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Atlantic Puffin / macareux moine on Gannett Islands, Newfoundland. Photo by/par Isabeau Pratte.

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Editors' Message

Rob Warnock and Barbara Bleho

Welcome to the first issue of *Picoides* of 2016! We are pleased with the number and quality of submissions we received for this issue, thank you to all who contributed. Without submissions there is no *Picoides*.

In this issue, there are several notices, four thesis abstracts (we would love to have more!), a student research award report on Canada Warbler habitat use, an article on Gannet Islands field site in Newfoundland, a brief overview of proper field protocol for working in waterbird colonies, and a review of the book *Better Birding* by George L. Armistead and Brian L. Sullivan. Please check them all out!

In the President's message, Greg briefly discusses our society co-hosting the International Ornithological Congress in Vancouver in 2018 and encourages members to attend NAOC VI in Washington, D.C. later this year. Greg also mentions new attractive bird-themed commemorative coins from the Royal Canadian Mint in honour of the 100th anniversary of the Migratory Birds Convention between Canada and the USA. Please visit the Mint's website for more information.

Although all positions for SCO-SOC Council will be won by acclamation this year, please submit your ballot paper to Ken Otter by April 15, 2016 to indicate your approval of this slate of excellent candidates. We congratulate all candidates who stood for election this year. Also please do not forget to make nominations for both the Doris Huestis Speirs and the Jamie Smith Mentoring Awards.

The next *Picoides* submission deadline is May 15, 2016. Please keep the submissions coming. Also, we welcome feedback from our readership as it is your publication. Have a safe and wonderful spring!

Message des éditeurs

Rob Warnock et Barbara Bleho

Bienvenue dans le premier numéro de *Picoides* 2016! Nous sommes heureux du nombre et la qualité des soumissions reçues pour ce numéro, merci à tous ceux qui ont contribué. Sans ces soumissions, il n'y a pas de *Picoides*.

Dans ce numéro, il y a plusieurs avis, quatre résumés de thèses (nous aimerions en avoir plus !), un rapport d'un projet d'un étudiant récipiendaire d'une bourse de recherche portant sur l'utilisation de l'habitat de la Paruline du Canada, un article sur un site de terrain sur les îles Gannet à Terre-Neuve, un bref aperçu du protocole de terrain approprié pour travailler dans les colonies d'oiseaux, et une revue du livre *Better Birding* par George L. Armistead et Brian L. Sullivan. Lisez les tous!

Dans le message du président, Greg discute brièvement de notre société qui sera co-hôte du Congrès international ornithologique à Vancouver en 2018 et encourage les membres à participer à la conférence de NAOC VI à Washington cet été. Greg mentionne également de nouvelles pièces commémoratives de la Monnaie royale canadienne sur le thème attractif des oiseaux en l'honneur du 100e anniversaire de la Convention concernant les oiseaux migrateurs entre le Canada et les États-Unis. Visitez le site Web de la Monnaie pour plus d'information.

Bien que toutes les positions pour le conseil de la SCO-SOC seront gagnées par acclamation cette année, s'il vous plaît soumettez votre bulletin de vote à Ken Otter d'ici le 15 Avril 2016 afin de confirmer votre approbation à cette liste d'excellents candidats. Nous félicitons tous les candidats qui se sont présentés à l'élection de cette année. Aussi, ne pas oublier de soumettre des nominations pour les prix Doris Huestis Speirs et Jamie Smith.

La prochaine date limite de soumission pour *Picoides* est le 15 mai 2016, en espérant recevoir de nouveau beaucoup de soumissions pour le prochain numéro. Aussi, vos commentaires sont les bienvenus, comme il s'agit de votre publication. En vous souhaitant un très beau printemps sécuritaire!

Follow SCO on Twitter! Follow us @SCO_SOC for news, exciting research, updates from members, and more!
Suivez SOC sur Twitter! Suivez-nous @SCO_SOC pour les nouvelles, la recherche passionnant, mises à jour des membres, et plus encore!

President's Message

Greg Robertson

I hope everyone is having an enjoyable and productive start to 2016. As usual, much of the recent activity has been around meeting planning. One significant development is that our VP, Ken Otter, has negotiated with the International Ornithological Congress (IOC) steering committee to have the SCO-SOC officially co-host (along with BSC) the Vancouver IOC in 2018. This move ensures that the SCO-SOC retains its place as the national body representing professional ornithologists in Canada. The IOC is a big meeting, with big expenses, so it's only through continued support by the membership that we were able to meet the financial obligations that come with co-hosting a meeting of this size. More immediate is the 6th North American Ornithological Conference (NAOC VI) is gearing up to open registration and submission of abstracts. I encourage you to attend this meeting if at all possible. It's a chance to celebrate ornithology and conservation in the American capital on the 100 year anniversary of the Migratory Birds Convention. I appreciate the current state of the Canadian dollar will not make it easy for those of us travelling state-side, but a lot can happen in 6 months and I have every confidence that Pete Marra and his local committee are going to put on an unforgettable conference.

On the topic of the centennial of the Migratory Bird Convention, the Royal Mint is releasing a series of commemorative coins this year. This first is a rather stunning Mountain Bluebird. More on the centennial as the year unfolds, but I encourage all members to participate in (or initiate!) events celebrating this landmark treaty. One hundred years later we almost take the treaty for granted, but take a moment to think about the sweeping changes that the treaty brought on. Among other things, it provided for the outright protection of billions of birds and hundreds of species across a whole continent. Truly visionary.

Message du président

Greg Robertson

Je souhaite que tout le monde ait un début d'année 2016 agréable et productif. Comme d'habitude, une grande part des récentes activités a été sur la planification de conférence. Un développement important est que notre vice-président, Ken Otter, a négocié avec le comité de direction du congrès international d'ornithologie (*International Ornithological Congress* ; IOC) d'inclure officiellement la SCO-SOC à titre de hôte associé (avec ÉOC) de l'IOC de Vancouver en 2018. Ce mouvement assure que la SCO-SOC conserve sa place comme l'organisme national qui représente les ornithologues professionnels au Canada. L'IOC est une grande réunion, avec de grands coûts, alors c'est seulement avec un soutien continu par les membres que nous étions en mesure de répondre aux obligations financières qui viennent avec la co-organisation d'une conférence de cette ampleur. A plus courte échéance, la 6e conférence de l'ornithologie d'Amérique du Nord (*North American Ornithological Conference* ; NAOC VI) se prépare à ouvrir les inscriptions et la soumission des résumés. Je vous encourage à participer à cette conférence, si cela vous est possible. Ce sera l'occasion de célébrer l'ornithologie et la conservation dans la capitale américaine à la date du 100e anniversaire de la Convention concernant les oiseaux migrateurs. Je suis conscient que l'état actuel du dollar canadien engendra des coûts additionnels pour ce voyage, mais beaucoup de choses peuvent se produire dans les 6 prochains mois et je suis persuadé que Pete Marra et son comité local préparent une conférence inoubliable.

Sur le thème du centenaire de la Convention concernant les oiseaux migrateurs, la Monnaie royale canadienne produira cette année une série de pièces commémoratives. La première pièce offerte est un magnifique merlebleu azuré. Plus de détails sur le centenaire reste à venir, mais j'en encourage tous les membres à participer (ou initier!) des événements célébrant cette convention historique. Cent ans plus tard, nous prenons presque la convention comme acquis, mais prenons un moment pour réfléchir sur les changements radicaux que cette convention a apporté. Entre autres choses, elle prévoit la protection pure et simple de milliards d'oiseaux et des centaines d'espèces à travers tout un continent. Vraiment visionnaire.

2015 James L. Baillie Award Report

Habitat use of Canada Warblers in an extensively managed forest landscape

Anjolene Hunt, M.Sc. Student, University of Alberta

To fully understand drivers of a species' decline and implement appropriate recovery strategies, it is important to understand which habitat is being used, why it is being used, and which activities are threatening this habitat. As for many species at risk, habitat loss is suggested as the main driver of decline in population size of the threatened Canada Warbler (*Cardellina canadensis*; Environment Canada 2015). The proposed recovery strategy identifies deforestation and forest degradation by forestry practices as possible threats to its breeding habitat (Environment Canada 2015). Although generally associated with old-growth deciduous forest stands in Alberta, Canada Warblers have also been detected in regenerating forest stands after timber harvest (i.e., post-harvest stands; Schieck and Song 2006; Ball and Bayne 2013). It is unknown whether these post-harvest stands are: 1) selected because they provide suitable habitat, where we would expect density and pairing/fledging success of individuals to be similar to those in old-growth stands; 2) used due to density dependent effects (i.e., only when old-growth stands are occupied by other individuals), resulting in lower densities in post-harvest stands; or 3) used due to conspecific attraction, resulting in use of areas near conspecifics, irrespective of underlying vegetation composition and structure.

Colour-banded male Canada Warbler in Lac La Biche, AB / Une paruline du Canada mâle avec bagues de couleur au lac La Biche, Alberta. Photo by/par Anjolene Hunt.

In this study, we aim to quantify effects of timber harvest attributes and conspecific attraction on density (males/ha), home range use (area used over the breeding season), and pairing/fledging success of male Canada Warblers in boreal Alberta's harvested landscapes. In 2014 and 2015, we surveyed harvested landscapes near Lesser Slave Lake, Calling Lake, and Lac La Biche, Alberta to determine density of Canada Warblers. Pre-selected survey blocks represented a gradient of harvesting extent (0-100% harvested), and time since harvest (0-30 years). We used a playback-point count method to locate males, in which we played a recording of a territorial male Canada Warbler song at pre-selected points. If a male was on territory, he would counter-sing from a distance, or fly in to inspect the apparent intruder, allowing us to accurately document his location. We then captured (using playbacks and active mist-netting), banded, and colour-banded a subset of these males, so that we could identify each individual and follow it throughout the breeding season. We tracked and observed each colour-banded male in weekly observation periods to map its home range, assess whether it was paired with a female, and later in the season, determine whether it fledged at least one young.

Preliminary Results and Discussion

Based on preliminary analyses of 2014 data, we found that the more extensively harvested a forest stand was, and the more recently it had been harvested, the less likely males were to use it, resulting in lower densities of males in these areas. Although completely harvested areas were highly available in our survey area relative to unharvested areas (~40% and 20% of the survey area, respectively), over 50% of our tracked males' home ranges did not include any amount of post-harvest stands (Figure 1A), and the average proportion of an individual home range composed of post-harvest stands was low (0.14 ± 0.04). Males that used higher proportions of post-harvest stands tended to have larger home ranges, suggesting that larger areas are required to obtain necessary resources. We did not detect a significant relationship between the amount of post-harvest stands included in male home ranges and subsequent pairing or fledging success, likely because many of the males avoided post-harvest stands altogether. Lastly, we found that in survey blocks with higher densities of conspecifics, males were more likely to use post-harvest stands than in survey blocks supporting low densities of conspecifics (Figure 1B). These preliminary models suggest that Canada Warblers may use post-harvest stands as a result of density-dependent factors and/or conspecific attraction, rather than suitability of the habitat.

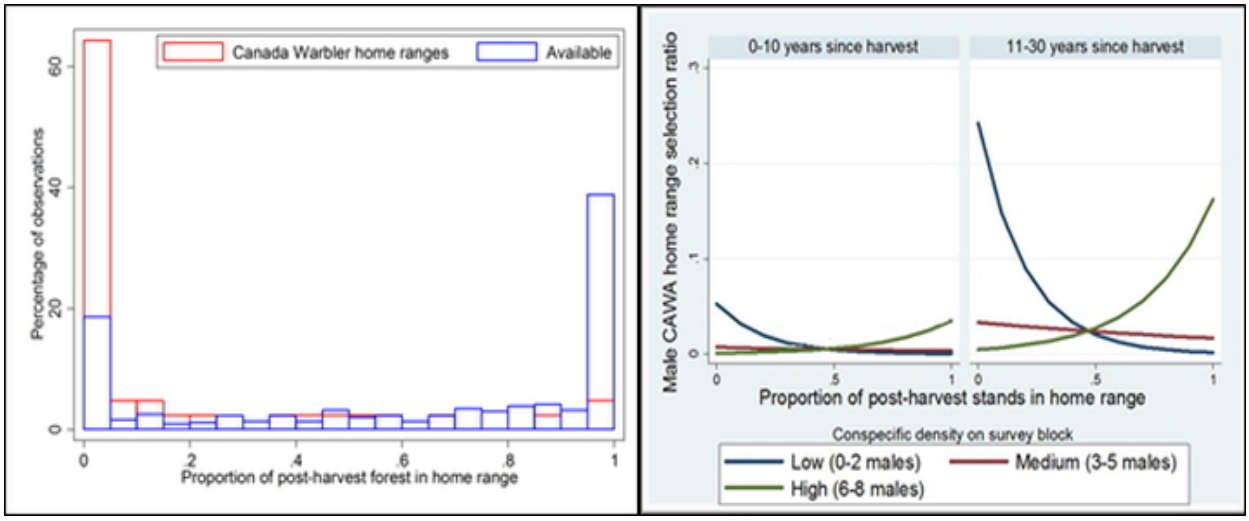

Figure 1: (**A**) Proportion of post-harvest forest included in 2014 Canada Warbler observed home ranges (in red, 95% Minimum convex polygons, n=41) and randomly selected 1-ha home ranges within each survey block (in blue, random; n = 423. (**B**) Interactive effect of conspecific density in the survey block (low, med, high) and proportion of a home range composed of post-harvest stands (left: recently harvested, right: older harvest) on selection ratios of male Canada Warblers. Selection ratio represents *the ratio of observed home ranges to randomly generated home ranges.*

*(**A**) Proportion de forêt après coupe observée de les domaines vitaux de la paruline du Canada en 2014 (en rouge, polygones convexes minimum 95%, n=41) et dans des domaines vitaux de 1ha sélectionnés aléatoirement dans chaque bloc d'inventaire (en bleu, aléatoire; n=423). (**B**) Effet interactif de la densité de congénères dans le bloc d'inventaire (faible, moyen, élevé) et la proportion des domaines vitaux composée de peuplements après coupe (gauche: jeunes coupes, droite: vieilles coupes) sur les ratios de sélection des parulines du Canada mâles. Les ratios de sélection représentent le ratio des domaines vitaux observés sur les domaines vitaux aléatoires.*

Future Work

Further analyses are being conducted on 2014 and 2015 data to 1) separate the effects of density dependent use of post-harvest stands from the effects of conspecific attraction; 2) assess whether density-habitat relationships are consistent with fitness-habitat relationships (as measured by pairing and fledging success) to determine whether Canada Warbler density is reflective of habitat quality.

Acknowledgements

In addition to the Baillie Student Research Award, I would like to thank the Natural Sciences and Engineering Research Council of Canada, Alberta-Pacific Forestry Industry, Alberta Conservation Association, University of Alberta Northern Awards, and the Environment Canada Habitat Stewardship Program for supporting my 2014 and 2015 research.

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FRANÇAIS—*Rapport du prix James L. Baillie 2015: Utilisation de l'habitat de la paruline du Canada dans un paysage forestier sous aménagement extensive par Anjolene Hunt, étudiante à la maîtrise, Université d'Alberta*

Afin de bien comprendre les causes du déclin d'une espèce et de mettre en œuvre des stratégies de rétablissement appropriées, il est important de comprendre quels habitats sont utilisés, pourquoi ils sont utilisés et quelles activités menacent ces habitats. Comme pour de nombreuses espèces en péril, la perte d'habitat est considérée comme une des principales causes du déclin des populations de la paruline du Canada (*Cardellina canadensis*) laquelle est menacée au Canada (Environnement Canada 2015). Le programme de rétablissement proposé identifie la déforestation et la dégradation des forêts par les pratiques forestières comme des menaces possibles à son habitat de reproduction (Environnement Canada 2015). Bien que généralement associé aux vieux peuplements feuillus en Alberta, la paruline du Canada est également observée dans les peuplements forestiers en régénération après la coupe forestière (Schieck et Song 2006; Ball et Bayne 2013). On ignore si ces peuplements après coupe sont: 1) choisis parce qu'ils fournissent un habitat convenable, alors la densité et l'appariement/succès à l'envol des individus devraient être semblables à ceux des observés dans les vieux peuplements; 2) utilisé en raison des effets dépendant de la densité (à savoir, seulement quand les vieux peuplements sont déjà occupés), ce qui impliquerait des densités plus faibles après coupe; ou 3) utilisé en raison de l'attraction conspécifique, résultant de l'utilisation des zones voisines à des congénères, quelle que soit la composition de la végétation sous-jacente et de la structure.

2015 University of Alberta field crew surveying for Canada Warblers in a shrubby, aspen forest / Équipe de terrain 2015 de l'Université d'Alberta inventoriant la paruline du Canada dans un peuplement de trembles. Photo by/par Kiirsti Owen.

Dans cette étude, nous cherchons à quantifier les effets de la coupe forestière et l'attraction conspécifique sur la densité (individus/ha), le domaine vital (zone utilisée lors de la période de reproduction) et l'appariement/succès à l'envol des parulines du Canada mâles dans les paysages boréales sous aménagement forestiers de l'Alberta. En 2014 et 2015, nous avons inventorié les paysages près du petit lac des Escales (Lesser Slave Lake), Calling Lake et de Lac La Biche (Alberta) afin de déterminer les densités de la paruline du Canada. Des blocs présélectionnés d'inventaire représentaient un gradient de l'importance de la coupe forestière (0 à 100%) et le temps depuis la coupe (0-30 ans). Nous avons utilisé la méthode de point d'écoute avec repasse pour localiser les mâles, alors que nous avons joué un enregistrement d'un chant territorial d'une paruline du Canada mâle aux points présélectionnés. Si un mâle était présent, soit il chantait à son tour à distance ou s'approchait pour venir voir l'intrus apparent, ce qui nous permettait de noter avec précision son emplacement. Nous avons capturé (en utilisant la repasse et des filets japonais) et bagué (aluminium et couleurs) un sous-ensemble de ces mâles, de sorte que nous avons pu identifier chaque individu et les suivre tout au long de la période de reproduction. Nous avons suivi et observé chaque mâle avec bagues de couleur à chaque semaine pour cartographier leur domaine vital, évaluer s'ils étaient appariés avec une femelle et plus tard dans la saison, s'ils ont produit au moins un jeune à l'envol.

Résultats préliminaires et discussion

Sur la base des analyses préliminaires des données de 2014, nous avons constaté que plus un peuplement a été coupé extensivement et plus cette coupe était jeune, moins les mâles étaient susceptibles de l'utiliser, résultant à des densités plus faibles des mâles dans ces peuplements. Bien que les peuplements complètement coupés étaient très abondants dans notre zone d'étude par rapport aux peuplements non exploités (respectivement ~ 40% et 20% de la zone d'étude), plus de 50% des domaines vitaux des mâles suivis ne comportait aucun peuplements après coupe (Figure 1A) et la proportion moyenne de peuplements après coupe dans les domaines vitaux individuels était faible (0,14±0,04). Les mâles qui ont utilisé des proportions plus élevées de peuplements après coupe ont tendance à avoir des domaines vitaux de plus grandes superficies, ce qui suggère que des zones plus grandes sont nécessaires pour obtenir les ressources nécessaires. Nous n'avons pas observé une relation significative entre la quantité de peuplements après coupe dans les domaines vitaux des mâles et l'appariement subséquent ou le succès d'envol, probablement parce que plusieurs mâles évitaient les complètement les peuplements après coupe. Enfin, nous avons constaté que dans les blocs d'inventaire avec des densités

plus élevées de leurs congénères, les mâles étaient plus susceptibles d'utiliser les peuplements après coupe que dans les blocs présentant une plus faible densité de congénères (Figure 1B). Ces modèles préliminaires suggèrent que la paruline du Canada peut utiliser les peuplements après coupe en raison de facteurs dépendant de la densité ou par l'attraction conspécifique, plutôt qu'en raison de la qualité de l'habitat.

À venir

D'autres analyses sont en cours avec les données 2014 et 2015 afin de 1) séparer les effets dépendants de la densité de ceux de l'attractivité des congénères sur l'utilisation des peuplements après coupe; 2) évaluer si les relations densité-habitat sont compatibles avec les relations de fitness-habitat (tel que mesuré par l'appariement et le succès à l'envol) afin de déterminer si les densités de parulines du Canada sont le reflet de la qualité de l'habitat.

Remerciements

En plus de la bourse de recherche étudiante James L. Baillie, je tiens à remercier le Conseil de recherches en sciences naturelles et en génien du Canada, l'industrie forestière de l'Alberta-Pacific, l'association de conservation de l'Alberta, le prix Northern de l'Université de l'Alberta, Prix du Nord et le Programme d'intendance de l'habitat pour les espèces en péril d'Environnement Canada pour leur soutien à mon projet (2014 et 2015).

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 1000 words long, again preferably accompanied by one or two photos. See page 18 for submission details.

Spotted Towhee. Photo by Brigitte Noel.

Feature Articles

Gannet Islands, Labrador: An Historic Field Site

Isabeau Pratte, Master's candidate, Acadia University, Wolfville, NS

Loafing Razorbills / petits pingouins. Photo by/par Isabeau Pratte.

The boat ride is rough and we cannot see the islands yet because the sea is obscured by dense fog. We left Goose Bay at four; the morning air is filled with rain. Anticipation, or maybe the waves, keeps us awake, ready to discover a place we have never set foot in, but where the story has taken us already. It was in 1981 that Tim Birkhead, supported by David Nettleship, began establishing a scientific camp on the Gannet Islands; an archipelago located 50 kms from Cartwright, Labrador. This group of seven islands, five of which form a cluster, is the choice breeding ground for thousands of seabirds that take advantage of the rich North Atlantic Ocean waters crossed by the Labrador Current. The most abundant species breeding here are the Common Murre, the Atlantic Puffin, the Thick-billed Murre and the Razorbill, the latter constituting the largest colony of its species in North America, with 10,000 breeding pairs. Even though alcids abound, other species such as the Black-legged Kittiwake, the Black Guillemot, the Great Black-backed Gull, the Herring Gull, and a few Northern Fulmars and Leach's Storm-petrels find these wind swept islands a prosperous site to raise young.

Life was tough that first year in 1981, when a researcher had to contend with continuous damp and humid oceanic weather with little but their wits to sustain them. In an attempt to stay dry, and perhaps sane, a permanent cabin was built in 1982 which is still in use today, though some repairs are in order to keep the water out when the skies open up. At the time, Birkhead focused his research on the murres and their fascinating social behaviour, ubiquitous to life in a dense colony environment. This co-existence of the two murre species has raised many interesting questions about their co-existence. Although they breed on the same islands, their nesting sites are well demarcated, the Thick-billed Murre preferring narrower ledges compared to the Common Murre (Birkhead and Nettleship 1987a). In fact, one of the most fascinating things about this colony is that one finds four species that are evolutionary closely related, nesting in sympatry. However, it is clear that in order for this perennial co-existence to work, mechanisms that limit competition must occur. Birkhead, while studying chick diet, showed that each alcid species preferred to provision a specific type of prey to its chick (Birkhead and Nettleship 1987b). Tim Birkhead was the pioneer of the study of seabird biology conducted at the Gannet Islands, and remains a legend. In 1985, the annual research conducted on the islands stopped. Birkhead and his team finally returned in 1992, but a bad surprise waited them. Families of Arctic fox had established territories on the islands after travelling over on the sea ice during spring, and were slowly devastating the colonies. The nesting success was very poor that year (Birkhead and Nettleship 1995). Seabirds have adapted to select nesting sites that are usually far from the mainland, on isolated islands that advantage the birds by being closer to their foraging resource and limit the predation by terrestrial animals. Consequently, they are highly vulnerable to predation, especially the eggs and the young, when a fox, a polar bear, or even a rat makes it to their breeding islands. They are not completely helpless though, as some species nesting on steep cliffs reduce their vulnerability to predation, especially in combination with the insular location of their nesting grounds. Unfortunately, the Gannet Islands are bulgy in shape and the nests are fairly accessible to terrestrial predators. Following the glorious Birkhead years, research has proceeded discontinuously on the islands. This summer I am going back to the Gannets to compare the foraging niche and the habitat use at-sea of the four alcids mentioned.

We berth in a little gravel cove under the curious eyes of the puffins loafing in front of their burrows. The sky is dotted by all the birds we flushed upon our approach. Seeing these four alcids, side by side, is incredible. Slowly, we explore the island. We are surprised at the rusty cry of a Razorbill when we happen upon a crevice, or the grave call of a puffin flying above us, the bird unsure of landing because of our presence. As the sun sets, on the hill above the cabin, the puffins invade. These are immature birds prospecting for future

burrows, elegantly displaying their colorful bills against their clean white breasts while performing a quick walk towards one of their congeners. At night, when the storm-petrels keep us awake, we only smile at their most intriguing calls.

When at last the sea calms down, we head for GC2, where the murres nest. After landing on the steep rocks, we discover on the heights of the island the small Birkhead cabin surrounded by puffin burrows; he built the cabin to be close to his murres, thus thwarting the whims of the ocean that would have prevented the keeping of good observations. Still standing, the unassuming cabin has also served other research teams in the 1990s and 2000s (Bryant et al. 1999; Hipfner 2000; MacFarlane Tranquilla et al. 2013). Deer mice have made an assault on the interior, so we undertook a massive cleanup to right the ship. The preservation of the field biology heritage is essential.

The small Birkhead's cabin / La petite cabine de Birkhead sur GC4. Photo by/par Isabeau Pratte.

The murres are there sitting on their eggs, and despite a relatively late season, we will leave healthy young birds, ready to fledge, at our departure in late August. The nesting success of the puffins seems fairly average this year; birds are forever at the mercy food resources and weather, and we found many young dead at the entrance of their burrows throughout the colony. It is in a changing and humid environment with 60 km/h wind gusts that we worked all summer, so that we could, for the first time, show where these four alcids forage during their breeding season at the Gannet Islands. I leave the islands with data for my master's project and my head charged with ideas and ambition, inspired by the birds and this marvelous ecosystem.

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FRANÇAIS— *Gannet Islands, Labrador : un été de terrain dans l'histoire*

La traversée est rude, on ne peut pas apercevoir les îles car la mer est plongée dans le brouillard. Le matin est pluvieux, nous sommes partis à quatre heures de Goose Bay. L'exaltation, ou si ce n'est les vagues, nous tient bien éveillés et prêts à découvrir un coin où jamais nous ne sommes allés, mais où l'histoire nous transporte déjà. C'est en 1981 que Tim Birkhead, chargé par David Nettleship, entreprend l'établissement d'un camp de recherche scientifique sur les îles Gannet, situées 50 km au large de Cartwright au Labrador. Ce groupe de sept îles, dont cinq sont rapprochées en un groupe que l'on appelle Gannet cluster, est l'habitat de choix de milliers d'oiseaux marins qui s'y reproduisent à chaque année, profitant de la richesse des eaux de l'océan Atlantique traversées par le courant du Labrador. Les

espèces les plus abondantes sont les guillemots marmettes, les macareux moines, les guillemots de Brünnich et les petits pingouins qui constituent ici la plus grande colonie de leur espèce en Amérique du Nord avec 10 000 paires. Bien que ces alcidés soient les plus abondant, d'autres espèces telles que les mouettes tridactyles, les guillemots à miroirs, les goélands marins et argentés ainsi que quelques océanités cul-blanc et fulmars boréals trouvent ici aussi un site de choix pour leur nidification.

Sunset on the Gannet cluster / Couché de soleil et macareux. Photo by/par Isabeau Pratte.

En 1981, la vie est rude sur le groupe d'îles soumis à un climat maritime très humide. Ainsi en 1982, un camp permanent est construit, le même encore utilisé aujourd'hui et dont quelques rénovations aideraient à limiter les infiltrations lorsque la pluie s'abat sur l'archipel. À l'époque, Birkhead oriente ses recherches sur les guillemots qui le fascinent par leur comportement très social qu'implique la vie en colonie si dense. La cohabitation des deux espèces de guillemots soulève beaucoup de questions. Bien qu'habitant les mêmes îles, leur choix de sites de nidification est très différent, les guillemots de Brünnich nichant sur des parois plus étroites que les guillemots marmettes (Birkhead et Nettleship 1987a). Un des intérêts de cette colonie est d'y trouver, coexistant, quatre espèces d'oiseaux marins très proches évolutivement. Pourtant, il est clair que pour qu'il y ait coexistence, des mécanismes dans la sélection des ressources doivent pouvoir limiter la compétition possible. Ainsi Birkhead, en étudiant le régime alimentaire des jeunes au nid, donc des proies ramenées par les adultes, montrera que chacun des alcidés présents sur les îles préfère un type de proie bien spécifique (Birkhead et Nettleship 1987b). Tim Birkhead fût le pionnier, et toujours une légende, de la science menée aux îles Gannet. Cependant, en 1985, on cesse de venir aux îles. Birkhead y retourne en 1992, mais une mauvaise surprise l'attend. Des familles de renards arctiques s'y sont établi après avoir voyagé sur les glaces printanières, et ravagent tranquillement mais surement la colonie. Le succès cette année-là est catastrophique (Birkhead et Nettleship 1995). Les oiseaux marins ont évolué un comportement qui les mène à choisir des sites de nidification loin de la terre ferme, sur des îles isolées ayant comme avantage de les rapprocher de leur source alimentaire et de les protéger des prédateurs terrestres. Ils sont donc très vulnérables à la prédation, en particulier de leurs œufs et de leurs jeunes, lorsqu'un renard ou encore un ours polaire ou des rats se retrouvent de façon aléatoire et parfois permanente sur leur île. Il est vrai par contre que certaines espèces qui nichent en falaises escarpées réduisent ces risques de prédation dû à la combinaison île et falaise qui accentue l'inaccessibilité de leur nid. Hors, aux îles Gannet, qui sont plutôt rondes, les nids sont accessibles. Suite à l'épopée Birkhead la recherche s'est faite de façon discontinue aux îles, et cet été, j'y retourne afin de comparer la niche alimentaire et l'habitat utilisé en mer par les quatre espèces mentionnées.

Thick-billed Murres and chicks / Guillemot de Brünnich et leurs jeunes. Photo by/par Isabeau Pratte.

C'est dans une petite anse de gravier que nous amarrons sous l'oeil curieux des macareux qui se prélassent devant leur terrier. Le ciel est comme étoilé par tous les oiseaux qui se sont levés à notre approche. De voir ces quatres espèces les une à côté des autres est incroyable. Tranquillement nous explorons l'île surpris au détour d'une crevasse par le cri rouillé d'un petit pingouin, ou celui grave d'un macareux qui nous survole pas certain d'atterrir, car nous sommes tout près de son terrier. Le soir, sur la colline qui surplombe la cabine, les macareux envahissent. Ce sont des immatures qui prospectent pour de futurs bons sites et se font valoir, leur bec en apparat contre leur poitrine, lors d'une petite marche rapide vers l'un de leur congénère. Et la nuit, quand les océanites nous empêchent de dormir, on ne fait que sourire à l'écoute de leurs cris des plus intriguant. Quand enfin la mer décide de coopérer on s'aventure sur GC2, là où les guillemots nichent. Après l'accostage sur les roches escarpées, nous découvrons sur les hauteurs, entourée par les terriers de macareux, la petite cabine de Birkhead, celle qu'il avait établie afin de toujours être près de ses guillemots, déjouant ainsi les caprices de l'océan qui auraient empêché le bien tenu de ses observations. Toujours debout, la cabine aura servit aussi à d'autres équipes de recherche à la fin des années 1990 et 2000

(Bryant et al. 1999; Hipfner 2000; MacFarlane Tranquilla et al. 2013). Les souris sylvestres l'ont prise d'assaut maintenant, et c'est un grand nettoyage que nous y feront. La préservation de ce patrimoine de la biologie de terrain est incontournable.

Les guillemots sont là, sur leurs œufs, et malgré une saison un peu tardive, ce sont de beaux jeunes prêts à l'envol, ou plutôt au saut vers l'inconnu océan, que nous quitterons à la fin août. Le succès des macareux semble plutôt médiocre cette année; les oiseaux toujours à la mercie des conditions météo et de nourriture, nous trouverons beaucoup de jeunes morts à l'entrée des terriers dans la colonie. C'est dans une météo changeante et humide sans compter les vents de 60 km/h que nous travaillerons tout l'été afin de montrer pour la première fois où ces quatre espèces s'alimentent durant leur saison de reproduction aux îles Gannet. C'est avec des données de maîtrise et la tête remplie d'ambition et d'idées que je pars des îles, déjà pressée d'y revenir, inspirée par les oiseaux et cet écosystème.

Guidelines to minimize disturbance of colonial-breeding waterbirds during research activities

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Colonial-breeding waterbirds (e.g. gulls, terns, alcids, storm-petrels, gannets, pelicans, cormorants, herons and egrets) are species that usually congregate in dense colonies during the breeding season and feed primarily in aquatic environments (USFWS 2002). They are most accessible to researchers when they are nesting on land in large aggregations. During this period, colonial waterbirds can be vulnerable to disturbance resulting from research activities conducted in breeding colonies (Carney and Sydeman 1999). When proposing or designing research projects that involve working with waterbirds, researchers should be mindful of potential impacts of their activities, and aware that working in a colony will cause some level of disturbance and may cause mortality and loss of productivity. Researchers should carefully evaluate the need to enter the colony, and if deemed necessary, and ensure that the value of the scientific data collected will outweigh the potential effects of investigator disturbance (Carey 2009; Carney and Sydeman 1999). The purpose of this article is to provide guidance to researchers working with colonial waterbirds to minimize negative impacts of research activities.

Common Tern. Photo by Amelia MacDonald.

Breeding colonies can be very dense and are commonly comprised of a variety of different nesting species that may differ in breeding phenologies or level of tolerance to investigator disturbance. In addition to disturbance of target species, research activities can impact nearby birds, so sensitivity to disturbance of both target and non-target species must be considered when planning to enter a colony. Physiological stress responses to both target and co-nesting species, due to researcher presence, may not be visible, but may have negative impacts, such as elevated heart rate increasing energy expenditure (Carey 2009).

Disturbance may also affect recruitment by prospecting birds (Carey 2009), resulting in demographic consequences for the population that are not obvious from survival statistics of banded individuals. While it is important to minimize risk and stress to captured individuals, researchers should also consider indirect potential consequences for the local population. Disturbance may lead to temporary desertion of the nest, reducing hatching success through environmental exposure (cold or heat) or allowing predators the opportunity to access eggs and nestlings. Nest visits can alert predators to the presence of nests (Hein and Hein 1996), so the number of visits should be minimized. Mixed colonies where multiple species of waterbirds are breeding can also present challenges. Gulls may opportunistically depredate other birds' eggs or chicks when those birds are flushed off their nests (Nisbet 2000).

Some burrow and crevice-nesting species may desert their nest after handling (Cairns 1980; Gaston et al. 1988). For species being banded where the tendency to desert after handling is unknown, researchers should carry out trials designed to estimate desertion tendency, before embarking on large-scale banding operations. Desertion tendency generally declines as incubation proceeds and is generally lower during chick-rearing than during incubation (Cairns 1980). However, for some species (e.g., gulls and terns), probability of investigator disturbance causing nestling dispersal from natal territories and reducing nestling survival increases as nestlings become older and more mobile (Brown and Morris 1994), so banding should occur no later than early brooding and preferably during late incubation (D. Moore, pers. comm.). Researchers should identify critical phases of the nesting cycle for specific species of interest and time activities to minimize adverse effects of disturbance. These suggestions apply also to the attachment of devices and to procedures such as blood sampling—any activity where capture and handling is required.

In general, it is recommended that researchers take precautions in all activities that disturb colonial breeding waterbirds. Investigators should avoid assuming that disturbance due to research activities is benign or deleterious. When possible, it is advisable to conduct pilot studies that test for disturbance effects, which can vary significantly among species and individual colonies (Kelly et al. 2015) and to consult appropriate literature. Researchers should also develop mitigation measures that minimize negative effects while still allowing them to collect the data required to answer research questions. As a rule of thumb, it is considered that a combined injury and mortality rate of >0.5% resulting from capture and banding activities should require re-evaluation and revision of procedures (McCracken et al. 1999). It is also good practice to continually monitor and evaluate the broader effects of all research activities, and, if necessary, to adjust methods.

General guidelines for working in a breeding waterbird colony:

1. Wear dull coloured clothing.
2. Work a small section of the colony at a time and limit time spent in the colony. Stay quiet and move slowly and keep together. If tasks take a significant amount of time, alternate time spent in the colony with time spent hidden or outside the colony. Based on factors such as species, colony size, and habitat, determine an acceptable length of time to work in the colony and respect that time limit.
3. Work the outside of the colony before disturbing the central birds.
4. Approach nests tangentially rather than directly when possible (Burger and Gochfeld 1981).
5. Work up slope rather than down. Proceeding in this way allows larger chicks to move to a place of safety rather than vulnerability (Redfern and Clark 2001).
6. Avoid forcing chicks to move too far from their natal territories—they can be killed by conspecifics or other species when trying to return after researchers have left the area.
7. Nest protectors (e.g. mesh cages) can be placed over unattended nests during work in the colony and then removed when leaving the colony.
8. It may be prudent for one researcher to act as a sentinel while in the colony to deter predators that may attempt to take eggs or chicks from unattended nests. This person could also recommend when to depart the colony based on levels of predation attempts or chick movement (C. Pekarik, pers. comm.).
9. Monitor the effect of research activities on creches, if present, to ensure that disturbance does not lead to trampling and associated injury or mortality of chicks.
10. Minimize the number of times nests are visited. If marking nests, flags should not impede parental access or attract predators. If necessary, use natural, inconspicuous markers (Hein and Hein 1996).
11. Minimize the number of times a bird is handled and minimize handling time (Carey 2009).
12. Do not handle birds in inclement weather—rain, fog, wind, extreme heat or cold. Avoid entering the colony under these conditions whenever possible.
13. Wherever possible, use remote monitoring systems (i.e. burrow-scopes), scopes or remote sensing devices to avoid entering the colony, especially for species prone to nest abandonment when disturbed (Safina and Burger 1983).
14. When possible, use shields such as vegetation or blinds while in the colony (Larson 1995). Banding should occur in a blind, behind a natural shield, or at the periphery of the colony (if use of a shield is impossible).

Acknowledgments

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Double-crested Cormorant. Photo by Kelly Broadway.

Recent Canadian Ornithology Theses

Diana Stralberg. 2016. Projecting boreal bird responses to climate change considering uncertainty, refugia, vegetation lags, and post-glaciation history. Ph.D. Dissertation. University of Alberta, Edmonton, AB.

Often referred to as North America's bird nursery, the boreal forest biome provides a productive environment for breeding birds, supporting high species diversity and bird numbers. These birds are likely to shift their distributions northward in response to rapid climate change over the next century, resulting in population- and community-level changes. To anticipate the pattern and extent of such changes, and to inform climate-change adaptation and conservation planning, species distribution models (SDMs) are often used to describe and map species' climatic niches through time. SDMs provide invaluable insights into climatic suitability patterns and potential distributional responses, but they are most useful when assumptions are acknowledged and the resulting limitations are addressed. Each chapter of my thesis focuses on understanding and addressing one of four major limitations of SDMs: (1) model uncertainty in current and future projections, (2) time lags in ecosystem responses to climate change, (3) the static nature of correlative models, and (4) the influence of historical biogeography in determining current distributions.

In my first chapter, using a continental-scale avian dataset compiled by the Boreal Avian Modelling project, I developed models to project climate-induced changes in the distribution and relative abundance of 80 boreal-breeding passerine species. For such projections to be useful, however, the magnitude of change must be understood relative to the magnitude of uncertainty in model predictions. I found that the mean signal-to-noise ratio across species increased over time to 2.87 by the end of the 21st century, with the signal greater than the noise for 88% of species. I also found that, among sources of uncertainty evaluated, the choice of climate model was most important for 66% of species, sampling error for 29% of species, and variable selection for 5% of species. The range of uncertainty exhibited across species and geographic regions suggests a basis for differential quantitative weightings in assessments of species vulnerability and spatial conservation priorities under climate change.

Boreal forest, Northwest Territories, Canada. Photo by Craig Machtans.

Many species and ecosystems will likely be unable to keep pace with rapid climate change projected for the 21st century, however. In my second chapter, I evaluated an underexplored dimension of the mismatch between climate and biota: limitations to forest growth and succession affecting habitat suitability. I found dramatic reductions in suitable habitat for many species over the next century when vegetation lags were considered. I used these results to identify conservative and efficient boreal conservation priorities anchored around climatic macrorefugia that are robust to century-long climate change and complement the current protected areas network.

Vegetation change may also be delayed in the absence of disturbance catalysts. In the western boreal region, a combined increase in wildfires and human activities may aid these transitions, also resulting in a younger forest. In my third chapter, I developed a hybrid modelling approach based on topo-edaphically constrained projections of climate-driven vegetation change potential, coupled with weather- and fuel-based simulations of future wildfires, and projections of large-scale industrial development activities, to better understand factors influencing decadal-scale upland vegetation change. I simulated scenarios of change in forest composition and structure over the next century, conservatively concluding that at least one-third of Alberta's upland mixedwood and conifer forest is likely to be replaced by deciduous woodland and grassland by 2090. During this timeframe, the rate of increase in fire probability diminished, suggesting a negative feedback process by which a warmer climate and more extensive near-term fires leads to an increase in deciduous forest that in turn, due to its relatively low flammability, leads to a long-term reduction in area burned.

Finally, boreal species' projected range shifts could be impeded by the northwestern cordillera, which spans from boreal Alaska to the rest of the North American boreal region, and may have inhibited the expansion of many species into climatically suitable habitat after the last glacial maximum (LGM). Using paleoclimate simulations for the past 20,000 years, I analyzed the relative importance of migratory and life-history characteristics vs. current and historical climatic suitability on the distributions of North American boreal-breeding species. The high relative importance of climatic suitability within the northwestern cordilleran region suggests a capacity for several species to disperse into Alaska once climatic connectivity is achieved in the future, which is supported by recently recorded signs of breeding activity.

Justine Kummer. 2015. The use of citizen science to identify the factors affecting bird-window collisions at residential houses. M.Sc. Thesis. University of Alberta, Edmonton, AB.

Every year a large number of birds die when they collide with windows. The actual number however is difficult to ascertain. Previous attempts to estimate bird-window collision rates in Canada relied heavily on a citizen science study that used memory-based surveys which may have potential biases. Building upon this study and their recommendations for future research the Birds and Windows citizen science project was designed to have homeowners actively search for collision evidence at their houses and apartments for an extended period. The first objective of the Birds and Windows project was to see how a more standardized approach to citizen science data collection influenced bird-window collision estimates and to see if the same patterns observed by memory-based surveys were observed using different data collection methods. Comparing the results from the Birds and Windows standardized searches and memory-based surveys revealed differences in absolute values of collisions but similar relative rankings between residence types. This suggests that memory-based surveys may be a useful tool for understanding the relative importance of different risk factors causing bird-window collisions.

The second objective from the Birds and Windows project was to determine which types of residences and windows are most problematic in an effort to determine the most effective mitigation strategies to reduce bird-window collisions. The factors that influence bird-window collision rates were categorized based on scale into four levels: neighbourhood type, yard conditions, house attributes, and window types. Variables at the yard level and those factors that increase bird abundance explained more of the variation in bird-window collision rates at residential houses. As few homeowners are likely to take an approach that reduces the number of birds in their yards, focus should instead be given to bird-friendly urban design and developing the most effective window deterrents.

Finally, the effects of bird feeder presence and placement on bird-window collisions at residential homes were determined through a manipulative experiment. During the study there were 1.84 times more collisions when the bird feeder was present. However, there were no collisions at half of the study windows. High variance was observed in the number of collisions at different houses, indicating that effects of bird feeders are context dependent. Changing the occurrence, timing, and placement of feeders can alter collision rates but is only one of many factors that influence whether a residential house is likely to have a bird-window collision or not.

In conclusion, I provide recommendations for conducting future survey-based citizen science projects and outline the next steps for bird-window collision research in working towards stopping avian mortality from collisions with windows. I have thoroughly outlined a number of factors affecting bird-window collisions and the focus of future research should now shift towards reducing the problem and determining the best window deterrent methods. The Birds and Windows project saw a number of successes as a citizen science project and citizen science remains the best method for collecting this large scale data in real-world scenarios and should continue to be used in similar experiments.

Paul J. E. Preston. 2015. The effect of food supplementation on the territorial behaviour of a nocturnal bird: the common poorwill (*Phalaenoptilus nuttallii*). M.Sc. Thesis. University of Regina, Regina, SK.

Common Poorwill. Photo by Dominic Sherony.

Foraging and territory defense are often considered to be mutually exclusive activities in the time budget of animals, indeed it is perceived that there exists an energetic trade-off between time spent foraging and time spent performing territorial behaviours. When animals have more energy available to them, they are able to spend more time performing territorial behaviours. Most studies of this relationship have been on diurnal organisms living in temperate latitudes where the time available for these activities is quite long. In contrast, the focus of my study is on a visual-hunting nocturnal species where the time available is much shorter because of the constraints imposed by ambient light. I examined the influence of food supplementation on the territorial behaviour of the insectivorous Common Poorwill (*Phalaenoptilus nuttallii*; hereafter poorwills). To do this I erected artificial light posts to attract and concentrate insect prey and therefore increase the ease of foraging. I then conducted point count surveys at stations where prey were concentrated and at stations where they were not, and assessed whether poorwills exhibited more vocal territorial behaviour at the stations where the prey was concentrated. My results were mixed, with no influence of the food supplementation seen on calling activity. However the presence or absence of moonlight was very influential and the interaction between moonlight and food supplementation was also significant. There is a negative relationship between the interaction between moonlight and food supplementation and calling rate—meaning when the moon is visible and the light is on, the birds call less. However, when the moon is not visible and the light is on, the birds call more. This pattern leads me to conclude that poorwills are constrained in their use of the light stations by the predation risk associated with it; however, like diurnal birds, they exhibit more territorial behaviour when there are more prey available (i.e., full moons or at artificial light sources).

Snow Geese. Photo by Brigitte Noel.

Canadian Ornithological News

Cats and Birds Initiative Aimed at Reducing Bird Mortality Launched

Canada's bird and cat populations are in trouble and Nature Canada and its partners are calling on Canadians to help keep them safe with the launch of its campaign to keep cats from roaming free.

Canada's birds are in trouble; some species have declined by over 90%. Declines can be attributed to habitat destruction and climate change, and an estimated 270 million birds die each year due to human factors such as collisions with windows and buildings, and hunting by cats. Cats, both pet and feral, cause 75% or approximately 200 million bird deaths a year. We have a responsibility to mitigate loss and protect our birds, as they are a key part of a healthy environment.

We also have a responsibility to keep our cats safe and healthy. The feral cat population is growing rapidly and shelters can't keep pace. In 2011, more than 50,000 cats were euthanized because homes could not be found. In comparison with dogs, twice as many cats are dumped in shelters and less than 5% of cats are returned home. It is a sad statistic that more than 1,300 dead cats were collected on the streets of Toronto in just one year. Outdoor cats are exposed to a variety of threats, including diseases like feline leukemia, parasites, vehicle collisions, malicious humans and fights with wildlife and other cats.

"While cats' independent natures might lead some people to treat them like something between pet and wildlife, we owe them the same level of care we give our dogs," said Eleanor Fast, Executive Director for Nature Canada. "Keeping a cat from roaming freely, while providing adequate stimulation is what they deserve. Therefore, we are challenging cat owners to take Nature Canada's pledge in support of protecting both cats and birds."

This initiative is just the start of a larger awareness campaign that will include a series of graphic novels to be penned and released starting later this year by Margaret Atwood.

"We are honoured to have the support of Margaret Atwood and all of our partners in this important campaign," said Eleanor Fast. She added, "We could not do our work to raise awareness of critical conservation and species issues if it were not for the individuals and organizations who give so generously to Nature Canada year after year."

Keep Cats Safe and Save Bird Lives is a coalition of individuals and organizations concerned about the well-being of cats and birds. It is led by Nature Canada and is supported financially by Fuller Landau, LLP, The Crabtree Foundation, The Walrus, Indigo, Environment Canada, Pets Plus Us and Toronto Life. For more information about this campaign or to see a full list of national, regional and local partners please visit http://www.catsandbirds.ca/who-we-are or http://naturecanada.ca/about/partners/

Recent COSEWIC and SARA Reports on Birds

The proposed federal recovery strategy for Lewis's Woodpecker is under the 60-day comment period until April 17, 2016. To view the report and make comments, access the Species at Risk Public Registry at http://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=2867.

The proposed federal management plans for Great Blue Heron *fannini* subspecies and Short-eared Owl are under the 60-day comment period until April 17, 2016 and April 23, 2016, respectively. To view the reports and make comments, access the Species at Risk Public Registry at http://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=2871 (Great Blue Heron) and http://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=2876 (Short-eared Owl).

Announcements

The Doris Huestis Speirs Award

The Doris Huestis Speirs Award is the most prestigious award given by the SCO-SOC. The award is presented annually to an individual who has made outstanding lifetime contributions in Canadian ornithology. Past awardees include professionals who work at museums, government agencies, private companies and universities, as well as amateur ornithologists and people who have contributed to ornithological infrastructure of Canada.

Doris Huestis Speirs was born on 27 October 1894 in Toronto, Ontario, and passed away in Ajax, Ontario, on 24 October 1989. Doris was highly prominent in art, literary, and ornithological circles. She founded the Margaret Morse Nice Ornithological Club, which was the only such group specifically for women, and she was also a founding member of the Pickering Naturalists' Club. In her lifetime, Doris made several prominent contributions to the ornithological literature on Evening Grosbeaks and Lincoln's Sparrows (the latter with her husband, J. Murray Speirs).

Process: Nominations should clearly articulate the nominee's cumulative, significant contributions to ornithology in Canada. Nomination packages containing attestations from more than one individual about the scope and impact of the nominee's contributions are particularly welcomed. To nominate a candidate for the Speirs award, preferably with supporting detailed information, contact the Chair of the award committee:

Bob Clark
Wildlife Research Division
Environment Canada
Saskatoon, SK S7N0X4
Tel: 306-975-4110
email: bob.clark@canada.ca

Deadline for receipt of nominations is 15 April 2016

The Speirs award selection committee (2015-2016) is composed of Bob Clark (Chair), Mark Brigham (Univ. Regina), Nicky Koper (Univ. Manitoba) and Ken Otter (UNBC).

Election Ballot for SCO-SOC Council

Although all positions for SCO-SOC Council will be won by acclamation this year, please submit your ballot paper to Ken Otter by **April 15, 2016** to indicate your approval of candidates. The election ballot is located at the end of this issue.

Long Point Bird Observatory Seeking Participants for Young Ornithologist Workshop

The Long Point Bird Observatory is looking for keen teen birders to apply for the 2016 Young Ornithologist Workshop to be held from August 6 to 14, 2016. Six young ornithologists between the ages of 13-17 will be selected to attend, and will receive the Doug Tarry Bird Study Award to cover all on-site expenses. Participants will receive hands-on training in field ornithology including bird banding, monitoring, field identification, birding trips, preparing museum specimens, and guest lectures. Applications are due April 30, 2016. For more information or to apply, visit www.birdscanada.org/lpbo or contact lpbo@birdscanada.org.

New Bird Book Just Released!

The long-awaited book, *Being a Bird in North America, North of Mexico* (BABINA), by conservation biologist Robert Alvo, has been published and is now available for purchase. It is suitable for anyone interested in birds, from new birders to serious ornithologists, and to people of all ages. Visit www.babina.ca to read reviews and to purchase this unique book online.

Information Exchange

Research and Observations on Ontario Birds Wanted

We would like to make it known to all ornithologists and naturalists that *Ontario Birds*, the tri-annual journal of the Ontario Field Ornithologists, is seeking manuscripts for publication that report findings on Ontario's birds. Manuscripts that deal with behavioural observations, banding studies, population monitoring including results of undergraduate or graduate ornithological theses on Ontario birds, to name but a few, are all worthy of submission. A special feature of the journal is our ability to include colour photos particularly of the subject species. All manuscripts submitted to *Ontario Birds* are reviewed by its three editors and sent for external review, if necessary. Our review process is not meant to be onerous, but rather is designed to make our papers readable and understandable to our members: all levels of professional and lay ornithologists, as well as birders. To view a recent past issue of *Ontario Birds*, please go to http://www.ofo.ca/site/Library. If you have a manuscript you would like to have considered for *Ontario Birds*, please send it as a Word document (with accompanying Tables, Figures and colour jpeg photos) to one of the editors: Chip Weseloh (Chip.Weseloh@canada.ca), Chris Risley (Chris.Risley@ontario.ca) or Ken Abraham (kenabra@sympatico.ca).

Ornithological Illustrator Available

Great Spotted Woodpeckers. Artwork by Elizabeth Pratt.

For more information and illustrations, please visit elizabethepratt.carbonmade.com.

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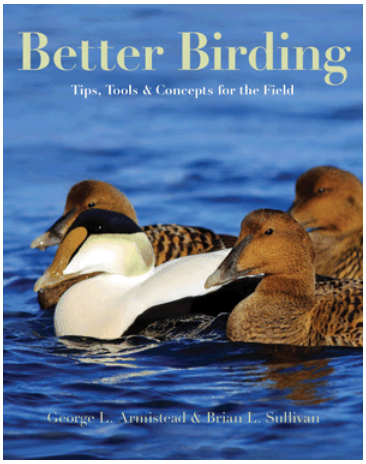
Book Review

Better Birding

By George L. Armistead and Brian L. Sullivan

Published in 2016 by Princeton University Press, Princeton, NJ. 318 pages.



This book is designed to provide practical tips, tools and concepts that will help people develop and improve their bird identification skills. As always, first-time readers should read carefully the introduction of any book. In the well-written introduction, the authors clearly discuss the purpose, how to use and the layout of the book and all the key items that all birders should keep in mind while identifying birds. These bird identification items include distribution, behaviour, bird sounds (including recordings and playbacks) molt and taxonomy. The introduction chapter ends with a short section on "why birding is cool." I agree that birding is cool.

The rest of the book is a series of chapters examining groups of similar looking birds: waterbirds (loons, swans, "mallard" ducks, white herons), coastal birds (eiders, murrelets, Pacific cormorants), seabirds (gannets, boobies, tropical terns, gadflies), large shorebirds (godwits and curlews), skulkers (marsh sparrows and small wrens), forest and edge species (accipiters, American goldfinches), night birds (nighthawks, screech owls) and open country birds (yellow-bellied kingbirds, crows and ravens, pipits, longspurs, cowbirds). I would have liked to have seen chapters on "little brown jobs" (sparrows) and gulls and terns.

Chapters after the introduction all have a similar structure. Each bird chapter begins a list of similar species, a text box containing basic information on age of breeding, breeding strategy and lifespan, a brief introduction describing key features and behaviours of the bird group. The introduction is followed by hints and considerations and identification followed by species accounts. The hints and considerations section is designed to provide brief information on confusing species, general range and distribution, seasonality and identification tricks. The identification section focuses on plumage and molt of the species group. Many of the chapters have additional taxonomic and/or natural history note text boxes containing additional interesting tidbits of information about specific species or species groups. The species accounts focus on the key features that will lead to successful identification in the field. The text is well written, easy to read and free of noticeable errors.

Each chapter is full of excellent colour photographs. I particularly liked the use of labels when appropriate, the use of side-by-side photos with detailed captions and the use of Crossley-style composite photos of labelled birds in flight so one can easily compare similar species, and different genders, ages and molts.

At the end of each chapter there is a brief reference section where readers can find more information on the various bird species and the bird identification topics. I liked that superscript numbers are used to link references with text in each chapter because it helped maintain the nice flow of the text. The book concludes with a handy and easy to use subject index.

I did learn a number of new things about bird identification from the book. Therefore, I recommend this book to anyone looking to improve their birding skills.

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

Do You Have a Book Review You Would Like to Share?

If so, we would love to hear from you! Some recent and upcoming releases in ornithological literature include *One Wild Bird at a Time: Portraits of Individual Lives* by Bernd Heinrich; and *Welcome to Subirdia: Sharing Our Neighborhoods with Wrens, Robins, Woodpeckers, and Other Wildlife* by John M. Marzluff.

SCO – SOC Information

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(Non-voting) Past Presidents:

Ross Lein	1983-1986	Henri Ouellet	1994-1996	Charles Francis	2004-2006
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Erica Dunn	1988-1990	Tony Diamond	1998-2000	David Bird	2008-2010
Jon Barlow	1990-1992	Kathy Martin	2000-2002	Erica Nol	2010-2012
Bruce Falls	1992-1994	Jean-Pierre Savard	2002-2004	Joe Nocera	2013-2014

Membership Information

www.sco-soc.ca/membership.html

SCO-SOC membership forms can be found at the link above. Current membership rates are as follows:

Student	$10.00/year
Regular	$25.00/year ($35.00/year international)
Sustaining	$50.00/year
Life	$500.00

SCO-SOC Website

www.sco-soc.ca/index.html

The SCO-SOC website 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.

To suggest any additions or edits for the website, contact Joe Nocera at joe.nocera@ontario.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 3-4 weeks later. Please send all submissions to Rob Warnock at warnockr@accesscomm.ca.

Disclaimer:

Picoides is not a peer-reviewed journal; the publication of an article in *Picoides* does not imply endorsement by SCO-SOC.

Society of Canadian Ornithologists
Société des ornithologistes du Canada

ELECTION 2016-2018/ÉLECTION 2016-2018
BALLOT/MISES EN CANDIDATURE

Only one candidate agreed to allow his/her name to stand for all available positions. Our By-laws require an affirmation vote by the membership to confirm these persons to their positions. The society wishes to thank all those who are willing to serve in these capacities.

Un(e) seul(e) candidat(e) a accepté d'avoir son nom considéré (e) pour les positions disponibles. Nos règlements exigent un vote d'affirmation par les membres pour confirmer les positions respectives. La société tient à remercier les membres prêts à contribuer au fonctionnement de l'exécutif.

Candidates for Vice-president/President-elect (By-laws require affirmation vote) (Vote for 1):
Candidats à la vice-présidence/Présidence élu(e) (Par règlement, vote a'affirmation requis): (Voter pour 1 personne):

Colleen Barber _____ **Yes/Oui** _____ **No/Non**

Candidate for Treasurer (By-laws require affirmation vote) (Vote for 1):
Candidats pour Trésorier (Par règlement, vote a'affirmation requis) (Voter pour 1 personne):

Junior Tremblay _____ **Yes/Oui** _____ **No/Non**

Candidate for Membership Secretary (By-laws require affirmation vote) (Vote for 1):
Candidats pour Secrétaire aux Membres (Par règlement, vote a'affirmation requis) (Voter pour 1 personne):

Darroch Whitaker _____ **Yes/Oui** _____ **No/Non**

Incumbent candidates (For Term 2, By-laws require re-election) (Vote for 5)
Conseillers/conseillère actuels (Par règlement, réélection requise pour le 2e mandat) (Voter pour 5 personnes):

Kyle Elliot _____ **Yes/Oui** _____ **No/Non**
Barbara Frei _____ **Yes/Oui** _____ **No/Non**
David Green _____ **Yes/Oui** _____ **No/Non**
Laura McKinnon _____ **Yes/Oui** _____ **No/Non**
Dan Mennill _____ **Yes/Oui** _____ **No/Non**

Candidates for council (Vote for 2):
Conseillers (Voter pour 2 personnes):

Jennifer Foote _____ **Yes/Oui** _____ **No/Non**
Marc-André Villard _____ **Yes/Oui** _____ **No/Non**

Please EMAIL or FAX your ballot/vote by 15 April 2016 to:
S.v.p. voter par COURRIEL ou par FAX au plus tard le 15 avril 2016 à :

Ken Otter, ken.otter@unbc.ca, FAX: 250-960-5537
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