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Systematic Notes on Palearctic Birds. No. 1 A New Swallow from the Northern Sahara

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In March, 1929, Hartert and Flükiger collected some specimens of the Pale Gray Martin (*Hirundo obsoleta*) on the northern rim of the Sahara along the foot of the Presaharian Atlas, four specimens from near Beni Ounif close to the border of Morocco, and two from much farther east near Biskra. Hartert thought at first that he had discovered a new species but in 1933 (Novitates Zool., vol. 38, pp. 331-332), he states that after comparing them with *H. o. spatzi* from the Ahaggar Massif in the central Sahara he "found them indistinguishable. The coloration is the same and the measurements agree." His judgment may have been influenced unwittingly by his implied disappointment, for the specimens from Biskra and Beni Ounif differ from *spatzi*, from which I propose to separate them as follows:

Hirundo obsoleta presaharica Vaurie, new subspecies

Type: A.M.N.H. No. 559519, Rothschild Collection; adult female; Biskra, southern Algeria; March 2, 1929; Ernst Hartert and Ernst Flükiger, collectors.

Subspecific Characters: Similar to *H. o. spatzi* but paler, grayish clay above with a buffy tinge, with the lower back, rump, and upper tail coverts brighter than the crown, not uniformly brownish clay as in *spatzi*; throat slightly whiter.

MEASUREMENTS: Type, wing (worn), 117; outer tail feather, 49; bill from skull, 11. Other specimens of presaharica measure, respectively, for the wing, tail, and bill: males, 118, 50, 11.5; 119, 49, 10.5; 122, 50, 11; 123, 52, 11.5; female, 123, 54, 10.5. In spatzi: males, 117, 49, 9; 117, 49, 11; 118, 51, 10.5; females, 119, 51, 10; 121, 52, 9. In buchanani which replaces spatzi in the Aïr Massif to the south of the

Ahaggar, four males have a wing length of 113, 113, 114, 115; and two females, 111, 113. All the specimens of the three races examined are spring birds in comparatively worn plumage.

RANGE: The Presaharian Atlas and probably extreme eastern Morocco, for according to Hartert (*loc. cit.*) the species has been observed, though not collected, west of Figuig not far from Beni Ounif and near Berguent. This last locality, at the western end of the high Algerian steppes, is, of course, well to the north of the Atlas.

DISCUSSION: The specimens from Beni Ounif are not quite so pale as the specimens from Biskra, but their general coloration is similar. Other populations will probably be found along the Presaharian Atlas that will close the gap between Biskra and Beni Ounif, but presaharica will remain separated from the nearest population of spatzi by a gap of more than 1000 kilometers of unsuitable open desert between Biskra and the Ahaggar. It is interesting to note that south of the Ahaggar, to which spatzi is apparently restricted, it is replaced by a darker and somewhat smaller race (buchanani of the Air Massif), the range of which, if not continuous, comes close to that of spatzi. All the populations of H. obsoleta may wander a little after the breeding season but are not migratory.

The characters separating presaharica from spatzi are relatively slight, and to one not acquainted with the geographical variation which prevails in this species1 might not be deemed of subspecific importance. Examination of the species throughout its range shows, however, that all the recognized races (with the exception of the two races at both extremes in the range of variation, buchanani darkest and perpallida palest) differ from one another in coloration to about the same degree that presaharica differs from spatzi. That is, in the populations of the Sahara, presaharica is paler than spatzi to the same degree that spatzi is paler than buchanani, or, in the more eastern populations, perpallida (eastern Saudi Arabia) is paler than nominate obsoleta (Egypt, Dead Sea, and southwestern Iran) to the same degree that nominate obsoleta is paler than pallida (southeastern Iran eastward). Because in this species it would be misleading, phylogenetically as well as geographically, to lump all the pale populations in one form and the dark ones in another, it seems wiser to recognize a number of relatively slightly differentiated races.

¹ For a review of the geographical variation in this species, other than in the populations of the Sahara, see Vaurie (1951, Amer. Mus. Novitates, no. 1529, pp. 15-18).