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## FURTHER ADDITIONS TO THE AVIFAUNA OF PARAGUAY

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The recent Paraguayan collections of Alberto Schulze and his assistants, Lopez, Huber, and Loesch, include a number of birds unrecorded from the country. Some twenty of these are listed below, together with a diagnosis of a new race of pygmy owl. Most of the additions are from the Chaco and are species occurring on the Yungas of Bolivia or the plains of northwestern Argentina. Now that about three thousand specimens have been received from Schulze, the faunal distinctness of the Chaco from the country east of the Río Paraguay becomes increasingly apparent.

A new locality not mentioned in former papers on Schulze's birds is the Riacho Caballero. This is a branch of the Río Colorado, a Chaco tributary of the Paraguay. Huber collected on the Riacho Caballero about thirty to forty kilometers northwest of Rosario.

#### Botaurus pinnatus Wagler

Kilometer 195, west of Puerto Casado; one female, March 8, 1937.

#### Phoenicopterus chilensis Molina

Kilometer 195, west of Puerto Casado; nine specimens, adult and immature, March 2-May 4, 1937.

#### Phalaropus fulicarius (Linnaeus)

Kilometer 170, west of Puerto Casado; one female, March 5, 1938.

Since the red phalarope winters at sea, it was a great surprise to find this example taken in the middle of the continent.

## Glaucidium brasilianum pallens, n. subsp.

Type.—U.M.M.Z. No. 92730; adult male; kilometer 265, west of Puerto Casado, Paraguay; September 14, 1936; Alberto Schulze, original No. 2010.

CHARACTERS.—Similar to Glaucidium brasilianum brasilianum (Gmelin), of Brazil and eastern Paraguay, but much paler both above and below, and in the brown phase less rufescent; pileum drab; back, wing coverts, rump, sides, and streaks on breast pale hair brown; light spotting and streaking above more nearly white, with less buffy.

Range.—Paraguayan Chaco (kilometers 195 to 265, west of Puerto Casado) and eastern Bolivia; probably also the Argentine Chaco.

Remarks.—A series of eight specimens from west of Puerto Casado exhibits complete gradation between the red and brown There is also a complete chain from phases in body color. almost plain crowns, through progressively more streaked stages, to spotted crowns. None of the birds examined has a wholly plain tail, although one in the red phase has only the faintest indication of bars on the median pair of rectrices, the Two other remaining pairs being lightly barred with dusky. red Paraguayan birds, together with a bird from Bolivia, are barred with rufous and dusky on all the rectrices. All those in the brown phase, including the type, have the tail barred with dark brown and white.

The pileum is almost immaculate in juvenile dress with a few faint shaft-lines showing on the forehead. The whole top of the head is streaked or spotted with whitish in old specimens, and only fully adult birds acquire the black collar on the hind neck.

Glaucidium brasilianum brasilianum, the form found in the eastern part of the country, apparently occurs west to the left bank of the Río Paraguay, for we have typical dark specimens taken only 25 kilometers east of the river.

Two names in the synonymy of the species were described from Paraguay. These are Strix ferox Vieillot and Strix infuscata Temminek, both based on Azara. Since Azara's work was done in eastern Paraguay, these names are synonymous with Gmelin's brasilianum and are not available for the form of the Chaco.

G. b. pallens probably ranges over the entire Chaco west of the Río Paraguay and into the Yungas of Bolivia. I have seen no material from the Argentine, and the only Bolivian specimen examined is without definite locality. In the subtropical zone of Salta and Tucumán pallens is replaced by G. b. tucumanum Chapman, described as being a dark race with reduced spotting on the crown.

#### Chordeiles minor chapmani Coues

Twenty kilometers east of Rosario; one female, January 20, 1938.

Schulze has also sent *Chordeiles minor minor* (Forster) from fifteen kilometers east of Rosario and Kilometer 120, west of Puerto Pinasco.

#### Polytmus thaumantias (Linnaeus)

Three kilometers east of Horqueta; one male, November 15, 1937.

## Chloroceryle inda (Linnaeus)

Four kilometers west of Horqueta; 1 male, December 2, 1937.

#### Furnarius cristatus Burmeister

Kilometer 170, west of Puerto Casado; two males, February 6 and 7, 1938.

Upucerthia certhioides (Lafresnaye and D'Orbigny)

Kilometer 265, west of Puerto Casado; one male, October 26, 1936.