

Maritimes SwiftWatch

VOLUME 9 — 2018-2019 Season

Led by Bird Studies Canada (BSC), Maritimes SwiftWatch is a volunteer-based monitoring and stewardship program designed to bring together biologists, citizen scientists, landowners and communities as stewards for Chimney Swifts and their habitat.

In 2018, 90 volunteers spent 218 hours scanning the skies for swifts, conducting 256 roost surveys, documenting nesting activity at many previously known nest sites, and identifying 16 new nest sites and three roost chimneys (see New Sites Discovered in 2018, p. 2). Maritimes SwiftWatch staff and partners contacted landowners hosting swifts on their properties to provide information about Chimney Swift biology and stewardship.

Chilly spring weather persisted into early June, with a record-breaking frost hitting much of the Maritimes on the fourth of June. Volunteers participating in the National Roost Monitoring Program reported a mixed bag of weather conditions ranging from snow to thunderstorms, and observed disturbance to roosting swifts by hungry raccoons and merlins again this year. More detailed information about Maritimes SwiftWatch roost count results and the National Roost Monitoring results can be found on pages 4-6.

This year SwiftWatch staff and partner organizations held Swift Night Out events in Bathurst and Woodstock, NB; hosted booths at community events in Riverside-Albert, NB and Kentville, NS; and led Swift Walks in Bridgetown and Yarmouth, NS.

As always, a sincere **thank you** is due to the volunteers, partners, and supporters whose contributions make SwiftWatch possible!

-Ally Manthorne, Maritimes SwiftWatch Coordinator

Photographer Simon Paul d'Entremont was in the right place at the right time to document this hungry Chimney Swift pursuing its prey in Bedford, NS.

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www.birdscanada.org/volunteer/ai

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Mark your calendar! The <u>2019</u>roost count dates are:

May 18 (optional) May 22 May 26 May 30 June 3

Additional counts before, between and after the above dates are encouraged!





New Roosts Discovered in 2018

In addition to monitoring the 20 known roost sites in NB and NS, sharp-eyed birders tracked Chimney Swifts to three previously undocumented roost chimneys in Allardville, NB (a roost of 5-10 swifts); Middleton, NS (a roost of 100 swifts); and Bridgetown, NS (over 500 swifts).

In Bridgetown, swifts were first observed funneling into the chimney of the former Bridgetown Regional High School on June 11. At the time, the old school was already in the process of being demolished, as part of a major project to convert the site to a track and field complex. Bird Studies Canada notified the site owner, NS Department of Transportation and Infrastructure Renewal, and as a result the chimney was left standing while swifts occupied the structure throughout the summer months. Dedicated roost monitoring by SwiftWatch volunteers, as well as videos shared by delighted spectators, documented over 500 Chimney Swifts roosting in the chimney in a single night.

Because this site hosted one of the highest congregations of roosting Chimney Swifts in Nova Scotia this season, Bird Studies Canada joined other conservation organizations and concerned citizens in urging preservation of the chimney. However, citing the poor condition of the existing chimney the Department of Transportation and Infrastructure Renewal applied for permits to demolish the roost chimney from Nova Scotia's Department of Lands and Forestry (under the Nova Scotia Endangered Species Act) and Environment and Climate Change Canada (under the Species at Risk Act). The latter permit has been issued, with the condition that a new artificial structure must be constructed to replace the existing roost. Details of this permit are posted on the Species At Risk Registry. Very few artificial chimneys for roosting Chimney Swifts have

been constructed in North America, and successful adoption of the new structure by Chimney Swifts is not guaranteed. However, the artificial roost can provide an opportunity to study influence of characteristics such as internal temperature, humidity, and surface texture on roost habitat selection. Bird Studies Canada continues to be engaged in this discussion, and SwiftWatch volunteers will play an important part by monitoring Chimney Swifts in Bridgetown and surrounding communities in 2019.

- <u>https://www.kingscountynews.ca/living/taking-swift-action-government-volunteers-move-quickly-to-protect-endangered-birds-in-bridgetown-230040/</u>
- <u>https://www.kingscountynews.ca/news/regional/swift-advocates-want-old-bridgetown-school-chimney-preserved-243089/</u>
- YouTube: <u>https://youtu.be/N3OXYCOS2xw</u>



Swifts on Stage: Elapultiek!

Elapultiek by Fire is a play written and performed by shalan joudry, a Mi'kmaw playwright, poet and ecologist, and produced by Ken Schwartz of Two Planks and a Passion Threatre. Set around a



crackling campfire, the performance explores reconciliation, relationships and trust as an indigenous and non-indigenous biologist conduct a nightly Chimney Swift count. As the two observers come to know one another and marvel at the nightly spectacle of roosting swifts, tensions rise as their differing perspectives on land, resources and history come to light.

In 2018 Elapultiek played to sold-out audiences at the Ross Creek Theatre in Canning, NS before touring indigenous communities across NS. In 2019, Elapultiek will be performed weekly at Kejimkujik National Park on Friday evenings from July 5 until September 6 at Jeremy Bay Campground. Visit Kejimkujik National Park's website for details and to book tickets: https://www.pc.gc.ca/en/pn-np/ns/kejimkujik/activ/culture



Some examples of signage recognizing landowner stewards

Swift and Swallow Friendly Properties Recognized

In 2018, 16 additional Chimney Swift nests were reported to SwiftWatch by landowners, volunteers, and partner organizations. We also spent time revisiting known nest sites to check out nesting activity and work with landowners to maintain swift-friendly properties. BSC has "Swift Friendly Property" and "Swallow Friendly Property" signs available in English and French to thank and acknowledge property owners for their integral role in the recovery of Chimney Swift populations. Please contact Maritimes SwiftWatch (marswifts@birdscanada.org or 506-364-5196) if you are a landowner hosting swifts and/or swallows and would like a sign for display, or to nominate a landowner steward in your community.

When new nest sites are found or reported in chimneys,

barns, wells or other structures, we record characteristics of the site such as the size and shape of the chimney or other structure, materials, building type, surrounding habitat, how long the site has been occupied by swifts, and how the site is used by owners. This information is helping us address questions about nest site selection, how to prevent disturbance and harm to nesting Chimney Swifts, and how to help landowners maintain swift-friendly chimneys over time.

We also ask our volunteers and staff to record details about chimney swift sightings including weather conditions, time of day, and Chimney Swift behaviour. This information helps us determine the most efficient methods to find nest sites and confirm nesting activity. Recently, Bird Studies Canada's Ontario SwiftWatch program published results from nest monitoring conducted by SwiftWatchers in several southern Ontario communities. The authors found that surveys to identify Chimney Swift nests are best conducted under clear skies, late in the nesting season, and ideally for at least 60 minutes. Read the paper here: <u>http://www.ace-</u> eco.org/vol14/iss1/art8/ACE-ECO-2019-1339.pdf

Even more Chimney Swift literature can be found here:

- Farquhar, M. L., Morin, A. and Nocera, J. J. 2018. High ambient temperatures induce aggregations of chimney swifts *Chaetura pelagica* inside a roost. Journal of Avian Biology 49: e01754
- le Roux, C., McFarlane Tranquilla, L., and Nocera, J. 2019. Ambient temperature preferences of chimney swifts (*Chaetura pelagica*) for Nest Site Selection. Journal of Thermal Biology 80:89-93



This fantastic property in southwest NS hosted dozens of Barn Swallow nests in 2018, as well as several Cliff Swallow nests.



Swifts By the Numbers -2018

Observers across Canada count Chimney Swifts on the same four nights, synchronizing counts to ensure that we are not double-counting swifts as they migrate through different regions. The number of surveyed roosts has increased from 75 of 97 sites surveyed in 2013, to 116 of 135 sites surveyed in 2018. These numbers represent both an increase in the number of previously unknown roosts identified, and in the numbers of volunteers adopting roosts to monitor and both are positive measures of awareness and stewardship for Chimney Swifts!

In 2018, dedicated volunteers in Manitoba, Ontario, Quebec, New Brunswick and Nova Scotia counted a combined total of 16,197 swifts on June 4, which is the second-highest count after the 17,128 swifts counted across Canada in 2015. The total number of swifts counted on each 2018 count date in each province are displayed in the graph below.

It will take a few more years of data collection to determine how well the National Roost Monitoring protocol is detecting population trends, but the monitoring data is helping to demonstrate the importance of individual roost sites to the owners and managers of these structures as well as the surrounding communities, and underscore the need for protection and long-term stewardship of roost sites across Canada, which serve as vital stopover points for migrating and non-breeding swifts.





Monitoring Swift Numbers in the Maritimes

The National Roost Monitoring program results for each site monitored in 2018 are displayed in the table on the following page. Roost counts at some locations were significantly higher than previous years, while other sites reported a total absence of roosting swifts during some surveys. Maritimes SwiftWatch count records dating back to 2011 were broken at the Temperance Street apartments in New Glasgow (1,207 swifts on May 24), McGowan Lake Hatchery in Caledonia (687 swifts on June 4), Upper Falmouth (393 swifts on May 27), St. Bernard's Catholic Rectory in St. Bernard (329 swifts on June 6), the public library in Truro (207 swifts on May 27), the Robie Tufts Nature Centre in Wolfville (206 swifts on May 27), St. Mary's Parish Church in Mabou (41 swifts on May 23) and a spectacular showing of 2,700 swifts at McLeod Avenue in Fredericton on June 2. Low counts in many communities on May 23 and May 31 reflected region-wide cold, wet weather that kept swifts huddled inside their roosts.

Of note, the average number of swifts per Maritimes roost chimney has steadily increased since surveys began in 2011. This may reflect an increase in discoveries of chimneys hosting large congregations of roosting Chimney Swifts (which are typically more obvious than sites hosting just a handful of swifts), rather than an actual population increase. As Maritimers become more aware of Chimney Swifts and the importance of finding and reporting roost sites, we hope to see increased reports of roost chimneys small and large! That said, in 2018 Nova Scotia and New Brunswick reported an average of 384 swifts per roost and 334 swifts per roost, respectively, which was considerably higher than the national average of 141 swifts per roost. These numbers highlight the importance of every individual roost and the value in maintaining each site for roosting swifts to return to each year.

Sometimes busy schedules prevent us from conducting counts on scheduled count dates. If you know in advance that you may miss a count, **please let us know** so we can help to arrange a 'backup' counter. On the other hand, if you have time to conduct extra watches before, between and after the four count dates (see front page for 2019 dates), we encourage you to continue monitoring your site throughout the season! The more count data that exist for each site, the better we can manage risks and threats for this habitat.



2018 National Roost Monitoring Results for NB and NS

Province	Site	Building Type	17-May	23-May	27-May	31-May	04-Jun
NB	Bathurst	Former post office	397	0	372	235	71
NB	Edmundston	Church	40	86	149	90	39
NB	Fredericton	Commercial	500	5	378	380	1534
NB	Hampton	Former post office	n.a.	0	69	81	115
NB	Plaster Rock	School	286	15	95	123	196
NB	Riverside-Albert	House	n.a.	n.a.	n.a.	n.a.	n.a.
NB	Sainte-Anne-de-Madawaska	Church	12	534	n.a.	54	405
NB	Sainte-Anne-de-Madawaska	School	0	0	0	0	0
NB	Sussex	Apartment	332	250	205	83	308
NB	Woodstock	School	n.a.	n.a.	n.a.	110	n.a.
NS	Bear River	House	37	204	n.a.	n.a.	50
NS	Bear River	House	0	n.a.	n.a.	137	n.a.
NS	Mabou	Church	n.a.	41	n.a.	19	n.a.
NS	McGowan Lake	Former smithy	122	466	296	243	687
NS	Middleton	School	n.a.	n.a.	115	44	243
NS	New Glasgow	Apartment (former school)	4	671	1087	239	851
NS	St. Bernard	Church	168	n.a.	n.a.	202	n.a.
NS	Truro	Library	n.a.	7	207	4	5
NS	Upper Falmouth	House	2	176	393	183	64
NS	Wolfville	Freestanding chimney	95	31	206	110	134
		TOTAL	1995	2486	3572	2337	4702

"n/a" means no count was conducted on this date

