PICOIDES

November 2025
Volume 38 (3)

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

Gray-crowned Rosy-finch (*Leucosticte tephrocotis*). // Roselin à tête grise. Photo: Laura Messett.

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Editors' Message

Rob Warnock and Barbara Bleho

Welcome to the third and final issue of *Picoides* in 2025. We hope everyone had a great summer and start to fall. We are pleased to see an increased number and diversity of submissions for this issue. More submissions make *Picoides* more useful and interesting for you, the SCO-SOC members. We need your help in maintaining this new momentum for *Picoides*.

In Daneille Ethier's latest President's Message, she discusses the great success of the 2025 SCO-SOC conference in Saskatoon, the renaming of the Early Career Research Award to honour the late Keith Hobson and planned launch of an SCO-SOC Student Committee in 2026. Danielle encourages donations to ECRA and participation on the new Student Committee from SCO-SOC members.

Congratulations and welcome to the new members of the SCO-SOC Council: Sachin Anand, Sunny Tseng, and Alexandre Terrigeol. Ther min-bios are on page 3. We congratulate David Bird and Rodger Titman for jointly receiving the 2025 Jamie Smith Memorial Award for Mentoring. Check out the award citation article on page 7. We also congratulate the students who won presentation awards at the SCO-SOC conference last August in Saskatoon: Yu-Wen Yang, Jelany Duali, Charlotte Probst, Jamie Quinn, and Leonard Patterson. Check out the summaries of their award-winning presentations on page 11. All eligible students are encouraged to apply for SCO-SOC research awards. Check out the notice on page 26. Nominations are now open for 2026 Early Career Research Award in honour of Keith Hobson. The nomination notice is on page 25.

SCO-SOC member Bob Elner was featured on the *Nature of Things* recently. Congratulations! Elizabeth Porter is compiling material to document more fully the history of SCO-SOC. Please consider assisting in this important endeavour. Her article is on page 23.

In this issue, there is a set of fascinating articles on Bobolinks, Snow Buntings, challenges in working in the subarctic near Churchill, Chimney Swift conservation and deep learning and data integration for improved bird conservation. On top of these articles, there is a thesis abstract and a review of both *Field Guide to North American Flycatchers: Empidonax and Pewees* and *Field Guide to North American Flycatchers: Kingbirds and Myiarchus*. In addition, there is artwork from Megan Edgar, Vidya Padmakumar, and Eamon Riordan-Short, and a poem by Sean Jenniskens. And of course, the latest *Avian Conservation and Ecology* Table of Contents is included in the issue. Check out all these items in this issue. Before we conclude, we would like to thank Jelany Duali, Laurie Boulerice and Jessika Lamarre for their help with French translation.

The next *Picoides* deadline is February 15, 2026. We look forward to your next submission to keep the momentum going, especially from students and bird labs. Without submissions, there is no *Picoides*. We also welcome your feedback as it is your publication, and we wish everyone a safe winter and holiday season.

FRANÇAIS—Message des éditeurs – Rob Warnock et Barbara Bleho

Bienvenue au troisième et dernier numéro de *Picoides* de 2025. Nous espérons que vous avez tous passé un excellent été et début d'automne. Nous sommes ravis de constater une augmentation du nombre et de la diversité des contributions pour ce numéro. Plus il y a de contributions, plus *Picoides* est utile et intéressant pour vous, les membres de la SCO-SOC. Nous avons besoin de votre aide pour maintenir cette nouvelle dynamique pour *Picoides*.

Dans son dernier message, la présidente Danielle Ethier évoque le grand succès de la conférence 2025 de la SCO-SOC à Saskatoon, le changement de nom du prix Le Prix de Recherche en Début de Carrière en l'honneur de feu Keith Hobson et le lancement prévu d'un comité étudiant de la SCO-SOC en 2026. Danielle encourage les membres de la SCO-SOC à faire des dons à l'ECRA et à participer au nouveau comité étudiant.

Félicitations et bienvenue aux nouveaux membres du conseil de la SCO-SOC : Sachin Anand, Sunny Tseng et Alexandre Terrigeol. Leurs biographies sont disponibles à la page 3. Nous félicitons David Bird et Rodger Titman pour avoir reçu conjointement le prix Jamie Smith Memorial Award for Mentoring 2025. Consultez l'article sur le prix à la page 9. Nous félicitons également les étudiants qui ont remporté des prix de présentation lors de la conférence SCO-SOC en août dernier à Saskatoon : Yu-Wen Yang, Jelany Duali, Charlotte Probst, Jamie Quinn et Leonard Patterson. Consultez les résumés de leurs présentations lauréates à la page 11. Tous les étudiants éligibles sont encouragés à postuler pour les prix de recherche SCO-SOC. Consultez l'avis à la page 27. Les candidatures sont désormais ouvertes pour Le Prix de Recherche en Début de Carrière en mémoire de Dr Keith Hobson. L'avis de candidature se trouve à la page 25.

Bob Elner, membre de la SCO-SOC, a récemment fait l'objet d'un reportage dans l'émission *Nature of Things*. Félicitations ! Elizabeth Porter compile actuellement des documents afin de retracer plus en détail l'histoire de la SCO-SOC. N'hésitez pas à lui prêter main-forte dans cette importante entreprise. Son article se trouve à la page 23.

Dans ce numéro, vous trouverez une série d'articles fascinants sur les goglus des prés, les bruants des neiges, les défis liés au travail dans la région subarctique près de Churchill, la conservation des martinets ramoneurs, l'apprentissage profond et l'intégration des données pour améliorer la conservation des oiseaux. En plus de ces articles, vous trouverez un résumé de thèse et des critiques des ouvrages Field Guide to North American Flycatchers : Empidonax and Pewees et Field Guide to North American Flycatchers : Kingbirds and Myiarchus. Vous y trouverez également des illustrations de Megan Edgar, Vidya Padmakumar et Eamon Riordan-Short, ainsi qu'un poème de Sean Jenniskens. Et bien sûr, la table des matières du dernier numéro d'Avian Conservation and Ecology est inclus dans ce numéro. Découvrez tous ces articles dans ce numéro. Avant de conclure, nous tenons à remercier Jelany Duali, Laurie Boulerice et Jessika Lamarre pour leur aide dans la traduction française.

La prochaine date limite pour *Picoides* est le 15 février 2026. Nous attendons avec impatience vos prochaines soumissions afin de maintenir notre élan, en particulier celles des étudiants et des laboratoires ornithologiques. Sans soumissions, il n'y a pas de *Picoides*. Nous apprécions également vos commentaires, car il s'agit de votre publication, et nous souhaitons à tous un hiver et un temps des fêtes en toute sécurité.

Follow SCO on social media for news, exciting research, updates from members, and more!
Suivez SOC pour les nouvelles, la recherche passionnante, mises à jour des membres, et plus encore!

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President's Message

Danielle Ethier

With fall migration behind us, I hope that everyone is looking forward to a less hectic winter (or the opportunity to visit our migrant bird on the wintering grounds!).

This fall marked the end of my first full year as President with SCO-SOC. I am so proud of all the hard work our council has done and the enthusiasm of our members. We hosted our first stand alone conference since 2019 in Saskatoon this past August. Over 200 participated from across Canada, and beyond, join us for this four-day event. The theme for the 2025 meeting was "*Under Our Wings: Avian Conservation and Ecology in a Changing World*". This theme reflects the society's commitment to conserving bird species and fostering a supportive environment for its members. It also celebrates the 20th anniversary of Avian Ecology and Evolution, a joint publication between the SCO-SOC and Birds Canada. The conference featured a packed schedule including 105 contributed talks, 42 posters, 5 symposia, 8 workshops, 2 sold out field trips to local attractions (Chaplin Lake, Last Mountain Bird Observatory), and a closing banquet at the Wanuskewin Heritage Park. Thank you to everyone that help plan this year's event, especially to our co-hosts Anne McKellar and Steve Van Wilgenburg.

You will notice in this issue that our Early Career Researcher Award has been commemorative renamed (2026-2030) in memorial of Dr. Keith Hobson. As part of this effort, we have launched a fundraising campaign to support our early career professionals in his memory. If you wish to make a contribution, please follow the link or QR code: https://www.zeffy.com/en-CA/donation-form/early-career-researcher-award-in-memoriam-of-dr-keith-hobson

Are you a student looking for a meaningful way to get involved with SCO? We are looking to launch a Student Committee in early 2026. More announcements will be made shortly, but if this opportunity interest you, please contact info@sco-soc.ca.

Thank you for your passion, dedication, and ongoing support. Wishing you a safe and productive winter.

Danielle Ethier, PhD
President | Society of Canadian Ornithologists
Senior Scientist | Birds Canada
president@sco-soc.ca

FRANÇAIS— Message de la présidente – Danielle Ethier

La migration automnale étant derrière nous, j'espère que tout le monde se réjouit à l'idée d'un hiver moins mouvementé (ou de la possibilité de rendre visite à nos oiseaux migrateurs sur leurs lieux d'hivernage!).

Cet automne a marqué la fin de ma première année complète en tant que présidente de la SCO-SOC. Je suis très fière du travail accompli par notre conseil et de l'enthousiasme de nos membres. En août dernier, nous avons organisé notre première conférence indépendante depuis 2019 à Saskatoon. Plus de 200 personnes venues de part et d'autre du Canada et d'ailleurs se sont jointes à nous pour cet événement de quatre jours. Le thème de la conférence de 2025 était « Sous nos ailes: conservation aviaire et écologie dans un monde en changement ». Ce thème reflète l'engagement de la société envers la conservation des espèces d'oiseaux et à maintenir un environnement favorable à ses membres. Il célèbre également le 20e anniversaire de *Avian Ecology and Evolution*, une publication conjointe de la SOC et d'Oiseaux Canada. La conférence présentait un programme chargé comprenant 105 conférences, 42 affiches, 5 symposiums, 8 ateliers, 2 excursions à guichets fermés pour participer à des attractions locales (Chaplin Lake, Last Mountain Bird Observatory) et un banquet de clôture au Wanuskewin Heritage Park. Merci à tous ceux qui ont contribué à l'organisation de l'événement de cette année, en particulier à nos co-hôtes Anne McKellar et Steve Van Wilgenburg.

Vous remarquerez dans ce numéro que notre prix pour les chercheurs en début de carrière a été rebaptisé (2026-2030) en mémoire du Dr Keith Hobson. Dans le cadre de cette initiative, nous avons lancé une campagne de financement pour soutenir les professionnels en début de carrière en sa mémoire. Si vous souhaitez faire un don, veuillez utiliser le lien ou le code QR : https://www.zeffy.com/en-CA/donation-form/early-career-researcher-award-in-memoriam-of-dr-keith-hobson

Vous êtes étudiant et vous cherchez un moyen significatif de vous impliquer dans la SCO-SOC? Nous envisageons de lancer un comité étudiant au début de l'année 2026. D'autres annonces seront faites prochainement, mais si cette opportunité vous intéresse, veuillez contacter info@sco-soc.ca.

Merci pour votre passion, votre dévouement et votre soutien continu. Nous vous souhaitons un hiver sûr et productif.

Danielle Ethier, PhD
Présidente | Société canadienne d'ornithologie
Scientifique principale | Oiseaux Canada
president@sco-soc.ca

SCO-SOC Election Results

Meet SCO-SOC's new members of council / Rencontrez les nouveaux membres du conseil de la SCO-SOC

Sachin Anand is a doctoral student at the University of Quebec at Rimouski, supervised by Prof. François Vézina (UQAR) and Prof. Oliver Love (UWindsor). His research focuses on the impacts of climate warming on the physiology of snow buntings, investigating their heat tolerance limits and capacity to acclimate to warmer temperatures. Sachin holds a Master's degree in Animal Ecology from Lund University, Sweden and is a recipient of the Excellence Scholarship for Foreign Students (PBEEE) awarded by the Fonds de recherche du Québec. His previous research includes winter bird energetics, island invasive species, fungal disease in amphibians, and work in a reptile zoo and conservation.

Photo courtesy of Center for Northern Studies/Centre d'études nordiques (CEN).

Sachin Anand est étudiant au doctorat à l'Université du Québec à Rimouski, sous la direction du professeur François Vézina (UQAR) et du professeur Oliver Love (UWindsor). Ses recherches portent sur les impacts du réchauffement climatique sur la physiologie des plectrophanes des neiges, en étudiant leur limite de tolérance à la chaleur et leur capacité à s'acclimater à des températures plus chaudes. Sachin est titulaire d'une

maîtrise en écologie animale de l'Université de Lund, en Suède, et est récipiendaire de la Bourse d'excellence pour étudiants étrangers (PBEEE) décernée par le Fonds de recherche du Québec. Ses recherches antérieures portent sur l'énergétique des oiseaux d'hiver, les espèces envahissantes insulaires, les maladies fongiques chez les amphibiens, en plus de son travail dans un zoo de reptiles et en conservation.

Photo by Povilas Bagdonas.

Sunny (Yi-Chin) Tseng is a PhD candidate whose research focuses on avian bioacoustics, with a particular interest in developing and advancing methods for passive acoustic monitoring. She is passionate about open-source science and science communication, especially through R package development and scientific infographic design. Sunny first became involved with SCO–SOC as a mentee in the mentorship program and later contributed to organizing the 2025 Saskatoon meeting, including designing its logo! She is excited to join the council and to work with fellow ornithologists!

Sunny (Yi-Chin) Tseng est étudiante au doctorat et ses recherches portent sur la bioacoustique aviaire. Elle s'intéresse particulièrement au développement et à l'avancement des méthodes de surveillance acoustique passive. Passionnée par l'utilisation des logiciels libres en science et la communication scientifique, elle s'intéresse notamment au développement de packages R et à la conception d'infographies scientifiques. Sunny a d'abord collaboré avec la SCO–SOC en tant que mentorée dans le cadre du programme de mentorat, puis a contribué à l'organisation de la conférence de Saskatoon de 2025, notamment à la conception de son logo! Elle est ravie de se joindre au conseil et de collaborer avec des collègues ornithologues!

Alexandre Terrigeol is Director of Operations at the Tadoussac Bird Observatory in Quebec. He coordinates the organization's research and education projects, including the Côte-Nord Migratory Bird Festival. He is actively involved in various organizations to promote the study and conservation of birds in Quebec, with a particular focus on bird migration.

Alexandre Terrigeol est directeur aux opérations à l'Observatoire d'oiseaux de Tadoussac, au Québec. Il coordonne les projets de recherche et d'éducation de l'organisme, notamment le Festival des oiseaux migrateurs de la Côte-Nord. Il s'implique activement dans diverses organisations pour promouvoir l'étude et la protection des oiseaux au Québec, en mettant notamment l'accent sur l'étude de la migration.

Photo by Clara Casabona i Amat.

STUDENT CONTRIBUTIONS WANTED FOR PICOIDES

SCO-SOC encourages students to submit material for *Picoides*. In particular, we would like each issue to feature abstracts of at least one or two recently published theses. They must be from students at a Canadian university, but need not necessarily focus on Canadian birds. Abstracts should be 250-400 words long, preferably accompanied by one or two relevant photos.

We also welcome articles describing aspects of student research in greater detail; these should focus on a subject relevant to Canadian ornithology, require references, and may be up to 1,000 words long, again preferably accompanied by one or two photos. See the SCO-SOC Information page for submission details.

2025 Early Career Researcher Award Research Synopsis

Deep learning and data integration for improved bird conservation

Elly Knight, University of Alberta, 2025 SCO-SOC Early Career Research Award Recipient
E-mail: ecknight@ualberta.ca

What luck we have to be members of the Society of Canadian Ornithologists! The 2025 SCO-SOC conference deeply emphasized for me the value and privilege of being an ornithologist in Canada. To receive the early career award from this community is deeply humbling.

My plenary talk at the 2025 meeting was titled "Deep learning and data integration for improved bird conservation", which is admittedly a rather nerdy, but I think important topic. I discussed how modern biodiversity monitoring is entering ornithologists into the realm of big data, with focus on passive acoustic monitoring. I used the framework of the "four Vs" (Farley et al. 2018) to argue that deep learning can help us make the best use of the volume and velocity (i.e., amount and high temporal resolution) of big data, while data integration can bring datasets together to address the variety and veracity (i.e., different types of data of varying reliability). I showed examples of insights like behaviour-specific Common Nighthawk habitat use (Knight et al. 2021a, 2021b, 2022, Adams et al. 2024) and improved trend estimation (Knight et al. 2021d). And all of this matters because it can help us answer bigger, harder questions, while also redirecting resources from redundant data collection toward evidence-based action that delivers measurable biodiversity outcomes.

But the real magic sauce behind that talk and the work that I do is in fact one and the same as our home society: community. From community comes collaboration, which is my favourite part of science, working together towards a common goal. Working with big data sets isn't possible without collaboration. Not only is collaboration required for the data sharing required, but knowledge and resource sharing are also necessary because working with big data isn't easy (Cheruvelil and Soranno 2018). In Canada, we have the challenge of studying birds across vast expanses of sparsely populated land, and I'd argue it is this large spatial scale that helps foster our community. We must work together to share data and knowledge across regions to understand and manage Canada's birds. And the best and most successful collaborations are those rooted in a diverse, ground-up community with a shared goal (Cheruvelil et al. 2014), like the SCO-SOC.

Looking back on my career, I can see that collaboration has always been a common thread. I completed my MSc on grassland birds (Knight et al. 2014, 2016) in the Centre for Wildlife Ecology with Drs. Nancy Mahony and David Green, which is a collaboration between Simon Fraser University and Environment and Climate Change Canada, where students work together across several labs on avian conservation research. During my MSc, I also joined the board of WildResearch and developed a community science monitoring program for nightjars, building a community of nightjar enthusiasts across the country, which is now stewarded by Birds Canada as the North American Nightjar Survey (birdscanada.org/bird-science/north-american-nightjar-survey). The collaborative science skills I learned with the nightjar survey led to several substantial 'side-of-desk' collaborations during my PhD with Drs Erin Bayne and Mark Brigham, including a continental effort to understand Common Nighthawk migratory connectivity (Ng et al. 2018, Knight et al. 2021c) and the founding of the Global Nightjar Network (globalnightjar.org). My postdoctoral fellowship with the Smithsonian Migratory Bird Center with Drs Autumn-Lynn Harrison and Peter Marra leaned into those skills to bring together Long-billed Curlew datasets from across the range (Knight et al. 2025). My subsequent shared quantitative position with the Alberta Biodiversity Monitoring Institute (ABMI) and Boreal Avian Modelling Project (BAM) gave me the latitude to really lean into collaborative science, building collaborative networks and community through formal and informal working groups and projects on a range of topics (Huus et al. 2024, Knight et al. 2024, Skinner et al. 2025, Knight et al. *In Press*).

Now, in my new role as Co-Director of BAM, building a collaborative community is actually in my job description. BAM, which has recently joined the non-profit organization Biodiversity Pathways (biodiversitypathways.ca), is going on as a twenty-year collaborative project. BAM was originally founded to harmonize disparate point count datasets from across Canada's vast boreal forest (Cumming et al. 2010, Sólymos et al. 2013, Barker et al. 2015), which at the time, did not have a standardized monitoring program. Many SCO-SOC members have contributed to BAM over the years, either via data or through knowledge and collaboration as part of the BAM team. And so, BAM exemplifies this symbiotic relationship between data, knowledge, and collaboration. Now, 20 years later, BAM builds high-resolution

density models for all of Canada with a dataset of almost 1.5 million observations (Stralberg et al. 2025), a contribution that is only possible because of Canada's ornithological community.

I am deeply grateful for the honour of receiving the 2025 SCO-SOC Early Career Research Award. But more than anything, I am deeply grateful for the community of Canadian ornithologists that have trained me, worked with me, stayed up until dawn watching nighthawks with me, and contributed the foundation of data and knowledge upon which our community is built.

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2025 Jamie Smith Memorial Award for Mentoring

Rodger Titman and David Bird

The Jamie Smith Memorial Award for Mentoring is one of the top honours bestowed by SCO-SOC. It is awarded to individuals who are committed to the training and development of the next generation of Canadian ornithologists. We are very pleased to announce that this year's award goes to two co-nominated recipients, both long-term colleagues and friends, as well as significant contributors to the SCO - Drs. David Bird and Rodger Titman.

Dave and Rodger are particularly deserving of this award given the shared values and approaches to their work which Jamie Smith supported during his career: a passion for training young ornithologists, an excitement in sharing new discoveries, and an always supportive approach to mentoring. Both Rodger and Dave had a long history of working together at the Macdonald campus of McGill University, where they immediately struck up a friendship that to this day remains strong. Their history of mentoring is broad and covers many shared experiences in ornithology. Rodger began teaching an undergraduate course in ornithology on the Macdonald campus of McGill University in 1975. In 1985, Dave joined him in team-teaching the course, each specializing in certain topics. When Rodger retired in 2009, Dave became the sole Instructor for ornithology. It is estimated that between them, a total exceeding 800 students successfully completed this course, which included obligatory weekly field trips with both Professors. In each of his last two years before retiring in 2013, Dave was nominated by his Department for the Award for Teaching Excellence.

Throughout their careers at McGill, both Professors actively participated in full research programs that allowed them to take on graduate students at the M.Sc. and Ph.D. levels. Indeed, Rodger and Dave collaborated closely to mentor students at both the undergraduate and graduate levels in Canada. Together, they supervised over 100 graduate students to completion, along with at least five M.Sc. students who were jointly co-supervised. The pair co-published hundreds of peer-reviewed papers from theses written by their graduate students (and without fail, ensuring that their student's name was listed first to help their careers).

Both also supervised several dozen senior undergraduate thesis projects focusing on birds, with many of these finding their way into the scientific literature, supporting undergraduate learning and career progression in the field of ornithology.

As the Director of the Avian Science and Conservation Centre (ASCC) (formerly the Macdonald Raptor Research Centre), Dave supervised a post-doctoral fellow, Juan Jose Negro, from Spain, funded by his government, an NSERC post-doctoral fellow, Diane Lacombe, and a post-doctoral fellow, Giovanni Leonardi, from Italy. In later years, Titman joined the ASCC as the Associate Director, and each summer both mentors hired several undergraduate students for multiple research projects, which later aided their entry into either graduate research or the job market. The ASCC also employed two technicians, Ian Ritchie and Mark Adam, who were trained entirely through his kestrel research; Ritchie was with the Centre for almost 30 years and directly mentored many students in the field of bird care. For more than three decades, the Centre offered international summer student internships, a program which attracted over 60 interns from Canada as well as England, Italy, Spain, Germany, Mexico, U.S.A., China, Czech Republic, Turkey, Australia, and France. Some of these interns became graduate students while others returned to their respective countries to pursue careers and degrees in wildlife biology. Both Titman and Bird applied for research grants, acquired government contracts, and raised funding in whatever way possible to provide financial support to their students. The ASCC maintained a colony of over 300 pedigreed captive-bred American kestrels which was readily available to students, interns, and employees for research. Working with Roger Bider and post-doctoral fellow Pat Weatherhead, Rodger participated in studies of red-winged blackbirds which damaged agricultural crops, which also engaged many graduate and undergraduate students. Both Dave and Rodger also actively participated in the Canadian Field Studies in Africa Program, generally taking turns spending three weeks on a travelling safari to teach ornithology to undergraduate students from McGill University and other academic institutions. During the 12 – 14 teaching sessions between the two of them over the years, taking students on driving and walking trips out in the field to see African birds and other wildlife was always a great source of pleasure for all involved. They jointly offered “The Bird Course” to over one hundred “students” for eight years, passing on their knowledge of avian biology to those with or without academic backgrounds. Even after they retired, they jointly took groups of a dozen or more to Kenya and Uganda on birding safaris.

Rodger Titman (left) and Dave Bird (right) have been friends and close colleagues for over 40 years. Photo: D. Bird. / Rodger Titman (à gauche) et Dave Bird (à droite) sont des amis et des collègues proches depuis plus de 40 ans. Photo : D. Bird.

Both Professors strongly believed in helping their students well beyond their graduation from the University. Mentoring was always a top priority, they both believed in mentoring people beyond academic life by practising public outreach in ornithology, and their office doors were always open for consultation on both professional and personal topics. Over their careers with McGill University, they provided essential professional support for many of Canada’s current ornithologists, writing at least several hundred letters of recommendation for any student who requested them for job postings, entrance into higher degree programs, scholarships, and achievement recognition. Over their five decades of tenure at McGill University, both Dave and Rodger remained very well-connected with all aspects of ornithology and wildlife biology, not just across Canada but across the world, and they used their experience and expertise to help students and interns procure jobs and access to supervisors for higher degrees, sometimes up to two decades or more after the students graduated.

Overall, it is fair to say that close to one thousand students in the field of ornithology benefited from the mentorship provided by Rodger and Dave during their collective careers at McGill University. Their mentorship also extended intergenerationally, as many of their students went on to mentor many others. Students mentored by them not only obtained degrees at higher levels at McGill University but also at other academic institutions around the world. Still others ended up acquiring influential jobs mentoring others in the field of ornithology and wildlife biology in Canada, the U.S., and elsewhere, e.g., the Director of the National Wildlife Research Centre, various levels of the Canadian Wildlife Service, the head of the Fish and Wildlife Branch in Manitoba, Professors in other academic institutions, the U.S. Navy endangered species program, and various prominent environment consulting firms, to name but a few. In summary, the mentoring impact of both Professors Titman and Bird on ornithology in Canada and elsewhere will remain significant for many decades to come.

Carol Tisdall, Award Nominator, and Oliver Love, Chair of the Jamie Smith Award Committee

FRANÇAIS— 2025 Prix commémoratif Jamie Smith pour le mentorat - Rodger Titman et David Bird

Le prix commémoratif Jamie Smith pour le mentorat est l'une des plus grandes distinctions décernées par le SCO-SOC. Il est décerné à des personnes qui s'engagent dans la formation et le développement de la prochaine génération d'ornithologues canadiens. Nous sommes très heureux d'annoncer que le prix de cette année est décerné à deux lauréats co-référencés, tous deux collègues et amis de longue date, ainsi que contributeurs importants au SCO - les docteurs David Bird et Rodger Titman.

Dave et Rodger méritent particulièrement ce prix étant donné les valeurs et les approches communes de leur travail que Jamie Smith a soutenues tout au long de sa carrière : une passion pour la formation des jeunes ornithologues, un enthousiasme pour le partage des nouvelles découvertes et une approche toujours positive du mentorat. Rodger et Dave travaillaient depuis longtemps ensemble au campus Macdonald de l'université McGill, où ils ont immédiatement noué une amitié qui est restée forte jusqu'à aujourd'hui. Leur histoire de mentorat est vaste et couvre de nombreuses expériences communes dans le domaine de l'ornithologie. Rodger a commencé à enseigner un cours d'ornithologie de premier cycle sur le campus Macdonald de l'université McGill en 1975. En 1985, Dave s'est joint à lui pour enseigner le cours en équipe, chacun se spécialisant dans certains sujets. Lorsque Rodger a pris sa retraite en 2009, Dave est devenu le seul instructeur en ornithologie. On estime qu'à eux deux, plus de 800 étudiants ont suivi avec succès ce cours, qui comprenait des sorties hebdomadaires obligatoires sur le terrain avec les deux professeurs. Au cours de chacune des deux dernières années avant sa retraite en 2013, Dave a été nommé par son département pour le prix d'excellence en enseignement.

Rodger Titman (left) and Dave Bird (right) were presented with the 2025 Jamie Smith Memorial Award for Mentoring by nominator and former student Carol Tisdall at the 2025 SCO-SOC conference in August. Photo: S. Van Wilgenburg/ Rodger Titman (à gauche) et Dave Bird (à droite) ont reçu le prix commémoratif Jamie Smith 2025 pour le mentorat de la part de Carol Tisdall, qui a proposé leur candidature et qui a été leur élève, lors de la conférence SCO-SOC 2025 qui s'est tenue en août. Photo : S. Van Wilgenburg.

Tout au long de leur carrière à McGill, les deux professeurs ont participé activement à des programmes de recherche complets qui leur ont permis d'accueillir des étudiants diplômés au niveau de la maîtrise et du doctorat. En effet, Rodger et Dave ont collaboré étroitement pour encadrer des étudiants de premier et de deuxième cycle au Canada. Ensemble, ils ont supervisé plus de 100 étudiants diplômés jusqu'à la fin de leurs études, ainsi qu'au moins cinq étudiants en maîtrise qui ont été supervisés conjointement. Ils ont co-publié des centaines d'articles évalués par des pairs à partir de thèses rédigées par leurs étudiants de troisième cycle (en veillant toujours à ce que le nom de leur étudiant soit cité en premier afin de favoriser leur carrière). Tous deux ont également supervisé plusieurs douzaines de projets de thèse de premier cycle portant sur les oiseaux, dont beaucoup ont été publiés dans la littérature scientifique, favorisant ainsi l'apprentissage des étudiants et la progression de leur carrière dans le domaine de l'ornithologie.

En tant que directeur de l'Avian Science and Conservation Centre (ASCC) (anciennement le Macdonald Raptor Research Centre), Dave a supervisé un post-doctorant, Juan Jose Negro, originaire d'Espagne et financé par son gouvernement, une post-doctorante du CRSNG, Diane Lacombe, et un post-doctorant, Giovanni Leonardi, originaire d'Italie. Plus tard, Titman a rejoint le CCSE en tant que directeur associé et, chaque été, les deux mentors ont embauché plusieurs étudiants de premier cycle pour de multiples projets de recherche, ce qui les a aidés à entrer dans la recherche de troisième cycle ou sur le marché du travail. Le CCSA employait également deux techniciens, Ian Ritchie et Mark Adam, qui ont été entièrement formés dans le cadre de ses recherches sur les faucons crécerelles ; Ritchie a travaillé au Centre pendant près de 30 ans et a directement encadré de nombreux étudiants dans le domaine des soins aux oiseaux. Pendant plus de trente ans, le Centre a proposé des stages d'été à des étudiants étrangers, un programme qui a attiré plus de 60 stagiaires du Canada, mais aussi d'Angleterre, d'Italie, d'Espagne, d'Allemagne, du Mexique, des États-Unis, de Chine, de République tchèque, de Turquie, d'Australie et de France. Certains de ces stagiaires sont devenus des étudiants de troisième cycle, tandis que d'autres sont retournés dans leur pays respectif pour poursuivre une carrière ou obtenir un diplôme en biologie de la faune. Titman et Bird ont tous deux demandé des subventions de recherche, obtenu des contrats gouvernementaux et obtenu des fonds par tous les moyens possibles

afin d'apporter un soutien financier à leurs étudiants. L'ASCC a maintenu une colonie de plus de 300 crécerelles d'Amérique élevées en captivité, qui était facilement accessible aux étudiants, aux stagiaires et aux employés pour la recherche. En collaboration avec Roger Bider et le post-doctorant Pat Weatherhead, Rodger a participé à des études sur les carouges à épaulettes qui endommagent les cultures agricoles, ce qui a également mobilisé de nombreux étudiants de troisième cycle et de premier cycle. Dave et Rodger ont également participé activement au programme canadien d'études sur le terrain en Afrique, passant généralement à tour de rôle trois semaines dans un safari itinérant pour enseigner l'ornithologie à des étudiants de premier cycle de l'université McGill et d'autres établissements universitaires. Au cours des 12 à 14 sessions d'enseignement qui se sont succédé au fil des ans, emmener les étudiants en voiture ou à pied sur le terrain pour observer les oiseaux et autres animaux sauvages d'Afrique a toujours été une grande source de plaisir pour toutes les personnes impliquées. Pendant huit ans, ils ont proposé conjointement le « cours sur les oiseaux » à plus d'une centaine d'« étudiants », transmettant leurs connaissances en biologie aviaire à des personnes ayant ou non une formation universitaire. Même après avoir pris leur retraite, ils ont emmené ensemble des groupes d'une douzaine de personnes ou plus au Kenya et en Ouganda pour des safaris ornithologiques.

Les deux professeurs croyaient fermement qu'il fallait aider leurs étudiants bien au-delà de leur diplôme universitaire. Le mentorat a toujours été une priorité absolue, ils croyaient tous deux au mentorat au-delà de la vie universitaire en pratiquant la vulgarisation de l'ornithologie, et les portes de leur bureau étaient toujours ouvertes pour des consultations sur des sujets professionnels et personnels. Au cours de leur carrière à l'université McGill, ils ont apporté un soutien professionnel essentiel à de nombreux ornithologues canadiens actuels, rédigeant au moins plusieurs centaines de lettres de recommandation pour tout étudiant qui en faisait la demande en vue d'une offre d'emploi, d'une entrée dans un programme d'études supérieures, d'une bourse d'études ou de la reconnaissance de ses réalisations. Au cours des cinq décennies qu'ils ont passées à l'Université McGill, Dave et Rodger sont restés très bien connectés à tous les aspects de l'ornithologie et de la biologie de la faune, non seulement au Canada mais dans le monde entier, et ils ont utilisé leur expérience et leur expertise pour aider les étudiants et les stagiaires à obtenir des emplois et à accéder à des superviseurs pour des diplômes supérieurs, parfois jusqu'à deux décennies ou plus après que les étudiants aient obtenu leur diplôme.

Dans l'ensemble, on peut dire que près d'un millier d'étudiants dans le domaine de l'ornithologie ont bénéficié du mentorat de Rodger et Dave au cours de leurs carrières collectives à l'Université McGill. Leur mentorat s'est également étendu d'une génération à l'autre, puisque bon nombre de leurs étudiants ont ensuite servi de mentors à beaucoup d'autres. Les étudiants dont ils ont été les mentors ont non seulement obtenu des diplômes de niveau supérieur à l'Université McGill, mais aussi dans d'autres établissements universitaires à travers le monde. D'autres encore ont fini par obtenir des emplois influents en tant que mentors dans le domaine de l'ornithologie et de la biologie de la faune au Canada, aux États-Unis et ailleurs, par exemple le directeur du Centre national de recherche sur la faune, différents niveaux du Service canadien de la faune, le chef de la Direction de la pêche et de la faune au Manitoba, des professeurs dans d'autres établissements universitaires, le programme des espèces menacées de l'U.S. Navy et diverses sociétés de conseil en environnement de premier plan, pour n'en citer que quelques-uns. En résumé, l'impact du mentorat des professeurs Titman et Bird sur l'ornithologie au Canada et ailleurs restera important pendant de nombreuses décennies.

Carol Tisdall, proposante du prix, et Oliver Love, président du comité du prix Jamie Smith

SCO-SOC Student Presentation Award Winners 2025
Lauréats du prix de la présentation étudiante 2025

Matthew Fuirst, with contributions from each award recipient
Matthew Fuirst, avec des contributions de chaque lauréat

Student presentation awards are given each year at the society's annual conference in recognition of outstanding oral and poster presentations. This year, five students were proud recipients of these awards at the annual SOC meeting held in Saskatoon.

Les prix de la présentation étudiante sont décernés chaque année lors de la conférence annuelle de la société en reconnaissance de présentations orales et d'affiches exceptionnelles. Cette année, cinq étudiants ont été les fiers récipiendaires de ces prix lors de la réunion annuelle de la SOC qui s'est tenue à Saskatoon.

Student Presentation Award Winners at the SCO-SCO Annual Conference in Saskatoon, August 2025. Left to Right: Yu-Wen Yang, Jelany Duali, Charlotte Probst, Jamie Quinn, Leonard Patterson.

Lauréats des prix pour les présentations d'étudiants lors de la conférence annuelle du SCO-SCO à Saskatoon, en août 2025. De gauche à droite : Yu-Wen Yang, Jelany Duali, Charlotte Probst, Jamie Quinn, Leonard Patterson.

Outstanding poster presentations / Présentations d'affiches exceptionnelles

Jamie Quinn, an undergraduate from the University of Northern British Columbia, presented a poster entitled: *Causes and consequences of variation in egg shape of tree swallows.* Her research focused on exploring the effects of environmental conditions and maternal characteristics on the shapes of eggs laid by female Tree Swallows, as well as the implications of variation in egg shape on hatching success. Using eggs from the 2024 breeding season, Jamie assessed three indices of egg shape and found clutch characteristics (i.e., egg mass, laying order, and clutch size) and female body condition to be stronger predictors of egg shape than the measured environmental conditions experienced during the egg formation period. Hatching success was not predicted by egg shape variables, but Jamie plans to further examine these relationships during graduate studies, where Jamie will be expanding the project to include long-term data on egg shape and reproductive success. According to Jamie "she could not think of a better way to experience my first conference than spending a week surrounded by brilliant bird researchers and enthusiasts. After field trips, workshops, and learning about the diversity of research being conducted in ornithology, I left Saskatoon exhausted, with as much knowledge as I could fit in my brain and a renewed excitement for the future – both for my own career and for the conservation of birds." Jamie is advised by Dr. Russell D. Dawson.

Jamie Quinn, étudiante de premier cycle à l'Université du Nord de la Colombie-Britannique, a présenté une affiche intitulée *Causes and consequences of variation in egg shape of tree swallows* (Causes et conséquences de la variation de la forme des œufs des hirondelles bicolores). Sa recherche s'est concentrée sur l'exploration des effets des conditions environnementales et des caractéristiques maternelles sur la forme des œufs pondus par les femelles hirondelles bicolores, ainsi que sur les implications de la variation de la forme des œufs sur le succès de l'éclosion. En utilisant des œufs de la saison de reproduction de 2024, Jamie a évalué trois indices de la forme des œufs et a constaté que les caractéristiques de la couvée (c.-à-d. la masse des œufs, l'ordre de ponte et la taille de la couvée) et la condition physique de la femelle étaient de meilleurs prédicteurs de la forme des œufs que les conditions environnementales mesurées au cours de la

formation des œufs. Le succès de l'éclosion n'a pas été prédit par les variables de la forme de l'œuf, mais Jamie prévoit d'examiner plus en détail ces relations au cours de ses études supérieures, où elle élargira le projet pour inclure des données à long terme sur la forme de l'œuf et le succès de la reproduction. Selon Jamie: «je ne pouvais pas imaginer une meilleure façon de vivre ma première conférence que de passer une semaine entourée de brillants chercheurs et passionnés d'oiseaux. Après des sorties sur le terrain, des ateliers et la découverte de la diversité des recherches menées en ornithologie, j'ai quitté Saskatoon épuisée, avec autant de connaissances que j'ai pu engranger dans mon cerveau et un enthousiasme renouvelé pour l'avenir - tant pour ma propre carrière que pour la conservation des oiseaux». Jamie est conseillée par le Dr Russell D. Dawson.

Leonard Patterson, an MSc student from the University of Alberta, presented a poster entitled: *Is it a mixedwood? Spatially-explicit responses to gradients in habitat structure and composition in three boreal bird species*. His research focused on conventional definitions of boreal mixedwood forests and how they may oversimplify the habitat complexity perceived by birds, potentially biasing past efforts to identify mixedwood habitat associations. Leonard's research addresses this gap by examining how mixedwood-associated boreal bird species respond to continuous gradients in tree species composition, spatial configuration, and forest age, across multiple spatial scales in Alberta. By broadening how we define mixedwood forests, he aimed to improve our understanding of bird–habitat relationships and highlight the consequences of current harvesting and reforestation practices. Leonard "really enjoyed attending the 2025 SCO-SOC conference in Saskatoon. The conference was a great opportunity to connect with fellow ornithologists and gain insights from presentations and discussions." Leonard is advised by Dr. Erin Bayne.

Leonard Patterson, étudiant en maîtrise à l'université d'Alberta, a présenté un poster intitulé : *Is it a mixedwood? Spatially-explicit responses to gradients in habitat structure and composition in three boreal bird species* (S'agit-il d'une forêt mixte? Réponses spatialement explicites aux gradients de structure et de composition de l'habitat chez trois espèces d'oiseaux boréaux). Sa recherche s'est concentrée sur les définitions conventionnelles des forêts boréales mixtes et sur la façon dont elles peuvent simplifier à l'excès la complexité de l'habitat perçue par les oiseaux, ce qui pourrait fausser les efforts déployés par le passé pour identifier les associations d'habitats mixtes. La recherche de Leonard comble cette lacune en examinant comment les espèces d'oiseaux boréaux associées aux forêts mixtes réagissent aux gradients continus de la composition des espèces d'arbres, de la configuration spatiale et de l'âge de la forêt, à plusieurs échelles spatiales en Alberta. En élargissant notre définition des forêts mixtes, il vise à améliorer notre compréhension des relations oiseaux-habitat et à mettre en évidence les conséquences des pratiques actuelles d'exploitation et de reboisement. Leonard "a beaucoup aimé participer à la conférence SCO-SOC 2025 à Saskatoon. La conférence a été une excellente occasion d'entrer en contact avec d'autres ornithologues et d'acquérir des connaissances grâce aux présentations et aux discussions. Leonard est conseillé par Erin Bayne.

Outstanding oral presentations / Présentations orales exceptionnelles

Jelany Duali, a PhD student from the University of Guelph delivered a talk entitled: *Non-breeding movements in small migratory birds: facultative behaviour shaped by environmental conditions and flight efficiency.* His research focused on how even though we often picture migratory birds as being largely stationary during the winter, many species make movements of up to several thousand kilometres during this period. Several mechanisms have been suggested to drive this behaviour; however, they have only been tested in species-specific studies. Jelany's collaborative research project aggregated light-level geolocator, GPS, and satellite transmitter tracking data from over 1,900 individuals and 82 species of passerines and near-passerines to show that nonbreeding movements are more frequent in efficient flyers, as well as in environments with low or declining vegetation quality. Jelany said that "the SCO-SOC conference in Saskatoon was a great opportunity for me to hear feedback on the methods behind my project, as well as to learn more about developing technologies like autonomous recording units and activity loggers. Jelany is advised by Dr. Ryan Norris.

Jelany Duali, étudiant en doctorat à l'université de Guelph, a présenté un exposé intitulé : Non-breeding movements in small migratory birds: facultative behaviour shaped by environmental conditions and flight efficiency (Mouvements non reproducteurs chez les petits oiseaux migrateurs : comportement facultatif façonné par les conditions environnementales et l'efficacité du vol). Ses recherches ont porté sur le fait que, même si nous nous représentons souvent les oiseaux migrateurs comme étant largement stationnaires pendant l'hiver, de nombreuses espèces effectuent des déplacements pouvant aller jusqu'à plusieurs milliers de kilomètres pendant cette période. Plusieurs mécanismes ont été suggérés pour expliquer ce comportement, mais ils n'ont été testés que dans le cadre d'études portant sur des espèces spécifiques. Le projet de recherche collaboratif de Jelany a regroupé des données de suivi de géolocalisateurs à capteur de

lumière, de GPS et d'émetteur satellite pour plus de 1900 individus de 82 espèces de passereaux et de quasi-passereaux pour montrer que les mouvements non reproductifs sont plus fréquents chez les oiseaux qui volent efficacement, ainsi que dans les environnements où la qualité de la végétation est faible ou en déclin. Jelany a déclaré que « la conférence SCO-SOC à Saskatoon a été une excellente occasion pour moi de recevoir des commentaires sur les méthodes utilisées dans le cadre de mon projet et d'en apprendre davantage sur les technologies en développement telles que les unités d'enregistrement autonomes et les enregistreurs d'activité ». Jelany est conseillée par le Dr Ryan Norris.

Charlotte Probst, a PhD student at the University of Michigan, delivered a talk entitled: *Disentangling drivers of morphological change over 50 years in Tree Swallows (Tachycineta bicolor).* Using nearly 50 years of data from Long Point Bird Observatory's long-term Tree Swallow monitoring project, she found that insect population declines and climate change interact to reshape Tree Swallow morphology and phenology. Tree Swallow mass decreased by ~6% since 1977, and although temporal size declines are often attributed to direct effects of climate warming, we instead found that Tree Swallow mass declines were primarily driven by the nearly 70% decrease in insect abundance across Long Point during this time period. Additionally, Charlotte found that in years with low insect abundance, the reduced benefit of synchronizing breeding with peak insect emergence no longer outweighs the costs of advancing breeding phenology, leading to increased fledgling success in broods with greater mismatch. Charlotte said that "the SCO-SOC conference was an amazing opportunity to meet new friends, reconnect with collaborators, and learn about incredible new research and methodologies. I left feeling inspired and full of ideas!". Charlotte is advised by Dr. Brian Weeks.

Charlotte Probst, doctorante à l'université du Michigan, a présenté un exposé intitulé « Disentangling drivers morphological change over 50 years in Tree Swallows (Tachycineta bicolor) » (Démêler les facteurs de changement morphologique au cours de 50 ans chez l'hirondelle bicolore). En utilisant près de 50 ans de données provenant du projet de surveillance à long terme de l'hirondelle bicolore du Long Point Bird Observatory, elle a découvert que le déclin des populations d'insectes et le changement climatique interagissent pour remodeler la morphologie et la phénologie de l'hirondelle bicolore. La masse de l'hirondelle bicolore a diminué d'environ 6 % depuis 1977, et bien que les diminutions temporelles de taille soient souvent attribuées aux effets directs du réchauffement climatique, nous avons constaté que les diminutions de masse de l'hirondelle bicolore étaient principalement dues à la diminution de près de 70 % de l'abondance des insectes à Long Point au cours de cette période. De plus, Charlotte a constaté que, lors des années où l'abondance d'insectes est faible, l'avantage réduit de synchroniser la reproduction avec le pic d'émergence des insectes ne compensent plus le coût associé à l'avancement de la phénologie de reproduction, ce qui se traduit par succès des oisillons plus élevé chez les couvées présentant un plus grand décalage temporel. Charlotte a déclaré que "la conférence SCO-SOC a été une formidable occasion de rencontrer de nouveaux amis, de renouer avec des collaborateurs et de découvrir de nouvelles recherches et méthodologies incroyables. Je suis repartie inspirée et pleine d'idées". Charlotte est conseillée par le Dr Brian Weeks.

Outstanding undergraduate presentations / Présentations exceptionnelles d'étudiants de premier cycle

Yu-Wen Yang, an undergraduate student from the Academia Sinica from Taiwan, presented a talk entitled: *Relative brain size explains migratory/resident tendency in birds: partial altitudinal migration in Asian House Martins*. Yu-Wen's study tested four hypotheses on partial migratory Asian House Martins (*Delichon dasypus*) in Taiwan. Her results most strongly supported the behavioral flexibility hypothesis: residents had larger brains, which aided survival in harsh winter conditions in the mountains by better behavioral innovativeness. Alternatively, she proposed a possible mechanism for the evolution of residency in this former migratory population, emphasizing the interplay between brain size, migratory propensity, and hypoxia in high mountains. Yu-Wen expressed that "the conference was warm and welcoming, with people from various backgrounds who all shared a love for birds. Beyond the focus on birds, I also learned a great deal about life from the experiences and perspectives of others.". Yu-Wen is advised by Dr. Chih-Ming Hung.

Yu-Wen Yang, une étudiante de premier cycle de l'Académie Sinica de Taïwan, a présenté un exposé intitulé « *Relative brain size explains migratory/resident tendency in birds: partial altitudinal migration in Asian House Martins*» (La taille relative du cerveau explique la tendance à la migration ou à la résidence chez les oiseaux : migration altitudinale partielle chez l'hirondelle de Bonaparte). L'étude de Yu-Wen a testé quatre hypothèses sur la migration partielle de l'hirondelle de l'hirondelle de Bonaparte (Delichon dasypus) à Taïwan. Ses résultats soutiennent plus fortement l'hypothèse de la flexibilité comportementale : les résidents avaient des cerveaux plus grands, ce qui leur permettait de survivre dans les conditions hivernales difficiles des montagnes grâce à une meilleure innovation comportementale.

Par ailleurs, elle a proposé un mécanisme possible pour l'évolution de la résidence dans cette ancienne population migratrice, en mettant l'accent sur l'interaction entre la taille du cerveau, la propension à la migration et l'hypoxie en haute montagne. Yu-Wen a déclaré que "la conférence était chaleureuse et accueillante, avec des personnes d'horizons divers qui partageaient toutes l'amour des oiseaux. Au-delà de l'attention portée aux oiseaux, j'ai également beaucoup appris sur la vie grâce aux expériences et aux points de vue des autres". Yu-Wen est conseillée par le Dr. Chih-Ming Hung.

Congratulations to this year's award winners! If you wish to support our student awards, please consider making a monetary contribution when you renew your annual membership or consider sponsoring our 2025 conference by contacting dethier@birdscanada.org. Your contributions directly support students, which helps build a stronger foundation for ornithological research and conservation in Canada, and beyond.

Félicitations aux lauréats de cette année ! Si vous souhaitez soutenir nos prix pour les étudiants, pensez à faire une contribution monétaire lorsque vous renouvelez votre adhésion annuelle ou envisagez de parrainer notre conférence de 2025 en contactant dethier@birdscanada.org. Vos contributions soutiennent directement les étudiants, ce qui aide à construire une base plus solide pour la recherche ornithologique et la conservation au Canada et au-delà.

Recent Canadian Ornithology Theses

Edwards, Brandon P.M. 2025. Systematic estimates and predictions of detection probabilities of North American landbirds, with applications for the North American Breeding Bird Survey. Ph.D. Thesis. Carleton University, Ottawa, ON.

In biological surveys, detectability refers to the observer's ability to detect an organism and is typically expressed as a probability. Often, detectability is ignored in conservation problems that draw from biological surveys, because the survey lacks ancillary information to estimate detectability, or detectability is simply unknown for a particular species. This can be problematic in instances where conservation managers may want to trade off monitoring versus action for a particular species, because it is impossible to know if zeros in a biological survey are true zeros because the species was not present, or a false zero because the species was there but not detected.

North American birds have been studied and surveyed extensively; as such, there is a plethora of point count data that are available across several programs. Because of this, we are in an excellent position to estimate detectability of many landbird species using data-driven approaches, such that these detectability estimates may be used for future conservation purposes. In this thesis, I focus on this data-driven estimation of detection probabilities for over 300 species of North American landbirds. In Chapter 2, I provide an overview of how the detection process works in birds, and how to model detectability. In Chapter 3, I then provide a pipeline for data-driven detectability estimates, by using methodology developed by the Boreal Avian Modelling project. This allowed for detection probabilities to be estimated for 338 species of landbirds. I expand upon these species in Chapter 4 by demonstrating how the use of Bayesian hierarchical modelling can help "fill in the gaps" for detection probabilities for data-sparse species. In Chapter 5, I apply these detection probabilities to the North American Breeding Bird Survey, a long-running bird survey that has not previously been able to account for detectability in their trend analysis. I show that by accounting for changes in detectability due to changes in the landscape at the local scale, trends can change dramatically from near-flat to highly decreasing. Finally, in Chapter 6, I examine the implications for conservation that the availability of detectability estimates can have, which include implications for data integration.

Feature Articles

Advancing Bobolink Conservation Through Interdisciplinary and Collaborative Research: Insights from the WEB Lab

Meghan Oliver, MScEM student, UNBF (meghan.oliver@unb.ca)

STUDENTS:

Alicia Higney, BScEM student, UNBF (alicia.higney@unb.ca)

Samantha Landry-LeBlanc, BScEM student, UNBF (slandryl@unb.ca)

Charlotte Toner, MScEM student, UNBF (charlotte.toner@unb.ca)

Because of the loss of their historical prairie habitat, Bobolinks (*Dolichonyx oryzivorus*) have become synonymous with agricultural landscapes, and the plights of this charismatic and gregarious species are well-documented. As a grassland-obligate species, Bobolinks are particularly susceptible to intensive agricultural practices since they nest on the ground in hayfields and pastures, and Bobolink population declines have been documented since the 1970s.

Efforts are being made to implement conservation measures across the Bobolink's breeding range, including delayed haying initiatives and land set-aside programs. Even still, facets of their lifecycle and the effectiveness of such conservation measures across a spatial gradient remain largely understudied. The Wildlife Ecology and Behaviour (WEB) Lab at the University of New Brunswick in Fredericton—headed by Dr. Joe Nocera—aims to fill these gaps and conduct research that will inform conservation decisions for this species at risk.

Adult Bobolinks (like this breeding male) respond to multiscale environmental features which likely play a role in territory selection during the breeding season. Photo: Meghan Oliver.

To contribute to these ongoing efforts, my master's research with the WEB Lab modelled the multiscale predictors of Bobolink abundance in a patchy, habitat-limited landscape. By conducting point counts in the agricultural areas around Fredericton, New Brunswick and quantifying patch- and landscape-level environmental characteristics of the fields, we found that abundance is predicted by metrics of habitat amount and field connectivity, but not by habitat patch configuration at large spatial scales, suggesting a weak response to landscape-level fragmentation.

Based on our results, we suggest that Bobolinks breeding in patchy landscapes do not exhibit strong negative responses to habitat edges nor do they have the same degree of area sensitivity as those breeding in more continuous landscapes (such as in the Great Plains). We suggest that Bobolinks select for larger, well-connected fields, then disperse into the surrounding fields to reduce competition and maximize resource availability. As a result, Bobolinks may be best conserved by maintaining patch connectivity and acknowledging the importance of smaller fields that are often overlooked when formulating management decisions.

Ultimately, our research serves as a case study on the habitat requirements of Bobolinks in patchy, habitat-limited landscapes, and I hope that our results can be used to inform site selection for delayed haying initiatives in the Northeast. There is a discernible need for a landscape-level approach to Bobolink conservation in landscapes with disjointed agricultural patches, and the metrics needed to select sites to induct into incentive programs in continuous grassland habitat may be quite different from those required for agricultural fields in the northeastern portion of the Bobolink's breeding range.

The scope of research undertaken in the WEB Lab is expansive, and while most studies focus on avian conservation in the Maritimes, the species of interest and ecological systems vary drastically. As such, it is atypical for multiple students to focus on the same species at the

same time. To my delight, three other students have joined the lab since I started with projects exploring different aspects of Bobolink conservation.

I worked with Charlotte Toner in the field during my second field season, and she went on to lead her own study for her undergraduate honours project the following year. Using the same sites around Fredericton, she collected faecal samples from Bobolinks during their staging period when they form large post-breeding flocks. For a long-distance migrant, this period in their lifecycle is vital as they prepare for the energetically demanding 10,000 km trip to their wintering grounds. Thus, Charlotte was interested in determining the dietary composition of Bobolinks to establish if a dietary shift occurs as they prepare for migration.

Through stable isotope analyses of carbon and nitrogen, Charlotte found that Bobolinks shifted their diet from C_4 to C_3 plants. The former photosynthetic pathway is seen in plants found in hayfields, while the latter is found in plants in shrubbier, early successional habitats (also known as "rough cover"). The change in nitrogen consumption over time was not significant; however, the values increased incrementally, suggesting a higher-protein diet later into the staging period. She also observed differences in the carbon and nitrogen content of male and female diets, and adult and juvenile diets, signifying that sex and age play a role in determining food sources.

Emergent aquatic insect traps were deployed at farms in the Annapolis Valley, Nova Scotia so the lab can determine insect presence and examine diet quality of post-breeding Bobolinks. Photo: Charlotte Toner.

Building on her undergraduate work, Charlotte is now using DNA metabarcoding and lipid analyses to assess diet composition and quality in post-breeding Bobolinks. She recently wrapped up her fieldwork in the Annapolis Valley of Nova Scotia, during which she collected Bobolink faecal samples and terrestrial and aquatic insect samples from her study sites. While the samples are still being processed, Charlotte predicts that diet composition will shift to include more invertebrates with higher fatty acid contents later into the staging period, perhaps because adults are building up fat stores and providing juveniles with the nutrients necessary to grow and develop muscles.

As a companion study, the lab is also exploring habitat preferences of post-breeding Bobolinks in the Annapolis Valley. The photosynthetic pathway shift seen in Charlotte's undergraduate project likely signifies a habitat change from hayfield to rough cover during the staging period. To explore this, the lab quantified Bobolink usage rates of habitats and seeks to identify the vegetative and landscape features associated with staging habitat selection.

Charlotte explained that the staging period is a vastly understudied portion of the avian lifecycle, and it is unknown what Bobolinks eat during this important period. She hopes her research, in conjunction with the habitat assessment, will help to guide conservation decisions for post-breeding Bobolinks. Identifying key invertebrate species in the Bobolink's staging diet and determining important habitat features will better inform management programs aimed at sustaining essential staging habitat.

Two undergraduate honours students also joined the lab this year, and both projects are increasing the geographic scope of Bobolink research and filling knowledge gaps about the effectiveness of conservation strategies.

The first project—led by undergraduate student Alicia Higney—is focused on the temporal variations in Bobolink breeding across two Maritime provinces, and how that impacts the efficacy of delayed haying programs. The widely accepted date to which to delay hay harvests for Bobolinks is July 15th; however, hay growing seasons vary based on the local climate. As such, Alicia is using breeding and weather data to determine the appropriateness of this date across latitudes.

With the help of Island Nature Trust, the Nature Trust of New Brunswick, and the Nashwaak Watershed Association, Alicia deployed autonomous recording units (ARUs) in nature preserves around New Brunswick and Prince Edward Island during the Bobolink's breeding season. By analyzing the recordings, she can assess vocalization type and rate to devise a breeding timeline in these provinces. She will then calculate growing degree days for cool-season grasses using weather data, which will provide insight into hay maturation timing across her study area. These data will be used to test the hypothesis that breeding phenology varies with latitude, and aid in the formulation of latitude-specific hay dates that minimize the risk of nest destruction due to haying.

This project came about through a combination of Alicia's scientific interests and her desire to conduct research on a species at risk. She noted that this is her first opportunity to conduct independent research and is eager to grow academically throughout her project. She is also excited about the prospect of her work being used to inform local conservation decisions and reduce incidental nestling mortalities due to agricultural activity.

Alicia used ARUs—including this one deployed in a nature preserve in New Brunswick—to record Bobolink vocalizations and assess breeding timing. Photo: Alicia Higney.

Finally, as the only student with a study area outside the Maritimes, Samantha Landry-LeBlanc is assessing the efficacy of land set-aside programs for Bobolinks using the Conservation Reserve Program (CRP) as a model. This federal program exists in the United States to provide unmanaged or minimally managed grassland habitat for breeding Bobolinks. While Canadian provinces provide separate incentive programs for landowners, there is no comparable federal program.

Samantha is therefore using Breeding Bird Survey (BBS) data to assess differences in Bobolink population changes between geographical regions with and without a federal set-aside policy. She is focusing her efforts on the Great Plains region, which includes portions of the Canadian Prairies (AB, MB, SK) and neighbouring states (IA, MN, MT, ND, SD). Using historical survey data, she will untangle predictors of Bobolink occurrence between two differently managed regions, and she hopes to determine whether any patterns can be attributed to CRP enrollment.

While her study is still in the early stages, Samantha pursued this project so her work can inform policy decisions. She acknowledges the importance of impactful research but noted that her main goal is to produce something digestible to a variety of audiences that will help to create tangible conservation outcomes. She hopes her results will aid in informing whether a federal set-aside policy should be implemented in Canada.

Landowners must harvest their forage at optimal times to ensure proper protein and nutrient composition for their livestock. Unfortunately, hay harvests typically overlap with the Bobolink's breeding season, resulting in nest destruction. Photo: Samantha Landry-LeBlanc.

After chatting with my lab mates, the themes of community and collaboration that underlie all our research became apparent. Both Charlotte's and my research occurred on privately-owned land, and the opportunity to connect with local landowners was consequential. My research highlights the need for landscape-level management programs, suggesting community-wide collaboration among landowners will be essential when implementing conservation strategies during and after the Bobolink breeding season. Charlotte noted the enthusiasm of the landowners she encountered and stressed that the scientific community needs to work alongside them to create effective management plans. Alicia's and Samantha's research projects both span multiple jurisdictions, and they recognize that different regions will need to work together to create cohesive conservation plans. As Samantha explained, Bobolinks do not see geographic borders, and our policies need to reflect the mobility of these birds.

In many ways, the community within the lab and the research we conduct reflect the Bobolink's social structure. During the breeding season, Bobolinks form loose nesting groups and rely on those around them, much like our lab depends on one another's insights and support. After breeding, these birds gather into large flocks made up of individuals from multiple different areas, mirroring the need for landscape-wide, jurisdiction-spanning cooperation in conservation. Ultimately, the Bobolink symbolizes how collaboration can strengthen management plans and create opportunities for scientists, policymakers, and landowners to work together to create robust and tangible conservation outcomes. We hope that our work in the WEB Lab continues to advance this collaboration and inform conservation decisions for this species at risk.

Mud, Mosquitoes, and Mystery: A Summer in the Churchill Subarctic

Mark Duchene*, Laura Maskell*, Shaun Rath, Caitlyn Goodwin, Maggie MacPherson
*These authors contributed equally to this work.

Fieldwork in the subarctic begins with a simple routine: waders on, bug spray applied, soggy tuna sandwich packed, and shotgun slung. Then you're out the door and into a landscape filled with stunning wildflowers, sunny blue skies, and wildlife abound. Still, beneath this beauty lies a world of challenges. Suprise trip hazards that end with facefuls of mud, swarms of blackflies and mosquitoes that seem to have just broken their fast, waders that drink up more water than we do, and the ever-present threat of polar bears that keeps you checking over your shoulder.

The 2025 Churchill Field Crew. From left to right: Mark Duchene, Caitlyn Goodwin, Laura Maskell, and Shaun Rath. Photo: Laura Maskell.

Despite these challenges, we were there for a purpose: shorebirds. Globally, shorebird populations are in steep decline, with subarctic and arctic-breeding shorebirds exhibiting the most extreme population declines (Birds Canada and Environment and Climate Change Canada, 2024; Smith et al., 2020). These declines are due in part to unregulated hunting and human-induced habitat loss on their wintering and migratory grounds (Watts et al., 2015; Wauchope et al., 2017). Additionally, reproductive failure is increasing on their breeding grounds due to climate-induced shifts in predator communities and loss of suitable nesting habitat (Brown et al., 2022; Kubelka et al., 2018). Consequently, it is becoming increasingly important to understand the behavioural and reproductive ecology of these shorebirds.

In our quest to learn more about the ecology of subarctic and arctic-breeding shorebirds, our research brought us to the Churchill Northern Studies Centre (CNSC) on the Western Hudson Bay coast in Northern Manitoba. This area is in the subarctic at the intersection of the boreal and tundra ecotones, where easy accessibility and a large shorebird diversity make it an ideal study site. Further, Churchill has been a hub of shorebird research since the 1960s (see Jehl, 1967; Jehl & Hussell, 1966), possibly generating more questions about this unique ecosystem than it has provided answers.

Laura holding a Lesser Yellowlegs (*Tringa flavipes*) that she banded last season. Photo: Caitlyn Goodwin.

While there are more than a million questions to be asked about shorebirds, our research is focused on two mysteries in the lives of these adorable birds. Laura's research is focused on the foraging behaviour and habitats of Lesser Yellowlegs (*Tringa flavipes*), while Mark's research looks at the impact of nesting Canada Geese (*Branta canadensis*) on nest survival rates within shorebird communities.

The Lesser Yellowlegs is a threatened shorebird that calls the Churchill area home during their breeding season. While there is research being done on the nesting success of Lesser Yellowlegs, there has been little other research completed with this species in their breeding grounds (Brown, 2025). The goal of Laura's research is to look at the foraging behaviour of Lesser Yellowlegs in their breeding grounds and to determine what characteristics they select for while choosing wetlands to forage in. Laura has also helped with Lesser Yellowlegs banding in Churchill to determine the rate in which breeding Lesser Yellowlegs return to their previous breeding grounds.

Like Laura, Mark recognized that shorebird research is often focused on the nesting success of individual species within the subarctic, but instead of exploring behavioural ecology, he decided to take a community-level approach to nest success. Given the diverse nesting bird community in the subarctic, Mark is interested in looking at how the spatial arrangement of nests impacts nest success of shorebirds, particularly regarding distance between shorebirds and Canada Geese. Prior research has found that Snow Goose (*Anser caerulescens*) colonies have a negative impact on nearby nesting

shorebird density and reproductive success (Flemming et al., 2019a; b). However, unlike Snow Geese, Canada Geese are not colony nesters and often intermix with shorebird nests, raising questions about their potential impact on shorebird nest survival.

Despite contending with hordes of bugs, soggy socks, and the occasional mud sinkhole scare, we could not have asked for a cooler field season experience. Getting to watch the mating displays of shorebirds and follow them throughout their breeding cycle to witness the hatching of their chicks is something we will never forget. Bonus highlights of our Churchill adventure include seeing Willow Ptarmigan, Sabine's Gulls, Buff-breasted Sandpipers, Boreal Chickadees, and a Lazuli x Indigo Bunting hybrid. It also did not hurt that we got to observe the occasional polar bear while safely in our car (usually)!

Mark getting dive-bombed by a Parasitic Jaeger while nest searching. Photo credit: Mark Duchene.

Acknowledgements

This research was made possible by the CNSC staff, our past and present field techs (Jacob Gerald, Juan Felipe Gomez Quijano, Caitlyn Goodwin, and Shaun Rath), and the support of our friends and families. Special thanks to our advisor Dr. Erica Nol for her support of our research and comments on this article.

Financial support for this research came from the CNSC Northern Research Fund (LM, MD), Alaska Department of Fish and Game (LM), Environment and Climate Change Canada (LM), Northern Scientific Training Program (LM), NSERC Discovery Grant (EN), and Ontario Federation of Anglers and Hunters (MD).

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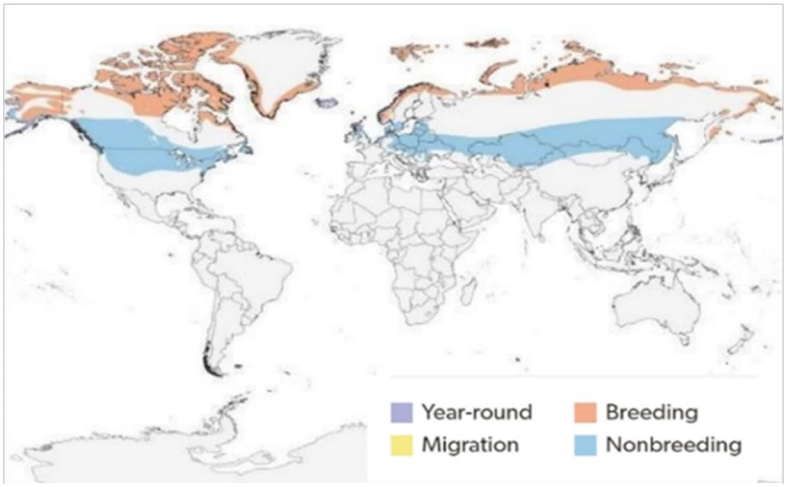
About the Authors

Laura Maskell is an MSc student at Trent University supervised by Erica Nol, project completion anticipated in 2026. Mark Duchene is an MSc student at Trent University co-supervised by Erica Nol & Maggie MacPherson, project completion anticipated in 2027. Shaun Rath is a Fleming College Fish and Wildlife Graduate and Mark's field technician for the 2025 field season. Caitlyn Goodwin is a BSc student at McGill University and Laura's field technician for the 2024-2025 field seasons. Maggie MacPherson is a Trent University Assistant Professor of Avian Ecology.

Does Climate Change Threaten the Little Snow Bunting?

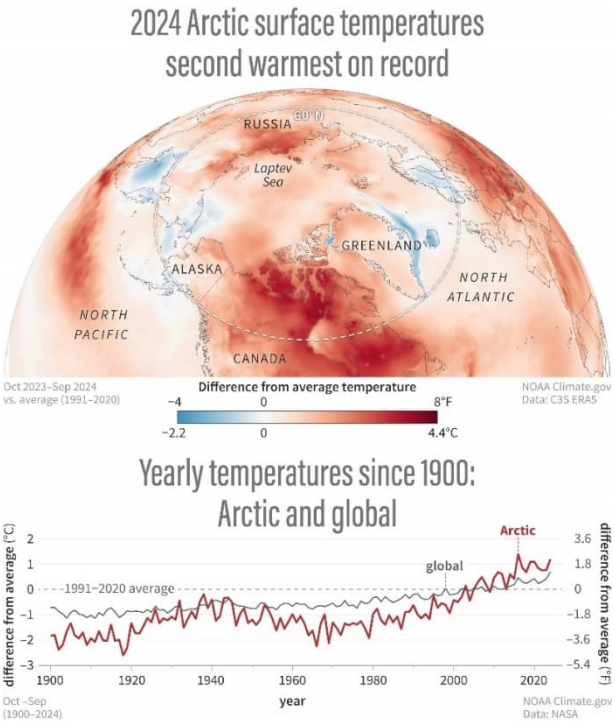
Sachin Anand, Doctoral Student, University of Québec at Rimouski (UQAR)
Sachin.Anand@uqar.ca

The Arctic is known for its long frigid winters and short cool summers. Species living here are well adapted to live in the extreme cold. One such species is the Snow Bunting, a small circumpolar songbird weighing just 30- 50gms. As a migratory species, they winter in milder southern regions with less severe temperatures. In spring, buntings migrate to their Arctic breeding grounds, arriving when temperatures are still around -22°C. Snow buntings are the most cold-tolerant of all songbirds, known to withstand experimental temperatures equivalent to air temperatures as low as -90°C!



Distribution of Snow Buntings. From: Montgomerie and Lyon 2020.

But these cold specialists face a major challenge: an Arctic region which is warming faster than the rest of the world. During hot days, birds rely on evaporative cooling to regulate their body temperature to stay within the normal range. Snow buntings, however, have evolved to conserve heat to survive extreme cold, and so possess a limited capacity to dissipate heat through evaporation, as shown in recent studies from our research group. This low heat dissipation might pose a significant threat to buntings, particularly in spring and summer, when breeding birds must work hard to feed their nestlings.



Arctic surface temperatures in 2024. From: National Oceanic and Atmospheric Administration (NOAA).

Nestling provisioning is one of the most energy-intensive activities in birds, requiring a daily energy expenditure (4-6 times basal metabolic rate) over many days. Such high sustained activity generates heat, forcing body temperature to rise towards the lethal hyperthermia (>45°C). Because of their poor evaporative cooling capacity, as a result, buntings must balance the need to maintain a high activity required for provisioning nestlings with the need to keep their body temperature within a safe range. Due to the limited ability to dissipate heat, rising temperatures will increase their heat load, potentially forcing buntings to reduce their activity to prevent overheating. This reduction in activity lowers their feeding rate, negatively affecting the nestling growth and survival. Further, a predictive framework model has suggested that buntings must reduce activity or risk hyperthermia when provisioning nestlings at operative temperatures as low as 12°C. Alarmingly, this temperature is already occurring across their Arctic breeding grounds.

My doctoral research, supervised by Prof. François Vézina (UQAR) and Prof. Oliver Love (University of Windsor), along with Dr. Audrey Le Pogam (UQAR) and Dr. Ryan O'Connor focuses on understanding the impacts of climate warming on snow buntings. In the coming years, I will conduct a series of physiological experiments to understand how buntings respond to warm temperatures, exploring both their adaptive capacity and the limits of their thermal tolerance. A couple of these experiments are explained below:

1) *Can snow buntings acclimate to warmer temperatures by improving their heat tolerance traits?* To investigate this, I will acclimate snow buntings to a range of ambient temperatures, from current conditions to those projected future scenarios using indoor temperature-controlled rooms. I will assess markers of condition (e.g., body weight, lean mass, fat mass) and physiological parameters (e.g., metabolic

rate during activity, body temperature, evaporative heat loss) both before and after a 6-week acclimation period. Comparing pre- and post-acclimation levels will inform about their capacity to adjust traits to improve heat tolerance.

2) *Identifying threshold temperatures that limit activity:* This experiment will measure the aerobic activity of snow buntings using a closed exercise wheel with a constant air supply while monitoring the birds' behaviour, body temperature, evaporative water loss, and oxygen consumption. This setup will allow me to measure the activity levels of buntings across different temperatures and identify the threshold temperatures which force buntings to reduce activity. Mapping these temperature limits across their breeding range will help identify areas where snow buntings are most vulnerable, both under current conditions and future climate scenarios, to guide targeted conservation strategies.

Using Social Network Analysis to Advance Chimney Swift (Chaetura pelagica) Conservation in Atlantic Canada

Anna Doran, Master of Science in Environmental Management Student, University of New Brunswick, Faculty of Forestry and Environmental Management

E-mail: adoran@unb.ca

Conservation Concerns

Aerial insectivores are among the fastest-declining avian guilds in North America, with loss of insect availability and suitable habitats assumed to be major contributing factors. The Chimney Swift (*Chaetura pelagica*), once common in urban and rural areas, has declined by more than 90% since the 1970s (COSEWIC, 2019). The species relies heavily on anthropogenic structures—particularly masonry chimneys—for communal roosting during migration and the non-breeding season. With chimneys gradually becoming obsolete and being capped or removed from infrastructures entirely, Chimney Swifts are losing critical roost habitat (Laughlin et al., 2022).

Chimney swifts entering a roost chimney on May 25, 2025, in Fredericton, New Brunswick. Photo: Anna Doran.

Effective conservation of this urban-adapted species requires understanding how individual roosts contribute to population connectivity and persistence; protecting isolated roosts may be doing little in the way of conserving Chimney Swift populations. However, quantifying this connectivity across large spatial scales remains a major challenge. Here I outline how graph-theory based social network analysis (SNA) can help identify roosts that sustain regional connectivity, highlighting Chimney Swift social network studies in Atlantic Canada that can shape conservation efforts.

Social Network Analysis: A Promising Frontier

SNA treats individual habitat sites as *nodes*, and links between sites as *edges* based on shared individuals or movement data. Although originating in social sciences, SNA is increasingly used in ecology. Applications in wildlife include studying infectious disease transmission, communal roosting behaviours, and interspecific social interactions (Bakner et al., 2024; Farine & Milburn, 2013; Gilbertson et al., 2021). In avian ecology, recent SNA studies have looked at roost site selection and habitat connectivity in species such as wild turkey and urban parrots, and have used citizen-science with telemetry data to build robust social networks (Aplin et al., 2021; Bakner et al., 2024). The application of SNA techniques to species-at-risk research, particularly in eastern North America, however, has seldom been seen.

A key study by le Roux & Nocera (2021) in Nova Scotia illustrates one of the first SNA approaches to Chimney Swift social ecology. Using handheld telemetry and Motus tower detections, they detected ten regional roosts in Nova Scotia and mapped connections based on observed movements. Their network showed that a few central roosts functioned as critical connectors; simulated loss of these nodes

rapidly fragmented the network. They suggest quantifying the importance of individual features and examining the influence of removal on the theoretical network structure may be a useful tool in implementing effective targeted conservation strategies, from the scale of a single key roost site to the larger scale of a habitat patch in a fragmented landscape.

Continuing Research

Building on this previous work, I will use large-scale citizen science roost count data from across eastern North America to quantify spatial and temporal patterns in roost size and abundance to identify high-value roosts. In New Brunswick, I will apply SNA to map roost networks and evaluate the potential effects of losing highly central roosts on network structure and function. To refine the model, I will integrate radio-telemetry data from the Motus Wildlife Tracking System by tracking individual swift movements among roosts and validate predicted connections.

This combined approach—linking large-scale observational datasets with quantitative network modelling and movement ecology—will identify roosts that disproportionately contribute to regional and continental connectivity. The findings from my graduate research will assist in prioritizing site-level protection and management actions for New Brunswick Chimney Swift conservation initiatives. More broadly, this project emphasizes the potential of SNA as an emerging tool for quantifying habitat networks and assessing landscape-level resilience in species at risk.

Looking Ahead

Identifying high-centrality Chimney Swift roosts can inform priority rankings for protection, maintenance, or restoration, particularly in urban areas where infrastructure change poses ongoing risks. SNA offers a powerful means to visualize and quantify habitat connectivity, guiding efforts to preserve the ecological networks upon which this species depends. Constructed networks also help predict indirect effects, such as how the loss of critical roosts disrupts social dynamics and movements across the landscape. Ongoing research underscores the value of integrating citizen science datasets, network modelling, and movement ecology to inform evidence-based conservation. The continued development and application of such approaches will be vital for safeguarding Chimney Swifts in Atlantic Canada in an era of rapid habitat change.

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Information Exchange and Announcements

Seeking contributions to document the history of the Society of Canadian Ornithologists

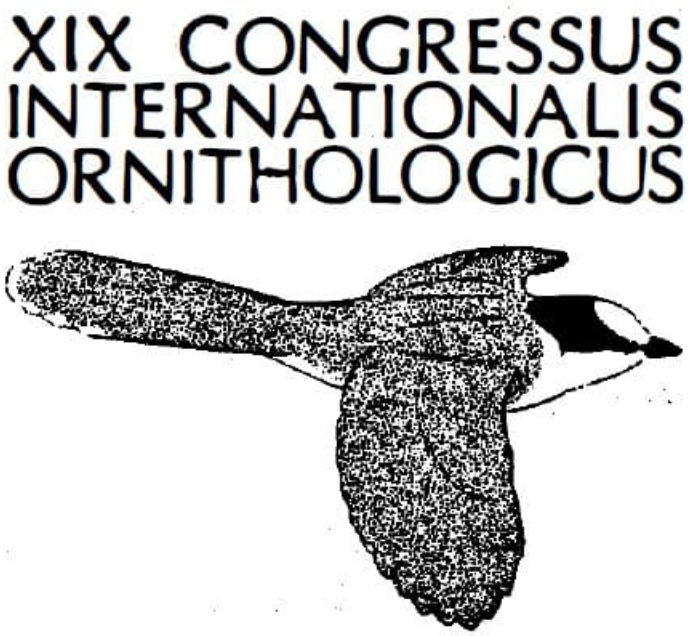
Elizabeth Porter, Kara Lefevre, and Leanne Grieves

Looking back is a powerful way to plan our path forward. During the 2025 Annual Meeting held in Saskatoon this past August, Dr. Ross Lein shared some of the story of how and why the Society of Canadian Ornithologists came to be. From the early feedback that "*a Canadian ornithological society wasn't needed*", to the many achievements that have followed since its founding, we were reminded of how much our community has accomplished.

This reflection inspired an exciting new initiative to document the history of the SCO and celebrate the people and milestones that have shaped both the Society, and Canadian ornithology. Led by doctoral student Elizabeth Porter (University of Guelph), Dr. Leanne Grieves (University of Saskatchewan), and Dr. Kara Lefevre (Thompson Rivers University), our goal is to build a living record of the Society's evolution - how it began, who has been involved along the way, and key milestones that mark our collective progress. We will begin by assembling a timeline of significant moments, and expand it with interviews, written reflections, summaries drawn from past *Picoides* Bulletins, and even artwork and photography that capture the spirit of the SCO community.

To do this, we need your help. We're grateful to those who have already started sharing some memories and look forward to hearing from many more of you! If you have memories, documents, photos, or suggestions of people we should reach out to, we'd love to hear from you. Whether you'd like to share a written contribution, participate in a conversation, or point us toward materials from the Society's past, every contribution will help us tell this story more fully. This will ensure that the history of the SCO is recorded, celebrated, and accessible for years to come.

Please contact Elizabeth Porter (e.d.porter@outlook.com) if you would like to contribute or if you have any questions.



Logo of the 1986 International Ornithological Congress (IOC), hosted by the SCO in Ottawa. From the Autumn 1981 Newsletter (Issue #1): "The impetus provided by the International Ornithological Congress has been a major force in stimulating the formation of a society at this time. Let us hope that when the IOC in Canada is over, we will still have a strong and active SCO." Image from the Spring 1983 Newsletter (Issue #5).

SCO-SOC Member Bob Elner Featured on the Nature of Things

A short "Nature of Things" program by Isabelle Groc on Bob Elner's research on shorebird grazing intertidal biofilm and some associated environmental issues is now available on YouTube. https://youtu.be/IMo0YiXIxjA?si=0d7hv1i7s0O1GDUp

Early Career Researcher Award
Prix de recherche en début de carrière

In Memory of Dr. Keith Hobson / en mémoire de Dr Keith Hobson

CALL FOR NOMINATIONS / APPEL DE NOMINATIONS - 2026

The Early Career Researcher Award honours fledgling ornithologists - in academia, industry, non-government or government agencies – that show strong potential for future leadership in Canadian ornithology. The award will be presented to the recipient at the Society's annual meeting where they will be invited to give a 30-minute keynote address, and travel to the meeting will be subsidized. The recipient will also be asked to provide a synopsis of their work to appear as a multi-page colour feature in the Society's *Picoides* newsletter. // Le prix de recherche en début de carrière honore les jeunes ornithologues – en milieu universitaire, dans l'industrie et en agences gouvernementales ou non-gouvernementales – qui démontrent un fort potentiel de leadership pour le futur de l'ornithologie canadienne. Le prix sera remis au récipiendaire à la conférence annuelle de la société où il sera invité à donner un discours d'ouverture de 30 minutes. Les frais de déplacement pour assister à la conférence seront subventionnés. Le récipiendaire devra également fournir un résumé de son travail qui sera publié en article de plusieurs pages avec photos dans le bulletin de la société, *Picoides*.

The Early Career Research Award is being temporarily renamed (2026-2030) in memory of Dr. Keith Hobson as a way to commemorate his outstanding contributions to the field of Canadian ornithology. Dr. Hobson was a world-renowned ornithologist and ecologist who was influential across multiple scientific fields including, mass spectrometry, forensics, geochemistry, marine biology, and paleoecology. Dr. Hobson was particularly renowned for his innovative applications of stable isotopes in ecological studies that transformed our understanding of trophic relationships, food webs, and tracking wildlife movements, globally. He was a research scientist with Environment & Climate Change Canada (1992–2024), professor at Western University (2015–2024) and adjunct professor at the University of Saskatchewan (1994 – 2024) and Dalhousie University (2017 – 2024). Keith was a long-standing member of the Society of Canadian Ornithologists, was awarded the Doris Huestic Speirs Award in 2011 for outstanding lifetime contributions in Canadian ornithology and served as Editor-in-Chief of SCO's flagship journal, Avian Conservation and Ecology, from 2012 – 2020. He was also inducted as a Fellow of the American Ornithological Society (2004), the Royal Society of Canada (2013), and the International Ornithological Union (2018). His research crossed multiple disciplines, taxa, ecosystems and continents addressing questions related to declines of bird species including aerial insectivores, the extent of incidental take of bird nests by industrial sectors, ecology of boreal birds in dynamic landscapes, the conservation of many Species at Risk, and migration ecology of avian and non-avian taxa. Keith published over 650 scientific papers (and counting), numerous book chapters and a book titled "*Tracking Animal Migration with Stable Isotopes*". He was an exceptional leader in the scientific community, having mentored 11 post-docs, 13 Ph.D. students, 29 M.Sc. students, numerous undergraduate students, served as an external examiner for numerous students and institutions, and taught both undergraduate and graduate courses at several institutions. Keith left an indelible mark on those he met—he was exceptionally engaging, entertaining, humorous, humble, genuine, passionate, and dedicated. His tireless work and mentorship affected countless students, collaborators, and researchers across Canada and the world through whom his pioneering work in ornithology continues to influence scientific innovation. A detailed biography on Dr. Keith Hobson can be found in the November 2024 issue of Picoides: https://www.sco-soc.ca/_files/ugd/c932da_2194f4d0799d4a3982a32cc6d778785f.pdf. //

Le Prix de Recherche en Début de Carrière est temporairement renommé (2026-2030) en mémoire de Dr Keith Hobson afin de commémorer ses contributions exceptionnelles dans le domaine de l'ornithologie canadienne. Dr Hobson était un ornithologue et écologiste de renommée mondiale qui a exercé une grande influence dans de nombreux domaines scientifiques, notamment la spectrométrie de masse, la science médico-légale, la géochimie, la biologie marine et la paléoécologie. Dr Hobson était particulièrement réputé pour ses façons novatrices d'appliquer la science des isotopes stables aux études écologiques, ce qui a transformé notre compréhension des relations et réseaux trophiques, ainsi que du suivi des mouvements migratoires de la faune à l'échelle mondiale. Il a été chercheur scientifique à Environnement et Changement Climatique Canada (1992-2024), professeur à l'Université Western (2015-2024) et professeur adjoint à l'Université de la Saskatchewan (1994-2024) et à l'Université Dalhousie (2017-2024). Keith était membre de longue date de la Société des ornithologistes du Canada, a reçu le prix Doris Huestic Speirs en 2011 pour l'ensemble de ses contributions

exceptionnelles à l'ornithologie canadienne, et a été rédacteur en chef de la revue phare de la SOC, *Avian Conservation and Ecology*, de 2012 à 2020. Il a également été intronisé comme membre de l'American Ornithological Society (2004), de la Société royale du Canada (2013) et de l'Union internationale d'ornithologie (2018). Ses recherches ont couvert plusieurs disciplines, taxons, écosystèmes et continents, abordant des questions liées au déclin des espèces d'oiseaux, notamment les insectivores aériens, l'ampleur des prises accidentelles de nids d'oiseaux par les secteurs industriels, l'écologie des oiseaux boréaux dans des paysages dynamiques, la conservation de nombreuses espèces en péril et l'écologie migratoire des taxons aviaires et non aviaires. Keith a publié plus de 650 articles scientifiques (et ce n'est pas fini), de nombreux chapitres de livres et un ouvrage intitulé "*Tracking Animal Migration with Stable Isotopes*" (Suivre la migration des animaux à l'aide d'isotopes stables). Il était un leader exceptionnel dans la communauté scientifique, ayant encadré 11 post-doctorants, 13 doctorants, 29 étudiants en maîtrise, de nombreux étudiants de premier cycle, ayant été examinateur externe pour de nombreux étudiants et institutions, et ayant enseigné des cours de premiers et deuxièmes cycles dans plusieurs institutions. Keith a laissé une empreinte indélébile sur ceux qu'il a rencontrés: il était exceptionnellement engageant, divertissant, drôle, humble, authentique, passionné et dévoué. Son travail infatigable et son mentorat ont influencé d'innombrables étudiants, collaborateurs et chercheurs à travers le Canada et le monde entier, grâce auxquels ses travaux pionniers en ornithologie continuent d'influencer l'innovation scientifique. Une biographie détaillée du Dr Keith Hobson est disponible dans le numéro de novembre 2024 de Picoides:

Contributions can be made in honour of Dr. Keith Hobson to the Early Career Research Fund. Donations will directly support the travel of the Early Career Research Award winner to the annual conference, where they will give a plenary address. You can support this initiative by making a donation by following the link or QR code at the bottom of this article// Des contributions peuvent être versées en l'honneur de Dr Keith Hobson au Fonds de Recherche en Début de Carrière. Les dons serviront directement à financer le déplacement du lauréat du Prix de Recherche en Début de Carrière à la conférence annuelle, où il prononcera un discours lors de l'assemblée plénière. Vous pouvez soutenir cette initiative en faisant un don par le lien ci-dessous ou le code QR au bas de cet article https://www.zeffy.com/en-CA/donation-form/early-career-researcher-award-in-memoriam-of-dr-keith-hobson

Nomination: Candidates can be nominated by themselves, former/current supervisors, colleagues and/or peers. A nomination letter should include a short statement (max 1000 words) describing the nominee's accomplishments in the following three area: academic accomplishments, service contributions, and leadership. If self-nominating, a reference letter from a former supervisor is recommended. The candidates CV should also be submitted with the application package. To be eligible, the candidate must have received their PhD from or currently working at a Canadian institution. The researcher should have obtained her or his PhD no more than five years prior to the SCO-SOC meeting where the award is to be given (August 2026). Periods where the researcher has not been active due to parental or personal leave would be excluded from the five years. // Les candidats peuvent s'auto-nominer ou être nominés par leurs superviseurs actuels ou passés, par leurs collègues et/ou par leurs pairs. La lettre de mise en candidature doit inclure une courte déclaration (max 1000 mots) décrivant les réalisations du candidat dans les trois domaines suivants: réalisations académiques, engagement et leadership. En cas d'auto-nomination, une lettre de recommandation d'un ancien superviseur est recommandée. Le CV du candidat doit également être soumis avec le reste de leur candidature. Pour être admissibles, les candidats doivent avoir obtenu leur doctorat d'un établissement canadien ou y travailler présentement. Un chercheur ne devrait pas avoir obtenu son doctorat plus de cinq ans avant la conférence de la SOC-SCO, où le prix sera décerné (Août 2026). Les périodes où le candidat n'a pas été actif en raison d'un congé parental ou personnel sont exclues des cinq années.

Deadline for submission of nominations is 31 January 2026.
La date limite de soumission des candidatures est le 31 janvier 2026.

Nominations should be sent, by email, to:
Les candidatures doivent être envoyées, par courriel, à l'adresse suivante :
Danielle Ethier, Chair, Early Career Research Award Committee
email: dethier@birdscanada.org

Society of Canadian Ornithologists
Société des ornithologistes du Canada

STUDENT RESEARCH AWARDS

TAVERNER AWARD

Taverner Awards are offered by the SCO-SOC to honour 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 students with limited or no access to major funding who are undertaking ornithological work in Canada. Two awards of up to $1,000 each are made annually.

AVIAN CONSERVATION AWARD

The Avian Conservation Award is open to any student conducting ornithological research that will make a substantial contribution towards the conservation of birds in Canada. The award is funded with revenue generated by participants of Birds Canada's Birdathon and is administered by SCO-SOC. One award of up to $2000 is made annually.

FRED COOKE AWARD

The Fred Cooke Award is offered jointly by the SCO-SOC and Birds 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. One award of up to $1000 is made annually.

STUDENT DISCOVERY AWARD

The SCO-SOC is committed to removing barriers and promoting diversity and inclusion within the ornithology community in Canada. The Student Discovery Award is offered to students who self-identify as being from underrepresented groups in ornithology. One award of up to $1000 is made annually.

For full award descriptions and application instructions, visit: https://www.sco-soc.ca/awards. Applicants must be members of SCO-SOC to be eligible. Application deadline is March 1st 2026. For further information, contact: studentawards@sco-soc.ca

Society of Canadian Ornithologists
Société des ornithologistes du Canada

BIRDS CANADA OISEAUX CANADA

BOURSES ÉTUDIANTES DE RECHERCHE

PRIX TAVERNER

Les prix Taverner sont offerts par la SCO-SOC pour honorer Percy A. Taverner et pour contribuer à l'accroissement des connaissances sur les oiseaux canadiens grâce à la recherche, à la conservation et à l'éducation du public. Les prix s'adressent aux personnes qui ont peu ou pas accès à un bon financement. Deux prix allant jusqu'à 1 000 $ chacun seront décernés chaque année.

PRIX DE CONSERVATION DES OISEAUX

Le Prix de Conservation des Oiseaux est ouvert à tout étudiant réalisant une recherche ornithologique qui contribuera de manière significative à la conservation des oiseaux au Canada. Le prix est financé par les revenus générés par les participants du Birdathon d'Oiseaux Canada et est administré par la SCO-SOC. Un prix pouvant atteindre 2 000 $ est attribué chaque année.

PRIX FRED COOKE

Le Prix Fred Cooke est offert conjointement par la SCO-SOC et Oiseaux Canada pour honorer les contributions du professeur Fred Cooke à l'ornithologie canadienne en soutenant les déplacements liés à des conférences ornithologiques ou aux activités de recherche d'un étudiant inscrit dans une université canadienne. Un prix pouvant atteindre 1 000 $ est attribué chaque année.

PRIX DÉCOUVERTE ÉTUDIANTE

La SCO-SOC s'engage à éliminer les obstacles et à promouvoir la diversité et l'inclusion au sein de la communauté ornithologique au Canada. Le Prix Découverte Étudiante est offert aux étudiants qui s'identifient comme appartenant à des groupes sous-représentés en ornithologie. Un prix pouvant atteindre 1 000 $ est attribué chaque année.

La description complète des prix et les formulaires de candidature sont disponibles sur le site: https://www.sco-soc.ca/awards. Les candidats doivent être membres de la SOC-SCO pour être admissibles. La date limite de candidature est le 1er mars 2026. Pour de plus amples renseignements, veuillez communiquer avec: studentawards@sco-soc.ca.

Society of Canadian Ornithologists
Société des ornithologistes du Canada

BIRDS CANADA OISEAUX CANADA

Bird Art and Poetry

"Long-billed Curlew (Numenius americanus) with sonogram" by Megan Edgar

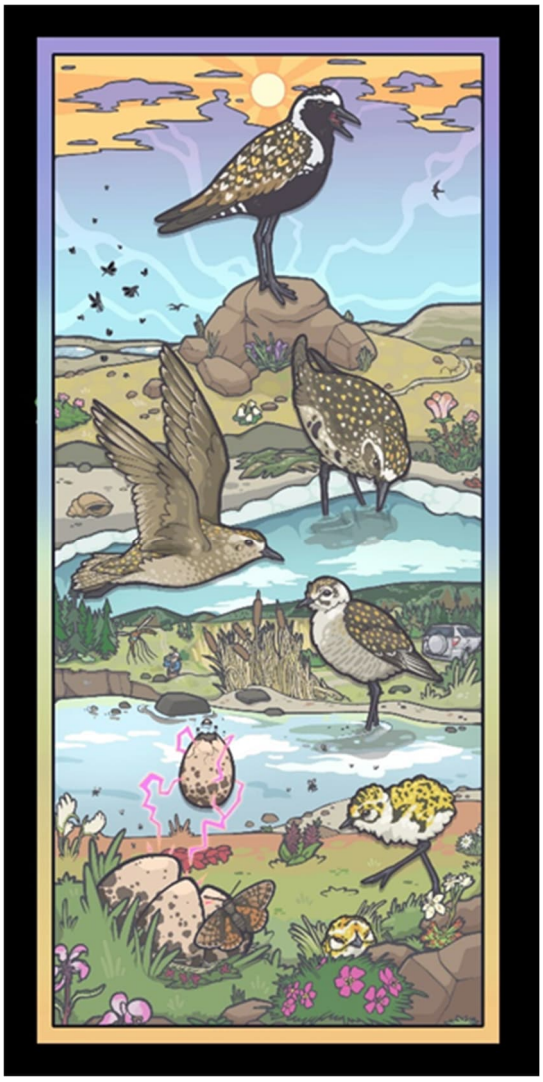
White Air

Sean Jenniskens

Breathing out
Arctic air
Frosted breath
On the wind;
White flakes, and –
White geese, too ~

Lockhart Lake by Eamon Riordan-Short
"This piece is a tribute to one of our field camps this summer near the treeline. The Smith's Longspurs and Harris' Sparrows more than made up for the boatloads of biting flies."

"The nocturnal sentinel – Eurasian Eagle-Owl (Bubo bubo) in watercolour" by Vidya Padmakumar



American Golden-Plover by Eamon Riordan-Short.
"I illustrated this representation of the lifecycle of the American Golden-Plover after a visit to Cambridge Bay this Summer. Seeing shorebirds on their arctic breeding grounds feels like seeing an entirely different bird: Sharper plumage and much more attitude. Having had the privilege to see this species in all its distinctive plumages, I wanted to put together a piece that showed how gorgeous this species is from start to finish."

Parasitic Jaeger near Cambridge Bay, Nunavut by Eamon Riordan-Short. July 2025.
"The best thing about summer above the arctic circle is 24-hour birding. I was still counting plovers around 11 PM, when a cold rain blew in that sent me packing back to the truck. Unexpectedly, the rain grounded the parasitic and long-tailed jaegers that I'd mostly seen on-the-wing. One set itself down not far from me and a slow, soggy army crawl through the mountain-avens and louseworts was all that stood between me and my best ever looks at parasitic jaeger. Easy choice."

Willow Ptarmigan at Sunrise by Eamon Riordan-Short. June 2025.
"Birding before dawn looks a bit different on the tundra. At around 1:30 AM, we pulled over for a bit of a grisly scene: a pair of long-tailed jaegers snacking on a deceased willow ptarmigan, with presumably a rival of his standing not far off with the sun rising behind him."

Willow Ptarmigan at Sunrise by Eamon Riordan-Short. June 2025.
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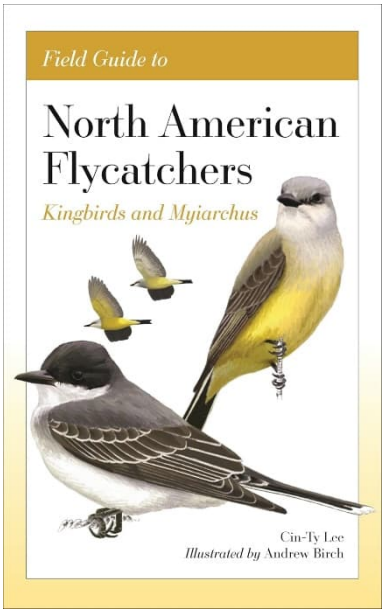
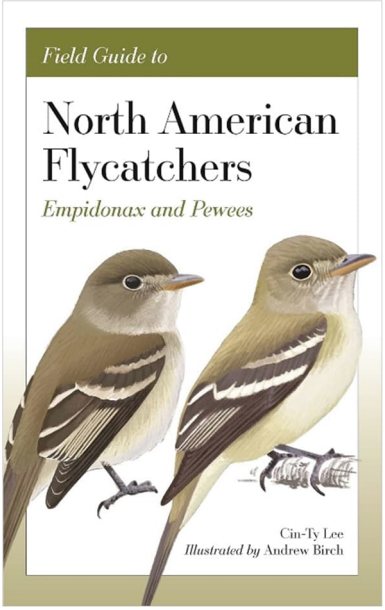
Book Review

Field Guide to North American Flycatchers: Empidonax and Pewees, Cin-Ty Lee and Andrew Birch Published in 2023 by Princeton University Press. Princeton, NJ and Oxford, UK, ISBN: 9780691240626 (paperback) and 9780691244327 (e-book)

Field Guide to North American Flycatchers: Kingbirds and Myiarchus, Cin-Ty Lee and Andrew Birch Published in 2024 by Princeton University Press. Princeton, NJ and Oxford, UK, ISBN: 9780691240640 (paperback) and 9780691244334 (e-book)





Bird identification guides are essential tools for both nature enthusiasts and environmental professionals. Bird field guides, in particular, provide readers with valuable information on plumage patterns, range maps, taxonomy, seasonality, and even population data for various bird species. For certain bird groups, for example, flycatchers, identification is often only possible through vocal recognition, clear visual observation, or high-quality well-focused photographs. Offering readers detailed and reliable information is crucial, and this is exactly what the two-volume book on the flycatchers of North America provides.

The authors skillfully lead readers toward a more accurate understanding of these often challenging-to-identify birds. In Canada, most flycatcher species can be observed in a range of ecosystems, with some sightings involving vagrant individuals. This makes the book especially valuable for birdwatchers and naturalists. The authors have structured the book around detailed species accounts, but before presenting those, they recommend reviewing the identification guidelines outlined in the introduction. Accurately identifying a flycatcher in the field involves several steps, including evaluating plumage, body size and shape, vocal repertoire, behavior, habitat preference, migration routes, and seasonal patterns. The main goal of the guide is to help readers recognize key identification features and understand the best ways to observe these birds under typical field survey conditions.

The book is well-written and compact, making it perfect for carrying anywhere: a definite strength of this publication. The authors chose not to include citations in the main text, which is acceptable, but it may disappoint more rigorous readers who prefer to see the sources of information directly referenced, even though these are listed at the end. The inclusion of range maps showing species distribution and seasonal presence is extremely valuable. These maps allow readers to compare and anticipate which species are likely to be observed in the field.

For both young and experienced ornithologists, this book is a perfect fit for research interests, professional goals, and birdwatching activities across Canada. It is also valuable for ornithological committees and aligns well with provincial environmental objectives, making it a useful resource for training new bird enthusiasts. The book can be used alongside broader field guides, while general guides cover a wide range of species, these specialized volume offers the precision and detail needed to master flycatcher identification. It is ideal for those seeking to deepen their skills and knowledge in this challenging group of birds.

While digital tools like birding apps and photo-sharing websites are increasingly popular for bird identification, a well-crafted book that combines in-depth, species-specific information, such as this one is highly recommended. The book is richly illustrated with comparisons between similar species, spectrograms of vocalizations, and practical tips on where to find each species. In summary, we congratulate the authors and strongly encourage all readers to explore and enjoy the valuable insights found in these two volumes. The authors clearly achieved their goal: these companion guides are among the most comprehensive and accessible resources on flycatcher identification available today in North America and Canada.

Reviewed by Rafael Fernandes, Peninsula Field Naturalists Club

E-mail: rafaelfdm@hotmail.com

Avian Conservation and Ecology Articles

Volume 20, Issue 1 June 2025

RESEARCH PAPERS	
Survival of captive-raised light-footed Ridgway's rails is influenced by release date and time in wild	Kimberly A. Sawyer, Courtney J. Conway
Landscape characteristics influencing habitat use of grassland birds in the Pampas ecoregion of Argentina	Clara Trofino-Falasco, María G. Pizzarello, María V. Simoy, María F. Aranguren, Rosana E. Cepeda, Adrián S. Di Giacomo, Claudia B. Marinelli, Gaston Moran, Maria C. Neyra, David G. Vera, Igor Berkunsky
Influences on the use of gravel roads as night roosts by Common Nighthawks in the boreal forest	Gabriel J. Foley, R. M. Brigham
The Acadian Flycatcher is a habitat specialist, and it shows	Nicole L. Regimbal, Shelby H. Riskin
The efficacy of acoustic indices in detecting the post-migration return of Short-tailed Shearwaters (*Ardenna tenuirostris*) to their colonies	Harrison R. Talarico, Gregory J. Jordan, Eric J. Woehler, Rowena Hamer, Jennifer L. Lavers

Volume 20, Issue 2 October 2025

RESEARCH PAPERS	
Automated telemetry reveals migratory movements and stopover timing of an endangered saltmarsh passerine	Bri Benvenuti, Adam D. Smith, Chris S. Elphick, Nick Ernst, Adrienne I. Kovach, Kathleen M. O'Brien, Nancy Pau
Effects of imperfect detection on inferences from bird surveys	Elizabeth A. Rigby, Douglas H. Johnson
Diurnal Forest Thrush abundance positively covaries with both prey availability and small Indian mongoose abundance	Aurélie Jean-Pierre, Frank Cézilly, Lens Jerry Saint-Louis, Gladys Loranger-Merciris
Boreal songbird response to variation in natural seismic line vegetation recovery	Hedwig E. Lankau, Lionel F. V. Leston, Erin M. Bayne
Monitoring demographic rates to assess the status of a reintroduced swan population	Rodney W. Brook, Kenneth F. Abraham, Glen S. Brown, Stephanie J. Melles
Hematological plasticity in House Sparrow populations in the Western Himalayas suggests recent range expansion to higher elevations	Renu Bala, Dhananjai Mohan, R. Suresh Kumar
Nest concealment reduces predation during the nestling stage of grassland birds in the Pampas	Martín A. Colombo, Luciano N. Segura
Selenium levels in Lesser Scaup (*Aythya affinis*) experimentally infected with introduced trematodes	Cheyenne R. Beach, Christopher N. Jacques, Joseph D. Lancaster, Rebecca A. Cole, Heath M. Hagy, Auriel M.V. Fournier
The continued decline of the Palila (*Loxioides bailleui*) on Mauna Kea, Island of Hawai'i	Noah J. Hunt, Chauncey K. Asing, Lindsey Nietmann, Paul C. Banko, Richard J. Camp
Using data from camera traps and autonomous recording units to evaluate and improve species-habitat inferences	Laura N. Stewart, Claudia A. Haas, Samuel Haché, Kathy Martin, Fort Good Hope Renewable Resources Council, K'áhshó Got'ı̨nę Foundation, K'áhshó Got'ı̨nę Guardians, T'sudé Nilı̨né Tuyeta Management Board, A. Cole Burton
An updated estimate of the number of birds killed by outdoor cats in Canada	Jonathan J. Chu, D. Ryan Norris, Julie Bourque, Christian Roy, Olivia Wilson, Elizabeth A. Gow
SHORT COMMUNICATIONS	
Avian biodiversity in the urban green spaces of Paris: higher bird species richness in larger parks and park centers	Daniel J. Mennill, Stephanie M. Gamboa, Emily M. Bolger, Madison I. Bygrove, Micaela Carlini, Katie A. Cesca, Hannah L. Drew, Natalie A. Emerick, Adam Gaisinsky, Reese M. Miller, Linda Nguyen, Liam D. O'Leary, Sona Regonda, Danielle N. Robinson, Emily Tessier, Stephanie M. Doucet

SCO – SOC Information

NAME	TITLE	EMAIL
Officers for 2024/25		
Dr. Danielle Ethier	President	dethier@birdscanada.org
Dr. Ann McKellar	Vice-President/President-elect	ann.mckellar@ec.gc.ca
Dr. Matt Reudink	Past President	mreudink@tru.ca
Dr. Lisha Berzins	Treasurer	lisha.berzins@usask.ca
Dr. Francis van Oordt	Membership Secretary	francis.vanoordtlahoz@mail.mcgill.ca
Dr. Lionel Leston	Recording Secretary	leston@ualberta.ca
Directors (Councillors)		
Dr. Kara Lefevre	Member of Council	klefevre@tru.ca
Dr. Carrie Branch	Member of Council	cbranch6@uwo.ca
Dr. Elizabeth Gow	Member of Council	elizabeth.gow2@@ec.gc.ca
Dr. Maggie MacPherson	Member of Council	maggie.macpherson@trentu.ca
Dr. Leanne Grieves	Member of Council	lag296@cornell.edu
Dr. Emily Choy	Member of Council	choye1@mcmaster.ca
Sunny Tseng	Member of Council	sunnyyctseng@gmail.com
Sachin Anand	Member of Council	anas0002@uqar.ca
Dr. Steffi LaZerte	Member of Council	sel@steffilazerte.ca
Alexandre Terrigeol	Member of Council	direction.oot@explosnature.ca
Other		
Rob Warnock	Co-editor, *Picoides*	warnockr@myaccess.ca
Barbara Bleho	Co-editor, *Picoides*	bleho.barbara@gmail.com

(Non-voting) Past Presidents:

Ross Lein	1983-1986	Tony Diamond	1998-2000	Joe Nocera	2012-2014
Spencer Sealy	1986-1988	Kathy Martin	2000-2002	Greg Robertson	2014-2016
Erica Dunn	1988-1990	Jean-Pierre Savard	2002-2004	Ken Otter	2016-2018
Jon Barlow	1990-1992	Charles Francis	2004-2006	Colleen Barber	2018-2020
Bruce Falls	1992-1994	Susan Hannon	2006-2008	Nicola Koper	2020-2022
Henri Ouellet	1994-1996	David Bird	2008-2010		
David Nettleship	1996-1998	Erica Nol	2010-2012		

MEMBERSHIP INFORMATION

SCO-SOC membership forms can be found at www.sco-soc.ca/membership.html. Current membership rates are provided below. SCO-SOC provides free membership to members of equity-denied communities. See our website for more information.

Student	$15.00/year	Regular	$35.00/year ($45.00/year international)
Early Career (<5 y post-grad)	$25.00/year	Sustained	$75.00/year
Life	$500.00	Retired	$25.00/year

SCO-SOC WEBSITE

The SCO-SOC website (www.sco-soc.ca/index.html) includes sections on membership, meetings, news, publications, awards, information for students, an overview of SCO-SOC, and links of interest to members and other visitors.
Please direct any suggested additions or edits to the website to the Society's webmaster, Jennifer Foote, at jennifer.foote@algomau.ca.

SUBMISSIONS TO PICOIDES

Articles and photos relevant to Canadian ornithology are welcomed by the editors. If submitting photos, please save them in .tiff or .jpeg format with descriptive file names, and supply captions including common names of species, location, date, photographer, and any other notes of interest. Deadlines for submission are February 15, May 15, and October 15; issues are typically published 4-6 weeks later. Please send all submissions to Rob Warnock at warnockr@myaccess.ca. Disclaimer: Picoides is not a peer-reviewed journal; the publication of an article in Picoides does not imply endorsement by SCO-SOC.