



Maritimes SwiftWatch

VOLUME 6 — 2015 - 2016 Season

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Mark your calendar!
The 2016 roost count dates are:

- May 25
- May 29
- June 2
- June 6

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

Connect with us:

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

In 2015, 65 volunteers scoured the region for swifts, conducted 176 roost watches, confirmed nesting activity at nest sites, and found more than 10 previously unknown nest sites. With this valuable information, Maritimes SwiftWatch staff and partners contacted landowners and managers to ensure they had sufficient information to avoid disturbance and harm to roosting and nesting swifts. Chimney Swift numbers were higher than usual at many roosts this spring, making for some very exciting (and challenging) counts! Take a look at the National Roost Monitoring results on page 7.

We traveled far and wide this year, staging our ever-popular Swift Night Out events in Sussex, NB, Middleton, NS, New Glasgow, NS, and Wolfville, NS and presenting project results to the Atlantic Society of Fish and Wildlife Biologists, the Atlantic Canada Organic Regional Network, the Society of Canadian Ornithologists, and at the Festival of Nature in Sackville, NB.

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

-Allison Manthorne, Maritimes SwiftWatch Coordinator



Photo: Ron d'Entremont

www.birdscanada.org/volunteer/ai



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Composite image showing the rapid and nearly-horizontal exit of an adult from its nest chimney. Photo: James Churchill

Searching for Chimney Swift Nests

James Churchill

In August, 2015, I arrive home from the wilderness to an email that gets my heart racing:

"...when I went upstairs last evening I could hear noises coming from the attic so I went up to investigate. There are definitely birds in the chimney on the west side. I'm not sure if there are other birds that nest in chimneys but perhaps you would like to check this one out in case they are swifts..."

I rush over and Ruth invites me inside. We ascend two flights of stairs to the historic maid's quarters in the attic of Ruth's Wolfville home. Ruth points to a thin, decorated metal plate covering a hole in the chimney that rises through the centre of the room. "The noise was coming from here," she mentions, pointing to the plate. Almost immediately, we are interrupted by the sound of a toy robot - one of those ones you wind up and let clumsily stumble across a table - the archaic sound of begging Chimney Swift nestlings. Within moments, an adult is also chirping from behind the plate.

We collect audio files for documentation, and later review footage from a video camera we had set up in the driveway. The footage captures the fleeting moment of a swift diving into the chimney.

According to long-time Wolfville Chimney Swift expert, Jim Wolford, and Maritimes SwiftWatch Coordinator, Ally Manthorne, Ruth's chimney is Wolfville's first confirmed nesting site in years (if not, let us know!). But how could this be? Wolfville's Robie Tufts Centre has hosted hundreds of roosting Chimney Swifts every year for decades.

Chimney Swifts differ from sasquatch in a few key ways: there are Chimney Swift specimens in the Nova Scotia Museum of Natural History, and there are reputable organizations devoted to their study. On the other hand, both species are very secretive around nest sites. Think about those Chimney Swift spectacles you have observed at large roost sites at dusk... swirling, swooping, chattering birds. Most active nest sites are nothing like that.

Unless you are fortunate enough to hear nestlings inside a chimney, it is clear why so few nesting chimneys are ever discovered. From the ground, evidence that a given chimney is occupied is minimal. Birds cover large areas during the day, following clouds of aerial plankton, across home ranges which encompass many buildings and many chimneys. Rarely is there any precursory chittering and swirling above nesting chimneys before entering. Unlike many songbirds, males do not sing at the periphery of a territory. Entrance and exit movements by adults are silent and direct, and flash by in the time it takes to send a text, or explain to onlookers why you are staring up at the rooftops.



Composite image showing an adult dropping silently into its nesting chimney. Entries are usually rapid and silent. Photo: James Churchill

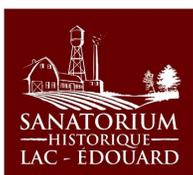
Spurred on by the excitement of Ruth's great find, three volunteers and one video camera carried out about 30 h of chimney watching in the Annapolis Valley, Nova Scotia in late July and early August. Eight more active nesting chimneys were discovered, including four in Wolfville, three in Kentville, and one in Middleton. Four of these were confirmed by fast-forwarding through footage from video cameras set up to record potentially suitable chimneys. One new Kentville site was discovered by my five-year-old daughter reviewing footage: "Daddy, I think I just saw one!!! But it might have just been a leaf..." A biologist friend, upon seeing her footage, replied, "a bit like a sasquatch video. Just saying."

All around us, all summer long, on university campuses, in apartment buildings, hospitals, schools, public libraries, churches and homes, cryptic Chimney Swifts are silently slipping into uncapped chimneys to rest and raise young...and your grainy, sasquatch-style home movies could help discover which ones!

Many thanks to those that allowed us to watch their chimneys. Our approach was to find large, old, protruding, uncapped, unlined chimneys (using Google Street View, or driving by) and then deploy the video camera at one site while visually watching another. Video footage was later watched at 3x speed to check for activity. A single video camera more than tripled our search effort; imagine what a few of these could do! Please contact Ally or me, James Churchill, if interested in helping to search in 2016: jameschurchill@gmail.com.

Artificial Chimney in Quebec Hosts Successful Nest

Simon Parent



Located 1200 feet above sea level at the 47th parallel, the historical roost of Lac-Édouard Sanatorium in Haute Mauricie is at the northern edge of the Chimney Swift's range in Québec. In 2015, Sanatorium Historique Lac-Édouard worked in collaboration with Canadian Wildlife Service stewardship program, Fondation de la Faune du Québec and Regroupement QuébecOiseaux to restore a 130-foot-high industrial chimney that hosts up to 180 Chimney Swifts (of Quebec's estimated population of 2000-2500 swifts). One pair of swifts nests 10 feet from

the bottom of this roost each summer and raised three fledglings in 2015. This historical roost is considered among the most important within the province because of its location at high latitude and its particular forest and lake environment.

My father, Réjean Parent, a talented wood carver, built our first artificial nest in 2014 using plans by Paul and Georgean Kyle (Driftwood Wildlife Association). Although it was temporarily installed, when we were ready to move it onto a concrete base on another location we realized it was hosting a nest with 5 eggs, of which 4 fledglings emerged! Unlike with other designs, this nest succeeded without any supplementary heat source, suggesting that there is great potential for the use of artificial nesting structures here.

Chimney Swift pairs usually return to the same nest year after year and their descendants will often nest close by.



This nest, built inside an unheated wooden artificial chimney, fledged four young in 2015. Photos: Simon Parent

We had this hopeful perspective in mind when the whole family left together for their winter ground on a windy morning of September. By then we had already installed two additional new structures, one of which is a heated structure developed by the Centre de Recherche Industrielle du Québec (CRIQ) that was offered to us by Canadian Wildlife Service, thanks to François Shaffer. The second structure was built using Paul and Georgan's plans and covered with recycled bricks from the old sanatorium, as a memorial to all those who recovered or died here a century ago.

This year we also conducted an inventory of the brick chimneys in the village, which houses just 164 inhabitants in a territory of 1000 km². However, this area is of particular interest because of its proximity to a 70 km² ecological reserve (Judith-de-Brésoles) containing many large, hollow trees, mostly birch and maples. Jean-Marc Fournier, a dedicated volunteer, spent a whole summer compiling a GPS inventory of potential tree nesting sites for Chimney Swift in the area, which will be very useful for further study.

To learn more about Sanatorium Historique Lac-Édouard's current work and future plans for Chimney Swift conservation, research and public education, visit:

<http://fr-ca.facebook.com/sanatoriumhistoriquelacedouard/>

Sanatorium Historique Lac-Édouard is a non-profit organisation with the mission to protect, promote and sustainably develop Lac-Édouard's cultural, natural and agricultural heritage, and to protect the habitat of Chimney Swifts. Thanks to Paul and Georgan Kyle for their personal efforts and involvement in Chimney Swifts protection. You were the first inspiration to all our work in Lac-Édouard.



The Sanatorium's roost chimney before repairs were made. Photo: Simon Parent

Partner Spotlight: Nature NB

Lewnanny Richardson is Nature NB's Species at Risk Program Coordinator. In 2015, Lewnanny coordinated volunteer monitoring of the Bathurst and Paquetville roost sites by local naturalists, and highlighted Chimney Swift monitoring and stewardship opportunities at school presentations, workshops and other community events.

Lewnanny also searched for potential roost and nest chimneys in the Village of St-Isidore, using a GoPro while driving around the village. St-Isidore hosted Chimney Swifts until 2012, when the chimney that the birds were using was capped, so Lewnanny is hopeful that those birds found a replacement chimney nearby. Especially in areas not yet covered by Google StreetView, video cameras can be a useful tool for quickly scouting neighbourhood buildings to identify potentially suitable (i.e. open, uncapped, large diameter) chimneys for spring and summer monitoring.

Plans for 2016 include coordinating a volunteer nest-searching blitz in Bathurst, which hosts up to 600 swifts per night during migration, and checking for nesting activity at the eight artificial nesting towers built a few years ago. If you live in northern New Brunswick and are interested in participating, contact Maritimes Swift-Watch or Nature NB (www.naturenb.ca)

Searching for Swallows and Swifts in Barns

Chimney Swifts belong to a group of birds known as *aerial insectivores*. These birds consume a diet of flying insects caught while in flight, and are admired for their aerial agility, charisma and stamina. Unfortunately, they also share the dubious distinction of being the most at-risk group of birds in Canada, with rapidly declining populations (read [The State of Canada's Birds 2012](#) for more information).

In 2015 Bird Studies Canada launched a new Swallows and Swifts program, including an educational website, online portal for reporting sightings and nests, and digital and print resources to support landowners and managers in becoming good stewards of land and property for aerial insectivores. You can view and download information and forms by visiting the site:

www.birdscandada.org/volunteer/ai

In the Maritimes, we also piloted a “Swallows and Swifts” survey to collect information about Chimney Swifts, Barn, Bank, Cliff and Tree Swallows on private land, as well as to gauge private landowners’ knowledge and attitudes toward this group of birds that are currently a conservation concern. We visited 79 sites around the Chignecto Isthmus of NB and NS and areas to the southeast previously known to have abundant populations of swifts or swallows. We were particularly interested in assessing barns and other structures used for nesting by Barn and Cliff Swallows. The occurrence of Chimney Swifts nesting in barns has been documented in southwestern Nova Scotia, so we wanted to investigate how widespread this phenomenon is, and why swifts are attracted to nest in barns. Unfortunately, despite thorough search efforts that involved a powerful spotlight named *Cyclops-X*, we did not discover Chimney Swift nests in any of the barns surveyed this season.

Our landowner questionnaire revealed that most surveyed landowners were unaware of the conservation issues relating to swallows and swifts. However, the majority of respondents fostered a positive attitude toward swallows and swifts and were generally enthusiastic about participating in their conservation. While over 80% of respondents reported having “no concerns” about swallows or swifts nesting on their properties, approximately half felt that “Chimney Swifts nesting in my chimney would be a fire hazard” (which is not the case). For those who did express concerns about swallows and



Barn Swallows close to fledging from a barn nest. Photo: Christian Artuso

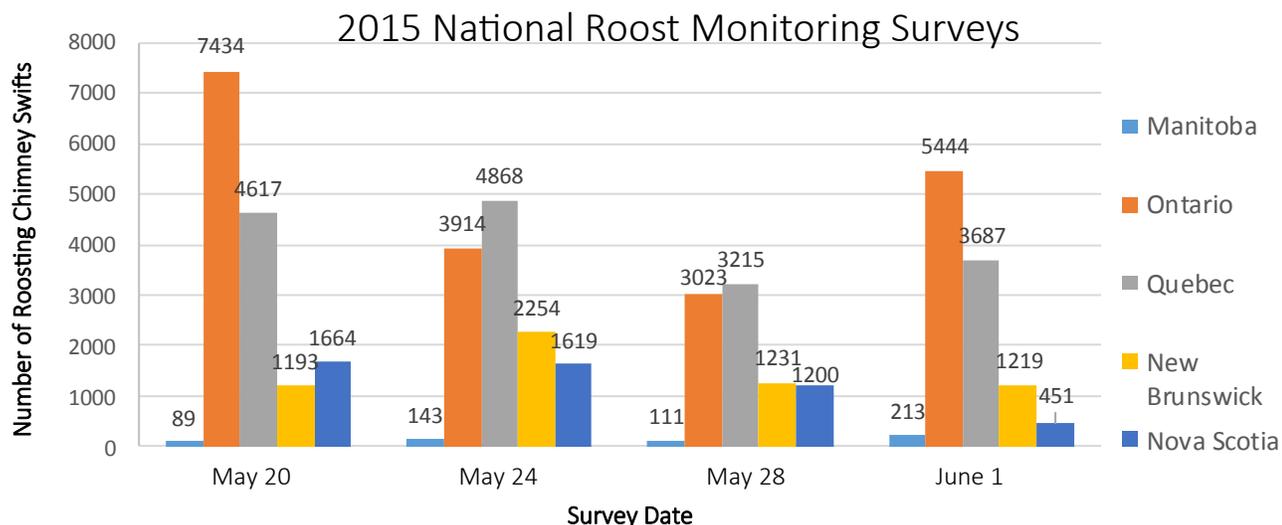
swifts nesting on their property, the primary concern was almost always related to the mess associated with their feces.

Among the many property and habitat characteristics recorded at each site, two stood out as positive for detecting Barn Swallow nests: (1) whether there was a structure on that property that had at least one obvious access point, and (2) whether or not there was a nearby source of mud. Considering that mud is a key component of the nests of certain swallow species, it goes without saying that its absence from the landscape would greatly inhibit nesting activity – even if there was an abundance of otherwise suitable nest sites. It is interesting to note that we also found a positive relationship between the level of human activity in a barn and the probability of detecting a nest. Barns with lots of action were far more likely to harbor Barn Swallow nests than abandoned ones amidst overgrown fields.

So, if there is a take-home message for landowners who wish to encourage swifts and swallows to nest on their properties, it’s to keep your barns opened during the spring and summer and maintain a source of mud, if not already present (for those with animals, gardens or heavy machinery, this is easy!). Also, be sure to check your barns for nesting Chimney Swifts. Look in the darkest, highest corner or peak and use a bright flashlight. Don’t expect to hear or see them enter –they are silent and easy to miss! To report sightings of swifts, swallows and other aerial insectivores, visit www.birdscanada.org/birdmon/ai or contact Maritimes SwiftWatch.



As part of our landowner outreach this year, we provided landowners with instructions and templates to build nest structures for Tree Swallows (above) and Barn Swallows. Photo: Jon Benson



Two Key Roosts Saved in Nova Scotia

We were pleased to receive funding this year from the Environmental Damages Fund to support the restoration of an important roost chimney in Truro. After the historic Normal College building was chosen as the new home of the Colchester-East Hants Public Library, the Town of Truro arranged to have the crumbling chimney repaired specifically for the benefit of its swift inhabitants, who settled right into their newly repaired roost in May. The success of this project is thanks to the naturalists who discovered and continue to monitor this roost, and the Town of Truro staff who carefully followed advice from Bird Studies Canada and Environment and Climate Change Canada biologists when undertaking the repairs.

In New Glasgow, the historic Temperance Street Elementary School building plays host to the largest concentra-

tion of roosting swifts in the province. In 2015 the school was sold by the Town of New Glasgow to a developer to be converted to apartments. One condition of sale was a promise from the buyer to preserve and maintain the chimney for swifts. Happily, Maritimes SwiftWatch has confirmed that the new owner of this building is well aware of its special residents and planning to keep the roost chimney intact. Upwards of 700 swifts will continue to have a safe place to roost, thanks to the dedication and cooperation of local naturalists, municipal leaders, and private landowners!

Swifts By the Numbers –2015

Observers across Canada conduct counts 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 70 sites in 2013 to 110 sites in 2015 as volunteers identify and adopt previously unknown roost sites for monitoring. In 2015, dedicated volunteers provided nearly 100% coverage of known roost sites during the four National Roost Monitoring dates. Nationally, a whopping 14,997 swifts were tallied at 110 roost sites on May 20. 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 data are already proving their use, as illustrated by the success stories above. Monitoring data help 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, which serve as vital stopover points for migrating and non-breeding swifts.



An interpretive panel designed by Bird Studies Canada and the Town of Truro (to be installed at the new library) explains the history of Chimney Swifts in Truro, why they are at risk, and ways to help out.

Tracking Swift Numbers in the Maritimes

Spring of 2015 proved to be an exciting season for SwiftWatchers. Although many sites in northeastern New Brunswick experienced heavy rain during the first count on May 20, Chimney Swift numbers on the whole were much higher than in 2014, producing some thrilling (and challenging) counts. A look back through the data from 2011-2015 shows us that some chimneys are only occasionally occupied by roosting swifts, while others, such as the Oxford chimney, are used as roost and nest sites in some years but only as nest sites in other years. Knowing the history and type of use at each of these sites is very helpful as we work with landowners to ensure the continued protection of roosting and nesting Chimney Swifts.

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 2016 dates), feel free to do so! The more count data that exist for each site, the better!

Province	Site	Building Type	20-May	24-May	28-May	1-Jun
NS	St. Bernard (Weymouth)	Church	84	145	121	154
NS	McGowan Lake	Unused smithy	231	179	128	0
NS	Bear River	House	307	252	275	2
NS	Middleton	School	497	335	327	0
NS	Wolfville	Freestanding chimney	82	n/a	84	40
NS	Upper Falmouth	House	n/a	n/a	n/a	n/a
NS	Truro	New town library	104	153	n/a	n/a
NS	New Glasgow	School	357	528	259	255
NS	Oxford	Freestanding chimney	2	4	0	n/a
NS	Mabou	Church	0	23	6	0
NB	Sainte-Anne-de-Madawaska	Church	0	567	221	207
NB	Sainte-Anne-de-Madawaska	School	0	0	0	0
NB	Bathurst	Former post office	500	600	525	335
NB	Paquetville	Church	0	1	n/a	1
NB	Plaster Rock	School	132	125	121	138
NB	Fredericton	Commercial	n/a	490	80	184
NB	Island View forestry nursery	House (used as office)	0	3	3	2
NB	Sussex	Apartment complex	486	288	130	214
NB	Hampton	Former post office	n/a	100	151	138
NB	Riverside-Albert	House	75	80	n/a	n/a
		TOTAL	2857	3873	2431	1670

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



BIRD STUDIES
ÉTUDES D'OISEAUX **CANADA**

Maritimes SwiftWatch is a multi-partner project led by Bird Studies Canada together with:



Kepukwit's SAR Program

Pictou Co. Naturalist Club



Maritimes SwiftWatch supporters:

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Our project is funded in part by the New Brunswick Wildlife Trust Fund. This Wildlife Trust Fund obtains a portion of its revenue from the purchase of conservation plates by New Brunswick residents who are interested in conservation. Seven dollars (\$7) from each conservation plate purchase goes into that fund annually. These funds are awarded to projects such as ours by the Minister of Natural Resources following review and recommendation by an independent board of 17 volunteers. Revenue from license plates is critical in furthering conservation efforts in our province so please consider purchasing conservation plates with your next car purchase to enable the NB Wildlife Trust Fund to continue to provide financial support for worthy wildlife projects.



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