

Threatened Birds of Asia:

The BirdLife International Red Data Book

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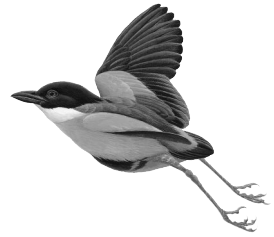
AZURE-BREASTED PITTA

Pitta steerii

Critical —

Endangered —

Vulnerable A1c; A2c; C1; C2a



This pitta qualifies as Vulnerable because it has a small, severely fragmented population, which is inferred to be rapidly declining owing to loss of its lowland forest habitat.

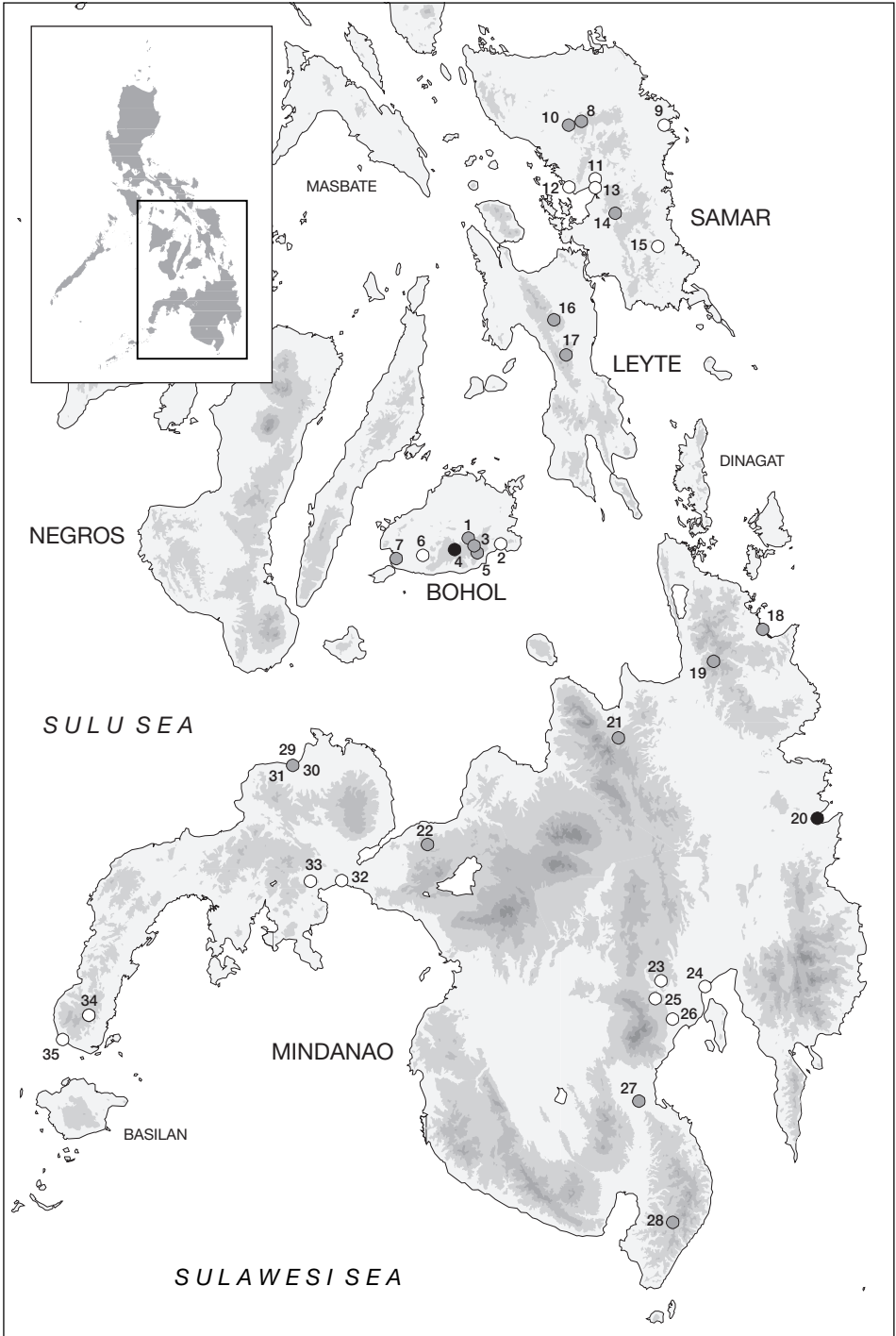
DISTRIBUTION The Azure-breasted or Steere's Pitta is endemic to the Philippines in two races on four islands: *coelestis* on Samar, Leyte and Bohol, and *steerii* on Mindanao (Dickinson *et al.* 1991); the assertion that the species is only present on the Zamboanga Peninsula in Mindanao (Collar *et al.* 1994) is in error. Records are as follows:

■ **PHILIPPINES** *Samar* **Mt Capoto-an**, May 1957 (three specimens, one juvenile, in AMNH, FMNH; also Rand and Rabor 1960); **Cadapnan**, Bantayan, Oras, May 1948 (two specimens in PNM); **Matuguinao** at 100–400 m, April 1957 (three males in AMNH, FMNH, YPM; also Rand and Rabor 1960); **Bonga** (type locality of the race *coelestis*), July 1896 (Ogilvie Grant 1897, Parkes 1971b; five specimens in AMNH); **Catbalogan**, March 1888 (female in BMNH); **Paranas**, June 1896 (male and female in BMNH); **Buluan**, Calbiga, April 1969 (female in PNM); **Tagaslian**, Borongan, June 1948 (two specimens in PNM);

Leyte **Mt Lobi** at Patok, Dagami, July 1961 (male in AMNH; also Parkes 1971b, 1973) and at Ma-alngon, Buri, 600–750 m, June 1964 (specimen each in FMNH, USNM, also Parkes 1973; see Remarks 1); **Mt Kabalanti-an** at Paniniklan, June 1964 (two males in UMMZ, UPLB), and Bulog Peak, Mahaplag, 450–600 m, July 1964 (two specimens in UMMZ, USNM; also Parkes 1973);

Bohol **Guindulman**, June 1906, and **Sevilla**, April 1906 (McGregor 1907e, Hachisuka 1931–1935; female in USNM); **Anislagan**, Sierra Bullones, 350–450 m, **Cantaub**, Sierra Bullones, 700–750 m, and **Mayana**, Jagna, at 700–750 m, April and/or May 1955 (Rand and Rabor 1960; eight specimens in DMNH, FMNH, UPLB); **Duao**, Sierra Bullones, December 1958 (two females in YPM); **Rajah Sikatuna National Park**, many recent records (Brooks *et al.* 1995c, B. Gee *in litt.* 1997), including at Logarita, January 1994 (Hornbuckle 1994), and on the park edge at Bilar, March 1986 (three specimens in NCSM), April and May 1987, with up to six birds daily and a minimum of 18 individuals located (Hornskov 1995a);

Mindanao (eastern) “**Car–Can–Mad–Lan**” area, 330–640 m, May 1963 (specimen each in FMNH, USNM); **Mt Hilong-hilong** at Balangbalang, Cabadbaran, 150–300 m, April 1963 (specimen each in DMNH, USNM); **Bislig** at the PICOP concession, March 1991 (Redman 1993) and on Road 5 subsequently (Evans *et al.* 1993a); (*central*) **Mt Kapiagan**, Misamis Oriental, May 1963 (female in PNM); **Tambo**, Munai, Lanao del Norte, June 1967 (male in DMNH); **Lasang**, Davao del Norte, and **Calinan** (as “Catalnan”), Davao, both March 1930 (three males in DMNH); “**Davao**”, April and August 1889 (two specimens in AMNH, two in RMNH), May 1899 (female in ZMB); **Tugbok** (assuming this to be the “Tokuboku” of the label), May 1930 (specimen in YIO); **Kibawalan**, Malalag, 360–670 m, March 1964 (male in CM); **Mt Tuduk** at Tugal and Datal-Bukay, Glan, 330–640 m, May 1966 (specimen each in DMNH, FMNH, USNM); (*western*) **Mamada**, 750 m, **Saluyong**, 600 m, **Sigayan**, 750 m, all near/in Katipunan, Zamboanga, late May and early June 1950 (five specimens in FMNH); **Tacuran** (assuming this to be the “Takunan” on the label), April 1929 (specimen in YIO); **Dumalon** (type locality; true name Dumalainao), October 1874 (Sharpe 1877, Tweeddale 1878h; female in UMMZ); **Zamboanga**, March–April 1878 (Tweeddale 1878h) and in March 1898



(female in AMNH); **Ayala**, October 1887 (specimen in BMNH); for a recent but unspecified locality on the peninsula, see Population.

POPULATION This pitta was described as “by no means common in any of the islands where it has been found” (McGregor 1909–1910), and as uncommon and local (Dickinson *et al.* 1991), but the evidence of calling birds has shown it to be common in Rajah Sikatuna National Park on Bohol (C. R. Robson *in litt.* 1994, Brooks *et al.* 1995c), and it seems that what makes it local is its association with lowland forest on limestone (see Habitat). On Mindanao the only recent (post-1970) records are two calling birds at Bislig in 1991, as documented, and a single bird in limestone country somewhere on the Zamboanga Peninsula (in Redman 1993). On Samar and Leyte the last records were in 1969 and 1964 respectively.

ECOLOGY Habitat Like all pittas this bird is primarily terrestrial, but occasionally (especially when calling) it ascends into trees, generally to 2–4 m off the ground, although a height of 13 m has been recorded (Lambert 1996). Comment that the species was found only in the “dark, dense and rocky parts of the original forest area” at 350–750 m (Rand and Rabor 1960) hints at the importance of rockiness in the habitat of this bird, something picked up early by Whitehead (1899b), who reported it from forest in “a mass of moss covered coral-limestone boulders” (“hummocky limestone” in Ogilvie Grant 1897), and almost a century later by Lambert (1993, 1996), who found it in shady primary (though sometimes stunted) forest growing on limestone karst, and who reported information for Mindanao confirming its presence there too in limestone hills. This preference may simply reflect some habitat feature which only survives because boulders obstruct forest disturbance, but it may more directly be related to an ecological factor such as the presence or abundance of a food source such as snails (T. M. Brooks *in litt.* 1997). At the PICOP concession (where records have also been from limestone areas: G. C. L. Dutson *in litt.* 1996) a bird was heard calling from highly degraded forest (Evans *et al.* 1993a), and the species is even thought to prefer degraded forest (and forest edge) on Bohol (C. R. Robson *in litt.* 1994), but this cannot be taken to mean that it can survive long-term in such habitat.

Food Insects were in the stomachs of all three specimens from Bilar, Bohol (NCSM label data); worms are also reported from Bohol specimens (Lambert 1996). A bird on Bohol had caught a large black insect with 3 cm long legs (Lambert 1996, D. Allen verbally 1997). Birds feed (usually solitarily) on the ground, flicking over dry leaves, but also on boulders and along fallen logs (Lambert 1996).

Breeding An April female had granular (i.e. inactive) ovaries (NCSM label data), another on Samar likewise in April (AMNH label data) and another in May (Rand and Rabor 1960); however, a male on Bohol had enlarged gonads in March, there is a juvenile in ZMB collected on Samar in June 1896 and another was observed on Bohol in late July (Lambert 1996). The extent to which song is an indication of breeding is not known, but six birds were singing around one clearing at Bilar, Bohol, on 23 May 1987 (Hornskov 1995a), which certainly suggests strong territorial defence, and, when combined with absence of calling in January, indicates likely breeding in the middle of the year (Lambert 1993c). This view is partly supported by two birds calling at Bislig, early March (Redman 1993); however, in November

The distribution of Azure-breasted Pitta *Pitta steerii* (map opposite; sequence not as in text): (1) Cantaub; (2) Guindulman; (3) Duao; (4) Rajah Sikatuna National Park; (5) Mayana; (6) Sevilla; (7) Anislagan; (8) Mt Capotan; (9) Cadapnan; (10) Matuguinao; (11) Bonga; (12) Catbalogan; (13) Paranas; (14) Buluan; (15) Tagaslian; (16) Mt Lobi; (17) Mt Kabalanti-an; (18) Car–Can–Mad–Lan; (19) Mt Hilong-hilong; (20) Bislig; (21) Mt Kapiagan; (22) Tambo; (23) Davao; (24) Lasang; (25) Calinan; (26) Tugbok; (27) Kibawalan; (28) Mt Tuduk; (29) Mamada; (30) Saluyong; (31) Sigayan; (32) Tacuran; (33) Dumalon; (34) Zamboanga; (35) Ayala.

○ Historical (pre-1950) ● Fairly recent (1950–1979) ● Recent (1980–present)

1994 in Rajah Sikatuna National Park, an adult female and a juvenile were sighted under a dense forest canopy, and a nest made of clay and sticks was found on a rock along the trail at 500 m (E. Arregadas verbally 1995); a slightly immature female was collected in April (McGregor 1907e), while two juveniles (in AMNH) were collected on Samar in May and June. Singing intensity may therefore have to do with brood dispersal following breeding (the same pattern apparently being shown by Whiskered Pitta *Pitta kochi*—see relevant account).

Migration It is not known whether this bird makes any local movements.

THREATS Extensive clearance of lowland forest represents a severe threat to this species (Collar *et al.* 1994), although it may enjoy a measure of immunity as a result of its preference for boulder-strewn terrain in which in any case the trees are often stunted. The deliberate conflagration of forests—associated with insurgency—is a problem, particularly on the Zamboanga Peninsula (D. Allen verbally 1997), while at Bislig good primary forest is being clear-felled (under the PICOP logging concession) and the land planted with exotic trees for paper production (B. Gee *in litt.* 1997; also Caufield 1983). It is not clear what proportion of forest has been lost on Samar and Leyte, but the situation is thought to be similar to that on Bohol, which currently retains a mere 4% forest cover (T. M. Brooks verbally 1997). Certainly PEWG (1996), using 1989 DENR statistics, credited Samar and Leyte with possessing as little as 433 km² of old-growth dipterocarp, but other sources of information put forest cover considerably higher (see Threats *Habitat loss* for Samar and Leyte under Philippine Eagle *Pithecophaga jefferyi*). At Rajah Sikatuna National Park on Bohol, limited illegal tree-cutting was observed in January 1997 (B. Gee *in litt.* 1997), although Brooks *et al.* (1995c) had considered such threats minimised by the management activities of DENR.

MEASURES TAKEN The species occurs in only one protected area, Rajah Sikatuna National Park. Additional protection may be conferred by the watershed reserve at Mt Hilong-hilong.

MEASURES PROPOSED Apart from the areas above, the species is known from three “key sites” (Mts Cabalantian/Capoto-an on Samar; Mt Lobi range on Leyte; and Mt Dapiak on Mindanao; see Appendix). These sites deserve further survey, formal designation and protection under the NIPAS process. In common with a considerable number of threatened species (see equivalent section under Blue-capped Kingfisher *Actenoides hombroni*), long-term survival of the Azure-breasted Pitta depends to a substantial degree on the effective protection of forest on Mindanao. A conservation strategy for the island should take into account the requirements of as many of these priority species as possible.

There are some striking challenges in the list of sites from which this species has been recorded: most notable, perhaps, are those on the Zamboanga Peninsula, which appears to have been neglected by ornithologists for far too long, and from the far south of Mindanao at Mt Tuduk, an intriguing “new” locality. As many of these places as possible should be revisited and their conservation status assessed, particularly in the light of the issue of whether timber extraction extends into core habitats of the bird. Moderate use of tape-playback to ascertain presence at the right season would make sense (although birds in February showed no interest in tapes, with birds only calling after rain: P. A. J. Morris *in litt.* 1996); and a search for other key sites on the island may be worthwhile.

REMARKS (1) Parkes (1973) referred to a specimen in FMNH taken at Buri, as if this was a different site from Ma-alngon, but in fact the specimen in question is from “Ma-alngon, Buri”, so Buri cannot count as a fourth locality for the species on Leyte.