

## HOW TO DETECT BREEDING CHIMNEY SWIFTS IN YOUR ATLAS SQUARE

### Chimney Swifts and the Manitoba Breeding Bird Atlas

The Manitoba Breeding Bird Atlas (MB\_BBA) is making a special effort to document all Species At Risk in Manitoba from 2010 – 2014. Your observations of Chimney Swift (Threatened) can have double value in this period, assisting both the MB\_BBA and The Manitoba Chimney Swift Initiative (MCSI). When you observe Chimney Swifts, consider entering your data online at <http://birdatlas.mb.ca/> (you will need to register first and receive an atlas number) as well as submitting to MCSI.

The MB\_BBA uses behavioural codes to indicate possible breeding, probable breeding or confirmed breeding. These codes can be viewed at: <http://birdatlas.mb.ca/mbdata/codes.jsp?lang=en&pg=breeding> (more information available in the *Guide For Atlasers*, downloadable from [http://birdatlas.mb.ca/pdfkit\\_en.jsp](http://birdatlas.mb.ca/pdfkit_en.jsp)).

Some Chimney Swift behaviours that you could report are summarized in the following table:

Behaviour	Description	Dates	Atlas Code
Flying or feeding	Single swift or several birds seen in flight in a given area (not direct line flight over an area) with no apparent association between birds	After May 30 <sup>th</sup> (earlier = possible migrants so care required)	<b>H</b> (Possible breeding)
Chasing	Looser association of 4 – 7 birds in flight, with pairs sometimes breaking off, some chipping calls	After May 16 <sup>th</sup> , possibly earlier	<b>D</b> (Probable breeding)
Trio-flying	3 swifts flying in tight formation (sudden turns in unison); appears to be 2 birds following a leader; often with loud chipping calls	After May 16 <sup>th</sup> , possibly earlier	<b>D</b> (Probable breeding)
V-ing	2 swifts gliding with chipping calls, then rear bird snaps wings into “V”, lead bird may also “V”	After May 16 <sup>th</sup> , possibly earlier	<b>D</b> (Probable breeding)
Site inspection	Feints made toward chimney by 1 or 2 swifts.	After May 30 <sup>th</sup> (earlier = possible migrants so care required)	<b>V</b> (Probable breeding)
Entering or exiting chimney	<2 entries/ exits	After May 21 <sup>st</sup>	<b>V</b> (Probable breeding)
	Multiple entries and exits by 1-2 (occasionally up to four) swifts during one observation period OR	After May 21st	<b>AE</b> (Confirmed breeding)
	1 entry/exit during daytime hours (from half an hour after sunrise to half an hour before sunset) and good weather.	After June 15th	<b>AE</b> (Confirmed breeding)
	Note: Non-breeders form communal roosts during the summer. The entry/exit of >4 birds		

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	should not be considered evidence of breeding unless consisting of parents with fledged young. See section of chimney monitoring for further explanation.		
Fledged young flying	Recently fledged young return to nest chimney for up to 2 weeks post fledging and can sometimes be identified. Note: adults moult in July and are often missing some flight feathers, especially close to the body.	After approx. July 25 <sup>th</sup> until August 4 <sup>th</sup> (note immature birds seen after these dates may be too far from nest site to Atlas with confidence)	<b>FY</b> (Confirmed breeding)
Fall roosting	Bird(s) entering chimney in August	After July 31 <sup>st</sup> try to distinguish migrants from local birds. After August 11 <sup>th</sup> treat as migrants	<i>Do not record migrants for Atlas</i>

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### Monitoring Chimney Swifts

Based partially on an excerpt from *The Chimney Swift Story in London, Ontario* by W. Wake

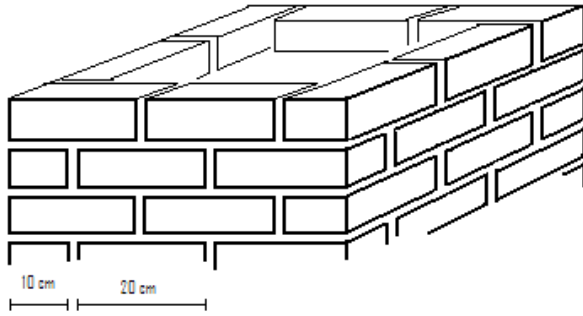
Although the observation of flying chimney swifts can provide an indication of probable breeding, it is usually necessary to monitor their nesting sites (usually chimneys) in order to confirm breeding activity. The following instructions will guide you through this process.

#### Select a Chimney

Begin by identifying what appears to be a good candidate chimney. A chimney suitable for nesting swifts will be brick, stucco, stone or concrete with a minimum interior diameter of 25-30 cm (1 foot) to accommodate the swifts' wingspan. A handy rule of thumb states that, for a chimney to be suitable, a horizontal course of bricks should be a minimum of 2 1/2 bricks wide on each outer side of the chimney shaft (wider, if there is a tile lining inside).

The minimum chimney dimensions required are slightly greater than those of many house chimneys, which are often only two bricks wide. Good candidate chimneys tend to be found on schools, churches, apartment buildings, hospitals, and commercial buildings that were built prior the 1960's. After the 1960's, chimney design and building codes changed resulting in chimneys that were no longer swift-friendly.

A suitable chimney will have no visible spark protector, animal guard or other device covering the top of the chimney opening and no aluminum flue protruding from it. Chimneys with metal linings around the top actually have internal metal caps and are not suitable. Chimneys with a terra cotta tile sticking up from the top may be suitable, however.



Generally speaking, to be large enough to accommodate nesting or roosting swifts, a chimney should be at least 2 1/2 standard bricks wide on each side.

Occasionally, swifts will nest in a chimney whose main shaft is only 2 bricks wide on one side, provided that the second dimension is longer and that the chimney interior is not narrowed by a liner or divided into multiple small flues. A few nest chimneys have a smaller entrance than the minimum diameter specified; in these cases the chimney shaft tends to widen out lower down. There is no maximum diameter. Indeed, swifts appear happy to nest in both small and large chimneys.

### **Monitor the Chimney**

After identifying an appropriate candidate chimney, the next step in verifying chimney swift use is to find a good vantage point on the ground, such that the chimney is silhouetted against the sky. Beginning about 30 minutes before sunset and continuing until about 30 minutes after sunset (sunset times are available at [www.theweathernetwork.com/weather/](http://www.theweathernetwork.com/weather/)), watch carefully to see if any swifts drop into the chimney. Monitoring at this time of day will reveal most, and possibly all, swifts using the chimney, whether a resident nesting pair with or without a helper bird or two, other non-breeding adults using the site as a night-time roost, or both. Unless the site is determined to be a communal roost with more than four birds entering for the night, **such an observation, made after May 21st within the 1-hour period bracketing sunset, would constitute a V: *Bird visiting a probable nest site in suitable nesting habitat during the species' breeding season.***

At earlier stages of the nesting cycle, swifts can be very secretive around their home chimneys. There will be little or no circling overhead, and approaches and entries may be silent, rapid and direct (sometimes even horizontal). It is very easy to miss such an entry. Nesting swifts, though resident for much longer, are probably most readily detected in chimneys from mid-July to early August, when many feeding visits are being made throughout the day and evening (though a check then will miss swifts that abandoned early due to nest failure). If there is an active nest in a chimney, swifts may enter and depart a number of times during the day and evening as they build the nest, exchange incubation duties, and feed young. **The observation of multiple entries and exits from one chimney, after May 21<sup>st</sup>, at any time of the day or evening, would constitute an AE: *Adult entering, occupying, or leaving a nest site (visible or not) or whose behavior suggests the presence of an occupied nest.***

The majority of nesting should be underway by mid-June at the latest. Swifts that are neither migrating nor nesting do not normally enter chimneys during the daytime, except to escape from bad weather. **The observation of an entry or exit from a chimney after June 15th during daytime hours (between half an hour after sunrise to half an hour before sunset) and reasonably good weather (not excessively windy or raining) would constitute an AE: *Adult***

***entering, occupying, or leaving a nest site (visible or not) or whose behavior suggests the presence of an occupied nest.***

If in doubt about the breeding status of the swifts using a particular chimney, it is always recommended to monitor the site more than once.

In the off-season, one can sometimes determine that swifts have previously used a chimney. This is done by checking the chimney clean out in the basement and looking for eggshells, feathers, droppings, fallen nests, and nesting material (nests are made exclusively of small sticks - no grass, straw or mud). However, these remains can last for years, so it may be impossible to know when the chimney was last used.

For more information, please visit the Manitoba Chimney Swift Initiative (MCSI) website (<http://www.manitobanature.ca/CHSW.html>) or contact the coordinator. Please also report any chimney swift sightings, and especially observations of swifts entering a potential nesting or roosting site to:

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