



Annual Report for Nova Scotia Habitat Conservation Fund 2019-2020

Prepared by Allison Manthorne

Project Title: *Strengthening Landowner Stewardship of Aerial Insectivores (Year IV)*

Background

Aerial insectivores, particularly the swifts and swallows, are declining more rapidly than any other bird group in Canada¹. Their dependence on human-influenced habitat for foraging and nesting provides a unique opportunity to engage the public as citizen scientists and environmental stewards. Through this project, Birds Canada worked with Nova Scotian landowners to steward nesting and roosting habitat, and expand the network of aerial insectivore stewards and citizen scientists across NS. Additional surveys (comprising landowner interviews and chimney assessments) took place in areas of Nova Scotia with high prevalence of swifts and swallow species (identified using data from SwiftWatch, NestWatch, Breeding Bird Surveys, eBird and the Maritimes Breeding Bird Atlas).

Birds Canada acknowledges the support of the Nova Scotia Habitat Conservation Fund (contributions from hunters and trappers) for supporting this ongoing project.

Project goal

The goal of this project was to address threats to declining aerial insectivores (specifically Chimney Swift, Barn Swallow, Tree Swallow, and Cliff Swallow) by (1) increasing awareness of aerial insectivore threats and habitat requirements among key stakeholder groups; (2) promoting stewardship and restoration of breeding and foraging habitat for these species on private land; and (3) engaging the agricultural community to improve outreach and encourage stewardship practices. We targeted landowners and community members in communities that have the greatest capacity to impact aerial insectivores and their habitats; and aimed to engage agricultural associations/federations which have the potential to reach a broader community and establish longer-term stewardship potential. As landowner outreach on private land is currently conducted by various groups for multiple species at risk

¹ State of Canada's Birds, 2019

in NS, Birds Canada collaborated with these groups to track our respective outreach activities and coordinate the information and resources provided to landowners.

Outline of the work completed and results:

This project addressed threats to the target species' habitats by (1) identifying and characterizing nest and roost sites of swifts and swallows through landowner interviews and property surveys; (2) providing species-specific information, habitat stewardship advice and "bird-friendly property" signage to landowners; and (3) engaging the general public in reporting and monitoring these species.

To monitor regional Chimney Swift population trends, we coordinated a network of SwiftWatch volunteers to participate in National Roost Monitoring surveys (in conjunction with similar monitoring programs across Canada) and held outreach events in communities hosting large roost sites to raise awareness of Chimney Swift biology, threats, population status and ways that Nova Scotians can help protect this species. We also surveyed known nest sites for presence of breeding swifts, and completed risk assessments to identify and rank sites for focused stewardship efforts, as well as chimney assessments to better understand factors influencing habitat selection.

2019-2020 Project activities, objectives, and achievements

Activities	Outcomes	Achievements
<p>Conduct targeted outreach through "Swift Night Out" community events and presentations to local clubs, schools, and town councils in communities with roosts.</p>	<ul style="list-style-type: none"> - Increased public awareness of Chimney Swift biology, threats, and how to help protect them - Increased ability of participants to identify Chimney Swifts and locate nest and roost sites - Broad participation in stewardship and monitoring activities - Increased reporting of Chimney Swifts 	<ul style="list-style-type: none"> -Presented an introduction to Swifts and Swallows to Nova Scotia Bird Society (Halifax, NS) and results of the Bridgetown Artificial Roost Tower project at the NS Species at Risk Practitioners Forum and Atlantic Society of Fish and Wildlife Biologists conference (White Point, NS) -Technician conducting weekly counts at Bridgetown roost provided information to visitors to the new site
<p>Coordinate Chimney Swift nest/roost site searches by volunteers through "Swift Walks" in communities with known roosts.</p>	<ul style="list-style-type: none"> - Volunteers engaged in nest searching - New nest sites identified and material provided to landowners - Long term protection of nest sites - Landowners engaged as citizen scientists and environmental stewards - Fill knowledge gaps related to nest/roost site selection and occupancy 	<ul style="list-style-type: none"> -Birds Canada did not host Swift Walks in 2019; however, volunteers and staff identified and surveyed 7 new properties hosting Chimney Swift nests and swallow colonies -3 new Chimney Swift roosts identified and monitored
<p>Coordinate standardized volunteer-based surveys at known roosting sites following the national monitoring protocol</p>	<ul style="list-style-type: none"> - Fill knowledge gaps related to population dynamics though tracking regional and national trends - Volunteers engaged in conducting citizen science and Chimney Swift conservation - Threats to roost chimneys identified and addressed before sites are damaged or lost 	<ul style="list-style-type: none"> - 55 volunteers submitted 118 roost and nest surveys - 10 of 11 roosts monitored via synchronized roost counts
<p>Promote Reporting of Aerial Insectivores via website through announcements on listservs, social media, newsletters, prior to migration and during migration/breeding; updates on social media; and TV or radio interviews</p>	<ul style="list-style-type: none"> - Increased usage of website to report aerial insectivore sightings and submit monitoring data -Visitors to website learn about threats, how to help monitor and conserve aerial insectivores - Standardized data collection, submission and sharing of results 	<ul style="list-style-type: none"> -5,849 unique page views on Swifts & Swallows website (birdscanada.org/volunteer/ai) between April 1, 2019 and March 31, 2020 -Annual SwiftWatch newsletter (English and French versions) -"New Roost Works" May 13, 2019 (SaltWire Network); "Chimney Swifts Are Returning to a Chimney Near You!" April

		25, 2019 (Birds Canada Blog); 33 project updates via social media channels
Strengthen stewardship relationships and implement stewardship agreements /signage (signs developed in 2017-2018)	<ul style="list-style-type: none"> -Follow up with existing landowners to continue to support best practices -Improved securement of important aerial insectivore nest and roost sties through bird-friendly property signage and non-binding stewardship agreements 	<ul style="list-style-type: none"> -Contacted 64 owners/managers of nest and roost sites to inform them about the species nesting/roosting on their properties, answer questions, provide stewardship advice and resources, and gain more information about site history and usage -Risk assessment surveys completed together with land owners/managers at 13 properties hosting Chimney Swifts -46 properties displaying Swift-friendly/Swallow-friendly Property signs or interpretive panels
Engage Agricultural Community in communicating Aerial Insectivore stewardship and conservation messages	<ul style="list-style-type: none"> -Improved knowledge of aerial insectivores and other farmland birds among key land stewards (agricultural producers and leadership organizations) in Nova Scotia -Integration of current aerial insectivore conservation messaging into industry-led environmental initiatives (Environmental Farm Plan, Agricultural Biodiversity Conservation Farm Plan, BioLOG) and on individual agricultural operations -Win-Win conservation solution helping agricultural producers recognize (and be recognized for) the habitat they provide to farmland birds 	<ul style="list-style-type: none"> -13 farms participating in Swift-Friendly/Swallow-Friendly Property signage project and following BMPs for target species -Participation in Nova Scotia Agro-ecosystems workshop (Wolfville, NS) *Also registered for information booths at Atlantic Dairy Focus and Maritime Beef conferences, which were both cancelled due to Covid-19

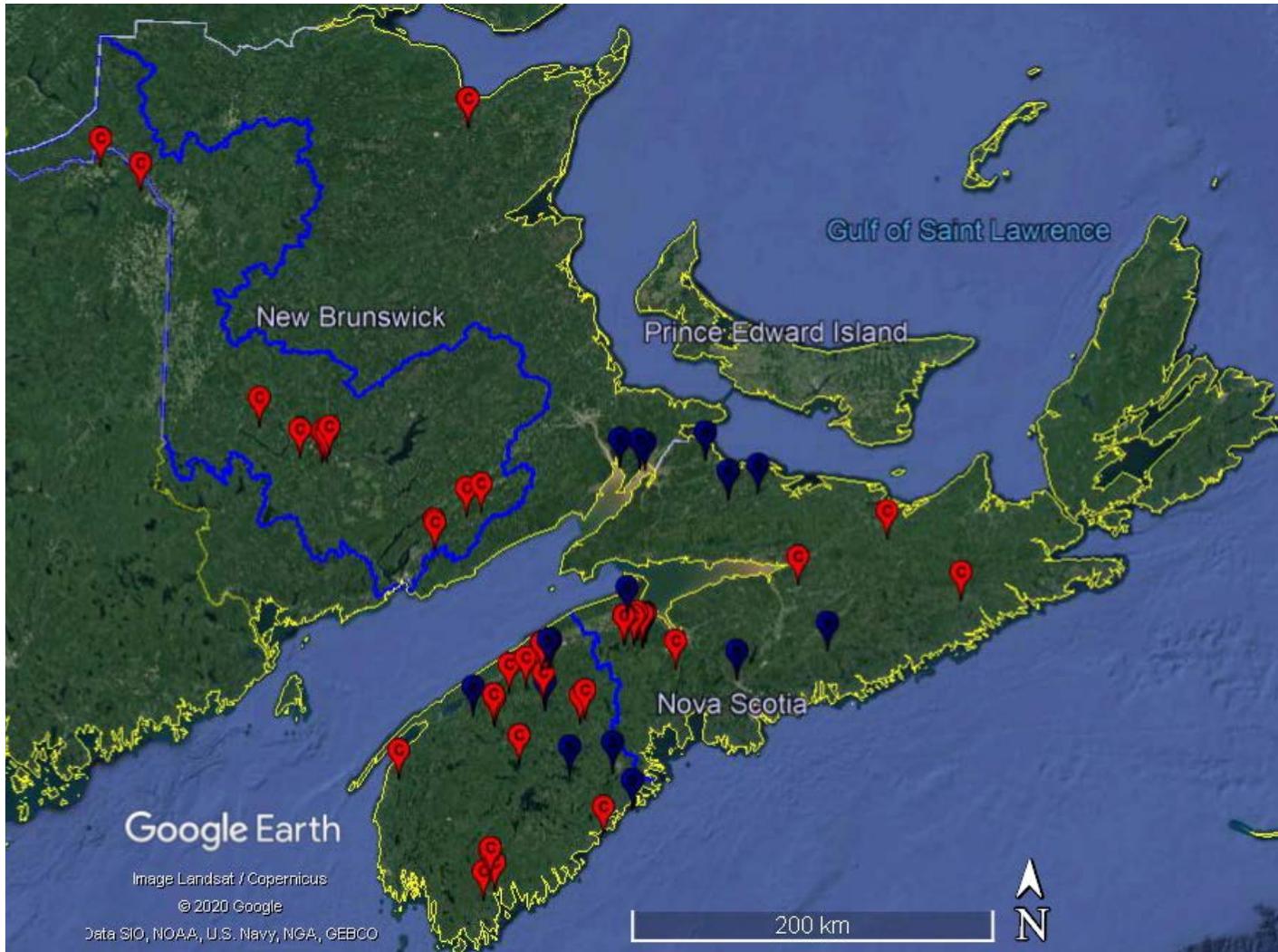


Figure 1. Map of Chimney Swift (red pins) and swallow (blue pins) roost and nest sites in NS. Landowners hosting swifts and swallows were contacted to notify them of the presence of the target species and provided with stewardship advice for their property. Landowners or stewards of known swift and swallow sites were re-contacted to confirm nesting/roosting in 2019/20 and invited to participate in a post-participation survey to assess behaviour change.



MARITIMES SWIFTWATCH

Chimney Swifts are in the Maritimes from May to September.

To keep swifts safe:

- Clean or repair chimney after September or before May
- Close fireplace damper during spring and summer
- Report your Chimney Swift sightings: your observations make a difference!

BIRDSCANADA.ORG/AI
MARSWIFTS@BIRDSCANADA.ORG
(506) 364-5196

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SUIVI DU MARTINET DANS LES MARITIMES

Les Martinets ramoneurs sont présents dans les Maritimes de mai à septembre.

Quelques conseils pour les protéger :

- Effectuez le ramonage et la réparation des cheminées d'octobre à avril
- Fermez les registres de foyers au printemps et en été
- Signalez la présence de Martinets ramoneurs : vos observations contribuent à leur conservation!

OISEAUXCANADA.ORG/AI
MARSWIFTS@BIRDSCANADA.ORG
506-364-5196

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SWALLOW-FRIENDLY PROPERTY

Swallows are in the Maritimes from April to September.

To keep swallows safe:

- Keep barn and shed doors or windows open for swallows from April to September
- Maintain a source of mud for nest-building
- Leave old nests for swallows to reuse next year
- Supply nest boxes or shelves if appropriate



BIRD STUDIES
ÉTUDES D'OISEAUX CANADA

Send us your sightings and observations!

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CETTE PROPRIÉTÉ ABRITE DES HIRONDELLES

Les hirondelles sont présentes dans les Maritimes d'avril à septembre.

Quelques conseils pour les protéger :

- D'avril à septembre, laissez les portes et les fenêtres de votre grange ou de votre remise ouvertes pour les hirondelles
- Conservez une source de boue pour la nidification
- Laissez les nids intacts pour l'année suivante
- Installez des nichoirs aux endroits appropriés



BIRD STUDIES
ÉTUDES D'OISEAUX CANADA

Signalez vos observations!

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Figure 2. Postcard-sized fridge magnets were provided to landowners, event participants and volunteers as a prompt to follow swift- and swallow-friendly property maintenance guidelines and report observations Birds Canada.

SWIFT-FRIENDLY PROPERTY



This property is recognized
for providing important nesting
and roosting habitat for the
Chimney Swift, a rare and
threatened bird.

LEARN MORE AND PARTICIPATE

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CETTE PROPRIÉTÉ ABRITE DES MARTINETS



Cette propriété est un site
important de nidification et de
repos pour le **Martinet ramoneur**,
un oiseau rare et menacé.

POUR EN SAVOIR PLUS ET PARTICIPER :

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SWALLOW FRIENDLY PROPERTY

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This property is recognized for providing important feeding and nesting habitat for **swallows**, a threatened group of birds.

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NOVA SCOTIA HABITAT CONSERVATION FUND

Atlantic Swallow Fund
Fonds en Attente pour la faune de Nouvelle-Écosse

CETTE PROPRIÉTÉ ABRITE DES HIRONDELLES

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ÉTUDES D'OISEAUX CANADA

Cette propriété est un site important de nidification et d'alimentation pour les **hirondelles**, dont plusieurs espèces sont menacées.

POUR EN SAVOIR PLUS ET PARTICIPER :
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Figure 3. Durable aluminium signs measuring 8.5" x 11" were provided to landowners hosting Chimney Swifts and those hosting Barn, Tree and/or Cliff Swallows to install in highly-visible areas to recognize their stewardship contributions and raise awareness of swifts and swallows in their surrounding communities.

Recommendations for follow-up steps to the project

This is an ongoing project for which we have a long-term commitment. We plan on following up this project with continued outreach and stewardship for aerial insectivores, including annual Swiftwatch Roost Counts and support for Chimney Swift hosts; promotion and continued use of our Aerial Insectivore data portal and Project Nestwatch; searching for new Chimney swift nests and better outreach/stewardship for individual nesting chimneys; strengthening our relationships with rural landowners in agricultural areas where swallows occur; and working with agricultural associations to improve the flow of stewardship information to farmers and understanding barriers to conservation for swallows on agricultural lands.