

MORTALITY OF PURPLE MARTINS FROM ADVERSE WEATHER

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On 28 March 1971, I found two dead, male Purple Martins (*Progne subis*) on the snow beneath my martin house in Oxford, North Carolina. The snowfall started early on the morning of 26 March and continued throughout most of that day until 13.2 cm had accumulated on the ground. The temperature fell to -4.0°C on the night of 26–27 March and to -0.6°C on the night of 27–28 March. Two martins were seen alive at the martin house at 07:30 EST on 26 March, only a short time after the snowfall had started. One of these was sitting and singing as the snow fell thickly around it. Much of the snow melted by 08:00 on 28 March, uncovering the dead martins. It was

THE OCCURRENCE OF *STREPTOPROCNE ZONARIS* *ALBICINCTA* AND *ARA MILITARIS* IN CHIAPAS, MÉXICO

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Among the specimens secured in the course of field investigations in Chiapas, México, during the winter and spring of 1962–63, is a male *Streptoprocne zonaris albicincta* (Cabanis) and a male and female *Ara militaris* (Linnaeus).

The specimen of *S. z. albicincta* (W. Found. Vert. Zool. No. 10293) was collected on 9 December 1962, approximately 8 km S from Solosuchiapa, about 400 ft elevation, from a large mixed flock of *Chaetura vauxi* and *S. zonaris* that commonly foraged in the vicinity of our camp in the deep valley along the upper Río Teapa. These swifts were observed almost daily during the time spent at this locality (25 November 1962–12 January 1963). Normally, they circled well above the Vaux's Swifts except on days when rain and low clouds caused them to fly closer to the ground, as on the day I collected this specimen.

This Collared Swift is referred to the subspecies *albicincta* on the basis of the very dark, sooty blue-black color of the crown, forehead, back, rump, and upper tail coverts. The dark blue-black color, particularly of the crown and forehead, readily distinguishes this specimen from *S. z. mexicana* Ridgway, which is a distinctly duller black and has a grayish forehead. The length of the wing (chord) and tail are $198.0 \pm$ and 72.7 mm, respectively. The tail is somewhat worn.

Streptoprocne z. albicincta is usually considered to range from Costa Rica southward through Panamá to northern and western South America as far as Perú.

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impossible to determine exactly when the birds died. The birds weighed 45.3 and 44.9 g. I could find no published information on normal early spring weights of Purple Martins, but Norris (Wilson Bull. 70:117, 1958) reported the weight of an immature male in July as 44.0 g.

In the gizzards of the dead birds were 0.094 g and 0.064 g, respectively, of fragmented insects which were weighed after being air dried.

Sprunt (*in* Bent, U.S. Natl. Mus. Bull. 179:505, 1942) noted that, "two or three days of severe cold so eliminates insects that starvation [of Purple Martins] not infrequently occurs." The relatively large amounts of unused food in the gizzards of the dead martins makes it improbable that these birds died of starvation. It is likely that death resulted from exposure to low temperature rather than some other cause.

Two more male Purple Martins were at the martin house at 07:15 on 29 March. These birds may have completed their northward flights after the more severe phase of the adverse weather had passed.

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There are two published records, however, from regions farther north: one from Mount Cacaguatique, El Salvador (Dickey and van Rossem, Fieldiana—Zool. 23:249, 1938); and the other from near Las Lajas, Guatemala (Wetmore, Proc. U.S. Nat. Mus. 89:541, 1941). *Streptoprocne z. albicincta* is reported herein for the first time from México. Monroe (Ornithol. Monogr. no. 7:167, 1968) considered the Honduran population to be intermediate between *S. z. mexicana* and *S. z. albicincta*. The color of the Chiapas specimen reported herein is much darker than that of the Honduran specimens in the LSUMZ collection.

The two *Ara militaris* (a male, Louisiana St. Univ. Mus. Zool. No. 39653; and a female, W. Found. Vert. Zool. No. 10878) were collected on 7 March 1963 in the vicinity of Finca Patichuiz, approximately 33 miles NE Las Margaritas, at about 6000 ft elevation. Measurements of the male and female, respectively, are: length of wing (chord), 375 and 377 mm; length of tail, 386 and 420 mm. Both macaws were shot as they flew up out of a huge limestone "sink," locally called a *pozo*. A third was seen but not collected. One of the workers at the Finca reported having seen five Military Macaws near the *pozo* on the previous day (6 March). The area was revisited on 2 April; no macaws were seen.

The limestone "sink," one of several in the area, is about 250 ft in diameter and about 100 ft deep, and has steep, undercut, and eroded sides with many small caves. The bottom was dry when visited and contained a dense stand of trees and brush. The owner of Finca Patichuiz and his sons said that the macaws nested in the shallow caves in the walls of the limestone "sink." According to them, the Military Macaws had been plentiful in past years with as many as 30 or 40 nesting each year in the walls of the huge *pozos* on the Finca. However, they reported that more recently (early 1960s), very few macaws were seen.

There has been only one other report of *Ara militaris* south of the Isthmus of Tehuantepec, Oaxaca, México, and that was Boucard's (Ann. Soc. Lin. Lyon, p. 32, 1878) record of Military Macaws nesting in