



HOW TO BE A GOOD CHIMNEY SWIFT LANDLORD

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TIPS FOR HOSTING CHIMNEY SWIFTS: QUICK SUMMARY (details start page 3)

If there are swifts in your chimney, consider yourself not only lucky but honored! You have the rare privilege of hosting a species at risk and seeing its life story unfold right on your own premises. Here are some tips for being a good swift host:

- Clean your chimney every year (best done in early April before swifts return).
- Don't use your furnace or fireplace during the season swifts are present.
- Keep the damper of your fireplace closed during swift season.
- Do not cap the chimney or line it with metal; if considering a conversion to gas, vent elsewhere.
- If a metal lining is installed, cap the chimney to prevent swifts and other wildlife from being trapped inside.
- Make chimney and roof repairs when swifts are out of the country (mid-October to mid-April).
- To keep nuisance animals out of the chimney, trim back overhanging foliage and securely wrap a 60-cm-wide band of metal flashing around the outside of the chimney near the top.
- If pruning trees, leave some dead branches with fine twigs at the tips for swifts to use as nesting material.
- If you are bothered by food-begging calls in the two weeks before young swifts leave the chimney, stuff foam rubber (not fiberglass insulation) above the damper in your fireplace; be sure to remove it later.
- Welcome swifts to your chimney – they eat huge numbers of flying insects, make minimal mess, do no structural damage to the chimney, and pose no fire or health hazard.
- If swifts are occupying your chimney, please send details of location, dates, numbers, etc. to organizations studying swifts and working to conserve them. In London contact chimneyswift@naturelondon.com. Elsewhere in Ontario contact OntarioSwiftWatch@birdscanada.org.

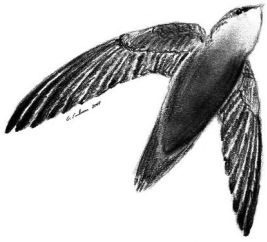
Read on to learn more about swifts, how to determine whether they are using your chimney and for additional ideas on how to be the best swift host ever, or how to be a good swift friend (if your chimney has no swifts).

Amazing Facts about Chimney Swifts

- Among fastest flyers in the bird world (100 km per hour or more).
- Spend far more time in the air than other land-based birds.
- Have amazing maneuverability, and can change directions on a dime.
- Large eyes focus quickly at high speeds and when suddenly entering dark spaces.
- Can echolocate (though bats are much better at this).
- Dine exclusively on flying insects, eating one-third of body weight per day.
- Despite small size (ca 21 g), can fly up to 800 km per day while hunting insects.
- Forage at great heights – above buildings and treetops – 20 m to 1000 m or more.
- Capture more than 1000 flying insects a day (up to 12,000 when feeding young).
- When not in air, cling woodpecker-like to vertical surfaces, usually inside chimneys.
- Unable to walk or perch horizontally, as feet not designed for such activities.
- Nest inside dimly lit spaces (once hollow trees, now chimneys, rarely old barns).
- Use saliva to glue tiny twig nests together and to inner chimney wall.
- Eggs are pure white; at hatching, the 4 or 5 nestlings are size of jellybeans.
- Ten-day-old nestlings resemble prickly porcupines; eyes open at 14 days.
- Last North American bird to have wintering grounds found (upper Amazon, 1944).
- While migrating, 100s or 1000s roost together at night in large unused chimneys.
- Annually flies more than 10,000 km on round trip to South America and back.
- One swift can fly 2 million km in a year.
- Can live up to 14 years in the wild, but life span for most is about 4 years.



Introducing Chimney Swifts



Chimney Swifts are small sooty-grey birds that spend their days on the wing capturing flying insects. Watch high overhead for cigar-shaped bodies; long, rapidly beating wings; short, stubby tails; and exuberant twittering.

Chimney Swift vocalizations are distinctive and easy to recognize. Check them out here: https://www.allaboutbirds.org/guide/Chimney_Swift/sounds. Under “Calls”, press play button.

The earliest swifts arrive in Ontario in late April and the last ones depart for South America in early October. During migration, swifts gather to spend nights together inside old chimneys. In London, spring migration peaks in late May / early June, and fall migration in late August / early September. Non-breeding swifts continue to roost communally throughout the nesting season. Chimneys used for roosting usually have larger diameters than chimneys used for nesting only.

While nesting, only one pair of swifts occupies a chimney at a time, though sometimes one or two helper birds may also be present. Nests are placed at least 2 m down inside the chimney shaft but are often much lower (below roof level). Swifts occasionally nest in silos or high up inside old wooden barns. Rarely, they may use large-diameter hollow trees. A nesting pair may occupy a chimney at the same time it is being used by roosting swifts. If so, the nest is usually placed lower down in the chimney than the area used by the swifts roosting there overnight, and the nesting birds often enter earlier for the night.

Upon return in the spring, a pair soon reoccupies the chimney it used the previous year. Here is a very rough approximation of the nesting-season schedule:

| | |
|--|---------------|
| ◇ nest construction | 1 week |
| ◇ egg-laying | 1 week |
| ◇ incubation | 3 weeks |
| ◇ nestling period | 3 weeks |
| ◇ youngsters outside nest but inside chimney | 1 week |
| ◇ outside flight practice | <u>1 week</u> |
| for a total of about 10 weeks. | |



Depending on how early in the season a pair of swifts begins the nesting cycle, the family may leave its nest chimney as early as mid-July or as late as mid-to-late August. If a nest fails, adults may abandon the chimney. If the failure happens early enough in the season, the parents may make a second nesting attempt.

The Chimney Swift was once a very common species in both urban and agricultural landscapes of southwestern Ontario. Numbers began to decline after World War II. By the 1980s the population was much diminished in rural areas and steadily shrinking in urban centres. In 2009, with the Canadian swift population having dropped by 90% since 1970, the Chimney Swift was designated as Threatened, a status confirmed in 2018.

Among reasons cited for swift declines are loss of suitable chimneys and old-growth trees, deteriorating quantity and quality of the food supply, increase in extreme weather events, and hazards encountered during migration and while wintering in South America. In Ontario, old brick chimneys are in steady decline, and swifts are rarely encountered in the rural landscapes where they were once widespread. Urban renewal, habitat loss, and industrial agriculture (e.g., land clearance, drainage, monocultures, chemical pesticides) have implications for the availability of nesting and communal roosting sites and for the swifts' food supply – airborne insects.

Chimneys suitable for swifts have not been built since the 1960s and many existing swift-occupied chimneys are being capped or demolished. Of a sample of 180 London chimneys known to be used by swifts since 2004, by 2020 only 120 remained available. In the past number of years attempts have been underway to develop “artificial chimneys” suitable for swifts in Ontario. Unfortunately, these cost many tens of thousands of dollars to build, and swifts have generally been reluctant to adopt them. Although a shortage of chimneys for swifts seems not to be a limiting factor for London swifts at present, it is expected to become so in the future.

Little more than half a century ago, the Chimney Swift was a common sight above Ontario cities and farms. As swifts darted about snatching insects from the air, their aerial acrobatics and pleasant chatterings brightened summer days and evenings for people on the ground below. Today, as swift numbers dwindle, very few Ontarians are lucky enough to have a pair of these remarkable little birds in their chimney.

If you have the good fortune to host swifts, read on for ideas on how to be the best swift landlord ever. And, if you currently don't have swifts in your chimney, there are suggestions for helping swifts in other ways.

Detailed Tips and Information for Being a Good Swift Landlord

Rarely do private citizens have the opportunity to make a truly personal contribution to the well-being of a species at risk. The owners of chimneys occupied by swifts are among the fortunate few! Here are some suggestions for making the experience as positive as possible for both the chimney owners and the swifts.

See Appendix A (page 7) for advice on determining whether swifts are using your chimney. If they are . . .

- Late Apr to early Oct: keep chimney top open and fireplace damper closed.
- Do not use the fireplace or furnace while swifts are occupying the chimney for the season.
- Hire only an ethical chimney cleaner who is able to recognize Chimney Swifts and understands the implications of their status as a protected species.
 - Δ In Ontario and Canada, Chimney Swifts, their nests, young and habitat are protected by law.
 - Δ Some chimney sweeps may say that swifts cause disease and their nests are a fire hazard – untrue.
 - Δ They may mistake swifts for European Starlings or House Sparrows, which have bulky nests.
 - Δ Chimney cleaning and wildlife removal companies may have a vested interest in wanting people to wrongly believe that Chimney Swifts are hazardous because this may result in increased business.
- Have the chimney cleaned annually in late March or early April, after fireplace / furnace season and before swifts return in the spring.
 - Δ Cleaning removes soot and creosote (from burning wood or coal) that could result in chimney fires.
 - Δ Swift nests are less likely to become detached and fall down when glued to clean bricks.
- If the chimney is lined with metal, cap it to prevent birds and other wildlife from becoming trapped inside.
- If you install a spark arrester or a wire screen to prevent access by nuisance wildlife during the winter, ensure it is removed before swifts return in the spring (reinstall in the fall).
- If you are converting an existing heating system or hot water heater to gas, instead of lining the chimney with metal, consider venting the exhaust elsewhere.
 - Δ Or, if the chimney contains two separate flues, only one is needed for venting.
 - Δ The second flue can remain unlined and open topped for continued use by swifts.
- If you are doing roof or chimney repairs, have them done in a season when swifts are not present.
- If you are no longer using your chimney and it is in poor shape (upper parts usually deteriorate first), before deciding to demolish the entire chimney, consider removing the upper part and constructing a new rim around the top, while leaving the shaft open.
 - Δ Swifts are usually happy to continue using a chimney whose height has been lowered a bit.
- If you are concerned that raccoons or squirrels may climb up and enter your chimney, securely wrap a 60-cm band of metal flashing around the upper part of the chimney. Be sure no sharp edges are exposed.
- If you are concerned that squirrels and other mammals may access your chimney from above, keep overhanging foliage from nearby trees trimmed back beyond jumping distance.
- If you think heavy rainfall might cause water running down inside the chimney to dislodge a swift nest, construct a small roof supported by four, thin, 30-cm-tall legs; secure in place above the chimney opening.
- When pruning trees, leave some dead branches in place for a few years, until all fine twigs have fallen off.
 - Δ Swifts break tiny dead twigs from the tips of branches for use in nest construction.
- Food-begging calls of youngsters in the chimney last about two weeks.
 - Δ Keeping the damper firmly closed mutes the sound and prevents swifts accidentally entering your room.
 - Δ And/or, firmly wedge insulation (e.g., foam rubber but not fiberglass) above the fireplace damper.
 - Δ Be sure to remove it after the young have fledged.
- Avoid having excessively noisy parties in the fireplace room when an active nest is in the chimney; otherwise insert insulation (see above).



This young swift is more than 2 weeks old, the stage at which youngsters are most likely to make food-begging calls.

- Keep food garbage and yard waste in secure containers, so as not to attract raccoons, which could prey on swifts inside chimneys or commander chimneys for their own use.
- Remember that swifts create minimal mess in a chimney, they do not negatively impact the physical structure of the chimney, they do not spread disease, and they pose no fire or health hazards.
- Once swifts have used your chimney, they are likely to return. They may take a year or two, so don't be too hasty in making alterations that might make the chimney inaccessible.
- Enjoy swifts! Watch their amazing aerial acrobatics as they swoop about capturing insects and making headlong dives into the chimney.
- Educate others! Invite friends and neighbours to watch your swifts.
- Take pride in the important contribution you are making to swift conservation.

Δ Contact Bird Studies Canada and request a sign or certificate (shown above right) to display in your window, letting everyone know that this is a swift-friendly building (use address for Ontario SwiftWatch below).

- Make sure any companies servicing your furnace or chimney are aware that swifts use the shaft. Avoid having work done (especially cleaning or repairs to the chimney) during the nesting season.
- If swifts are nesting or roosting in your house or other building, please send details to those who study and conserve swifts.

Δ In London, contact chimneyswift@naturelondon.com.

Δ Elsewhere in Ontario, contact OntarioSwiftWatch@birdscanada.org.



Additional Suggestions for Owners of Old Wooden Barns in Which Swifts Nest

- See Appendix A (page 7) for advice in determining use of old wooden barns by swifts.
- As pertinent, follow suggestions on page 3 and above for chimneys occupied by swifts.
- Ensure there is an opening through which swifts can enter at all times. A small open window in the gable or elsewhere can provide access (can be closed in winter). A door will do.
- Avoid storing things in the barn that might attract raccoons.



Additional Information for Owners of Chimneys on Commercial, Industrial or Institutional Buildings

- See Appendix A (page 7) for advice in determining whether swifts are using your chimney.
- As pertinent, follow suggestions for owners of chimneys given on page 3 and 4 above.
- Chimneys on large buildings tend to have large-diameter openings.
 - Δ A single pair of swifts may nest in a large chimney or in a small chimney, such as is typically found in older homes.
- Large-diameter chimneys may also be used by hundreds of swifts for communal overnight roosting.
 - Δ Communal roosts may be occupied during spring or fall migration, as well as during the breeding season (mainly by non-breeders).
- More than a dozen large London chimneys are known to be regularly used by swifts for communal roosting.
 - Δ Swifts may switch roosts from season to season and not necessarily occupy the same roost chimneys each year.
- Numbers at roosts tend to be largest in spring and fall migration.



- In London there are usually not more than seven or eight roost chimneys being used by swifts at one time.
- If a chimney is being used only for overnight roosting (i.e., no active nest inside), there will usually be no comings and goings of swifts during daytime hours.
- If a chimney is used for nesting only (i.e., not roosting), swifts can be observed making regular entries and exits (often silent and quick) during the day and evening, as they tend their nests.
- If a chimney is being used by a nesting pair at the same time as by birds roosting for the night, there will be discrete entries and exits during the daytime, plus at dusk the presence of a highly visible and audible flock of circling, twittering swifts.
- Even if an owner is not aware of their presence, swifts may well have been using your chimney since it was constructed 60, 100 or 150 years ago.
- Larger chimneys on larger buildings rarely have fireplaces, so owners of such chimneys are unlikely to ever hear the sounds of swift nestlings.
- Owners or managers of large buildings may have little or no contact with people who service their furnaces and chimneys. It is therefore useful to post a sign (shown above right) beside the chimney cleanout to alert tradespeople to the possibility of swifts using the chimney and indicating appropriate precautions to take.

Δ To obtain a “Swift-friendly Chimney” sign, contact OntarioSwiftWatch@birdscanada.org.

- Take pride in the presence of swifts in your chimney and help educate others about the species. Post a “Swift-friendly Property” sign in the window or the lobby of your business or institution (see page 4).

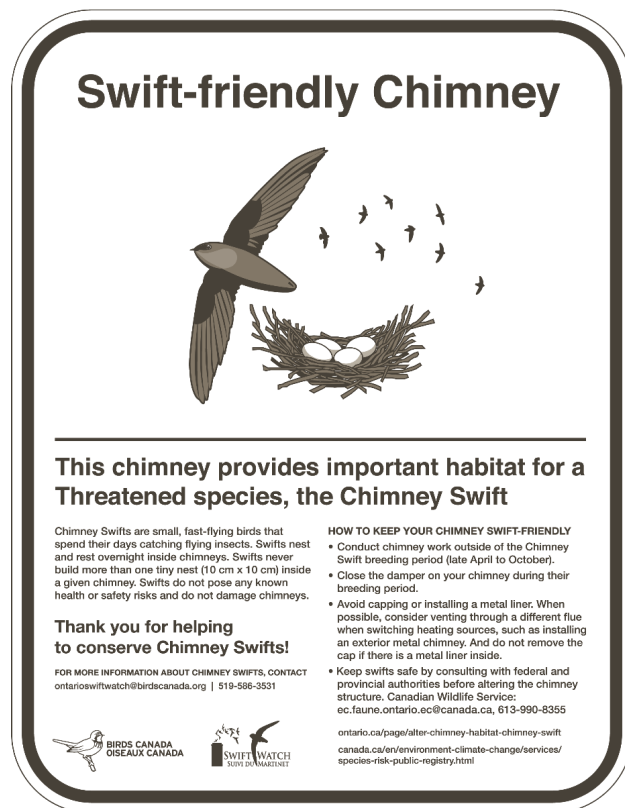
Δ To obtain such a sign, contact OntarioSwiftWatch@birdscanada.org.

- The City of London and local environmental groups have teamed up to work towards having London certified as a “Bird Friendly City” (a program of Nature Canada). By accommodating swifts in your chimney, you can take pride in making an important contribution to this initiative.
- If you are no longer using your chimney (but swifts are) and the chimney is beginning to deteriorate, there are alternatives to taking it down. In most cases, the brick or stonework nearest the top is the part of the chimney that is in poor shape.

Δ You may choose to have this section of the chimney repaired or rebuilt.

Δ Another possibility is to remove the rows of deteriorating bricks and construct a new rim around the top edge. Swifts will readily return to the chimney at its new slightly lower height.

Δ Make sure any work is done in a season when swifts are absent.



The stone chimney at Elborn College, Western University.

Far left (2015): showing some deterioration in the upper stonework. The chimney was no longer needed for venting the heating system, so, in 2016, the upper part of the chimney was removed and a new rim put in place around the top edge.

Near left (2020): the chimney at its new, lower height. Swifts have continued to use the shaft for both nesting and communal roosting.

In many cases, the cost of removing only the upper part of a chimney may be less than for removing the entire chimney.

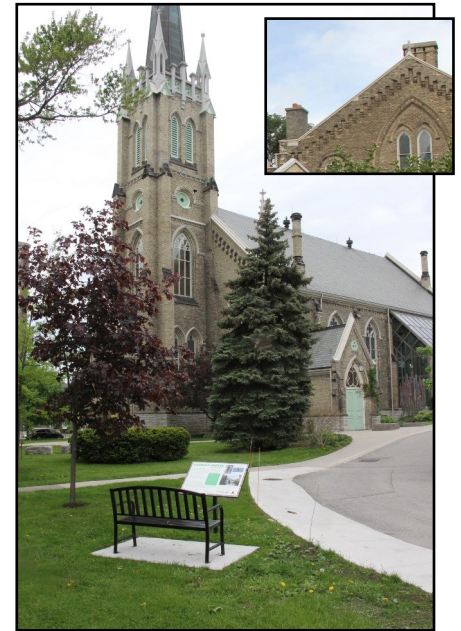
- When landscaping around your property, consider the needs of swifts, which eat only flying insects.
 - Δ Before wafting skyward as adults, many insects pass through a caterpillar stage during which they munch on plants – leaves, buds or shoots.
 - Δ Plant native trees, shrubs and wildflowers, which support far more species of insects than do non-native plants. (Native plants also nourish insects that feed many other species of native birds.)
- Make your building safer for swifts (and other birds) by taking steps to reduce or eliminate window kills.
 - Δ Avoid the use of reflective window glass or shiny cladding on outer walls.
 - Δ Or install window treatments (e.g., rows of dots 5 cm apart, on the outside) that alert birds to the presence of a barrier through which they cannot fly.



In London, in May of 2019, this Chimney Swift died after crashing into the window at right. (photos by Brendon Samuels)

Some owners of large institutional, commercial or industrial chimneys that host swifts use these charming and enigmatic little birds as a means to engage with the community. Here are some examples:

- For a number of years before it was demolished, the opportunity to watch acrobatic swifts twitter, circle and dive into the Kingsmill's chimney (overlooking Carling Street) drew patrons to the outdoor patio at the Marienbad Restaurant across the street.
- A school or community facility may host nesting or roosting swifts in its chimney. If so, the resident swifts could serve as the focus for lessons on endangered species or for a celebration of swifts. A speaker from the Nature London Chimney Swift Initiative is available to deliver a free PowerPoint presentation.
 - Δ Contact chimneyswift@naturelondon.com.
- First-St. Andrew's United Church, (photo at right) at the corner of Queens and Waterloo in London, has five chimneys that are used by swifts, mostly by nesting pairs, but one chimney sometimes serves as a communal swift roost.
 - Δ To engage the community, encourage public use of its park-like grounds and educate people about swifts, the church installed a viewing bench and an interpretive sign, located at a spot from which four of the five chimneys can be seen at once.



Whether or Not You Have a Chimney That Hosts Swifts, You Can Help Produce Food for Swifts to Eat

- In addition to safe housing, Chimney Swifts must have adequate food (flying insects) in order to survive.
- Insects originating at ground level may fly or waft upward where they are eaten by swifts.
- Between heavy pesticide use and ongoing loss of natural habitat, the swift's food supply is under attack.
- Many native insects are declining, and shortage of suitable insects is likely contributing to swift declines.
- Many insects go through a caterpillar stage during which they eat plants (leaves, twigs, buds or stems).
- To help produce food for swifts, **plant native species of trees, shrubs, wildflowers and grasses**, as native plants provide food for far more insect species than are supported by non-native plants and trees.
- If you own a rural property, encourage fencerows, un-mowed ditches and natural areas as insect nurseries.
- Convert your lawn (essentially a desert when it comes to insect production) to a native plant garden.
- If you live in an apartment, a balcony pot of native plants helps feed insects that help feed swifts.
- Discontinue using pesticides (including herbicides, which kill plants on which many insects rely for food).
- Advocate for the preservation of habitats such as woodlands, wetlands and native meadows where swift food (insects) is produced, and support organizations that protect such places.

How Else to Help Swifts

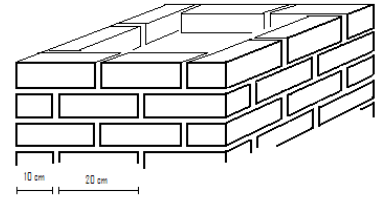
Even if you don't host swifts in your chimney, you can help scientists learn more about swifts and their conservation needs. Sign up to become a swift monitor. In London contact chimneyswift@naturelondon.com. Elsewhere in Ontario, contact OntarioSwiftWatch@birdscanada.org.

Appendix A

How to Determine Whether Swifts Are Using a Chimney

Check to see that the chimney is suitable.

- Swifts usually choose brick, stone or mortar chimneys, built \leq 1960s.
- Chimney has a horizontal course of bricks of $\geq 2\frac{1}{2}$ by $\geq 2\frac{1}{2}$ bricks.
- The top of the chimney must be open (i.e., not covered by mesh, wire screening, concrete slab, metal cap, top-knot, etc.). Confirm open status via Google Earth or <https://maps.london.ca/CityMap/>.
- A tile may protrude above the rim. If there are ≥ 2 flues, swifts occupy only one.
- Most chimneys that appear suitable for swifts will not be occupied by swifts.
- Swifts sometimes choose unconventional chimneys that don't follow the "rules".
- They can enter a small opening down a narrow shaft, if it widens out lower down.



Right: 3 examples of chimneys used by swifts. Left and centre right: 3 flues/chimneys not used by swifts due to presence of spark arrester, metal topknot, flat slab and proximity to second flue.



Check for occupancy by swifts.

- Swifts may be present in Ontario any time from late April to early October.
- Hearing or seeing swifts overhead is a good hint they may be nesting in a particular area (but this is no guarantee, as swifts may forage several km from the home chimney).
 - Nesting swifts can be very discrete around their chimney, and patience and effort may be needed to confirm which chimney they are using.
- Swifts may occupy suitable chimneys for different reasons and for different lengths of time.
 - short period in spring when prospecting for a nest site
 - spring or fall migration for overnight communal roosting
 - summer roost of non-breeding swifts
 - swifts are prone to switching roosts from week to week, season to season and year to year
 - if used as a spring roost, the chimney may or may not serve as a fall roost that year, and vice versa
 - active nest during breeding season
 - chimney may be abandoned early if nest attempt fails
 - after fledging, swifts sometimes move around visiting and entering different chimneys.
- **Swifts can be hard to detect and don't necessarily use a chimney every season or every year; to conclude that swifts never use a particular, suitable-looking chimney may require multiple visits at intervals from spring to fall over a number of years.**



To detect swift use of a chimney:

The usual protocol involves observing in good weather for 1 hr starting 30 mins before official sunset (check local newspaper for daily sunset times or go to https://weather.gc.ca/city/pages/on-137_metric_e.html).

- If possible, have chimney silhouetted against northwest sky (not other buildings or foliage, no night/security lighting nearby); watch carefully for entries and/or exits.
 - If a large roost, may be advance circling and twittering.
 - If one pair, may be a few quick, direct, silent entries and exits.
 - Note: bats may fly lower, always end up outside chimney.

To confirm nesting activity, check for daytime use of chimney:

- Generally follow above guidelines (chimney silhouetted against sky; avoid looking directly at sun).
- Spend 1 to 2 hrs watching for entries or exits.
- There may or may not be swift activity overhead.
- Entries and exits are likely to be fast, direct and silent, easy to miss.

To detect previous swift occupancy:

Info can sometimes be obtained in the off season.

- Via the chimney cleanout, examine materials on the floor of the shaft, e.g., feathers, egg shell fragments, twigs from nests, dried carcasses and skeletal remains. But such debris may be from species such as the European Starling.
- For a fireplace chimney, check for debris on the smoke shelf and the floor of the fireplace.
- Lack of evidence during an off-season check is not sufficient to conclude that swifts have not occupied the chimney.

To detect swift nests in old wooden barns or sheds (rare in SW Ontario):

- Swifts foraging and twittering in the general area may be a clue to swift presence.
- Shine a flashlight up into relatively high, dimly lit areas inside barn, e.g., roof, upper walls, gable peaks, top side of beams, vertical wooden features.
 - Watch for active swift nests, or, in the off season, remnants of tiny twig nests or dried saliva on the wood surface indicating where nests were attached.
- During nesting season, look for swifts discretely coming and going from the barn (via a door, window opening or gap in the wall or roof).
- Older youngsters may make begging calls or be seen clinging to the wooden wall somewhat away from the nest.

To detect swifts nesting inside hollow trees (very rare in SW Ontario):

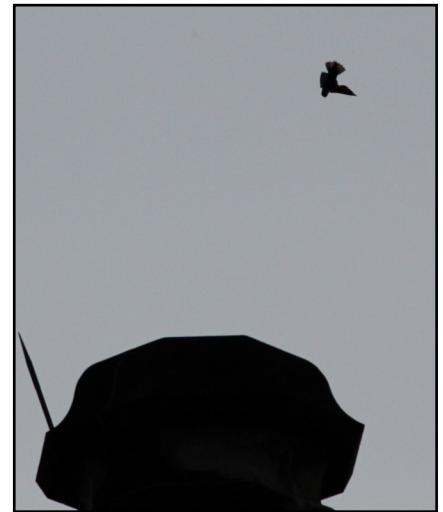
- Check for large-diameter old trees, mainly in old-growth woodlands.
- Swifts flying overhead in the area may be a hint that swifts might be nesting nearby.

To learn more about Chimney Swifts in London, visit

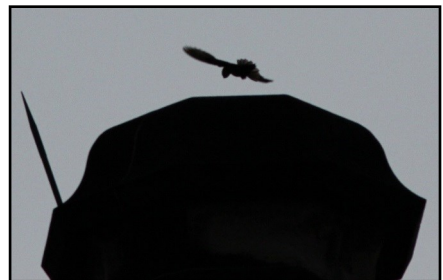
<http://www.naturelondon.com/chimney-swifts-resources/>

To arrange for a free PowerPoint presentation on Chimney Swifts in London or to ask questions about local swifts, contact chimneyswift@naturelondon.com

Acknowledgements: Thanks to Garth Casbourn and Diane Kristensen for sketches and to Brendon Samuels, David Wake and Winifred Wake for photos.



A single swift approaching (above), then entering (below) a nest chimney.



Swifts entering a communal roost for the night.



Nature London

www.naturelondon.ca

chimneyswift@naturelondon.com

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