BANDED COTINGA  *Cotinga maculata*

As a species of primary lowland Atlantic Forest in south-east Brazil, this largely frugivorous bird has suffered serious habitat loss and depends on a few key protected areas for its survival, notably Sooretama and those owned by CVRD.

**DISTRIBUTION**  The Banded Cotinga (see Remarks 1) is endemic to the Atlantic Forest region of south-eastern Brazil from Bahia south of Salvador south through south-eastern Minas Gerais (no records since 1940) to Espírito Santo and formerly Rio de Janeiro state.

*Bahia*  Older records are from as far north as rio Jiquiriçá; rio das Contas (Wied 1831-1833); and rio Gongogi, Cajazeiras, 300 m, June 1928 (specimen in AMNH). It is not known if any populations persist in these areas today, but ones currently exist in the small CEPLAC experimental station on the rio Jequitinhonha at Barrolândia (bird seen in October 1987: LPG) and in the CVRD Porto Seguro Reserve (birds seen in October 1986 and January 1988) (Gonzaga *et al.* 1987, B. M. Whitney *in litt.* 1988). There are two records from Monte Pascoal National Park, in September 1979 (A. Greensmith *per* D. Willis *in litt.* 1988) and in July 1990 (Gardner and Gardner 1990b). Between this park and the border with Espírito Santo records are from the Braço Sul do rio Jucurucu, April 1933 (Pinto 1935), Viçosa (now Nova Viçosa) (Wied 1820-1821), and rio Mucuri (Wied 1831-1833).

*Minas Gerais*  The only records are from São Benedito (corresponding to the present Tabainha: see Naumburg 1935), rio Manhuaçu, 180 m, January 1930 (specimen in AMNH); and the rio Doce, left bank, on the lower rio Suaçuí, September 1940 (Pinto 1944), i.e. close to the present Rio Doce State Park.

*Espírito Santo*  Older records are from the rio São Mateus in the nineteenth century, and May 1957 (Wied 1831-1833, Aquirre and Aldrighi 1987), and rio Doce, March 1906 (Pinto 1944). The key sites for the species in the state are Sooretama Biological Reserve (whence a specimen in MNRJ, October 1963), with recent records since 1977 (King 1978-1979, Sick and Teixeira 1979, Scott and Brooke 1985, C. E. Carvalho *in litt.* 1987) and the adjacent CVRD Linhares Reserve (see Population), with records since 1984 (Scott 1984, Collar and Gonzaga 1985, Pacheco and Fonseca 1987, B. M. Whitney *in litt.* 1987, 1990). The only other records were from the Fazenda Klabin forest (now much reduced and converted to the Córrego Grande Biological Reserve) in June 1970 and in 1973 (Sick 1972, Sick and Teixeira 1979) and in September 1979 (A. Greensmith *per* D. Willis *in litt.* 1988).

*Rio de Janeiro*  Descourtilz (1854-1856) reported the species near Campos dos Goytacazes (now Campos) and the Morro do Frade (near Frade); it was found at Cantagalo and Nova Friburgo (von Hering 1900a).

**POPULATION**  Over half a century ago it was already evident that the Banded Cotinga was “far from common” (O. M. O. Pinto in Wied 1940), but this perception had been expressed long before by Wied (1820-1821), who noticed that it was locally less common than the White-winged Cotinga *Xipholena atropurpurea* (see relevant account), and this view persists in modern assessments, compounded by the fact that it is certainly seriously reduced in abundance and distribution as the result of extensive forest destruction within its range (Sick 1969, 1972, King 1978-1979, Sick and Teixeira 1979, Scott and Brooke 1985). It was considered uncommon in Sooretama, where in five sightings a minimum of three birds (all males) were involved in December/January 1980/1981 (Scott and Brooke 1985), while in the Linhares Reserve, November 1984, at least four birds were involved in five records (Scott 1984), with a similar value on 20 December 1986 of at least four individuals (three males and one female) seen from a tower (B. M. Whitney *in litt.* 1987). It has been remarked, however, that this species would appear to be rarer if all observations had to be made from ground-level (C. E. Carvalho *in litt.* 1987, B. M. Whitney *in litt.* 1987). Nevertheless, even though numbers in the much smaller reserves listed under Distribution cannot be high, the species appeared to be fairly common in the CVRD Porto Seguro Reserve in October 1986 when, apart from two females seen on and around a nest, at least four males and two females were watched feeding (Gonzaga *et al.* 1987; see Ecology).

**ECOLOGY**  The Banded Cotingas inhabits the canopy of humid primary lowland forest (Scott and Brooke 1985, Sick 1985, Gonzaga *et al.* 1987), and the statements that it is (was) found even on the highest mountains (Descourtilz 1854-1856) and ranges through the coastal mountains (Meyer de Schauensee 1982) can be largely discounted from the evidence of the records above. There is a tendency for birds to occur very locally within small areas often also frequented by White-winged Cotingas (and often, unless
this reflects observational bias, along the edges of clearings), presumably owing to the presence of as yet unidentified fruiting trees attractive to both species (NJC, LPG, TAP).

Food has been generally recorded as many types of seeds, berries and “tree” fruits, some of which colour its flesh (Wied 1831-1833, Gonzaga et al. 1987, B. M. Whitney in litt. 1987), but also including caterpillars and other insects (Descourtilz 1854-1856). Birds observed in Porto Seguro in October 1986 were feeding (in company with White-winged Cotingas) in fruiting trees around a large cleared area in the centre of the reserve, perching on the highest bare twigs of the canopy or on isolated dead trees and repeatedly flying across the clearing (Gonzaga et al. 1987). In Linhares, December 1986, three adult males flocked together while feeding on (possibly green) fruits in a tree (B. M. Whitney in litt. 1987).

Calculated dates of the onset of the post-breeding moult are in November and December (Snow 1982), which fits well with records of immature males moulting into adult plumage in January and February (specimen in AMNH; C. E. Carvalho in litt. 1987), and with a nest attended by an incubating female at Porto Seguro on 11 October 1986; this nest was a very slight structure of small twigs placed in the fork of an almost horizontal branch in the canopy of a fairly tall tree at the forest border (Gonzaga et al. 1987). This appears to be the only record of a nest of this species, apart from a report of one found inside a hollow arboreal termite nest (Sick 1985), and a statement that the nest is placed atop big trees (Descourtilz 1854-1856). That birds keep paired during the breeding season (Descourtilz 1854-1856) seems to be incorrect, on current knowledge of the habits of the genus (Snow 1982, Sick 1985) and given the apparent absence of a male at the nest found in October 1986 (NJC, LPG). Wied (1831-1833) confidently spoke of its appearance in Bahia in the cold season, on the Mucuri for instance in groups of 4-12; although this does not fit current evidence, it is by no means impossible that local movements at least of part of the population occurred when numbers of birds were much higher than today.

THREATS The massive deforestation which has taken place throughout the species's range has been regarded as the main cause of its decline (King 1978-1979, C. E. Carvalho in litt. 1987), and indeed the reserves in which it survives are very few and too small to be confident about the future of the populations they hold. The privately owned forest at Fazenda Klabin, although now the IBAMA-run Córrego Grande Biological Reserve, has been reduced over the past two decades from 4,000 ha to only 1,200 ha (Gonzaga et al. 1987), and the Monte Pascoal National Park is also under severe pressure (Redford 1989).

The brilliance of the male’s plumage made it prized in the past for “feather-flower” craftwork by Indians (Cardim 1925) and Bahian nuns (Wied 1820-1821), with priests collecting 30 or 40 males apiece in the cold season to send to Salvador to support this work (Wied 1831-1833); and it has obviously been a major enticement for modern bird fanciers (Santos 1955). Capture for the cagebird trade, occurring sporadically, has thus been regarded as a threat to the species (Sick and Teixeira 1979, Sick 1985) and, although it has been seldom reported from captivity in recent decades, this is probably a simple consequence of its rarity (a view shared by W. C. A. Bokermann verbally 1991).

MEASURES TAKEN The species is listed in the Appendix I of CITES and has been protected by Brazilian law since 1973 (LPG, Bernardes et al. 1990). Some of its present remnant populations should persist so long as the protected areas where they occur continue to be preserved; but see Threats. On the basis of evidence under Population, the two critical areas for the species are the CVRD Porto Seguro Reserve in Bahia and the Sooretama Biological Reserve and adjacent CVRD Linhares Reserve in Espírito Santo, although the Monte Pascoal National Park holds birds and the Rio Doce State Park in Minas Gerais may prove to be important if the species is found there.

MEASURES PROPOSED The few remaining patches of forest within the species's range could still harbour small and so far undetected populations, and merit being identified and searched. Support for existing key sites is clearly imperative. More specifically, it is important that CVRD continue recognizing the importance of their reserve at Porto Seguro in Bahia and give it total protection, as they have done for their excellent reserve at Linhares.

REMARKS The Banded Cotinga is closely related to the Amazonian Purple-breasted Cotinga Cotinga cotinga, which it replaces in south-east Brazil, where it is the only species of the genus. An earlier view that the two species were probably conspecific (Hellmayr 1929b) has not prevailed (Traylor 1979, Snow 1982, Sick 1985).