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## VAUX SWIFT IN LOUISIANA

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OUISIANA is the wintering ground for many distinctly western species and subspecies. Recent records for the Rufous Humming-bird, Golden-crowned Sparrow, Bullock Oriole, and others indicate a definite tendency for even far western forms to move southeastward to the lower Mississippi River valley during the winter.

In spite of familiarity with this phenomenon, I was much surprised when swifts taken on the Louisiana State University campus, East Baton Rouge Parish, Louisana, on February 9 and 15, 1939, proved to be the Vaux Swift (*Chaetura vauxi*). Aside from extending the known range of the species many hundreds of miles eastward, these records constitute the first known occurrences of the Vaux Swift within the boundaries of the United States during the winter months, previous records for that season coming from Mexico and Central America.

The first record of swifts in Louisiana in winter was in 1937–38, when I saw two individuals almost daily from November through February. One of the individuals was captured and banded on February 16, 1938 (U. S. Bureau of Biological Survey band number 38-114000). Since I had no thought of its not being an ordinary Chimney Swift (Chaetura pelagica), I did not examine it as critically as I should and it was put on record as belonging to that species (Cf. H. C. Oberholser, "Bird Life of Louisiana," La. Dept. Conserv. Bull., 28, 1938, 353).

During November, 1938, swifts were again noted in the same chimney on the University campus. This time a larger number, varying from five to ten, was seen. They were observed almost daily during the period from November through February. When it appeared that they intended to remain throughout the winter, efforts were made to capture them for banding purposes. Six specimens were caught, five of which were banded and released (numbers 39-47001 to 39-47005). The sixth specimen was preserved as a study skin. Only after being placed among specimens of *Chaetura pelagica* in the Museum of Zoology collection was it noted that the bird differed from that species. Since it was smaller and paler it was immediately suspected of being *Chaetura vauxi*. The question then arose as to whether the five birds banded and released

were identical with the one made into a skin. These were recaptured on February 15, along with four additional unbanded birds and all proved to be the smaller and paler species. These four unbanded birds were retained as museum specimens; the others were released. Although a few swifts were observed at this chimney throughout the remainder of February and all of March, it could not be determined whether they were the Vaux Swift or incoming migrants of the Chimney Swift. On April 2, 115 swifts were captured at this chimney. All proved to be Chimney Swifts and were therefore banded and released.

After careful comparison with material kindly loaned by the Museum of Vertebrate Zoology of the University of California, and the Bureau of Biological Survey, it is obvious that the five specimens taken at the University in February, 1939, belong to *Chaetura vauxi*. Both Dr. H. C. Oberholser and Mr. George Willett have examined the specimens and confirm this identification. It is probable that the specimen captured and released in February, 1938, was also of this species.

The five specimens, all females, available for study measure as follows: wing, 116.5, 110.5, 112.6, 111.5, 115.0 mm. Four were washed before being prepared as study skins and present a markedly different appearance from the unwashed specimens. On comparison of the washed specimens with skins of *Chaetura vauxi* available from Mexico, California, Washington, British Columbia, and Alaska, they appear to be somewhat darker, particularly on the upper parts. The under parts are grayer. Probably this is due to the fact that specimens of *Chaetura vauxi* used for comparison are, with few exceptions, either breeding birds or birds collected in the United States during the northward migration, and thus are in more worn and faded plumage.

The Chimney Swift congregates in great numbers in certain sections of the southern United States during the fall months. At Baton Rouge the numbers recorded seem to exceed any other published estimates for the species. Several chimneys have been observed which simultaneously house between five and six thousand birds each during September and October. Banding records indicate that these flocks are continually changing in individual composition. When an interval of about ten days is allowed to elapse between trapping dates at any one chimney, the composition of the flock is observed to have changed almost entirely. Several conservative estimates have placed local populations of Chimney Swifts at Baton Rouge throughout the latter part of September and the first of October at 50,000 or more birds. If we assume only a minimum number of shifts in the population, we must conclude that the number of individuals passing through the region mounts to several hundred thousand. Banding of large numbers of these birds is accomplished with the minimum of difficulty. To date, 16,114 swifts have been banded and released, all within an aggregate of seven days.

The large flocks begin to dwindle during late October and, except for a few stragglers, are usually gone by the first of November. At what time Vaux Swift makes its appearance is not known. In the West the species is said to be an early fall migrant, so it may perhaps appear here before the large flocks of Chimney Swifts have completely dispersed. It is questionable whether the two species can be positively identified except with the specimen in hand. A soot-covered Vaux Swift could be distinguished from a Chimney Swift only by its small size. However, now that the western species is definitely established as a winter visitor to Louisiana, all swifts handled in banding operations will be critically inspected.

Note: After this paper was in press, another specimen of *Chaetura vauxi* was captured at Baton Rouge. It was taken from a flock of several thousand Chimney Swifts on October 14, 1939, during the course of bird banding operations. This, I believe, constitutes the first instance in which the two species have been found together and confirms the suggestion above that Vaux Swift may appear in Louisiana before the large flocks of Chimney Swifts have dispersed. Like the other specimens of the Vaux Swift taken here, the October specimen proved also to be a female.

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