

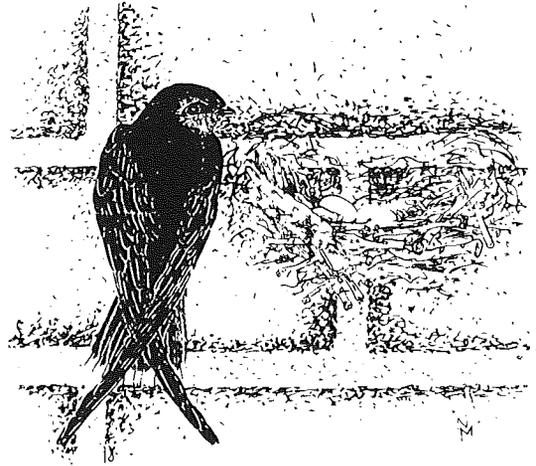
Chimney Swift

Chaetura pelagica

The Chimney Swift breeds from southern Canada south to Texas and Florida. It is the northern representative of a large group of closely allied *Chaetura* swifts found in the American tropics. Its winter range is mostly in the Amazon River basin of Brazil; it does not winter in hollow trees in Vermont, as early natural history accounts from the state claim. Chimney Swifts feed almost entirely on minute flying insects, and consequently are vulnerable to cold, rainy spring weather that grounds the food supply; starvation or reverse migration has often resulted. The swift's cigarlike shape and rapid, stiff-winged flight are a familiar sight over most communities in eastern North America.

In Vermont, the Chimney Swift usually arrives in late April or early May, depending on the weather; an early date is April 18 (RVB, Spring 1973–83). It is one of the first breeding species to disappear in the fall. Most swifts leave their breeding locations in early August to form large roosting aggregations before heading south. Swifts may be seen migrating throughout September, but become scarce thereafter.

The Chimney Swift is one of several species whose nesting habits were changed by the arrival of Europeans in North America. The species nested in hollow trees before the Europeans arrived, but afterward switched to unused chimneys. Natural substrates are apparently rarely used now for nesting. Vermont's early ornithologists considered the swift common (Thompson 1842); today it is generally conceded that the species' opportunistic occupation of human dwellings has resulted in a net increase of the overall population. During migration thousands of swifts will sometimes occupy an unused industrial chimney as a communal roosting site. A flock preparing to roost swirls in unison over the chimney, until at dusk a few birds lead the entire flock of hundreds into the darkened recess (W. J. Norse, S. B. Laughlin, pers. observ.). Such

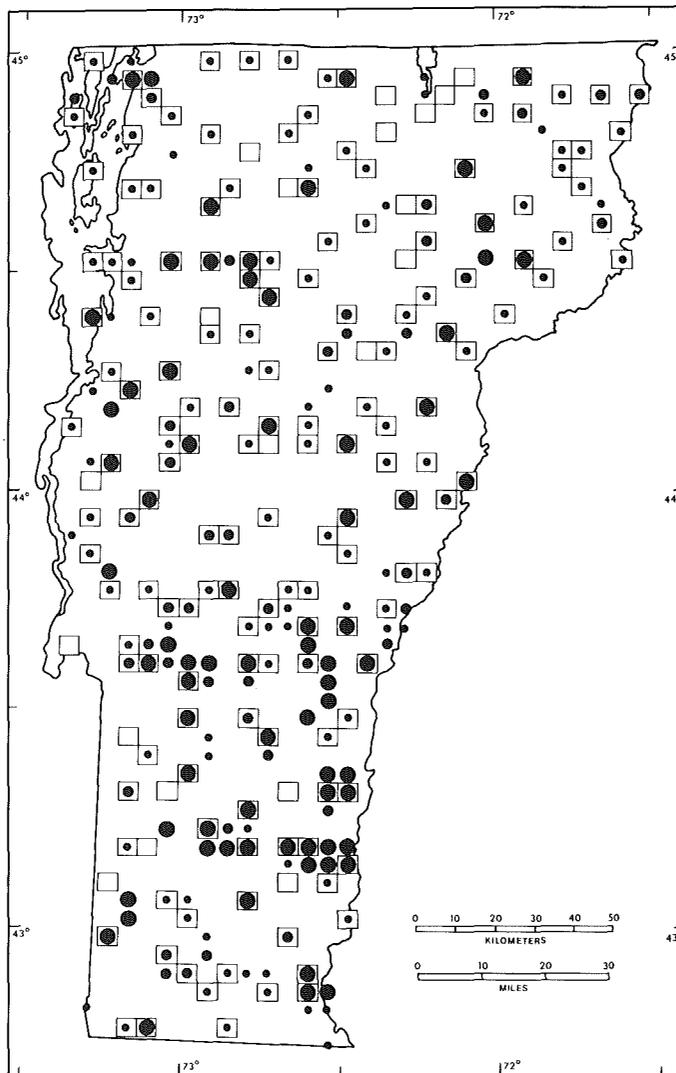


roosts may be used for days during fall migration, and the spectacle repeated year after year.

The danger of the Chimney Swift's nesting site was shown in Winhall, Vermont, where swifts nested in the chimneys of weekend vacation homes in which fires were seldom made. One weekend in early June 1980, when temperatures dropped to -1°C (30°F) at night, fires were lit and smoke blossomed out of the chimneys: Chimney Swifts were not seen again around those houses that summer; most of the birds probably perished (W. J. Norse, pers. observ.).

The swift's aerial displays and loud twittering, so often seen and heard in early summer, are courtship behavior. The nest is a shallow, bracketlike cup made of twigs, which the birds break off from tree branches during flight; a gelatinous saliva is used to fasten the twigs together and to cement the nest to the vertical surface inside the chimney. The clutch consists of 4 to 5 pure white eggs. Laying may start when the nest is only half finished. Both adults share the 19- to 21-day incubation chores and the raising of the young. The young take their first flights at 30 days of age (Fisher 1958), but may continue to roost in the chimney for some time thereafter.

Vermont nest building dates range from May 29 to July 1; egg dates from May 17 to July 17 (6 clutches containing 2 to 5 eggs);



No. of priority blocks in which recorded

TOTAL 159 (89%)

Possible breeding: 82 (51% of total)

Probable breeding: 28 (18% of total)

Confirmed breeding: 49 (31% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	29	93	18
Green Mountains	48	89	30
North Central	13	68	8
Northeast Highlands	16	100	10
East Central	19	100	12
Taconic Mountains	12	75	8
Eastern Foothills	22	92	14

and nests with young from July 26 to August 21 (quite late). As might be expected, most Atlas Project confirmations (51%) were of birds observed entering probable nest sites.

Chimney Swifts occur throughout Vermont, though they may be difficult to locate in areas of unbroken forest where there are no man-made structures. Swifts may feed many miles from their nests. Frequently they may be observed foraging over remote, snag-filled ponds, though whether this means they are breeding locally in some natural cavity or merely feeding is unclear.

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