

TABLE 1. Mean hematocrit values of raptors during 1975 and 1976.

Season	Species	Sex		
		Unknown	Male	Female
Winter (18 Dec. 1975 to 12 Feb. 1976)	American Kestrel		$\bar{x} = 52.7 \pm 3.2$ (N = 14)	$\bar{x} = 52.2 \pm 3.0$ (N = 18)
	Goshawk	$\bar{x} = 52.8 \pm 3.2$ (N = 2)		
	Cooper's Hawk	45.0 (N = 1)		
	Red-tailed Hawk	$\bar{x} = 48.5 \pm 7.8$ (N = 2)		45.0 (N = 1)
Spring (20 March to 14 April 1976)	Marsh Hawk	41.0 (N = 1)		
	American Kestrel		48.0 (N = 1)	$\bar{x} = 45.3 \pm 4.1$ (N = 3)
Fall (2 Oct. to 18 Dec. 1976)	American Kestrel		49.3 \pm 3.6 (N = 6)	50.2 \pm 3.5 (N = 7)

not due to smaller size (Balasch et al. 1974) since we found high values for larger raptors. Other factors such as variation in sampling methodology and geographical variation may also be influential.

We wish to thank all who assisted in this project, particularly Erwin Sonnenberg, Charles Schwartz, and Thomas R. Taylor. We also thank F. Lynn Carpenter, David Jones, Michael D. Kern, and an anonymous reviewer for their valuable comments on earlier drafts of this paper.

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Condor, 82:227-228
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CHARACTERISTICS OF THE RAZOR-BILLED CURASSOW (MITU MITU MITU)

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In 1766, Linnaeus named the Razor-billed Curassow *Crax mitu*, based on Marcgrave's (1648) account from Pernambuco, northeastern Brazil. For the next 300 years since then, nothing more was reported about this bird. Marcgrave's specimen (not preserved) was assumed to have come from Amazonia, where lives the relatively common *Mitu mitu tuberosa*. This species and its allies were put in a new genus, *Mitu*, by Lesson

(1831), the name generally used until Delacour and Amadon (1973) merged *Mitu* into *Crax*.

In 1952, Pinto reported from Alagoas a single female, the first northeastern specimen to reach a museum. The locality was in extreme eastern Brazil, well separated from the range of *tuberosa*. Delacour and Amadon (1973; contra Vaurie 1967) agreed with Pinto that the specimen (in the Museu de Zoologia, Universidade de São Paulo) represented a different subspecies, *M. m. mitu*.

In February 1977, I had the privilege to study a female of this subspecies which was living in the spacious aviary of Pedro Nardelli, an outstanding aviculturist in Rio de Janeiro. It had been found in Alagoas and kept in a box for several years, even once laying an egg, before it was acquired by Nardelli. The bird adapted itself well to the aviary and its plumage was

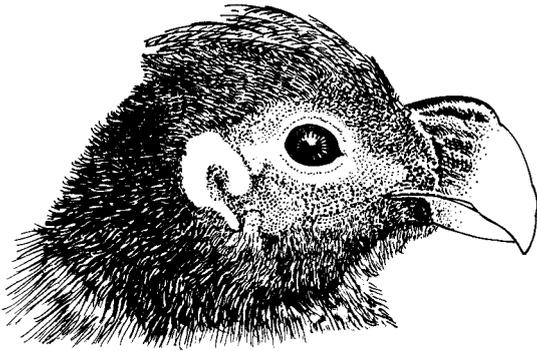


FIGURE 1. Razor-billed Curassow (*Mitu m. mitu*) adult female from São Miguel dos Campos, Alagoas, Brazil. After a color photograph slide of a captive bird.

in good condition. I report here some features of this curassow that were hitherto insufficiently noted or unknown. They confirm that *M. m. mitu* is distinct from *M. m. tuberosa*.

The shape of the bill was well described by Marcgrave (see Pinto 1946, 1952). It is not swollen in nominate *mitu* as in *tuberosa*. In the former (Fig. 1), the proximal half of the culmen ascends, and forms a narrow ridge, well defined against the flat sides of the bill. The division between this part and the descending distal part is emphasized by color: the former is pale red and the latter horn-white. This can be seen only on a living bird or a recently killed specimen. The bill of *tuberosa* is entirely red but the lustre in both forms is alike.

The skin around the ear opening is bare, an important feature of nominate *mitu* that was not mentioned by either Marcgrave or Pinto.

Feathers grow only immediately around the opening. A slender band of feathers joins the auriculars with those on the sides of the head. The skin is plumbeous, as is usual in *Crax* and *Mitu*.

The tip of the tail in the captive female lacks a broad white band, showing that certain earlier authors were wrong in thinking that this condition was due to immaturity or abrasion. Hellmayr and Conover (1942) and Coimbra-Filho (1970) are confirmed in regarding this feature as the main distinction of the nominate race. The central and adjacent rectrices have a trace of paler color at the very tip, and the remaining rectrices each show a very narrow brown apical band. The tail of Nardelli's bird was more worn than that of Pinto's specimen, which has even more brown on the feather tips. A two-year-old immature male *tuberosa*, which Nardelli put as a companion for the female, had its tail mostly tipped white; some older feathers were tipped largely chestnut.

The female *mitu* seemed smaller and more compact

than the male *tuberosa*. Pinto (1952) reported that his female *mitu* was indeed smaller than females of *tuberosa*. In the genus *Mitu*, the sexes are similar.

The rest of the plumage of the captive female was like that of adult *tuberosa*: black with a steely sheen, and with chestnut abdomen. Pinto's specimen shows some ferruginous on the throat and other parts. The iris of the captive female was dark red and the legs were pale red.

Sr. Nardelli recently obtained more specimens of nominate *mitu* from Alagoas for a breeding program. In June 1979 he had four birds in Rio; they were tentatively sexed by him through cloacal examination as one male and three females. All of them are very similar, and slight differences in size and color may reflect age rather than sex. The male of this subspecies, hitherto unknown, is slightly more robust than the females. Its bill is somewhat swollen, the proximal part is deeper red and the distal part has a faint creamy-rose tint. The tip of the tail is whitish (not brownish), the iris is chestnut-red, and the legs are bright red.

The survival of *M. m. mitu* in the diminishing forests of northeastern Brazil is in doubt. This curassow could be saved by breeding in captivity and being released in forest reserves in Alagoas.

I thank E. Eisenmann and E. Willis for reviewing the manuscript and making many suggestions for its improvement. I thank Valma Page for making the drawing.

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