

LIVING

EDITOR: ROB McCORMICK 745-4641 ext. 244 / fax 743-4581 / life@peterboroughexaminer.com



Bill Schmoker

Swift response

Tower-building efforts offer some hope for the endangered chimney swift

Among the most aerial of landbirds, the chimney swift is an agile, fast-flying, swallow-sized bird that is most easily identified by its characteristic “cigar on wings” profile. It flies almost constantly, except when at the nest or roosting. Unlike most birds, swifts actually prefer to coexist with humans, requiring no more than a square foot of the interior of an old chimney to make their nest or spend the night. It therefore comes as a surprise to many that swift populations are in serious trouble.



OUR CHANGING SEASONS
Drew Monkman

Found throughout eastern North America, chimney swifts historically nested and roosted (gathering in large numbers to spend the night) in hollow trees. However, loss of the forest habitat led to an adaptation to using brick chimneys, hence their name. The horizontal configuration of the bricks, with their roughness and horizontal grooves, provides an appropriate surface for nest building and overnight roosting.

Swifts have a flickering, almost bat-like flight that is nearly always accompanied by a sharp, chippering call. They are most commonly seen flying in groups as they feed on insects, catching them in their large, gaping mouths. In fact, swifts will eat nearly one third of their own weight in flying insects such as mosquitoes every day.

Swifts are particularly well-known for their aerial courtship displays which begin here in Peterborough in mid-May. Trio-flying is characterized by three swifts following each other as they thread their way among buildings and trees. These trios seem to be composed primarily of a female and two males. Another unique flight trait is called V-ing, a behaviour thought to be important in maintaining a pair bond. As two swifts sail by, chippering loudly and rapidly, the rear bird suddenly snaps its wings upward so they form an acute angle with one another. Copulation may take place during V-ing, as two swifts momentarily come together in mid-air.

Swifts nest and roost in chimneys. Their claws and tail bristles allow them to cling easily to the bricks; in fact, they are actually unable to perch or stand upright like other birds. The nest is attached to the vertical surface of the inside of the chimney. It is in the shape of a half-cup and consists of twigs that are broken from the tips of tree branches and glued together with the birds' saliva. Both sexes participate in all

aspects of nesting. They sometimes get help from one or two other unmated adults that assist in incubating eggs, brooding and feeding the nestlings of an existing mated pair. There is only one active nest per chimney. However, because large flocks of unmated birds and breeders who are not on “incubation duty” commonly roost together throughout the summer, this sometimes leads to the misconception that the birds are nesting as a colony.

The eggs are incubated for about 18 days, and the babies fledge from the chimney about 30 days after hatching. They can be seen flying around with their parents in slow, noisy parades near the nest site, and will return to roost in the nest chimney during the first few days. Swifts only raise a single brood of young, but return to the same breeding site year after year.

Following the breeding season, the swifts' communal instincts peak as fall migration approaches. They congregate at suitable roosting sites, sometimes circling in large, tornado-like flocks above a roosting chimney at dusk, before suddenly descending inside to spend the night. Chimney swifts leave the Kawarthas in mid- to late September and winter in the Amazon Basin of Peru. They arrive back in our area in early May.

Little is known about local nesting sites, since nesting behaviour tends to be rather secretive. Roosting is observed quite easily, however. Joe Nocera, a research scientist at the Ontario Ministry of Natural Resources, had teams of volunteers monitor roosting sites in Peterborough each night during August and September of this year. The largest roost in town is a chimney just to the east of Wildrock Outfitters on Charlotte Street. The high count was 97 swifts in late August. Another well-used roost is the chimney on the power plant at the Mt. St. Joseph Convent on Monaghan Road. A high count of 22 birds was recorded there. About 10 years ago, hundreds of swifts were seen going into the old Post Office chimney in the spring during migration. Because these roosts are made up primarily of migrating individuals coming from outside Peterborough, it is difficult to guess how large our local population might be.

Like many migrants from the tropics, swifts are experiencing a dramatic decline in numbers, both in Peterborough and across their range. Reports from the 1940s and



Joe Nocera, special to The Examiner

The chimney-swift tower at the Riverview Park and Zoo.

'50s describe migrating flocks of 10,000 individuals, an abundance that is unheard of today. Chimney swifts have now been designated as threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Loss of nesting and roosting habitat is one of the main reasons for the decrease in population. Old, brick chimney habitat has been greatly reduced by the now extensive use of chimney caps and inserts —

smooth, insulated, metal liners.

A loss of food is most likely involved in the species' decline as well. Studies in England have pointed to lower insect populations as a result of modern farming techniques. The English barn swallow has been particularly hard hit. A decrease in insect numbers has not yet been proven to be the case in North America but seems likely.

However, there may be some hope on the horizon for this bird. Through an innovative program called Trent-Severn Waterway Wildlife — Action for Habitat Health, special funding has been provided by Parks Canada in order to increase protection and awareness of species at risk, such as the chimney swift, along the waterway and adjacent areas. Local conservation and naturalist organizations have been invited to submit project ideas. One of these ideas has been to construct nesting and roosting towers for chimney swifts. Studies have revealed that if alternative nesting and roosting structures are provided, they can be quite suitable to swifts. Thanks to the work of the Peterborough Field Naturalists, in partnership with Parks Canada/Trent-Severn Waterway, Kawartha Field Naturalists, Otonabee Region Conservation Authority and other local groups, chimney swifts now have a selection of nine new homes to choose from. Towers have been erected in Lindsay, Fenelon Falls, Bobcaygeon, Buckhorn and Peterborough. The Peterborough towers are at Locks 20 (Trent Severn Waterways headquarters), Riverview Park and Zoo, and Fairhaven seniors' residence. No fewer than 19 City of Kawartha Lakes and Peterborough businesses have donated materials for constructing the towers. The lead volunteers on the project are Judy Kennedy and Robbie Preston of the Kawartha Field Naturalists, along with John Bottomley, president of the Peterborough Field Naturalists. Grade 10-to-12 students at Adam Scott built the Peterborough towers under the direction of Dennis Moloney. One Kawartha tower was built by Grade 10 students at Fenelon Falls Vocational, while four additional towers were built by members of Kawartha Field Naturalists and volunteers from OMNR and Fleming College.

Chimney-swift towers are 12 feet tall by two feet wide and consist of an eight-foot “chimney” on four-foot legs set in concrete. The walls of the chimney are lined on the inside with scored, rough lumber, which provides a surface the birds can easily hang on to. The outside of the towers is vinyl siding. The birds enter through a raised chimney-like structure on the top.

Nocera plans on playing recordings of swift calls around the towers next spring to see if this will help attract the birds to their new accommodation. He is hoping all the towers will all be occupied, so he can begin studying their nesting patterns.

“We are at risk of losing the chimney swift,” Nocera said, “and it is for this reason that the tower-building efforts of local naturalists and researchers are so important. We also need to use other conservation measures such as opening up old, defunct chimneys that have been sealed off, and educating the public about the species so they can act as stewards when a swift pair decides to grace their chimney.”

However, despite the importance of erecting towers, chimneys are still the best location for nesting. They provide the best conditions to protect the birds from overheating, direct sunlight penetration and protection from predators. Even the best-designed towers fall short of the success of common masonry chimneys.

The esthetic value of watching chimney swifts' aerial acrobatics and interactions is a simple pleasure that nature has to offer. It would be a tragedy to lose it. Capping of well-maintained chimneys is usually not needed, and only occurs because homeowners have unfounded fears about diseases the swifts might harbour, or are bothered by the mysterious noises of feeding nestlings for a few short weeks in the summer. Closing the damper and packing the area below the damper and fireplace with insulation can substantially reduce the noise.

So, if you have a masonry chimney, keep the top open and damper closed from late April through early October to provide a potential nesting and roosting site for swifts. Any chimney cleaning should be scheduled for other times of the year. If you are a landowner, be sure to leave any large, “chimney-like” standing dead trees on your property, and watch to see if swifts use them. And, when you see a chimney swift tower, give some thought to how you can contribute to the survival of a species at risk, and the protection of its habitat. For more information, go to www.waterwaywildlife.com.

■ **Drew Monkman is a Peterborough teacher and author of *Nature's Year in the Kawarthas*. He can be reached at dmonkman1@cogeco.ca. Visit his website and see past columns at www.drewmonkman.com.**