

# MANITOBA CHIMNEY SWIFT INITIATIVE (MCSI) MONITORING PROTOCOL - 2017

## General Overview

Monitoring Chimney Swifts in Manitoba begins with our support of the National Roost Monitoring Program (NRMP). In 2017, MCSI is adding an extra monitoring night before and after the NRMP designated dates. So, we will be at chimney sides on May 20 (MCSI), May 24, May 28, June 1, June 5, and June 9 (MCSI). However, we welcome monitoring data for other dates during the season!

The following is a description of the Manitoba Chimney Swift Initiative (MCSI) monitoring program and our protocol for observing Chimney Swift (chsw) roost and nest sites. Roost sites are used by Chimney Swifts to rest at night. Nest sites are where a breeding pair makes a twig nest and raises their young.

There are three ways for you to support the MCSI and help us improve our understanding of the Chimney Swift, a Threatened Species (federally listed on Schedule 1 of the Species At Risk Act; provincially listed under the Manitoba Endangered Species Act). You can monitor a known site, report opportunistic sightings, and/or venture into uncharted territories - to identify new, urban sites or to find Chimney Swifts using a natural tree cavity. After you identify Chimney Swift habitat, the MCSI can implement stewardship and outreach programs. *We welcome new participants at any time!*

TO MONITOR, contact the MCSI at [mbchimneyswift@gmail.com](mailto:mbchimneyswift@gmail.com) to have a roost or nest site assigned ( [https://www.mbchimneyswift.com/Documents/2014\\_16\\_database.pdf](https://www.mbchimneyswift.com/Documents/2014_16_database.pdf) ). In addition to organizing volunteers for the MCSI Roost and Nest Site Monitoring Program (May - late August/early Sept.), the MCSI supports the National Roost Monitoring Program (NRMP) (May – early June). For NRMP information, follow the link on our website's Resources page ( [https://www.mbchimneyswift.com/?page\\_id=1165](https://www.mbchimneyswift.com/?page_id=1165) ).

REPORT OPPORTUNISTIC SIGHTINGS. The MCSI tracks reports of Chimney Swifts you see as you go about your daily activities. We welcome details of your opportunistic observations i.e., time, date, location, number of Chimney Swifts observed, behaviour, and weather conditions, even if a datasheet is not filled out. These reports help us to identify new (to us!) areas of occupation and candidate chimneys to monitor.

REPORT NEW SITES. Look for open (uncapped), unlined, rough-interior chimneys which are at least 2.5 X 2.5 bricks wide. If you discover a new site, please **fill out the Chimney Assessment Form** to the best of your ability. This form involves a small

amount of math. Don't worry if you are not able to fill out all columns, such as GPS coordinates. The form is located at:

[https://www.mbchimneyswift.com/Documents/assessment\\_form.pdf](https://www.mbchimneyswift.com/Documents/assessment_form.pdf) ; a WORD document link is available also on the Resource page [https://www.mbchimneyswift.com/?page\\_id=1165](https://www.mbchimneyswift.com/?page_id=1165)

Natural tree cavity use has never been confirmed in Manitoba but it is thought some small populations of Chimney Swifts may reside in old growth forests e.g., near Riding Mountain National Park. Contact the MCSI if you find the elusive swifts!

### **When do we monitor Chimney Swifts?**

MONITOR CHIMNEY SWIFTS IN MANITOBA BETWEEN MID-MAY AND LATE AUGUST/EARLY SEPTEMBER. This will give us the best indications of how migrating birds arrive/depart, distribute themselves between roosts, and how nest activities progress over the summer. Arrival and departure dates vary between-years and is weather related. We greatly appreciate any monitoring as your schedule allows.

ROOSTING HOUR OBSERVATIONS: BEGIN YOUR VIEWING SESSION ½ HOUR BEFORE SUNSET AND CONTINUE MONITORING UNTIL ½ HOUR AFTER SUNSET. If swifts are using the chimney, this is the time they come in to roost, or rest, for the night; the birds leave the site within ½ hour of sunrise the following morning. If the weather is cold or rainy, swifts may enter their chimneys early or just stay inside until the return of nicer weather. We recommend that you monitor on days without prolonged, heavy rain and/or unseasonably cold temperatures (particularly < 13° C).

DAYTIME OBSERVATIONS: TIMES OUTSIDE OF THE ROOSTING HOUR AND OUTSIDE THE PERIOD OF FIRST MORNING DEPARTURES (½ HOUR BEFORE TO ½ HOUR AFTER SUNRISE). Daytime observations help us distinguish between roost sites and nest sites. Chimney Swifts using a site (entries/exits) during the daytime indicate that the chimney is being used as a nest site; activity patterns vary with different stages of nesting. Ideally, daytime monitoring should last for a minimum of 60 minutes.

COMBINED DAYTIME AND ROOSTING HOUR OBSERVATIONS. If volunteers wish, they may combine their daytime and evening monitoring sessions together by starting monitoring 1 hour prior to sunset (= 30 minutes prior to the roosting hour) and continue to ½ hour after sunset. This "robust roosting hour" monitoring session would last 90

minutes. Remember to indicate the time of sunset on your datasheet so we can distinguish daytime vs. roosting hour activity.

If no swifts are observed after several monitoring sessions (assuming at least one of these monitoring sessions takes place after the first week of June) you may choose to be reassigned to a new site in need of monitoring. Don't feel discouraged though - a **Chimney Swift count of zero is still useful data!**

### **Filling Out the Datasheet**

Use the **MCSI Monitoring Report 2017** datasheet for **all** monitoring sessions in Manitoba i.e., for both the "National Roost Monitoring Program (NRMP)" and the "MCSI Roost and Nest Site Monitoring Program".

The datasheet is posted as a WORD document (in the Resources section of the MCSI website – [get new link from Frank](#) ) and as a pdf:

[get new link from Frank](#)

### **DATE**

Write down the date on which your monitoring session takes place.

### **LOCATION**

If you know the address of your site, write it down. If this is unknown, please write down the approximate location of the site. For example, I watched "the building on the west side of Banning St., north of Portage Ave behind Shoppers Drug Mart".

### **MCSI SITE NO.**

Each site is identified with an individual number. The coordinator will give you the site number for each chimney assigned to you. Our database is posted at:

[https://www.mbchimneyswift.com/Documents/2014\\_16\\_database.pdf](https://www.mbchimneyswift.com/Documents/2014_16_database.pdf)

### **TIME OF OBSERVATION = Start/End Times**

Write down the start time and end time of your observations.

### **DURATION OF OBSERVATION**

Write down the total length of time (minutes) which you observed the site for.

### **DAYTIME OR ROOSTING HOUR**

Circle the applicable choice(s). Daytime observations take place any time beyond ½ hour after sunrise until ½ hour before sunset. Roosting hour observations take place

from ½ hour before sunset until ½ hour after sunset (the swifts leave the roost within ½ hour of sunrise the next morning).

### **SUNSET TIME**

Write down the sunset time for the day of observation. Sunset (and sunrise) times can be found online at <http://www.theweathernetwork.com/> or the bottom of Environment Canada forecast pages [http://weather.gc.ca/forecast/canada/index\\_e.html?id=MB](http://weather.gc.ca/forecast/canada/index_e.html?id=MB) , and on the weather page of newspapers.

### **START TEMP.**

Indicate the temperature at the **beginning** of the observation period. You can find this information online at <http://www.theweathernetwork.com/> , [http://weather.gc.ca/forecast/canada/index\\_e.html?id=MB](http://weather.gc.ca/forecast/canada/index_e.html?id=MB) , or use your vehicle's temperature gauge. Temperature is one of the most important factors influencing Chimney Swift activity. Flying insects are not abundant in the air at temperatures less than 13° C which makes feeding difficult for the swifts. We need to learn more about temperature related Chimney Swift behaviour, so please try your best to fill this information in as accurately as possible on the datasheet.

### **Name of Observer(s)**

Write down the names of all observers present.

### **Contact Information**

Write down the email address or phone number of one of the observers present.

### **TIME – ENTRY (↓) OR EXIT (↑) – NO. OF CHSW TIME**

Write down the time when a Chimney Swift(s) enters or exits the chimney (e.g., 8:45), one time per entry or exit event.

### **ENTRY OR EXIT**

If you observe a swift(s) entering the chimney, mark an arrow pointing down (↓). If you see a swift(s) exiting the chimney, mark an arrow pointing up (↑).

### **NO. OF CHSW**

Record the total number of Chimney Swifts which you saw during the entry or exit event.

### **COMMENTS**

If you observe anything that you feel is worth noting while monitoring your site, please enter this in the comments section. Even if you don't observe swifts entering your site, you may notice something that could potentially influence their presence or absence. For example, a Rock Dove (pigeon) walking on a chimney rim may discourage a Chimney Swift entry at the time of your observation.

### **TOTAL ENTRIES**

Count the total number of Chimney Swifts entering into the site.

### **TOTAL EXITS**

Count the total number of Chimney Swifts exiting from the site.

### **MAX. IN CHIMNEY**

The maximum number of Chimney Swifts in the site is determined by the total entries and total exits, adjusted for the sequence of events. Consider two different sequences which both involve 5 entries and 2 exits. For sequence A, which starts with 1 exit followed by 4 entries, 1 exit, and 1 entry, the maximum in the chimney = 4. For sequence B, which starts with 2 entries followed by 2 exits, 1 entry, and 2 entries, the maximum in the chimney = 3. No worries - we can calculate this value for you as long as you provide all the details of "TIME – ENTRY (↓) OR EXIT (↑) – NO. OF CHSW".

### **MAX. SEEN IN THE AIR**

If other swifts are flying near the chimney, *and you have an extra set of "eyes" helping*, do your best to count the swifts and write down the number. This provides an estimate of how many Chimney Swifts are in the area compared to how many are using your site. *It is very important to keep monitoring the chimney rim as the first priority.*

### **Wind (Beaufort Scale; provided on datasheet)**

Use the Beaufort Scale to estimate wind speed at the beginning of your observations.

### **Cloud Cover**

Look up at the sky and estimate the percentage covered by clouds. Use the cloud cover scale at the bottom of the datasheet to indicate the range your estimate falls within.

### **Precipitation**

Indicate the conditions at the start of your monitoring session: None, Occasional, Light Rain, Heavy Rain, Thundershower, or Other (specify).

Make a note if weather conditions change appreciably during your monitoring session.

**You are done! It is time to submit your monitoring data/observations.**

We request that participants submit their data once every two weeks, at least, so that updates can be sent out to all participants throughout the season.

Datasheets may be filled out electronically and emailed to:

[mbchimneyswift@gmail.com](mailto:mbchimneyswift@gmail.com) OR they may be filled out manually and mailed to:

Tim Poole, MCSI Coordinator, Nature Manitoba, 401 - 63 Albert Street, Winnipeg, MB R3B 1G4.

The MCSI website can be found at: <http://www.mbchimneyswift.com>

Questions? Contact [mbchimneyswift@gmail.com](mailto:mbchimneyswift@gmail.com) for monitoring/general inquiries and [mcsi.outreach@gmail.com](mailto:mcsi.outreach@gmail.com) for habitat stewardship/outreach information.

**As our project is built upon the foundation of volunteers, the MCSI Steering Committee thanks you for your generous contribution of time and support!**