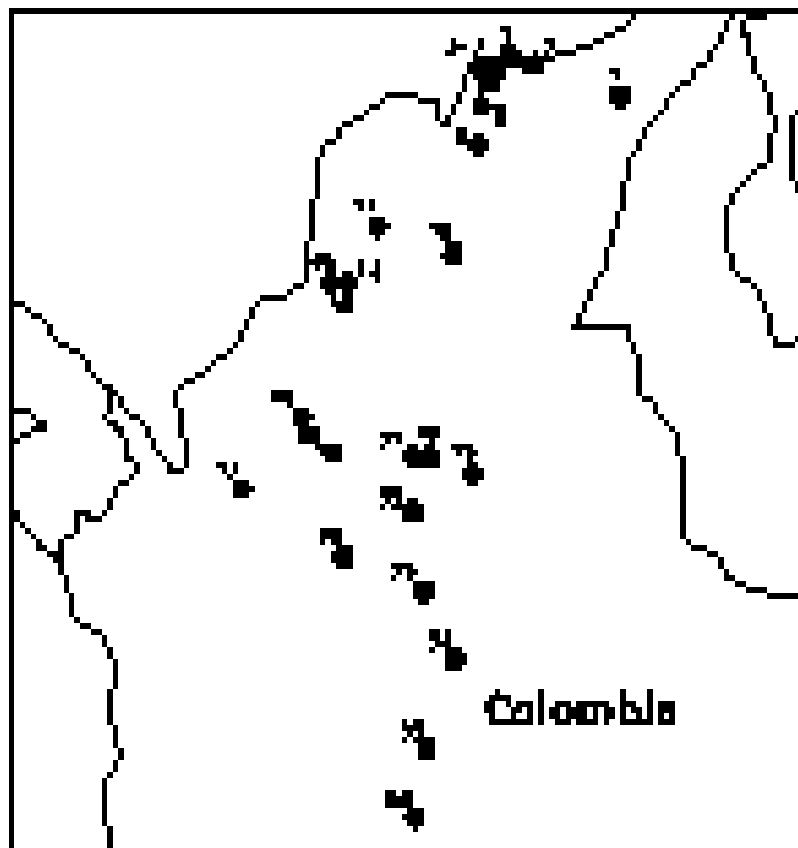


Occupying a restricted range in northern Colombia in humid forest of the lowlands and foothills, this large gamebird has suffered serious decline and widespread local extinction owing to deforestation and hunting, such that the location of any surviving populations is unknown and surveys and associated conservation efforts are now exigent.

DISTRIBUTION The Blue-billed Curassow is endemic to northern Colombia in the foothills of the Sierra Nevada de Santa Marta, the north-west lowlands, the northern Andean foothills west of the río Magdalena, and the western slopes of the middle Magdalena valley. In their otherwise very accurate map of the species's (former) range, Hilty and Brown (1986) showed a continuous distribution around the base of the Santa Marta massif, but there appear to be no records from the west or south. In fact its entire range may now have contracted to only a few remnant forest patches (Negret 1987). In the following list dates have been largely omitted, since so few are given in the original sources, but from a comparison of these records with many of the museum skins on which they are based it appears that almost all of them were made before 1950 (those known to be later are indicated).



Localities (see Remarks 1) for the species, with coordinates from Paynter and Traylor (1981), are here arranged by department, north-east to south-west as far as 9°N, then north-west to south-east: (*La Guajira*) La Cueva¹ (see Remarks 2), 11°01'N 72°56'W (Vaurie 1967b; female in USNM labelled *Crax annulata*, collected on “old trail, Fonseca-Río-hacha”, 560 m, 13 April 1945); (*Magdalena*) Don Diego², 11°15'N 73°42'W (Todd and Carriker 1922); Los Naranjos³ (“Naranjo”), 11°18'N 73°54'W (Allen 1900); San Lorenzo⁴, Cuchilla, 11°10'N 74°04'W (Todd and Carriker 1922); Cincinati⁵, 11°06'N 74°06'W (Vaurie 1967b); Bonda⁶, 11°14'N 74°08'W (Allen 1900); La Tigra⁷, 11°10'N 74°09'W (Vaurie 1967b); along the río Frío⁸ and on the Quebrada Mateo near Río Frío, 10°55'N 74°10'W (Darlington 1931); Aracataca⁹, 10°36'N 74°12'W (Darlington 1931); Costarrica¹⁰ (“Camp Costa Rica”), 9°44'N 74°25'W (Vaurie 1967b; two females in USNM identified further as from “Petróleos Ariguani, 76 km north-east of Plato”, 75 m, collected on 1 February 1947); (*Bolívar*) San Juan Nepomuceno¹¹, 9°57'N 75°05'W, in the Serranía de San Jacinto, 1960 or 1961 (Haffer 1975); Regeneración¹², 8°06'N 74°38'W (male in USNM from “Q. San Marcos–Lower Rio Cauca”, 30 m, 9 February 1948); Volador¹³, 7°58'N 74°15'W (Vaurie 1967b; male in USNM labelled as from “25 miles west of Simiti” [“El Tigre”], 730 m, 27 May 1947); (*Sucre*) Coloso¹⁴, Serranía de San Jacinto, 9°30'N 75°21'W (Blake 1955, Haffer 1975; specimen in FMNH labelled as from “Las Campanas”¹⁵, 9°30'N 75°30'W, 18 May 1949); (*Córdoba*) Alto de Quimarí¹⁶, 8°07'N 76°23'W (Meyer de Schauensee 1950, Vaurie 1967b); Socoré¹⁷ (see Remarks 3), 7°51'N 76°17'W (Blake 1955, Haffer 1967, Vaurie 1967b; female in FMNH labelled also “upper río Sinú”, 27 March 1949; male in USNM labelled from “1½ miles below the mouth of río Verde”, 115 m, collected on 22 April 1949); Catival¹⁸ (see Remarks 3), 8°17'N 75°41'W (Blake 1955, Haffer 1967, Vaurie 1967b; female in FMNH labelled from the upper río San Jorge¹⁹, 8°25'N 75°45'W, 21 July 1949); (*Antioquia*) Puerto Valdivia²⁰, 7°18'N 75°23'W (Hellmayr and Conover 1942); Nechí²¹, 8°07'N 74°46'W (Vaurie 1967b); El Real²², río Nechí, 7°40'N 74°46'W (Vaurie 1967b); Remedios²³ (El Amparo), 7°02'N 74°41'W, December 1974 (Serna 1980); Puerto Berrío²⁴, 6°29'N 74°24'W, July 1978 (Serna 1980); río La Miel²⁵ (captive birds), 5°46'N 74°39'W (Meyer de Schauensee 1948-1952); (*Tolima*) west of Honda²⁶, 5°12'N 74°45'W (Chapman 1917a).

POPULATION The species was not common anywhere in the Santa Marta region at the beginning of the century, though perhaps most numerous in the humid lowlands of the north coast (Todd and Carriker 1922), along which a road now runs (TAW 1986). In the Serranía de San Jacinto by the 1970s it was “becoming very rare” (Haffer 1975; see Remarks 4), and this status is expected wherever its habitat has been settled (Hilty and Brown 1986). By the 1980s it had “disappeared from most places” in which it was found, albeit uncommon, 30 years before (Estudillo López 1986). Indeed the species is now believed extinct throughout most of its range, with only a few small isolated populations surviving away from the Santa Marta region (Negret 1987). There appear to be no recent observations and the only certain evidence that the species survives at all may be the record of four in trade in 1987 (see Threats).

ECOLOGY This curassow inhabits forested regions in the tropical zone, i.e. humid lowlands, foothills and lower mountain forests up to 1,200 m (but less commonly above 600 m), feeding chiefly on the ground (Todd and Carriker 1922, Darlington 1931, Blake 1977, Hilty and Brown 1986). Young birds have been recorded in July (Allen 1900, Todd and Carriker 1922), and a three-quarters grown juvenile (from Nechí, in FMNH) is also from this month; however, the male from Regeneración and two females from Costarrica, all taken in February, had enlarged gonads (greatly so in one female), as did the female from La Cueva in April (see Distribution).

THREATS Destruction of lowland forest in northern Colombia is taking place at such a rate as to cause serious concern (King 1978-1979). Haffer (1967) referred to rapid deforestation associated with agriculture east of the Golfo de Urabá, in the secondary contact zone with Great Curassow *Crax rubra*, and to the survival of forest remnants in the Serranía de San Jacinto only “along some of the deeply incised valleys” (Haffer 1975); similarly, Paynter and Traylor (1981) noted that by 1960 forest at Puerto Valdivia was confined to ridges. At Río Frío, Santa Marta, the species was much hunted 50 years ago (Darlington 1931), and this was and is doubtless true of the bird throughout its range. There is also evidence that the species is sometimes traded, with four birds being imported illegally into Japan in July 1987 (Tokunaga 1987).

MEASURES TAKEN None is known.

MEASURES PROPOSED Surveys are needed of any major remaining regions of forest to identify the current status and distribution of this species (this is now being planned: Strahl 1991), and several protected areas should be established to conserve this and other endemic and/or threatened and near-threatened species of northern Colombia (threatened species known to have occurred sympatrically with this curassow in the vicinity of Puerto Valdivia are listed in the equivalent section under Antioquia Bristle-tyrant *Phylloscartes lanyoni*). Although (at least formerly) present in the upper Sinú valley (Quimarí, Socorré), the species has not been recorded from the Paramillo National Park there (Negret 1987), and further survey of this protected area to check for its presence is important (this should be extended to the Recurve-billed Bushbird *Clytoctantes alixii* and Red-bellied Grackle *Hypopyrrhus pyrohypogaster*, both of which at one time occurred in this area: see relevant accounts). The conservation of any Blue-billed Curassows remaining in the coastal lowlands of the Santa Marta region, where they possibly reached their maximum abundance, requires consideration as one of the highest priorities in Colombia.

Captive breeding Very few specimens are in captivity, a breeding pair with three offspring being at Houston Zoo in 1987 (W. T. Todd *per* R. Wirth *in litt.* 1987). Given that the species in the wild could now be virtually extinct, the development of a full-scale recovery plan utilizing as many captive individuals as possible is urgently needed, under the auspices of the CBSG. However, this does not mean that the export of more wild-caught specimens from Colombia should be countenanced.

REMARKS (1) Hellmayr and Conover (1942) accepted the record of a live pair from Cartagena, Bolívar department (Sclater 1876), as indicating occurrence there, but the birds presumably originated in the interior; Vaurie (1967b) implied Bogotá as a site, but the specimen in question was undoubtedly a trade skin. A record of *Crax annulata*, a synonym of *C. alberti*, from Isla de Charo, Arauca department, on the Venezuelan frontier (Nicéforo María 1947), refers to Yellow-knobbed Curassow *C. daubentoni* (Vaurie 1967b, J. I. Hernández Camacho verbally 1988). (2) Vaurie (1967b) listed La Cueva for Magdalena. (3) Vaurie (1967b) listed Alto de Quimarí, Socorré and Catival for Bolívar. (4) Hilty and Brown (1986) somewhat misrepresented Haffer (1975) in saying that the bird is “now quite scarce” in the Serranía de San Jacinto.