

Status and Occurrence of Chimney Swift (*Chaetura pelagica*) in British Columbia.

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Introduction and Distribution

The Chimney Swift (*Chaetura pelagica*) is a small, but very quick and agile passerine that is found breeding throughout eastern North America (Sibley 2000). The breeding range in Canada starts east of the Rocky Mountains in eastern Saskatchewan from Nipawin, Raymore, and Ft. Qu'Appelle to Langenburg (Smith 1996b), southern Manitoba from Dauphin, St. Laurent, Selkirk south to Winnipeg and Indian Bay, but absent from extreme south-western and south-eastern Manitoba (Steeves *et al.* 2014), southern Ontario north to the Sioux Lookout and Redditt in the west, to Cochrane and the Clay Belt in the east, with the highest abundances near the Great Lakes (Cadman 2007, Steeves *et al.* 2014), southern Quebec north to Amos, Senneterre, northeast of Lake Saint Jean, and Percé (Lemieux and Robert 1996), and most regions of New Brunswick and Nova Scotia, but rare in areas adjoining Northumberland Strait and on Prince Edward Island (Erskine 1992, Steeves *et al.* 2014). The Chimney Swift is a very uncommon summer resident in Newfoundland and Labrador (Mactavish *et al.* 1989). The western edge of the Chimney Swift's breeding range extends into the United States from west-central North Dakota, along Missouri River (Stewart 1975b), the eastern half of South Dakota (Peterson 1995). This species also breeds and summers very locally west to eastern quarter of Montana (Steeves *et al.* 2014), south-eastern Wyoming, mostly Cheyenne and other Laramie towns, however, breeding likely in these areas, but not currently documented (Faulkner 2010), and eastern New Mexico, where this species is very rare and local (Steeves *et al.* 2014), western Nebraska (Johnsgard 1979a), western Kansas (Busby and Zimmerman 2001), it is also found in scattered plains, towns and Front Range cities in the eastern half of Colorado (Kingery 1998a), the species is widespread in Oklahoma, except for the western Panhandle (Versaw 2004), and the eastern two-thirds of Texas, west to the central Panhandle, but mostly absent from regions bordering the Rio Grande (Kyle and Kyle 1997, Steeves *et al.* 2014). The newest southernmost breeding record in Texas comes from Hidalgo County, in 1996, with nesting likely in nearby Mexico (Steeves *et al.* 2014). The Chimney Swift also breeds in the eastern United States to the Atlantic Coast and south to Gulf Coast, and south to south-central Florida, where it is found as far south as western Collier County, south Lake Okeechobee, eastern Broward County, and east Dade County (Robertson and Woolfenden 1992a).

Along the west coast of North America, the Chimney Swift is rare to very uncommon, but a regular transient and summer resident in southern California, mainly at Big Pine in Inyo County and in the coastal lowlands and inland valleys from Mendocino County south to San Diego County (Unitt 2004), with most recorded in Los Angeles County (Steeves *et al.* 2014). The first

recorded breeding record in California was in 1975 at Ft. Bragg in Mendocino County (Small 1994). The Chimney Swift has also been recorded in Bermuda through late June (Amos 1991).

The Chimney Swifts return to North America from South America in March or April in flocks, and pairs of birds soon break away to individual nest sites in chimneys or on the walls of abandoned buildings (Steeves *et al.* 2014). There the pair builds a nest of loosely woven twigs against this vertical surface, cemented together with the bird's glue-like saliva (Steeves *et al.* 2014). The female lays 4 or 5 eggs then shares the brooding duties with her mate (Steeves *et al.* 2014). The eggs hatch in about 19–20 days, and the young fledge about 30 days from hatching (Steeves *et al.* 2014). In some instances an unmated helper will assist with the rearing of young (Steeves *et al.* 2014). Throughout the breeding season, large flocks of individuals commonly roost together in large chimneys, leading to the misconception that the birds are nesting as a colony (Steeves *et al.* 2014). Some nonbreeding birds may even roost in a chimney occupied by a single nesting pair (Steeves *et al.* 2014). When the young have fledged, parents and juveniles from several chimneys move to larger staging roosts, and at summer's end they amass in the thousands to migrate to South American wintering areas (Steeves *et al.* 2014).

The entire North American population of Chimney Swifts migrates south to spend the winter in South America, but little is known of the biology of these birds while there (Steeves *et al.* 2014). The Chimney Swift's winter range in South America is from western Peru and in the upper Amazon basin of eastern Peru, northern Chile, and north-western Brazil (Araya *et al.* 1972, Plenge 1974, Stotz *et al.* 1992). The winter range of the Chimney Swift was discovered in Peru in 1943, from 13 banded birds recovered in the region between the Putumayo and Napo rivers (Lincoln 1944, Brackbill 1950). There is also 1 winter record for Bermuda, on December 31, 1977 (Amos 1991).

The species is very rare in Cuba, Jamaica, Hispaniola, and the Virgin Islands (Raffaele *et al.* 1998). The Chimney Swift has been recorded once in south Táchira, Venezuela, in the month of November (De Schauensee and Phelps 1978).

North of California along the west coast of North America, the Chimney Swift is an accidental vagrant with 3 accepted records, all in the month of May, for Oregon by the Oregon Bird Records Committee (OFO 2016), no accepted records for Washington State, by the Washington Bird Records Committee (Wahl *et al.* 2005, WRBC 2016), 4 records for British Columbia (Toochin *et al.* 2014) and there is 1 incredible specimen record for Alaska on June 16, 1981 from St. George Island, in the Pribilof Islands (Gibson 1981). There are no confirmed records for Alberta (Slater and Hudon 2002).

The Chimney Swift is a casual species in Greenland (American Ornithologists' Union 1998a). There are a few records for Chimney Swift from Europe, with 5-6 autumn records for Great Britain (Alström and Colston 1991, Byrne and Graves 1992, Hutt 2006). There is one record from France (Trevoux and Trevoux 2007). There is also a single record for the Azores (Hering and Alfrey 2006).

Identification and Similar Species

The identification of the Chimney Swift is covered in all standard North American field guides. This species is long winged, has more of a tendency to soar, and has a cigar shaped body (Sibley 2000, Dunn and Alderfer 2011). The Chimney Swift measures 13 cm in length, with a wingspan of 35.56 cm, and weighs 23 grams (Sibley 2000, Dunn and Alderfer 2011). In the context of British Columbia, any potential vagrant bird encountered has to have the very similar looking Vaux's Swift (*Chaetura vauxi*) ruled out. The Vaux's Swift is a very common breeding species found throughout much of British Columbia (Campbell *et al.* 1990b). It is a smaller winged species than the Chimney Swift, with fluttery, and rapid wing beats (Sibley 2000, Dunn and Alderfer 2011). This species measures 12 cm in length, with a wingspan of 30.48 cm, and weighs 17 grams (Sibley 2000, Dunn and Alderfer 2011).

The Chimney Swift is identified by its overall darker plumage than that of Vaux's Swift (Sibley 2000, Dunn and Alderfer 2011). The throat and chest are dark sooty-brown, which is clearly lighter on Vaux's Swift (Sibley 2000, Dunn and Alderfer 2011). The wings are longer and narrower at the base with dark axillaries that do not contrast with dark under-parts (Sibley 2000, Dunn and Alderfer 2011). On Vaux's Swift, the dark axillaries of the under-wing contrast with the paler underside of the bird, and the wings are broader at the base and shorter in overall length (Sibley 2000, Dunn and Alderfer 2011). The rump is dark on Chimney Swift and does not contrast with the rest of the upper-parts or wing (Sibley 2000, Dunn and Alderfer 2011). This is a key field mark, but can be hard to see unless looking down on a bird (Sibley 2000, Dunn and Alderfer 2011). The Vaux's Swift has a bright light golden-brownish rump that clearly contrasts from the rest of the upper-parts of the bird, and can be seen from a good distance at the right angle (Sibley 2000, Dunn and Alderfer 2011). The Chimney Swift is prone to soar more, recalling in some ways a small Black Swift (*Cypseloides niger*), and does far less rapid fluttering flight style of the Vaux's Swift (Sibley 2000, Dunn and Alderfer 2011). One of the best ways to distinguish the 2 species is by calls (Sibley 2000, Dunn and Alderfer 2011). The Chimney Swift makes single high, hard chips that run together into rapid, uneven, twittering, chattering series, and creates a rolling descending twitter (Sibley 2000, Dunn and Alderfer 2011). Single chips make a sound similar to some warbler chip notes (Sibley 2000). The Vaux's Swift makes sharp chips, higher than the Chimney Swift (Sibley 2000). The full call is several sharp chips followed by buzzy trills making a "tip tip tip tipto tzeeerip" (Sibley 2000). Chip notes are higher

and final buzz is much higher and finer than a Chimney Swift (Sibley 2000). These calls are reminiscent of an Eastern Kingbird (*Tyrannus tyrannus*) (Sibley 2000).

Though the identification is tricky, with careful study and good viewing opportunities, keen observers should be able to identify potential Chimney Swifts they encounter in the province.

Occurrence and Documentation

In British Columbia, the Chimney Swift is an accidental vagrant that has been documented with sight records only to date. The first record for British Columbia was found by Rick Toochin at Iona Island, in Richmond on June 3, 2005 (Toochin *et al.* 2014). The bird was seen both through a telescope and through binoculars with about 100 Vaux's Swifts feeding low over the Outer Pond (R. Toochin Pers. Comm.). Unfortunately photographs were not secured, but direct size comparisons of body and wing size, rump colour and vocalizations were made at the time (R. Toochin Pers. Comm.). The second record for the province occurred during a hawk watch when a single bird was seen by Louis Haviland and Rick Toochin in Sooke on October 8, 2007 (Toochin *et al.* 2014). This bird had been seen in the same area the previous day, but was not identified to species (R. Toochin Pers. Comm.). The bird was hanging out with a late Violet-green Swallow (*Tachycineta thalassina*) and was viewed from above and below in telescopes and binoculars (R. Toochin Pers. Comm.). This bird was heard calling at least twice, but unfortunately efforts to get pictures were unsuccessful (R. Toochin Pers. Comm.). The third record for British Columbia was 3 birds found by Guy Monty and Mike Toochin while conducting a bio-inventory survey in Tumbler Ridge on September 9, 2011 (Toochin *et al.* 2014). This region is highly likely to get this species again in the future given its location on the east side of the Rocky Mountains where no natural barriers prohibit birds from wandering into the region from Saskatchewan. However, as with all provincial sightings, careful attention must be made as Vaux's Swift have occurred in the region as a casual vagrant, so it is not a case of just assuming a swift seen here is a Chimney Swift (Summers and Gebauer 1995). The fourth and latest record of Chimney Swift for British Columbia was of a presumed adult watched by Rick Toochin and Al Russell through both telescopes and binoculars flying low over the water at Willband Creek Regional Park, Abbotsford on July 20, 2014 (R. Toochin Pers. Comm.). As with other records, the bird was viewed from both above and below, allowing for excellent views of the rump and the underside of the bird (R. Toochin Pers. Comm.). Unfortunately identifiable photographs were not obtained. As with all these records to date, they are sight records, given how swifts fly fast and often move quickly, it will likely be a skin specimen that will be the first fully documented record for British Columbia. In the new era of ever faster and better Digital SLR Cameras, it is very likely a future record will be photographed.

There are to date too few records to look for a pattern of when Chimney Swift is most likely to occur in British Columbia. In Oregon, all 3 accepted state records have occurred in the Spring, in the month of May (OFO 2016). Observers should watch for this species from mid-April to early November, paying particular attention to all odd-looking Vaux's Swifts. Given this species is slowly expanding its breeding range westward, it is very likely that the Chimney Swift will be recorded in British Columbia in the future.

Table 1: Records of Chimney Swift for British Columbia:

- 1.(1) adult June 3, 2005: Rick Toochin: Iona Island, Outer Pond, Richmond [with 100 Vaux's Swifts] (Toochin *et al.* 2014)
- 2.(1) fall plumage October 8, 2007: Rick Toochin, Louis Haviland: Grant Road, Sooke (Toochin *et al.* 2014)
- 3.(3) fall September 9, 2011: Guy Monty and Mike Toochin: Tumbler Ridge (Toochin *et al.* 2014)
- 4.(1) adult July 20, 2014: Rick Toochin, Al Russell: Willband Creek Regional Park, Abbotsford (R. Toochin Pers. Comm.)

Acknowledgements

We wish to thank Barbara McKee and Don Cecile for editing this manuscript.

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