

proaches the single specimen of *pachyrhynchus* in its rich chestnut throat, chin and cheeks. The latter, indeed, differs from true *guianensis* only in its somewhat darker upperparts, especially darker crown, slightly paler lowerparts and redder throat. In the latter respect it resembles our Santarem specimen (Amer. Mus. No. 36492). The two birds are, indeed, enough alike to be referred to the same race, but beyond this statement I do not venture, except to add that should there prove to be a form from the southern side of the Amazon, referred by Hellmayr to true *guianensis*, *rufina* (Spix) might be the name for it. Measurements show that the male averages larger than the female but reveal no constant geographic variation in size, though the bill in *marmoratus* may be slightly smaller.

Otus choliba duidæ, new subspecies

SUBSPECIFIC CHARACTERS.—Darker than any known member of either the *choliba* or *asio* group; the prevailing color of the upperparts black, with vermiculations and broken markings of shades of buff and ochraceous-buff; underparts heavily striped and closely barred with black, the basal half, more or less, of the feathers ochraceous-buff, giving a pronounced suffusion of this color.

TYPE.—No. 245,914, Amer. Mus. Nat. Hist., ♂ ad.; Mt. Duida, Venezuela, 5000 ft.; January 3, 1929; Olalla Bros.

SPECIMENS EXAMINED

Otus choliba duidæ.—VENEZUELA: Mt. Duida, 4700 ft., 2; 5000 ft., 2.

Otus choliba choliba.—ARGENTINA: Santiago del Estero, 1; Embarcacion, 1.

Otus choliba decussatus.—BRAZIL: Chapada, Matto Grosso, 4; Veruga, S. Bahia, 1; Boa Nova, Bahia, 1; Santa Rita, Bahia, 3; Bahia, 2; Floriano, Piahy, 1; ?São Paulo, 1 (richly colored).

Otus choliba crucigerus.—PERU: Santa Ana, Urubamba, 2; Lagarto Alto, Ucayali, 1. ECUADOR: Curaray, 1. COLOMBIA: Villavicencio, 1; Anolaima, 4; Dabeiba, Antioquia, 1. VENEZUELA: Mérida region, 9; Esmeralda, Orinoco, 1; Ft. Duida, 725 ft., 1; Caicara, Orinoco, 1; Bolivar, Orinoco, 1. B. W. I.: Trinidad, 3.

This is, I believe the first zonal form of *Otus choliba* to be described as such, though it is not improbable that the large *ingens* Salvin, from Jima, Ecuador, may be a Temperate Zone representative of this species. We have two specimens of *crucigerus* from the region at the base of Duida, which show no approach to *duidæ*. Lacking topotypical specimens of *crucigerus* and also of *choliba*, I am unable to identify much of our material satisfactorily. Our four specimens of *duidæ* agree closely and, in the heavy black markings below, they are nearer to three birds from northern Argentina than to any others; but whether these Argentina birds are true *choliba*, I am unable to say. Three examples

from Chapada, Matto Grosso, agree in color and size (♂: wing, 155-157; tail, 82-83 mm.) with the small, comparatively pale and lightly marked *decussatus*, of which we have an excellent topotypical series. A fourth Chapada specimen resembles the others in size but is in an extreme ochraceous-tawny phase of plumage. The rest of our South American specimens of this species I provisionally refer to *crucigerus*.

THE *Glaucidium brasilianum-nanum* GROUP

In determining the relationships of the form of *Glaucidium brasilianum* inhabiting the upper life-zone on Mt. Duida, I have of necessity examined our large series of this group and I present here some of the results of this study including the description of a very distinct form from the upper Amazon which, because of the wide variation prevailing amongs these owls, has heretofore been confused with true *brasilianum*.

Glaucidium brasilianum duidae, new subspecies

SUBSPECIFIC CHARACTERS (brown phase).—Upperparts more richly colored than in the other races of this group, varying from Saccardo's umber (one specimen) to warm olive-brown (three specimens), nearly as dark as some specimens of *G. jardini*; all five specimens with as much black in the nuchal ring as *jardini*; back immaculate without even concealed markings; crown from bill to nape with fine white or ochraceous shaft-streaks; tail black with five white, incomplete bars, exclusive of rudimentary basal bar and tip; rictal bristles and ear-coverts largely black; Saccardo's umber markings of underparts of about the same shade as in the corresponding phase of *b. brasilianum*, but much more extensive, occupying a greater area than the white markings and almost meeting on the breast to enclose a white chest-spot. Five males: wing, 95-101; tail, 55-62 mm.

TYPE.—No. 245,915, Amer. Mus. Nat. Hist.; ♂ ad.; Mt. Duida, Venezuela, 4700 ft.; February 22, 1929; Olalla Bros.

RANGE.—Subtropical Zone, Mt. Duida, Venezuela.

In some respects this very distinct zonal race is between *brasilianum* and *jardini*, a fact which suggests that the latter may also be a zonal representative of *brasilianum*. The round spots on the crown which characterize *jardini* are not a constant marking, for we have specimens from Baeza, eastern Ecuador (1), and Mérida, Venezuela (3), in which the crown is more finely streaked than in the average specimen of *brasilianum*. I am not sure, indeed, that the Mérida bird is not separable.

It is interesting to observe that the zonal form of *brasilianum* in northern Argentina, *G. b. tucumanum* from Rosario de Lerma (4800 ft.), Salta, is also a deeply colored race, the upperparts being fuscous with barely a tint of brown. In our three specimens of this bird, however, there is almost no indication of black in the nuchal band and the crown-