

## 2023 Manitoba Chimney-side Monitoring Protocol for MCSI and NRMP Nights

Early spring monitoring tracks the arrival and dispersal of migrating Chimney Swifts (CHSW), records peak counts, and provides the basis for subsequent trend analysis. The Manitoba Chimney Swift Initiative (MCSI) coordinates Manitoba volunteers for our provincial MCSI Roost and Nest Site Monitoring Program as well as the National Roost Monitoring Program (NRMP).

The MCSI-collected data are shared with biologists at the Canadian Wildlife Service - Quebec Region, who collate and analyse the national results.

### WHEN DO WE MONITOR?

This year, MCSI monitoring nights will be held on the same evenings as National Roost Monitoring Program (NRMP) nights (a total of four evenings during a two-week period), with the option to monitor on different dates throughout the spring/summer based on the chimney category as well as the volunteer's availability and desired time commitment (more details below).

Our MCSI/NRMP monitoring nights for 2023 will be on **May 24<sup>th</sup>, May 28<sup>th</sup>, June 1<sup>st</sup>, and June 5<sup>th</sup>**. In case of poor weather, the rain day will be the following day.

During the remainder of the year, volunteers can continue to monitor on a schedule and frequency that works for them. This flexible monitoring can include 'special assignments', such as one-time visits to chimneys that are not frequently monitored to check if swifts are using that chimney for nesting or roosting.

### WHICH CHIMNEYS DO WE MONITOR?

Similar to previous years, our monitoring efforts will focus on three categories of chimneys. This includes 1) chimneys that host larger groups of swifts (part of the NRMP), 2) chimneys that are priority for confirming/reaffirming 'residence' status, and 3) chimneys that are routinely monitored by MCSI volunteers.

#### **1) NRMP sites**

Select chimneys that usually host larger groups of Chimney Swifts (4 or more swifts) are part of the National Roost Monitoring Program (NRMP). These NRMP chimneys only need to be monitored on the four NRMP evenings at the start of the season.

Areas with NRMP chimneys to monitor include:

- Carman
- Selkirk
- Portage la Prairie
- Dauphin
- Winnipeg – Fort Rouge
- Otterburne
- Souris
- La Broquerie
- St Jean Baptiste
- Winnipeg – St James

## **2) Chimneys that are priority for confirming ‘residence’ status**

Sites are confirmed as ‘residences’ when they have hosted Chimney Swifts at least once in the last 3 years. Based on this criterion, we have gone through our database and compiled a list of sites that are high priority for monitoring this year. By confirming use of these chimneys by swifts, the structures can be protected as Chimney Swift habitat into the future. These chimneys can be monitored on NRMP/MCSI nights as well as anytime throughout the spring/summer.

Areas with priority chimneys to monitor include:

- The Pas
- Morden
- Winnipeg – Elmwood
- Winnipeg – Fort Rouge
- Winnipeg – North End
- Winnipeg – River Heights
- Winnipeg – St James
- Winnipeg – West End
- Manitou
- Selkirk
- Winnipeg – City Centre
- Winnipeg – Fort Garry
- Winnipeg – North Kildonan
- Winnipeg – St Boniface
- Winnipeg – St. Vital

## **3) Chimneys routinely monitored by MCSI**

Many chimneys that are typically used as nesting habitat by swifts have been monitored annually by MCSI volunteers. Monitoring these chimneys allows us to maintain the MCSI database and continue to gather data on where, when, and how chimneys are being used by swifts around Manitoba. These chimneys can

be monitored on NRMP/MCSI nights as well as anytime throughout the spring/summer, but are not as high priority to monitor as the chimneys in category 2.

If you are able to monitor in one of these areas, please contact the MCSI Coordinator (Marissa) at [mbchimneyswift@gmail.com](mailto:mbchimneyswift@gmail.com).

**USE THE “MCSI CHIMNEY-SIDE MONITORING REPORT 2023”** datasheet for **ALL** observations made in Manitoba during 2023.

**For ALL nights:** watch the chimneys for 1 hour prior to sunset through to ½ hour after sunset, record the time of every entry or exit event, and note the number of swifts seen during the entry or exit events.

The extended viewing time before sunset informs us how temperature/weather conditions influence the time of roosting. Also, we like to designate active chimneys as roost or nest sites. We distinguish between roost and nest sites on the basis of Chimney Swift behaviour.

**Roost sites** are occupied by Chimney Swifts resting for the night. Typically, only entries occur during the roosting hour = ½ hour before to ½ hour after sunset; the period of first morning departures is ½ hour before to ½ hour after sunrise.

**Nest sites** are used during the daytime (times outside of the roosting hour and the period of first morning departures). Activity patterns vary with different stages of nesting e.g., daytime entries and exits in early June indicate nest building is underway.

#### GENERAL INSTRUCTIONS:

**First and foremost, please follow our ABCD’s of Chimney Swift monitoring during COVID-19:**

**Abide** by current Covid-19 Public Health directives.

**Be aware** of how your presence may impact other people. Do your best to stay off sidewalks to allow for physical distancing and respect the privacy of residents who may be isolating.

Choose the best monitoring approach to engage Chimney Swifts in 2023. Keep your personal safety, and the safety of those around you, at the forefront.

Drive with due diligence. Travel prudently and try to stay in your neighbourhood, if possible.

**Arrival time:** Arrive at your site and be ready to start observations at the appropriate time. Since the counts will be conducted on identical dates for all sites in Canada, it is recommended that you conduct the count even if there is light drizzle or light intermittent rain. However, do not monitor roost sites when electrical storms are in progress. Safety comes first.

**Filming swifts entering the site:** When the number of swifts at a roost is high e.g., ~ 100 individuals, it may be very useful to film the birds entering the chimney with a video camera. Then it is possible to count the swifts by watching the film sequence in slow motion. Total roosting Chimney Swifts = total entries minus total exits, adjusted for the sequence of the events (see details below).

## COMPLETING THE MCSI MONITORING REPORT 2023 DATASHEET

Use the **MCSI Chimney-side Monitoring Report 2023** datasheet for monitoring sessions in Manitoba. The datasheet is posted as a WORD and PDF document (in the Resources and Links section of the MCSI website)

### **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 with MCSI site numbers is posted at: [https://www.mbchimneyswift.com/Documents/2021\\_database.pdf](https://www.mbchimneyswift.com/Documents/2021_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 TEMPERATURE**

Indicate the temperature at the **beginning** of the observation period. You can find this information online at <http://www.theweathernetwork.com/> or [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 activity, 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**

Write down the time when a Chimney Swift(s) enters or exits the chimney (e.g., 8:45 PM), 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 do not 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.

### SUBMITTING YOUR MONITORING REPORTS

We request that participants send their data to the MCSI Monitoring Coordinator in a timely fashion so that updates can be sent out to all participants.

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:  
Marissa Berard, MCSI Coordinator, Nature Manitoba, 401 - 63 Albert Street, Winnipeg, MB R3B 1G4.

If you wish to submit photographs of the site(s) monitored, please specify the name of the photographer, the date the photograph was taken, and the name and address of the site that was photographed.

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

Questions? Don't hesitate to contact us. You can reach us at:  
[mbchimneyswift@gmail.com](mailto:mbchimneyswift@gmail.com)

MCSI is always interested in receiving reports of new Chimney Swift sites and opportunistic observations. Tell us about any Chimney Swifts you see in 2023.

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