SASKATCHEWAN CHIMNEY SWIFT INITIATIVE (SCSI) MONITORING - 2023

General Overview

The following is a description of the new SCSI monitoring program followed by Manitoba Chimney Swift Initiative (MCSI) protocols for observing Chimney Swift (CHSW) roost and nest sites. Roost sites are used by CHSW 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 SCSI and help us improve our understanding of the CHSW, a Threatened Species (federally listed on Schedule 1 of the Species At Risk Act). You can venture into uncharted territories - to identify new, urban sites or to find CHSW using a natural tree cavity, report opportunistic sightings, and eventually monitor a site. After you identify CHSW habitat, the SCSI can implement monitoring and potentially stewardship and outreach programs through Nature Saskatchewan's Stewards of Saskatchewan banner program. *We welcome new participants at any time!*

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.

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 in Manitoba. Contact the SCSI if you find the elusive swifts!

REPORT OPPORTUNISTIC SIGHTINGS. The SCSI will track reports of CHSW 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.

TO MONITOR, contact the SCSI at <u>rmagnus@naturesask.ca</u>. If you have a sighting that you would like to participate in monitoring, the SCSI supports the National Roost Monitoring Program (NRMP) (May –June).

The following is MCSI protocols for monitoring in Manitoba:

When do we monitor CHSW?

MONITOR CHSW 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 heavy rain and/or unseasonably cold temperatures (particularly < 13° C).

DAYTIME OBSERVATIONS: TIMES OUTSIDE OF THE ROOSTING HOUR AND 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. Daytime monitoring should last for a minimum of 60 minutes, or until entries/exits by a CHSW are observed.

COMBINE DAYTIME AND ROOSTING HOUR OBSERVATIONS. If volunteers wish, they may combine their daytime and evening monitoring sessions together by monitoring for 30-45 minutes **prior** to the roosting hour. This "robust roosting hour" would extend from 60-75 minutes before sunset to 30 minutes after sunset. 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 **CHSW count of zero is still useful data!**

Filling Out the Datasheet

Use the **MCSI Monitoring Report 2016** 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" AND for roost sites and nest sites.

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".

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 $\frac{1}{2}$ hour after sunrise until $\frac{1}{2}$ hour before sunset. Roosting hour observations take place from $\frac{1}{2}$ hour before sunset until $\frac{1}{2}$ hour after sunset (the swifts leave the roost within $\frac{1}{2}$ 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 <u>http://www.theweathernetwork.com/</u>.

START TEMP.

Indicate the temperature at the **beginning** of the observation period. You can find this information online at <u>http://www.theweathernetwork.com/</u>, or use your vehicle's temperature gauge. Temperature is one of the most important factors influencing CHSW 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 CHSW behaviour, so please try your best to fill this information in 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 (\downarrow) OR EXIT (\uparrow) – NO. OF CHSW

TIME

Write down the time when a CHSW enters or exits the chimney e.g., 8:45.

ENTRY OR EXIT

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

NO. OF CHSW

Record the total number of CHSW 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 CHSW entries into the site.

TOTAL EXITS

Count the total number of CHSW exits from the site.

MAX. IN CHIMNEY

The maximum number of CHSW 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 (ψ) OR EXIT (\uparrow) – 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 CHSW 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.