

A VAUX'S SWIFT SPECIMEN FROM NEW MEXICO WITH A REVIEW OF *CHAETURA* RECORDS FROM THE REGION

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ABSTRACT: Vaux's Swift has finally been documented in New Mexico on the basis of two observational records supported by photographs and a specimen. Here I report on the circumstances of collection of the specimen and review the status of Vaux's and Chimney Swifts in the region. In New Mexico, Vaux's Swift appears to be a rare but regular migrant in the fall and perhaps the spring, with most records from the southwestern part of the state. The Chimney Swift is established as an annual summer resident on the eastern plains of New Mexico with a tendency to wander farther west. More data from Chihuahua are needed.

Small dark swifts of the genus *Chaetura* occur regularly in New Mexico (Hubbard 1978), but these birds are often left identified only to the genus. New Mexico lies between the core ranges of the two northern species of *Chaetura*, the Chimney Swift (*C. pelagica*) to the east and Vaux's Swift (*C. vauxi*) to the west (AOU 1957). Until recently, all of these swifts definitively identified in New Mexico had proven to be Chimney Swifts (e.g., Bailey 1928, Hubbard 1978). The Chimney Swift is now a confirmed breeder on the eastern plains of New Mexico (Williams 2001), and Vaux's Swift is a transient in the southwestern United States (e.g., Phillips et al. 1964). This pattern of occurrence along with the two species' similarity makes every *Chaetura* observed in New Mexico an identification challenge.

The Chimney Swift is larger (Table 1) and darker ventrally than Vaux's Swift. Their vocalizations are different, but most observations of *Chaetura* in New Mexico are of silent birds. Indeed, accounts of Vaux's Swift from the early to mid-20th century cautioned against attempting to distinguish these two species in the field (Lowery 1939, Oberholser 1974).

Vaux's Swift is in general more likely in the southwestern part of the state, and the Chimney Swift occurs primarily in the eastern plains (Figure 1). However, specimens of Chimney Swifts in New Mexico as far west as the Mimbres and Rio Grande valleys (Figure 1), records from the extreme southwestern part of the state and in Arizona, and at least intermittent breeding in California (Hamilton et al. 2007) demonstrate that every *Chaetura* in New Mexico needs to be identified with the utmost caution, especially

Table 1 Wing Chords of Females of Three Taxa of *Chaetura*

| Taxon | Wing chord | | | Source |
|----------------------------|------------|-------------|----------|--------------|
| | Mean | Range | <i>n</i> | |
| <i>C. v. vauxi</i> | 111.9 | 107–117 | 10 | Ridgway 1911 |
| <i>C. v. tamaulipensis</i> | 112.4 | 109–115 | 4 | Sutton 1941 |
| <i>C. pelagica</i> | 129.7 | 122.5–133.5 | 8 | Ridgway 1911 |
| MSB 29000 | 114.2 | | | |

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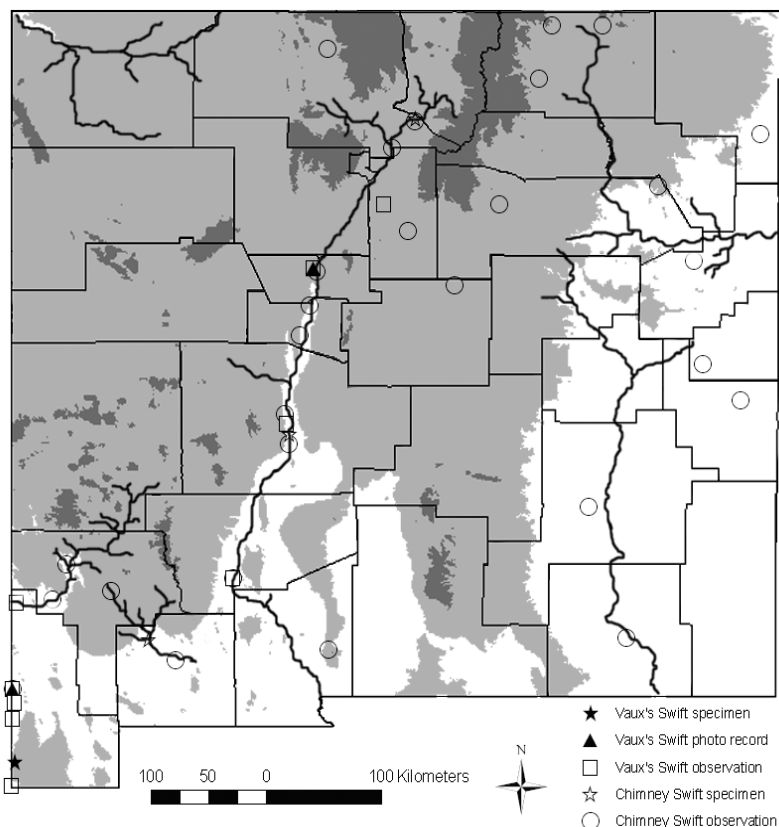


Figure 1. Distribution of records of *Chaetura* swifts in New Mexico. Data from eBird, Ornis, NMOS Field Notes database, and NMOS records courtesy S. O. Williams.

during migration. Here, I report on the first specimen of Vaux's Swift for New Mexico, collected in the Peloncillo Mountains, Hidalgo County, and I review the occurrence of Vaux's Swift as a migrant in the southwest United States and northwest Mexico.

METHODS

I compiled records of *Chaetura* swifts from published literature, online resources for bird distribution (databases of Ornis, www.ornisnet.org, eBird, www.ebird.org, and the New Mexico Ornithological Society [NMOS], <http://nhnm.unm.edu/partners/NMOS/query.php5>), and the NMOS rare-bird

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Figure 2. MSB 29000, ventral and lateral views.

archive courtesy of S. O. Williams. I also solicited observations from surrounding states, especially those in Mexico. I could not evaluate the validity of each of these records myself but relied instead on the judgment of those who published the records.

On 20 September 2009, I visited the Peloncillo Mountains, Hidalgo County, New Mexico, accompanied by Shane G. Dubay and Michael J. Lelevier. That evening, as we scanned for birds along the lower reaches of Clanton Canyon, we saw up to three small ashy brown swifts that we identified only as *Chaetura* species. Knowing that bodies of water often attract swifts, we proceeded up the canyon to Geronimo Tank (31° 31.231' N, 109° 0.991' W), a small earthen tank ~100 m in diameter. We had brief views of *Chaetura* swifts, but at great distances. The next morning, 21 September 2009, we returned to Geronimo Tank and found what we estimated to be six *Chaetura* swifts flying over the tank and apparently foraging in the company of about 15 Violet-green Swallows (*Tachycineta thalassina*). The swifts were pale ventrally, and we tentatively identified them as Vaux's Swifts. I was able to secure a specimen, confirming its identification as a Vaux's Swift.

I prepared the specimen as a study skin and deposited it in the Division of Birds at the Museum of Southwestern Biology (MSB 29000; Figure 2). The specimen weighed 15.6 g, with a wing chord in the dry specimen of 114.2 mm. Its ovary was 3.5 × 1.5 mm, and the presence of a bursa 6 × 4 mm indicated that the bird hatched that year. Its stomach was full of small insects. It was carrying light fat and had trace amounts of molt on its head and neck.

RESULTS

Vaux's Swift has a breeding distribution from southeast Alaska to Central America and Venezuela (AOU 1957). There are five recognized subspecies, with the nominate subspecies nesting in the Pacific Northwest and migrating largely to southern Mexico (Bull et al. 2007). Most records of Vaux's Swift in the United States are assumed to refer to the nominate subspecies, but *C. v. tamaulipensis* has been collected in south-central Arizona (Phillips 1954) and may nest in the mountains of west-central Mexico (Phillips and Webster 1957). I compared MSB 29000 to the small series of *C. vauxi* at MSB, and although I did not see any indication that this specimen represents anything other than the nominate form, comparison to a larger series would be informative. Subspecies *tamaulipensis* differs from nominate *vauxi* in its darker underparts, more glossy upperparts, and lack of a fine whitish supercilium (Sutton 1941).

The nominate form of Vaux's Swift nests in forests from southeast Alaska and adjacent British Columbia southeast to western Montana and south to Santa Cruz County, probably Monterey County, California (AOU 1998). The bulk of the population migrates through the Pacific coastal states, with diffuse records from the Great Basin east regularly to southeast Arizona (eBird). Dates of migration for Arizona extend from mid-April to mid-May and mid-September to mid-October (Phillips et al. 1964; eBird). Hayward et al. (1976) considered Vaux's Swift casual in Utah. There are no confirmed records from Colorado or trans-Pecos Texas. Eastern Texas has several sight records (Oberholser 1974, Rappole and Blacklock 1994), and Louisiana (Lowery 1939, S. W. Cardiff in litt) and Florida (Webber and Collins 1995) host small wintering populations during at least some years. Two of the three records for New Mexico accepted by the New Mexico Bird Records Committee are from the southwestern part of the state; the third is from Albuquerque in the middle Rio Grande valley (Table 2).

Dates of autumn migration for Vaux's Swift in the state are roughly September through mid-October, with most records for the last two weeks of September through the first week of October. Spring has fewer records over a shorter interval, 12 April through 25 April.

In adjacent Mexican states, Vaux's Swift is poorly known, despite presumed passage of nearly the entire population through Sonora (Russell and Monson 1998) and perhaps Chihuahua during migration. Friedmann et

Table 2 New Mexico Records of Vaux's Swift Accepted by the New Mexico Bird Records Committee

| Date | County | Locality | Notes |
|--------------|------------|---------------------------------------|---|
| 18 Sep 2007 | Hidalgo | San Simon Cienega | Lone bird; photographed (Williams 2001) |
| 21 Sep 2009 | Hidalgo | Geronimo Tank | One of ~6; specimen collected (MSB 29000) |
| 1-2 Oct 2009 | Bernalillo | Albuquerque; Rio Grande Nature Center | Lone bird; photographed (Williams 2009) |

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al. (1950) listed *C. v. vauxi* as a spring migrant through Sonora and Baja California but noted that its distribution and season of occurrence were imperfectly known. I was able to find only two records from Chihuahua, of a flock of eight observed near Madera on 28 August 2010 (eBird; W. H. Howe in litt.) and of a possible Vaux's Swift at Basaseachic Falls 14 August 1997 (N. Moore-Craig in litt.). Russell and Monson (1998) considered Vaux's Swift to be a rare transient in spring and fall in Sonora, with small groups of birds observed near the Gulf of California and additional records from the Sierra Madre Occidental. Spring dates for Sonora are 11 April–22 May; fall 16 September–19 October (eBird).

The Chimney Swift was once restricted to nesting in hollow trees in the forests of eastern North America (Cink and Collins 2002) and historically did not occur on the southern Great Plains. It spread west as the building of chimneys accompanied settlement (e.g., Sutton 1967). Observations of this species on the eastern plains of New Mexico go back to at least 1962, and it has been an annual summer visitor to the eastern plains of New Mexico since 1978 (NMOS database), with records from Carlsbad to Clayton (Figure 1) and confirmed nesting at Carlsbad in 2001 (Williams 2001). Farther west, Chimney Swifts have been reported from Silver City, Redrock, and San Simon Cienega. Supporting these observational records are three specimens from New Mexico: as far west as Rinconada (near Dixon), Rio Arriba Co. (U.S. National Museum of Natural History 193249), 1 May 1904; the Mimbres River valley at Canagra Place 30 miles southeast of Silver City, Luna Co. (Cincinnati Museum of Natural History 24449), 22 May 1921; and San Antonio, Socorro Co., 22 April 1952 (MSB 20287; Figure 1).

In surrounding states, Chimney Swifts have been known to breed in Colorado since 1938 (Bailey and Niedrach 1965). There are two specimens from the University of Arizona campus, Tucson, 18 June 1952 (Phillips et al. 1964) and scattered sight records (eBird). In California, the Chimney Swift was first documented in Imperial County, a specimen collected along the Colorado River 6 May 1930 (Huey 1960). It was reported "in numbers" in California from 1968 to 1974, and the first documented nest was at Fort Bragg in 1975 (Small 1994). It is currently a rare but annual summer visitor to Los Angeles from 30 April to 12 October, though since the late 1990s its numbers have apparently diminished (Hamilton et al. 2007).

Birds thought to be Chimney Swifts have been reported in New Mexico as early as early March, but the majority of records come from the third week of April through the third week of September. There are no fall specimens of the Chimney Swift, and reports of it after the third week of September seem highly speculative, so I don't include them in Figure 1.

DISCUSSION

This summary of occurrence of *Chaetura* in New Mexico is only as good as the data it is based on. Some of these birds were likely misidentified. I use the records because most of the observers are experienced with birds in New Mexico and understand the difficulties in identification of swifts. Many of these observers have reported "*Chaetura* sp." from parts of the state where one species is much more likely than the other, implying that

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they are making their identifications on the birds' field marks, not simply geographic location.

Field identification of *Chaetura* swifts will always be among the greatest challenges to field ornithologists in New Mexico. Observers have been reporting probable Vaux's Swifts for years, mostly from the southwestern part of the state, but also up to the middle Rio Grande valley (Figure 1). The NMOS has accepted three records of Vaux's Swift that mirror these unsubstantiated reports, so it seems likely that many of these identifications of Vaux's Swift are correct. There are no accepted spring records of Vaux's, and all Chimney Swift specimens from New Mexico are from the Rio Grande valley or farther west, making definitive documentation of Vaux's Swift during the spring highly desirable. In northwest Mexico, Chihuahua is devoid of published records, and further documentation of passage of Vaux's Swift should be a priority in this little-known state.

The confirmation of Vaux's Swift in New Mexico seems long overdue, given the proximity of records from adjacent Arizona, where the species is known as close as the Chiricahua Mountains (Phillips et al. 1964). Many sight records from southwestern New Mexico by experienced birders were conservatively reported as *Chaetura* sp. because definitive details could not be documented (eBird, NMOS database). There now is definitive evidence that Vaux's Swift occurs in New Mexico. Additional specimens and careful documentation will be critical to elucidating the status of both species of *Chaetura* in New Mexico further.

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