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THE SUBSPECIES OF
ARATINGA ACUTICAUDATA

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In the course of identifying an extensive collection of birds made by Francisco Steinbach in the Departments of Cochabamba and Santa Cruz, Bolivia, we encountered a series of *Aratinga acuticaudata* representing an apparently undescribed race. While studying this race we borrowed practically all the material of this species in this country, and it was decided to extend the study to include a revision of the series of forms that make up the species. For the loan of valuable comparative material we are indebted to the authorities of the following institutions: Museum of Comparative Zoology, Cambridge, Massachusetts; American Museum of Natural History, New York; United States National Museum, Washington, D.C.; and Carnegie Museum, Pittsburgh.

The first description of *Aratinga acuticaudata* was published by Azara (1802) under the name *Maracana cabeza azulada*, and in 1817 Vieillot based his *Psittacus acuticaudatus* on this description. Azara had only a single specimen from Paraguay, and it was apparently a young bird, since he failed to mention the blue sides of the head that are diagnostic of *acuticaudata*. Therefore, when Spix described *Aratinga haemorrhous* from Bahia, Brazil, in 1824, his description differed in such slight detail from that of Vieillot that *haemorrhous* was placed in the synonymy of *acuticaudata* by Wagler in his monograph of the Psittacidae. The first author to describe the adult form of *acuticaudata*, in which the sides of the head are blue, was des Murs, who described and figured a specimen sent back from Corrientes, Argentina, by D'Orbigny. Des Murs assumed, however, that this specimen represented the adult male and that both Spix and Azara had described their species from females. It

was not until Souancé's studies of the parrots in the Masséna collection (1856) that the validity of *haemorrhous* was recognized and both forms were given specific rank.

A third species was added to this group by Cory (1909), who named *Conurus neoxenus* from Margarita Island, Venezuela. Later, in his *Catalogue of Birds of the Americas* (1918) Cory reduced this form to a subspecies of *haemorrhous*. Hellmayr (1929) discussed the group as a whole, and came to the conclusion that the differences separating *acuticaudata* and *haemorrhous* were of subspecific value only, particularly since three specimens of *acuticaudata* from Urucum de Corumbá, Matto Grosso, seemed intermediate. He therefore placed the three forms in a single species under the name *acuticaudata*, and this arrangement was followed by Naumberg and Peters. In the present revision, for which 126 specimens were available for study, the concept of a single species has been upheld and three races are recognized, one of them previously undescribed.

Aratinga acuticaudata acuticaudata Vieillot

Psittacus acuticaudatus Vieillot, Nouv. Dict. Hist. Nat., 25, p. 369, 1817—Paraguay, 24° S. Lat. (based on Azara no. 278).

Diagnosis.—Adult: the blue of the forehead and crown extending over the sides of the head and throat; the lower mandible black; the general coloration green with a faint wash of blue.

Young: the blue of the head restricted to the forehead and crown; the blue wash lacking on the body plumage.

Range.—From extreme southwestern Matto Grosso (Urucum de Corumbá) and the lowlands of eastern Bolivia south through Paraguay, Corrientes, Argentina, and Uruguay to the provinces of Buenos Aires, Pampa, and Tucuman, Argentina.

Measurements.—Wing: 38 males, 183–205 mm. (193.9); 31 females, 181–197 (189.8).

Remarks.—In seventy-two specimens available for study from all parts of the above range except Uruguay, there is no evidence of consistent geographic variation within this subspecies. The blue on the head and the general bluish wash over the body appear most intense on a series of ten birds from the Paraguayan Chaco, but this coloration may be due to the freshness of the skins, which have all been collected since 1940. Individually, they can be matched by specimens from all parts of the range, although on the whole the blue is more intense. Wetmore reported that specimens from

Pampa and Tucuman seemed slightly duller green than those from Formosa, but this difference is not apparent when large series are compared. In size there is no variation in any part of the range.

Aratinga acuticaudata haemorrhous Spix

Aratinga haemorrhous Spix, Av. Bras., 1, p. 29, pl. 13, 1824—Province of Bahia.

Conurus neoxenus Cory, Field Mus. Nat. Hist., Orn. Ser., 1, p. 243, 1909—Margarita Island, Venezuela.

Diagnosis.—Adult: differs from *acuticaudata* in having the blue of the head paler and restricted to the front part of the crown, the lower mandible pale like the upper, and the green of the body golden green without any bluish wash; smaller.

Young: blue restricted to forehead only, or replaced by a brownish color.

Range.—From northern Venezuela and adjacent Colombia to eastern Brazil (Piauhy, Parahyba, and Bahia) and southern Matto Grosso. Apparently never taken in British Guiana or Brazil north of the Amazon.

Measurements.—Wing: 15 males, 171–202 mm. (183.7); 14 females, 167–193 (180.3).

Remarks.—This race is poorly represented in collections. Only thirty-two specimens were available for the present study, and twenty-one of these were from Venezuela. Five were cage birds or were labeled only "Brazil." Five were from definite localities in Brazil, and of these one male from Bahia and a second from Parahyba are the only two that can with certainty be considered typical; the other three were from southern Matto Grosso.

Despite the wide and discontinuous range of this form, there are no consistent geographical variations, and it is necessary to reduce Cory's race *neoxena*, of Margarita Island, to synonymy. Cory separated that form on the basis of two skins, but we do not know what comparative material was available to him. At that time there were no specimens of *haemorrhous* in Chicago Museum, and he may have based his comparisons on the descriptions of other authors. The characters on which he separated *neoxena* were the bluish tone of the body plumage and the increased extent of the blue on the crown. The latter character is not apparent when the type is compared with an adequate series from Venezuela, but the former character is. However, the type differs as much in this respect from two other specimens from Margarita Island as it does from mainland

specimens, and it is apparent that Cory chose an extreme of individual variation as his type. The series of specimens from Venezuela exhibits a wide range of individual variation in the general color of the bird, and the Margarita Island birds fall within the extremes. Another character, the greater extent of the green tips on the inner web of the rectrices, which Cory mentioned in a footnote in his *Catalogue of Birds of the Americas*, is entirely dependent upon the amount of wear to which the feathers have been subjected.

There has been a certain disagreement concerning the relation between Venezuelan and Brazilian birds. Berlepsch and Hartert (1902) considered them identical, and Cory himself included Venezuela within the range of *haemorrhous* and restricted *neoxena* to Margarita Island. Peters, on the other hand, included Venezuela within the range of *neoxena*, and Phelps (1940), in his discussion of birds of Margarita Island, included northeastern Venezuela within the range of that race. However, in the extensive series before us there is no evidence of variation within Venezuela (including Margarita Island), or between Venezuelan and Brazilian specimens, and the race *neoxena* apparently can not be upheld.

The three specimens from Fazenda Capão Bonito, Matto Grosso, agree in all particulars with the birds of northeastern Brazil and Venezuela except in size. They are so much larger, wing 193–202 as compared to 170–192, that one would be tempted to separate them except for the measurements of the five specimens of unknown provenance whose range of 181–193 is intermediate. There is a possibility that further collecting would show a steady increase in size from north to south. Although Capão Bonito is only 240 miles from Urucum de Corumbá, where Cherrie collected specimens of *acuticaudata*, there is no sign of intergradation in the three specimens of *haemorrhous*. This, however, might be expected since Urucum is on the edge of the Chaco, where *acuticaudata* is found, and Capão Bonito is in the central Brazilian tableland where birds representative of the interior of Bahia and Piauí would be more likely to occur.

***Aratinga acuticaudata neumanni*¹ subsp. nov.**

Type from Comarapa, Santa Cruz, Bolivia. Altitude 2,500 meters. No. 179076 Chicago Natural History Museum. Adult male. Collected July 15, 1926, by Fr. Steinbach. Orig. No. 204.

¹ Named for the late Professor Oscar Neumann, who recognized the subspecies as new, but who unfortunately died before he was able to describe it.

Diagnosis.—Adult: differs from *A. a. acuticaudata* in having the blue of the head restricted to the forehead and crown, and the sides of the head and throat not blue, but the same green, with a pale bluish bloom, as the rest of the under parts. Differs from *haemorrhous* in being darker, less golden green above and below, and in having the blue of the head darker and extending back to the nape instead of being confined to the front half of the crown. Resembles closely the juvenile form of *acuticaudata*, but the blue on the crown of *neumanni* is usually more extensive. Slightly larger than *acuticaudata* and significantly larger than *haemorrhous*. Color of soft parts: tarsus orange, upper mandible orange, lower mandible slate-colored.

Young: either similar to the adult, or not represented in the present series.

Range.—Intermediate altitudes (5,000–8,500 feet) in the Departments of Cochabamba, Santa Cruz (and Chuquisaca, Tomina?), Bolivia.

Measurements.—Wing: 13 males, 185–204 (195.4); 9 females, 192–203 (195.8).

Remarks.—This is a well-characterized race, which can have escaped detection up to the present only by virtue of its close resemblance to the young of *acuticaudata*. Although at first glance it seems more nearly related to *haemorrhous* because of the restriction of the blue to the crown, its general coloration and size place it nearer *acuticaudata*. Since it is also closer geographically, it must certainly be an altitudinal race of the latter. Five thousand feet is determined to be the lower limit, since birds from an elevation of 4,000 feet in Salta, Argentina, are true *acuticaudata*.

The size ranges in the wing measurements of the three races of *acuticaudata* are:

A. a. acuticaudata: 38 males, 183–205 (193.9); 31 females, 181–197 (189.8).

A. a. haemorrhous: 15 males, 171–202 (183.7); 14 females, 167–193 (180.3).

A. a. neumanni: 13 males, 185–204 (195.4); 9 females, 192–203 (195.8).

It is apparent that *haemorrhous* is a small race, and could almost be separated on size alone, except for the three large specimens from Capão Bonito, Matto Grosso. These three have wing measurements

of 193, 195, and 202, and if more intensive collecting should show this large size to be constant, they may prove separable.

The wing measurements also show a further distinction between *neumanni* on the one hand and *acuticaudata* and *haemorrhous* on the other. In the former the sexes are the same size while in the latter two the females are slightly but significantly smaller.

Specimens examined.—*Aratinga a. acuticaudata*: BOLIVIA: Santa Cruz (Sara, Camp Wood, 4 females; Tacuiba, 3 males, 1 female; Santa Cruz, 4 males, 3 females; Buenavista, 2 males, 4 females; Rio Surutu, 2 males; Cercado, 1 male). BRAZIL: Matto Grosso (Urucum de Corumbá, 1 male, 2 females). PARAGUAY: Chaco (Colonia Fernheim, 4 males, 2 females; Orloff, 3 males, 1 female). ARGENTINA: Salta (2 males, 2-); Formosa (Riacho Pelage, 2 males); Chaco (Vermejo, 1-; Mocovi, 1 male; Avia-terai, 1 female); Santa Fe (Ocampo, 2 males, 4 females); Santiago del Estero (Suncho Corral, 3 males, 1 female; La Valle, 1 female); Tucuman (Tapia, 5 males, 4 females, 1-; Tucuman, 1 male, 1 female); Cordoba (Cosquin, 1 female; "Cordoba," 1 male); Pampa (Victorica, 1 male).

Aratinga a. haemorrhous: VENEZUELA: Margarita Island (Boca del Rio, 2 males, 1 female [incl. type of *neoxena*]); San Mateo de Caicara (1 female); Quiribana de Caicara (3 males); Caicara River, Orinoco River (1 male, 1 female); Monagas (Carapaico, 1 female); Guarico (El Sombrero, 1 male); Ciudad Bolivar (2 males, 1 [?]); Lara (Tocuyo, 1 male, 5 females, 1 [?]). COLOMBIA: Magdalena (Riohacha, 1 female). BRAZIL: Bahia (Queimadas, 1 male); Parahyba (Joazeiro, 1 male); Matto Grosso (Fazenda Capão Bonito, 2 males, 1 female); "Brazil" (1-). Zoo birds: 1 male, 3 females.

Aratinga a. neumanni: BOLIVIA: Santa Cruz (Comarapa, 4 males, 2 females; Chilon, 3 males); Cochabamba (Ele-Ele, 2 males, 1 female; Aiquile, 3 males, 4 females; Tujma, 1 male, 1 female); "Lajma" (1 female).

REFERENCES

AZARA, FELIX DE

1802-1805. Apuntamientos para la historia natural de los Paxaras del Paraguay y Rio de la Plata. 3 vols. Madrid.

BERLEPSCH, (*Count*) HANS VON, and HARTERT, ERNST

1902. On the birds of the Orinoco region. *Nov. Zool.*, 9, pp. 1-134, 1 pl.

CORY, CHARLES B.

1909. Birds of the Leeward Islands. *Field Mus. Nat. Hist., Orn. Ser.*, 1, pp. 193-255, 1 pl.

1918. Catalogue of birds of the Americas. *Field Mus. Nat. Hist., Zool. Ser.*, 13, pt. II, no. 1, 315 pp., 1 pl.

DES MURS, M. A.

1845-49. *Iconographie ornithologique*. 72 pls. Paris.

HELLMAYR, CHARLES E.

1929. Contribution to the ornithology of northeastern Brazil. *Field Mus. Nat. Hist., Zool. Ser.*, 12, pp. 235-501, 1 pl.

NAUMBERG, ELSIE M.

1930. Birds of Matto Grosso, Brazil. *Bull. Amer. Mus. Nat. Hist.*, 60, 432 pp., 17 pls., 43 figs., 5 maps.

PETERS, JAMES LEE

1937. Check-list of birds of the world. 3, xiii+311 pp. Cambridge, Massachusetts.

PHELPS, W. H.

1940. Los Aves de Margarita (con anotaciones sistematicas por W. H. Phelps). *Bol. Soc. Ven. Cien. Nat.*, 43, pp. 91-132.

SOUANCE, CHARLES DE

1856. Catalogue des Perroquets de la collection du Prince Massena d'Essling. *Rev. Mag. Zool.*, pp. 56-64.

SPIX, J. B. VON

1824-25. *Avium species novae, quas in itinere per Brasiliam. . . .* 2 vols. Monachii.

VIEILLOT, L. S. P.

1816-19. *Nouveau dictionnaire d'histoire naturelle*. 36 vols. Paris.

WAGLER, J. G.

1832. *Monographia Psittacorum*. *Abh. K. Bayer. Akad. Wiss.*, 1, pp. 469-750.



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