NOTES

MIGRATION OF THE PURPLE MARTIN IN SOUTHERN MEXICO

ROBERT W. DICKERMAN, Department of Microbiology, Cornell University Medical College, New York, New York 10021

ROBERT M. ZINK, Museum of Vertebrate Zoology, University of California, Berkeley, California 94720

SUSAN L. FRYE, J.F. Bell Museum of Natural History, University of Minnesota, Minneapolis, Minnesota 55455

The migration of the Purple Martin (*Progne subis*) south of the United States is poorly documented. There are few specimen records from either migration routes or wintering grounds. Sight records are of comparatively little value because female Purple Martins resemble closely the abundant Gray-breasted Martin (*P. chalybea*). This is important because observations of roosting martins are often at night and usually only ventral views are possible. Little is known of the extent to which these two species flock and/or roost together. For example, on 7 August 1961, RWD observed a group of 30 female-plumaged martins roosting on wires in the village plaza at Tlacotalpan, Veracruz, which included birds of two sizes and that varied in the extent of white and gray in the underparts. In such flocks the species composition is uncertain, and the presence of *P. subis*. The similarly plumaged *P. modesta elegans* of South America was once taken in Florida (Key West, 14 August 1890) and Panama (Eisenmann and Haverschmidt 1970) and could appear in Mexico.

Additionally, Caribbean forms of *Progne* with confusing plumages (Eisenmann 1959) could occur with *P. subis* and make identification even more difficult. Further confounding the understanding of the migration of *P. subis* is the apparent asynchronous migration of males (earlier) and females (Phillips et al. 1964). Hence the number of adult males present in a migrating or roosting flook may have no direct relationship to the number or presence of females. We attempt here to summarize available information on the migration of the Purple Martin in Mexico, primarily through the Gulf lowlands.

Purple Martins reach southern Mexico by early July. On 10 July 1961 RWD saw seven adult male Purple Martins among approximately 1200 roosting martins in the plaza at Tlacotalpan, Veracruz. On 24 July 1961 one adult male was observed among approximately 300 and on 27 July 1961 three or four were noted among 500-600 roosting martins. Migrating flocks which included adult males were also noted near Tlacotalpan on 27 July 1961. Niles (1972) examined 21 migrants from Yucatan Peninsula (18), Honduras (1), Nicaragua (1) and Cuba (1) taken between 25 July and 8 October (it was not possible to correlate dates and general localities from his discussion). Russell (1964) reported a sight record for 13 July and a specimen collected 25 July in Belize.

In August large flocks and roosts of martins occur in many areas in the Gulf lowlands of Mexico, especially at the plazas of towns and villages. Klaas (1968) described a flock of "several thousand individuals" and collected three female Purple Martins from 14 to 17 August 1962 near Felipe Carillo Puerto, Quintana Roo. On the night of 25 August 1977, two of us (RMZ and SLF) observed approximately 14,000 martins roosting on utility wires in the central well-lighted section of downtown Villahermosa, Tabasco. There were 63 adult male Purple Martins (purple plumage) among a sample of 6,900 birds counted. However it is unclear how many Purple Martins were present because of the difficulty in distinguishing females from *P. chalybea*. Elsewhere in Central America, in areas where Purple Martins are not regular visitors, roosts of *P. chalybea* numbering tens of thousands develop during this same period

NOTES

(for example in Escuintla, Guatemala; RWD pers. obs.). Our latest fall record for the Purple Martin in Mexico is a female taken by R.J. Oehlenschlager in the Sierra de San Andres Tuxtla, Veracruz, on 7 October 1974.

Russell (ibid.) wrote of Purple Martins in Belize, "Spring migrants were seen as early as February 6, but most birds passed through in the first two weeks of March." Monroe (1968) recorded specimens from La Cieba on the Gulf lowlands of Honduras taken 3 May. The spring migration in Mexico is also poorly documented. Niles (1972) examined eight specimens from the Yucatan Peninsula taken between 18 February and 17 April. We have many records between 3 April, when two males with two female-plumaged birds were seen at Tlacotalpan (RWD), and 30 April when a female *P. subis* succlected at that locality, and five males were seen near Lake Catemaco, Veracruz (RWD). Spring records are lacking from other parts of Mexico. It should be noted that Locetscher (1955) erroneously recorded as *P. subis* five specimens of *P. chalybea* collected 2-4 May at Lake Catemaco by Nelson and Goldman.

Knowledge of the migration patterns of Purple Martins through Mexico and Central America is fragmentary. We wish to point out the problems that exist with regard to the migration of the Purple Martin, that only careful sight records will contribute to existing knowledge, and that additional specimen records are needed to adequately document the migration of this species.

We wish to thank Richard J. Oehlenschlager, Robert M. Mengel and John Weskes for verifying specimen identifications and the first for providing us unpublished information on specimens in the James Ford Bell Museum of Natural History, University of Minnesota. We thank Allan R. Phillips for calling to our attention the misallocation of the Nelson and Goldman specimens from Catemaco and Ned K. Johnson and Dale A. Zimmerman for useful comments on the manuscript.

LITERATURE CITED

Eisenmann, E. 1959. South American migrant swallows of the genus *Progne* in Panama and northern South America; with comments on their identification and molt. Auk 76:528-532.

Eisenmann, E. and F. Haverschmidt. 1970. Northward migration to Surinam of South American martins (*Progne*). Condor 72:368-369.

- Klaas, E.E. 1968. Summer birds from the Yucatan Peninsula, Mexico. Univ. Kansas Publ. Mus. Nat. Hist. 17:579-611.
- Loetscher, F.W., Jr. 1955. North American migrants in the state of Veracruz, Mexico: a summary. Auk 72:14-54.

Monroe, B.L., Jr. 1968. A distributional survey of the birds of Honduras. Ornithol. Monogr. No. 7.

Niles, D.M. 1972. Molt cycles of Purple Martins (Progne subis). Condor 74:61-71.

- Phillips, A., J. Marshall and G. Monson. 1964. The birds of Arizona. Univ. Arizona Press, Tucson, AZ.
- Russell, S.M. 1964. A distributional study of the birds of British Honduras. Ornithol. Monogr. No. 1.

Accepted 20 October 1980