edwards, Wilson nor Bonaparte, and though Audubon did not paint a mute swan, he said "...It is possible we have more than two species of swan within the limits of North America...." This, again, was obviously overlooked by Askins and Elphick, or ignored.

Re: Chris Elphick's comment on Dr. David Beers Quinn.

For more than fifty years DB Quinn was the world's most prominent scholar on the early English explorations to America, writing dozens of books, many with the head of the British Museum, Paul Hulton, many published by the Hakluyt Society of London, the major receptacle of historical material on early English explorations, the diaries and journals.

I have pieced together a well-documented theory that includes historical and pre-historical information. In total, that information establishes a very serious doubt to the contention that mute swans are not indigenous to North America (New Evidence of Early Presence of *Cygnus olor*, *Picoides* Nov. 2008 Pg36)

While it is Dr. Askins prerogative to question such opinions, the only valid way to express disapproval is to present valid and convincing contradictory material, in its place. However, Dr. Askins has simply exchanged his opinion, for the documented material in the *Picoides* paper.

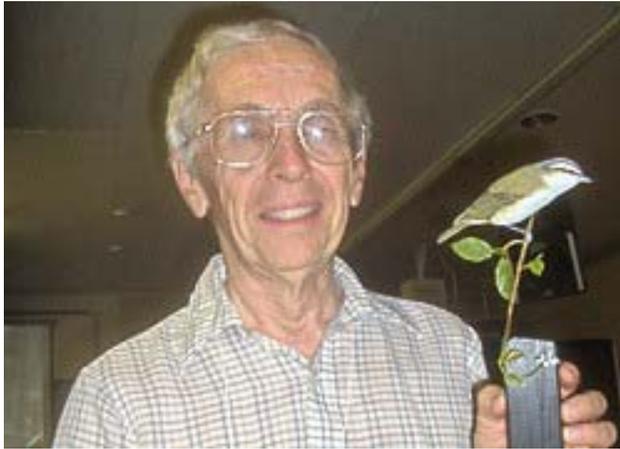
I believe the published paper published stands, until documented material, not just opinions, proves otherwise.

My apologies to Robert Alison, a professional waterfowl biologist for more than thirty years, who kindly provided the background on the MBC, MBTA and other Canadian documents, for this paper and the one prior, accepted by the AOU for their August, 2008 meeting in Oregon.

Kathryn Stillwell Burton, WWNews@aol.com for additional information
Old Lyme, Connecticut



The North American Breeding Bird Survey in Canada recognizes David Christie
(Reprinted with permission from Bird Studies Canada E-newsletter, June 19, 2009)



David Christie with Red-eyed Vireo woodcarving.
Photo by Stan Moeller.

A special presentation was made to a long-time Breeding Bird Survey (BBS) volunteer at the banquet of the Nature NB annual general meeting. David Christie of Hillsborough, NB was recognized for having run over 100 BBS routes since the survey started in 1966. David is only the third person in Canada to ever reach the 100 mark. Tony Erskine, who was the original coordinator of the BBS in the Maritimes and the national BBS coordinator for some time, made the presentation.

Since 1966, David has run a number of different BBS routes in NB, but the route he has run the most often is Penobsquis. In honour of his long-standing commitment to the survey and his many contributions as a volunteer, David was presented with a carving

of a Red-eyed Vireo, carved by award-winning New Brunswick-based carver Jim Edsall. The Red-eyed Vireo is number eight on David's top 10 list of most commonly counted birds on his Penobsquis route.

The presentation was sponsored jointly by Environment Canada and Bird Studies Canada. The North American Breeding Bird Survey is coordinated in Canada by Environment Canada's Canadian Wildlife Service (CWS) and is one of the continent's most valuable sources of bird trend information. In the Maritimes, Becky Whittam of Bird Studies Canada coordinates volunteers for NB, NS, and PE. Currently, some 500 BBS routes are run each year in Canada. However, there are many more participants needed to fill vacant routes or to replace those who have retired. If you are able to identify all species by sight or by sound, have good hearing, and are willing to donate one day or more a year to the Breeding Bird Survey, please contact us. For more information on the Breeding Bird Survey, visit the CWS website at: <http://www.cws-scf.ec.gc.ca/nwrc-cnrf/default.asp?lang=en&n=416B57CA>.



Wild Turkey feathers up close.
Photo by Larry Halvorson.



André Cyr receives Quebec Education Award from BPQ:



André Cyr (r) accepts Quebec Education Award from BPQ President and Awards Committee Chair Jeff Harrison (l). Photo by Eve Marshall.

André Cyr has spent his 30 year professional career as an ornithologist at the University of Sherbrooke. He recently retired as professor of Ornithology in the University's Department of Biology. Over the years his passion for birds has led him to an outstanding career as a scientist, educator, author and promoter of the birds of Quebec. His interest in birds started when he was very young and he has translated that enthusiasm into his teaching career where he is noted for non-traditional but highly effective methods.

Dr. Cyr is a widely published author and conference presenter who is noted for his many collaborative papers in biological journals and conference proceedings. With Jacques Larivée he is the author of

the Seasonal Atlas of the Birds of Quebec. He also played a major role in the scientific analysis, promotion, and recognition of the Quebec bird monitoring system: EPOQ, with Jacques Larivée. This work contributed to the recognition of the importance of checklists for scientific studies that led to ebird. With N. David, M Gosselin, and P. Blain, he translated the Peterson Field Guide of Eastern Birds into French.

Equally important is Dr Cyr's role as a public face and popularizer of birding in Quebec through various media and public appearances. With tireless dedication he has used his skills as an educator, public speaker, promoter, bird photographer, and his unique talent as an imitator of bird calls, to promote public interest and support for birds. His many contributions have led to numerous awards including the Charles Eusèbe-Dionne prize from the RQO.

Bird Protection Quebec recognizes Dr. André Cyr with its Quebec Education Award for 2008 in honour of his significant educational contributions to Quebec birding.



Louise Gratton Receives Quebec Conservation Award



Louise Gratton (r) accepts Quebec Conservation Award from BPQ President and Awards Committee Chair Jeff Harrison (l). Photo by Eve Marshall.

Louise Gratton graduated from UQAM with a M.Sc. in Biology in 1981. Since that time she has devoted her considerable talents to a career in habitat conservation in Quebec. She is an expert in plant ecology and botany and was an ecological consultant for 20 years and still, occasionally, will provide expertise to environmental groups. She currently shares most of her time between her position as Director of Science with the Nature Conservancy of Canada, Québec region, and as scientific advisor to the Appalachian Corridor, an organization she co-founded in 2002. This unique and creative project, using ecological data on the habitat needs of birds, other fauna, and plants, biological

surveys, and the involvement of governments, institutions, businesses, landowners and the general public, is making a significant contribution to wildlife conservation in Quebec

In addition to her professional work, Louise has given her time freely to the cause of conservation in Québec and Canada. She is past Chairperson of the Board of Directors of Nature Canada (formerly the Canadian Nature Federation). Over the years, she has also been associated with many Quebec organizations or government committees involved in conservation including the Quebec Government Advisory committee on endangered flora; Floraquebeca; Association des biologistes du Québec; Fondation pour la sauvegarde des espèces menaces and Nature Québec (formerly the Union québécoise pour la conservation de la nature). She is currently on the board of the bi-national organization Two Countries, One Forest; Secretary-Treasurer of the Appalachian Corridor; President of Les Amis de la tourbière de Saint-Joachim-de-Shefford and President of the Environmental and Sustainable Development Committee of the City of Sutton.

Bird Protection Quebec recognizes Louise Gratton with its Quebec Conservation Award for 2008 in honour of her significant contributions to Quebec conservation.



Cartoon Artists Sought for Upcoming Book

I am looking for several more people to do cartoon drawings for our book called, "Being a Bird in North America". You may recall that last year I solicited photos in *Picoidea* and received excellent feedback.

We are devoting one page to each of the 669 species that breed in Canada and the U.S., not including Hawaii. We're trying to depict one or two interesting stories that apply to the species, and concentrate the account on those ideas rather than fill in the blanks for a number of set sections for each species. The point of the drawings is to depict that story or those stories in a humorous way. The stories can relate to conservation, environmental or ecological issues, or anything else biological. The idea is to give readers an interesting way of remembering each species.

I start by sending you an idea for a species. It's always best to send me a sketch first, before putting too much work into it. I often ask for some changes before asking you to finalize it. Use your own style! It's important to highlight or even exaggerate the main points that distinguish the species in question from similar looking species.

The drawings will likely appear from 1 x 1 inch to 2 x 2 inches in the book (possibly 3.5 x 3.5 inches) and must be scanned at 300 dots per inch (dpi). Each final drawing should be signed. I encourage you to provide your bio (100 words max.) for publication in the book.

I will start paying \$40 per drawing only once I begin obtaining profits.

If you are interested, please contact me at robalvo1@gmail.com or by phone at (613) 236-0660 and I'll call you right back. Thank you.

Rob Alvo, M.Sc. Conservation Biologist, Senior Author.

Guide to Turkey Vulture Nestling Aging Now Available

Turkey Vultures: A Photographic Guide for Aging Nestlings. R. W. Nelson, D. Moore, F. Kunnas, and R. Morse. 2009. Fish and Wildlife Division, Alberta Species at Risk Report No. 124. Edmonton, AB. 44 pp.

Descriptions and 80+ color photos of known-age nestlings, "... are intended to allow users ... to estimate the age of nestling Turkey Vultures, from their own photographs, to within +/- two days, without handling the young birds." Part of an ongoing study at the northern edge of the breeding range. Available as a pdf download at:

<http://srd.alberta.ca/fishwildlife/speciesatrisk/projectreports.aspx>

Turkey Vulture nestling. Photo by Wayne Nelson.

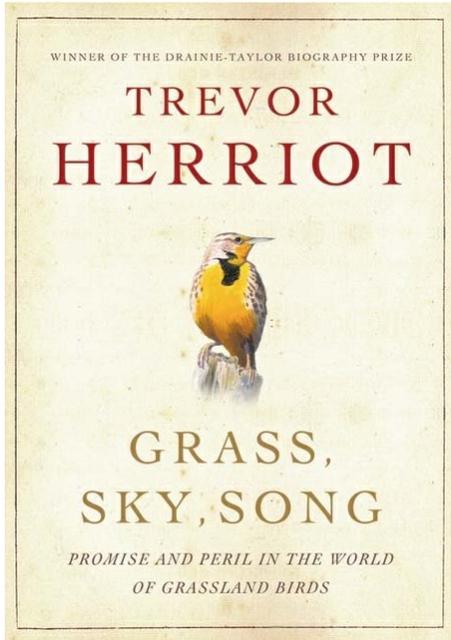




Book Review

GRASS, SKY, SONG: PROMISE AND PERIL IN THE WORLD OF GRASSLAND BIRDS

TREVOR HERRIOT. 2009. Harper Collins Publishers Ltd., Toronto. ON. Hardcover. 288 pages. 14.6 x 21.2 x 1.5 cm. 17 black and white drawings. ISBN - 10: 1554680387. \$32.95 CDN



Grass, Sky Song is a book that eloquently reveals the spirit of the grassland world, and the uniqueness of its birds. . The author, Trevor Herriot, draws on over 20 years' experience as an observer of nature to draw the reader to the beauty and distinctiveness of and threats to grassland landscapes and wildlife.

The author speaks clearly from the heart and this greatly enhances this book. He openly shares his passion, fears and hopes for the prairie and its birds. Personal stories and observations make the book riveting. Particular highlights include his personal 'discovery' of grassland birds and the 2005 retracing of John Macoun's expedition across southern Saskatchewan with Stuart Houston. At times, he makes you laugh with a funny anecdote and other times very sad with facts and observations about grassland bird decline and the alarming increased incidence of cancer in prairie people including within his family. I was often relating what I read with my own personal experiences and observations of the prairie landscape. His excellent, easy to read and poetic prose does truly make the prairie, birds and wildlife, the people

and the many threats to them jump off the page.

Although not a scientific book per se, Herriot clearly distills complex issues with eloquent prose and careful, very limited and strategic use of statistics and makes the issues readily understandable and useful for both the layperson and the expert. The bird conservation issues discussed in the book are similar to those found in Brigit Stuchbury's highly regarded book the *Silence of the Songbirds*.¹ Through 18 chapters, Herriot discusses bird conservation issues such as socio-economics, human population growth, habitat loss and landscape change, climate change, bird population monitoring and trends, pesticides and their interactions through the prism of his experiences and observations. His research for *Grass, Sky Song* is impeccable and his interviews with prominent prairie ornithologists such as Stuart Houston and Steve Davis further strengthen the book. At the end of the book, there is a useful notes and references section.

Between each chapter there is a two to three page profile of an at risk grassland bird species. These profiles briefly and accurately describe its status and threats to the bird species existence and how its natural history attributes interact with the current and evolving prairie landscape. For each species profile, there is a stunningly beautiful drawing of the species by the author. Seventeen grassland at risk bird species are specifically profiled in this book and they include Sharp-tailed Grouse, Western Meadowlark, Burrowing Owl, Sprague's Pipit and Swainson's Hawk. These species profiles complement and strengthen the main chapters of the book.

Herriot is correct in saying that loss of grassland birds and their habitats diminishes the value of prairie and makes us poorer. A good question is 'if grassland birds disappear, is it still a truly functional prairie?' We face the real prospect of a 'silent spring' as described by Rachel Carson on the prairie in the future.



Although from different perspectives (self-taught naturalist versus professional biologist), different birds and habitats, Herriot and Stuchbury have come to the same conclusion that we need hope, practical ways to help advance bird conservation and strengthen the bonds between nature and culture. Like Stuchbury, the author successfully ends the book with practical ways for people to help birds and their habitats. These include smart consumer choices that can sustain the prairie, education of others about the prairie and its birds, effective conservation efforts that make a positive difference and effective lobbying efforts to ensure positive outcomes from government decision-making.

In conclusion, I highly recommend this book to anyone interested in prairie bird conservation and ecology.

Reviewed by Rob Warnock, E-mail: warnockr@accesscomm.ca.

1. Stuchbury, Brigit. 2007. *Silence of the Songbirds*. Harper Perennial, Toronto, ON. 256 pages.

An Ordinary Bird

Do you see that sparrow
alright-that house sparrow?
the one with the black bib
an ordinary bird, you think
one demeaned by many and
even birders discount
their kind except in numbers,
but, I tell you, I have watched
these birds for fifty years
and am still fascinated to
see them in courtship display
when that bib is lowered
down to the ground, tail upright
wings held closed but raised
and vigorously fluttered, a blur
of delight to dazzle a nearby
silent enthralled female sparrow
who just by standing still
feeds his fervent fire on
this early April bright morning
as he mounts, wings fluttering
dismounts, then mounts again
until I, amazed, lose count
a mechanical toy wound tight
released by Spring's tide
and our copious feeding ... he
comes running to her again
those vibrating wings flashing
signals of delirious delight
shattering the myth of commonness.



House Sparrow. Photo by Jean Sébastien Guénette.

Bob Nero



5th North American Duck Symposium and Workshop (NADS 5)

Long Point Waterfowl and the University of Guelph are co-hosting the 5th North American Duck Symposium and Workshop (NADS 5) to be held in Toronto from August 17-20, 2009. NADS 5 will showcase current research in duck ecology, conservation, and management from North American and European researchers. Examples of plenary sessions include "Riches of the Boreal Forest: Waterfowl Populations and Conservation Challenges," "Predator Management at the Landscape Scale: The Delta Experience," "Implications of a Changing Great Lakes Ecosystem for Ducks," and "Linking Harvest, Habitat and Human Dimensions: An Update."



NADS 5 is open to all who have a keen interest in duck ecology and management. Online registration for NADS 5 is now available. Limited early bird prizes are available for those who register before April 30. The organizers of NADS 5 would also like to announce the third call for paper and poster presentations. Please check out the NADS 5 website at: <http://www.northamericanducksymposium.org/> for detailed information on paper and poster submissions and descriptions of plenary sessions.

9th Prairie Conservation and Endangered Species Conference and Workshop February 25-27, 2010 in Winnipeg, MB

Patterns of Change: Learning from our past to manage our present and conserve our future!

Mark your calendars! Plan to join us February 25-27, 2010 for the 9th Prairie Conservation and Endangered Species Conference in Winnipeg, Manitoba.

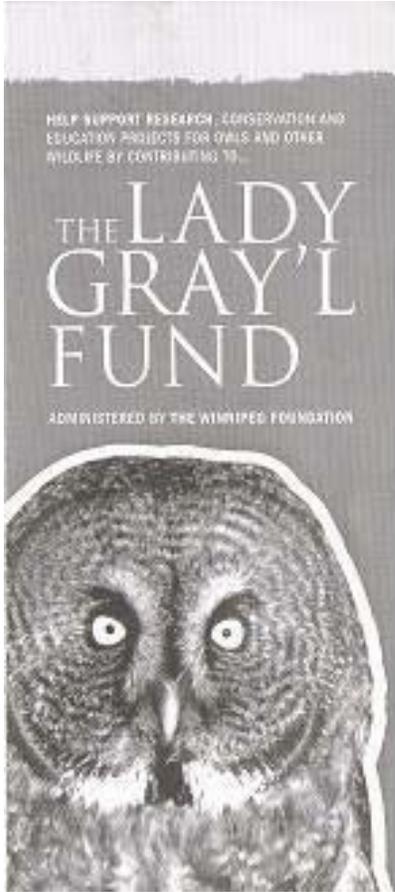
Held every three years since 1986 in a Canadian Prairie Province, this premiere conference brings together researchers, ranchers, land managers, consultants, Aboriginal groups, educators, nature enthusiasts, and many others to share information, ideas and new approaches to sustaining native prairie landscapes and endangered species.

Patterns of Change is the conference theme. Through compelling plenary sessions, stimulating workshops and enlightening poster displays, participants will ponder the many changes that have shaped the past and those that are imperative to our future on the Prairies.

Prepare to enjoy the hospitality of Friendly Manitoba! This conference is a great opportunity to catch up on old friendships and forge new ones. We hope to see you there!

For more information please contact:

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Toll free: 1-866-532-6155
Tel: (204) 253-8623
Fax: (204) 255-2523
www.pcesc.ca



LADY GRAY'L, a Great Gray Owl that served to educate and entertain many people, died of natural causes on October 13, 2005. This famous owl, taken from a nest as an injured chick in May 1984, was 21 1/2 years old when she died. For her full story, see the book *Lady Grail, Owl With A Mission* by R. Nero. Along with her handler, Dr. Bob Nero, Lady Gray'l was a frequent visitor to schools, shopping malls, nursing homes and at various conservation programs. Together they educated thousands about conservation. She was the most travelled owl in Manitoba, the most photographed individual bird in North America, and her name is well known beyond our own provincial borders.

It should be noted that Lady Gray'l and Dr. Nero played a major role in having the Great Gray Owl selected as Manitoba's official bird emblem in 1987. And in her memory, a fund has been established at The Winnipeg Foundation.

PURPOSE OF THE FUND

The LADY GRAY'L FUND will be used to fund research, conservation and education projects directly relating to owls and other wildlife. Priority will be given to owls and Manitoba-based projects. Only projects sponsored by charitable organizations within Canada are eligible for funding.

A decision group, along with The Winnipeg Foundation, will be responsible for selecting recipients.

name _____ -

address _____ -

city _____ province _____ postal code - _____

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Enclosed is my donation of:

0 \$50 0 \$100 0 \$250 0 \$500 0 \$1,000 other: \$ ___ I wish to pay with: 0 VISA 0 MasterCard 0 cheque

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I authorize The Winnipeg Foundation to receive this regular donation

for a period _____ of year(s) or until notified by me, by

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signature _____

Please make cheques payable to **The Winnipeg Foundation**, with a memo on the cheque stating:

"Lady Gray'l Fund". Thank you!

Mail to: The Winnipeg Foundation 1350 - One Lombard Place Winnipeg, Manitoba R3B 0X3

For more information, contact The Winnipeg Foundation at (204) 944-9474.

The Winnipeg Foundation registered charity no.: 119300960 RR0001



**Society of Canadian Ornithologists
Société des ornithologistes du Canada**

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

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St-Jean de l'Île d'Orléans (QC)
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beudet.lamothe@sympatico.ca



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