

Chimney Swift *Chaetura pelagica*



Folk Name: Chimney Bat, Chimney-sweeper

Status: Breeder

Abundance: Common

Habitat: Aerial insectivore—observed in flight—perches in chimneys

Chimney Swifts are unusual birds which local residents have variously described as being “matchless aviators,” as the “imp of the upper air,” and as a “stunt flying,” “cigar with wings.” They are small, only about a half-inch bigger than a Carolina Chickadee, but they have long pointed wings. They spend all day long in flight, flying very fast, darting and swooping about in search of airborne insects which they consume by the thousands. Many biologists believe that “the value of these birds can hardly be overestimated” when it comes to controlling insect populations. At times, because of their similarity in flight, non-birders misidentify swifts as being swallows or even bats.

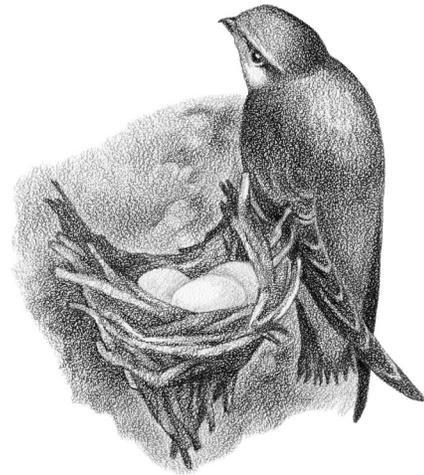
The Chimney Swift is the only member of the swift family that breeds in the eastern United States. They are a cavity-nesting species that once nested in hollow trees, but after a period of many years, they came to rely almost entirely on man-made cavities, especially chimneys, for their survival:

“So completely did they forsake their old nesting sites to build in chimneys that the name chimney swift is now universally applied to them.” —*The Concord Times*, North Carolina, July 3, 1902

Each breeding pair must find a chimney, or similar dark, protected cavity in which to build their nest and raise their young. An article published in *The Charlotte Democrat* on June 21, 1895, noted that Chimney Swifts “build their nests like lovely little wall pockets and hang them where the soot is blackest.” Generally, a single pair nests in a single chimney, and each pair will usually produce four or five offspring. Nest sites are often repeatedly used. One chimney in the Carolina Piedmont hosted a pair of nesting Chimney Swifts every year for at least 25 years. Unfortunately, today many chimneys are being capped, and nesting sites for this species are becoming very limited.

William McIlwaine offered this description of a nest he found at his house on Lyndhurst Avenue in Charlotte on August 17, 1928:

Just before I began to write there fell down the chimney here in the “big back room” the nest of a chimney swift. It is beautifully made. There is a



J F M A M J J A S O N D

semi-circular band of sticks and glue about an inch wide. This sticks to the side of the chimney. And from the ends it is suspended. The nest made of sticks is held together with this glutinous substance. Quite a remarkable affair. Sort of a wall basket.

Historically, the Chimney Swift has been a common to abundant breeding bird in the Central Carolina region with spring migrants generally returning here in early April. R.B. McLaughlin reported an average arrival date of 12 April, after he conducted three years of migration study in Statesville, during the late 1800s. William McIlwaine reported swifts returning to Charlotte on 14 April in 1929: “Getting home I was on the front porch when overhead I heard an excited chattering. There they were! Chimney swifts! All sorts of aerial evolutions.” Elizabeth Clarkson noted she saw “the first Chimney Swifts on the 8th” in April 1943. A check of recent arrival dates (12-year period) gives an average arrival of 5 April. We have only three reports on file of Chimney Swifts arriving in the region in March: March 31, 1924 (Rowan), March 31, 2004 (York), and March 28, 2007 (Gaston).

The fall migration of the Chimney Swift is a wondrous spectacle to behold. Hundreds and thousands of swifts join together in flight and move southward. They often create quite a stir when the flock stops to roost for the night. There are many published accounts of immense flocks of swifts roosting in the chimneys of churches, schools, or other buildings in the Carolina Piedmont.

A.L. Pickens, who taught at Queens College in Charlotte, published a remarkably detailed five-page account of the “evening drill of chimney swifts” in the scientific journal *The Auk*. In it, he shared his observations of what he coined as the “sky-writing” formations Chimney Swifts

make while settling into a communal migration roost, in this case, a chimney at the Christ Episcopal Church in Columbia, SC. He made notes on the bird's arrival and departure on five August evenings and four mornings during the summer of 1932:

The advance of twilight brought out the gathering "chippers," though one evening they began more than a half an hour before sun-down. Swifts collect by hundreds in a formless mass, then perhaps they dart away for a number of blocks, form a long line like a letter "I" and advance on the chimney that is to be their host. Coming near the leaders veer to the right or left and draw the line into a "J," at times perhaps reversed. The tail curls into a circle, and the whole band presents the appearance of a script figure of "6," also perhaps reversed, the tail being wound rapidly on the revolving loop to form an "O." ...However the drill progress, long or short, it terminates in the unwinding of the final circle into the mouth of the chimney.

Flocks of hundreds to thousands of Chimney Swifts can still be observed moving through the region each fall. Chimneys at many buildings throughout the region—including several schools in Charlotte—are vital for use as stopover roosting habitat each year. A teacher at Eastway Middle School estimated a fall flock at 5,000 birds. Another flock in a chimney at Sedgfield Middle School was estimated at between 300 and 500 birds. Ken Kneidel shared what he called a "National Geographic moment" of a flock moving through Mecklenburg County on October 13, 2014:

Was at McDowell Prairie on Monday when the sky got filled with Chimney Swifts. With my arm extended, my hand with outstretched fingers covered about 10 at any one moment. Some were so close they were zooming right over my head



Chimney Swift over McAlpine Creek Park. Their "cigar-shaped" body helps identify these fast flyers. (Jeff Lemons)

while others were just specks, high in the sky. Multiplying my hand over the whole sky made it clear that there were several hundred in the sky at that time. ...Then the cool part...I walked about 50 yards forward in about 10 minutes, looking at field sparrows and a yellowthroat at ground level, then looked up and surprise! Not a Chimney Swift in the sky! I wish I had seen their exit.

These southbound migrants are usually entirely gone from our region by the second week of October. A review of local records over the past two decades indicates the usual departure date in the region is around 13 October with the latest recorded departure date of 24 October, recorded in 2009.

Where do our Chimney Swifts migrate each fall? For many years, the answer to this question was a great mystery to the scientific community, so researchers developed a special banding study to find out. Many thousands of swifts were banded in the United States and Canada between 1935 and 1945. Scientists banded 109,000 swifts in Tennessee alone. After a decade of effort, success was finally achieved. In 1945, the U.S. Fish and Wildlife Service announced the recovery of bands from eight Chimney Swifts. Natives living along the Yanayaco River in northeastern Peru had killed them and collected the bands. The recovery site was over 3,500 miles from the site in Tennessee where the birds were banded. The mystery was solved.

With Chimney Swifts nesting and roosting in such close proximity to people, it might be expected that a few problems could arise. Two examples from the region are shared below:

"Swifts Smudge Charlotte Home: One evening during the latter part of September, Mrs. C.C. Kreiger battled soot smudged Chimney Swifts for three hours in their living room and sun parlor. The Kreigers finally gave up and called the fire department, who tried lighting another fire to drive the Swifts out but only succeeded in smoking themselves out. Finally exterminators came to the rescue with poison gas and the birds were done for, and so were the wallpaper, drapes, curtains, rugs, and furniture. And I guess the moral of this is, if you have Swifts nesting in your chimney, don't build a fire; if you have Swifts roosting in your chimney, start your fire well before dark—before the birds go to roost."

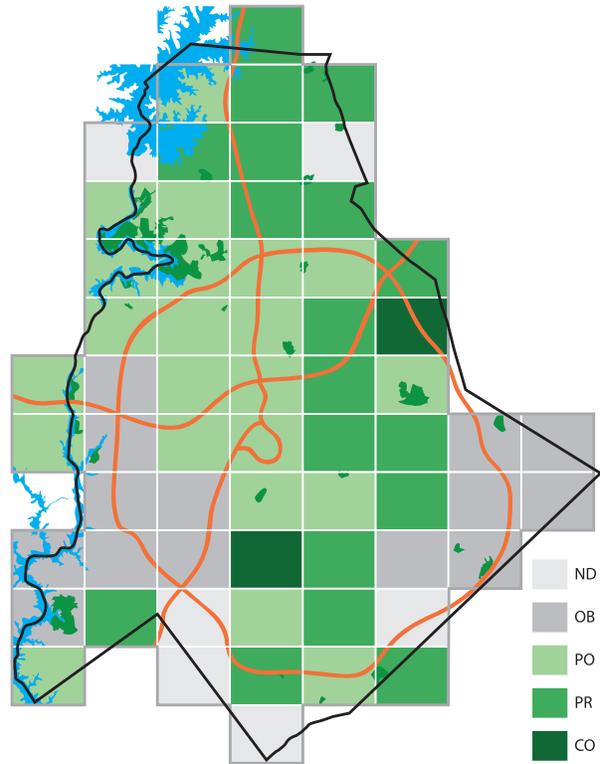
—*The Chat*, November 1947

"Two Gastonia firemen were mighty nervous they admit when they answered a West Franklin avenue woman's urgent call for help Friday afternoon. The lady said there was a rattlesnake in her chimney and would the firemen please, please, come and get it out. Arthur Creasman and Bud Atkinson said they wished it had been something else, like a fire in a powderhouse. But firemen don't have their wishes and they agreed dutifully

to go to her aid. Armed with a pike pole and an ax, the pair loaded into the chief's red car and went racing off to the scene. 'That was the most rattlesnakey noise I ever heard,' said Creasman later. And the men admitted going to work probing the darkness above with a feeling they never had fighting fire. 'You know I was never so glad of anything before as when we pulled out a handful of little chimney swifts,' they agreed. 'But you wouldn't believe a bird could sound so much like a snake.' ”

—*The Gastonia Gazette*, June 30, 1956

Unfortunately, today the Chimney Swift appears to be one of our neotropical migrants that is in great peril. Recent studies indicate that nationwide, the population of the Chimney Swift is in steep decline. Many groups have joined together to address this problem, and the Chimney Swift is now being targeted for conservation efforts across the nation and in South America as well. Residents in the Carolina Piedmont can help by participating in citizen science research studies that document fall communal roosting sites and by helping to insure there are plenty of chimneys available for breeding and roosting throughout the region.



Mecklenburg County Breeding Bird Atlas:
Somewhat Local—likely declining (PR/18 , CO/2)