## REFERENCES

- Anon. (1994) From the field: Philippines. Oriental Bird Club Bull. 19: 66,
- Brüggemann, F. (1876), Beiträge zur Ornithologie von Celebes und Sangir, Abh. Naturwiss. Ver. Bremen 5: 35-102.
- Dickinson, E. C., Kennedy, R. S. and Parkes, K. C. (1991) The birds of the Philippines. B.O.U. Check-list No. 12. Tring: British Ornithologists' Union.
- Goodman, S. M. and Gonzales, P. C. (1990) The birds of Mt. Isarog National Park, southern Luzon, Philippines with particular reference to altitudinal distribution. Fieldiana Zool. (2) 60: 1-39.
- Gould, J. (1880) The birds of Asia, Part XXXII.
- McClure, H. and Leelavit, P. (1972) Birds banded in Asia during the MAPS Program, by locality, from 1963 throw 1971. U.S. Army Research and Development Group, Far East, Report No. FE-315-7, 478 pp.
- Ogilvie-Grant, W. R. (1895) On the birds of the Philippine Islands, Part V. The highlands of the province of Lepan to north Luzon. *Ibis* 7(1): 433-472.
- Ridgway, R. (1912) Color standards and nomenclature. Washington D.C.: A. Hoen and Company.
- Whitehead, J. (1899) Field-notes on birds collected in the Philippine Islands in 1893-6, Part Π. *Ibis* 7(5): 210-246.
- O. Frode Jakobsen and C. Yding Andersen, Danish Ornithological Society, Vesterbrogade 140, DK-1640 Copenhagen V,

## An annotated check-list of the forest birds of Rajah Sikatuna National Park, Bohol, Philippines

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Rajah Sikutana National Park preserves most of the natural forest remaining on the island of Bohol, in the central Philippines. The park holds many species of forest birds, including at least 48 species endemic to the Philippines, and all four of Bohol's endemic subspecies. An annotated list of the forest bird species known from the national park is given, including 10 species not previously known from Bohol. The national park is well-protected by the Department of the Environment and Natural Resources (DENR), who have an active reforestation programme in the adjacent cleared areas.

## INTRODUCTION

Bohol, an island of 4,117 km² (Dickinson et al. 1991), lies between Cebu and Leyte in the central Philippines. It is low-lying with its highest point at only 878 m (Heaney 1986). The island has no pronounced dry season but is rainy from July to September due to typhoons, and from October to December due to north-eastern monsoons (DENR 1992). The driest month is April (DENR 1992). Much of the island consists of coralline limestone of geologically recent origin. During the lower sea levels of the mid- and late-Pleistocene (until 18,000 years ago), Bohol was joined to Leyte and Samar, and from there to Mindanao (Heaney 1986).

As a result of this recent connection, Bohol is faunistically very similar to Samar and Leyte, with most bird species and subspecies shared between the three islands. This group, the Eastern Visayas, has two endemic bird species, Samar Hornbill *Penelopides samarensis* and Yellow-breasted Tailorbird *Orthotomus samarensis*, both of which are allospecies of forms found elsewhere in the Philippines. Bohol itself has four recognized endemic subspecies (Streaked Ground-Babbler *Ptilocichla mindanensis fortichi*, Black-crowned Babbler *Stachyris nigrocapitata boholensis*, Rufous-tailed Jungle-Flycatcher *Rhinomyias ruficauda boholensis*, and Metallic-winged Sunbird *Aethopyga pulcherrima decorosa*), due to its historically isolated position, at the end of a peninsula with only a narrow connection to Leyte (Rand and Rabor 1960). This location, however, may have also left Bohol depauperate in comparison to Leyte and Samar, for several species such as Elegant Tit *Parus elegans* and Sulphur-billed Nuthatch *Sitta oenochlamys* are noticeably absent from the island.

Bohol has received surprisingly little attention from ornithologists. A. H.

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Everett and his brother collected (in northern Bohol) in October-November 1877 (Tweeddale 1878), J. B. Steere in 1888 (Steere 1890), A. Celestino, M. Canton and R. C. McGregor, in the hills near Tagbilaran (9°38'N 123°51'E), Sevilla (9°43'N 124°02'E) and Guindulman (9°46'N 124°29'E), in June 1906 (McGregor 1907) and W. C. Forbes in 1921 (Bangs 1922). The only subsequent collections are those of D. S. Rabor, at 300-350 m at Sandayong (9°49'N 124°21'E) and 700-750 m at Cantaub (9°49'N 124°28'E), in the hills between Sierra Bullones (9°49'N 124°17'E) and Guindulman, in March-May 1955 (Rand and Rabor 1960) and December 1958 (Dickinson et al. 1991), and a recent unpublished collection by P. Cua (Dickinson et al. 1991). A. Alcala also collected on the island (near Sierra Bullones) in May 1962 (K. Cebra in litt. 1995).

Bohol has been very heavily deforested. Even as early as 1877, Everett 'found a country with grass 12 feet high, and with no forest except on the tops of a few hills. Birds were scarce; and he had to return stricken with fever' (Tweeddale 1878). The most recent surveys of land cover in the Philippines showed only 166 km² of open dipterocarp forest remaining on Bohol, 4% of the island's area (Forest Management Bureau 1988, Swedish Space Corporation 1988).

Most of Bohol's remaining natural forest lies within the Rajah Sikatuna National Park (henceforth RSNP), with only small patches of intermingled plantations and dipterocarp forest elsewhere on the island. RSNP covers

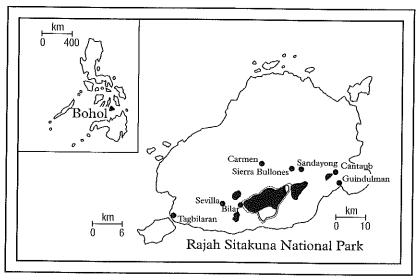


Figure 1. Bohol, showing remaining forest cover (Forest Management Bureau 1988, Swedish Space Corporation 1988, IUCN 1991) in black.

9,023 ha in area and lies between 200 m and 800 m altitude (DENR 1992), although its most accessible trails lie between 200 m and 500 m. It is mainly comprised of primary but fairly broken dipterocarp forest on steep, limestone terrain, surrounded by agricultural land and deforested hills. Four springs lie within the national park (DENR 1992). RSNP is managed by the DENR who have a headquarters at the Logarita Forest Station (9°43'N 124°08'E) on the western edge of the park.

The DENR is engaged in an active and successful programme of reforestation around the edges of the park, with large mahogany plantations dating back to the 1960s. The Logarita Forest Station is currently being expanded, and already includes a large bunkhouse and a swimming pool. An old scout camp lies in a large clearing just inside the forest. RSNP does have problems with the collection of firewood and rattans, the hunting and trapping of wildlife, and the clearance of the forest for *kaingin* (slash-and-burn agriculture) in the eastern portion of the reserve, but these threats are apparently being effectively controlled by the DENR.

A total of 48 species of endemic Philippines has been recorded in RSNP, including both Eastern Visayas endemics. All four of Bohol's endemic subspecies are found, and the presence of 12 species listed in Birds to watch 2 (Collar et al. 1994) highlights the park's importance for conservation. The park also holds other interesting wildlife, including six species of large mammals: Philippine Tarsier Tarsius syrichta, Long-tailed Macaque Macaca fascicularis, Philippine Flying-Lemur Cynocephalus volans, Malay Civet Viverra tangalunga, Common Palm Civet Paradoxurus hermaphroditus and wild pigs Sus philippinensis (or possibly Sus cebifrons). This diversity of easily-observed wildlife, along with the ease of access, from Cebu or Manila to Tagbilaran by boat or aeroplane, and then 1 hour by bus from Tagbilaran to Bilar (9°43'N 124°07'E) and the proximity to Carmen (9°50'N 124°12'E) and the Chocolate Hills, has made RSNP a popular destination for birdwatchers in the last few years. This paper consolidates the many interesting records of birds from the park.

T.B. and G.D. spent 23-27 July 1994 birdwatching in RSNP. B.K. has lead KingBird tours to RSNP in February-March in 1990 and annually since 1992. P.M.M. is currently coordinating a project on the birds of Bohol by the Philippine Wetland and Wildlife Conservation Foundation Inc. (PWCF) and has visited RSNP on a number of occasions. We compiled records from RSNP from a number of trip reports (Allen 1994, Buck et al. 1990, Curio 1993, Gardner 1993, Greensmith 1990, Hornbuckle 1994, Jensen and Hornskov 1992, Redman and Mitchell 1993 and Sargeant 1992), with additional records from the notes of the following people, to whom we are most grateful: Des Allen (14-20 March 1994); Mike Archer; Desiderio Asane; Euan Brodie (spring 1991); Hugh Buck, Gavin Cooper and Tim Fisher (6-8 May 1989); Eberhard Curio, B. Feil and A. Flasskamp (February

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1993); Ian Gardner (spring 1992 and spring 1993) and Neil Bostock [N.B.] (spring 1993); Alan Greensmith (23-27 March 1990); Morten Heegaard [M.H.] (1-4 July 1992); Jon Hornbuckle (25-30 January 1994); Jesper Hornskov and Stig Jensen (April and May 1987); John Howes (1987); Phil Hurrell; Ole Jacobsen (6-10 February 1988); Frank Lambert [F.L.] (January 1990); Adrian Long and Melanie Heath (January 1995); Torben Lund (20-24 April 1990); Ken Mitchell and Nigel Redman (December 1993); Michael Mitchell; Pete Morris [P.M.] and Nina Higgins (27 January-February 1994); Craig Robson [C.R.] and Peter Davidson [P.D.] (10-14 April 1994); Paul Ryman; Dave Sargeant (17-19 January 1988); Rob Timmins (11-15 February 1992) and Keith Turner.

## ANNOTATED LIST

The approximate abundance of each forest bird species in RSNP is noted as follows:

- (1) Very rare, with a few records only
- (2) Only recorded infrequently
- (3) Common, usually recorded daily

Winter visitors are noted with 'W' and species endemic to the Philippines with 'e'. The listing of species as 'threatened' or 'near-threatened' follows Birds to watch 2 (Collar et al. 1994). Nomenclature and systematic order follow Sibley and Monroe (1990, 1993).

Included in the list below are details of ten species which were not listed for Bohol by Dickinson et al. (1991). These are Chinese Goshawk Accipiter soloensis, Rufous-bellied Eagle Hieraaetus kienerii, Changeable Hawk-Eagle Spizaetus cirrhatus, Philippine Hawk-Eagle Spizaetus philippensis, Pink-bellied Imperial-Pigeon Ducula poliocephala, Mindanao Bleeding-heart Gallicolumba criniger, Philippine Eagle-Owl Bubo philippensis, Ruddy Kingfisher Halcyon coromanda, Ashy Minivet Pericrocotus divaricatus and Scarlet Minivet Pericrocotus flammeus.

RUFOUS NIGHT-HERON Nycticorax caledonicus (1)

Gardner (1993) noted several birds in RSNP, but these are the only Bohol records since McGregor (1907) found the species 'not uncommon' and observed that: 'The natives of Bohol are extremely afraid of a spirit which they call the "cuak cuak" and at night they carefully close doors and windows to shut it out. When the night herons fly over in the early evening uttering their weird call the natives say: "There is the 'cuak cuak', be careful".'

• Philippine Serpent-Eagle Spilornis holospilus (3)
Sibley and Monroe (1990) split this form from Crested Serpent-Eagle S. cheela.

Besra Accipiter virgatus (2)

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This species is likely to have been overlooked. Rand and Rabor (1960) collected two specimens, Sargeant (1992) saw one bird at Dimiao on the southern edge of RSNP in January 1988 and M.H. saw a single in RSNP on 2 July 1992. P. M. and K. Mitchell found a pair nesting at Logarita in February 1995 and, based on photos, retrospectively identified one seen at the same site in 1994.

CRESTED GOSHAWK Accipiter trivirgatus (1)

Dickinson et al. (1991) list one historical specimen for Bohol without details. This is held by the Californian Academy of Sciences and was collected by A. Alcala on 8 May 1962 near Sierra Bullones (K. Cebra in litt. 1995). In RSNP, Jensen and Hornskov (1992) saw two on 20 May 1987 and one on 22 May 1987, and Redman and Mitchell (1993) saw one on 18 December 1993.

CHINESE GOSHAWK Accipiter soloensis (W2)

Birds seen in RSNP by Jensen and Hornskov (1992) - five migrating on 9 April 1987 and two on 11 April 1987 - are the first records for Bohol. There are several subsequent records from RSNP, although some of these may be the result of confusion with pale Besras. The species is a winter visitor throughout the Philippines (Dickinson *et al.* 1991) and is not unexpected on Bohol.

GREY-FACED BUZZARD Butastur indicus (W1)

Single birds were recorded in RSNP on 25 March by Greensmith (1990) and on 22 March 1994 (B.K.). There are no other records of this species from Bohol since 1888 (Steere 1890).

Rufous-bellied Eagle Hieraaetus kienerii (1)

One juvenile seen well and identified beyond doubt in RSNP on 23 May 1987 (Jensen and Hornskov 1992) is the first record for Bohol.

Changeable Hawk-Eagle Spizaetus cirrhatus (1)

Buck et al. (1990) observed this species, which has not previously been recorded on Bohol, in RSNP in May 1989.

• PHILIPPINE HAWK-EAGLE Spizaetus philippensis (1) NEAR-THREATENED A single in RSNP, seen and well-described by Jensen and Hornskov (1992) on 22 May 1987, is the first record for Bohol. Sargeant (1988) also saw the species in RSNP, on 18 January 1988.

Red Junglefowl Gallus gallus (2)

SLATY-LEGGED CRAKE Rallina eurizonoides (1)

First recorded on Bohol by Rand and Rabor (1960) and subsequently found in RSNP in May 1989 (Buck et al. 1990), April 1990 (T.L.) and in December 1993 (Redman and Mitchell 1993).

• Plain Bush-hen Amaurornis olivacea (1)

Single birds were recorded in RSNP in January 1990 (F.L.) and 9 March 1990 (B.K.). This taxon was split from Rufous-tailed Bush-hen *A. moluccanus* by Sibley and Monroe (1990).

POMPADOUR GREEN-PIGEON Treron pompadora (2)

Rand and Rabor (1960) only found this species at 700-750 m altitude (four specimens) in March-May 1955. It is recorded sporadically in RSNP, with large flocks sometimes seen in winter (Redman and Mitchell 1993, and P.M. in 1994), and occasional records from later in the year. Possibly the species breeds at higher altitudes in the spring, with flocks forming at fruiting trees in the lowlands in the winter.

- WHITE-EARED BROWN-DOVE Phapitreron leucotis (3)
- AMETHYST Brown-Dove Phapitreron amethystina (2)

Four specimens were collected by McGregor (1907) and 18 by Rand and Rabor (1960). Records from RSNP are as follows: one on 18 January 1988 (Sargeant 1988); two on 2 July and a single on 4 July 1992 (M.H.); singles on 20 and 21 December 1993 (Redman and Mitchell 1993); and several records (recorded on 3/5 days) from 10-14 April 1994 (P.D., C.R.). Sixteen of Rand and Rabor's (1960) specimens were from 1,000-2,500 m (Dickinson et al. 1991), so the scarcity of records from RSNP is perhaps unsurprising. C.R. saw birds carrying nesting material in April.

• Yellow-breasted Fruit-Dove Ptilinopus occipitalis (2)

This species seems to be scarce on Bohol. Rand and Rabor (1960) collected six at 700-750 m and there have been a few records from RSNP, with a maximum of four birds on 11 March 1993 (B.K.).

BLACK-CHINNED FRUIT-DOVE Ptilinopus leclancheri (2)

P. leclancheri was collected on Bohol by McGregor (1907), at Tagbilaran and at Sevilla, but not by Rand and Rabor (1960). A number of observers has recorded the species in small numbers in RSNP, and Greensmith (1990) found a nest containing a single egg in March 1990. P.M. found it to be common in February 1995, once he had learnt the call.

• PINK-BELLIED IMPERIAL-PIGEON Ducula poliocephala (1)

A single, seen very well in RSNP by C.R. on 13 April 1994, is the first record for the island.

Green Imperial-Pigeon Ducula aenea (1)

Collected in very small numbers in the lowlands by McGregor (1907) and by Rand and Rabor (1960). Two were seen in RSNP on 18 December 1993 (Redman and Mitchell 1993).

Philippine Cuckoo-Deve Macropygia tenuirostris (3)

Split from Reddish Cuckoo-Dove M. phasianella by Sibley and Monroe (1990).

COMMON EMERALD-DOVE Chalcophaps indica (3)

• MINDANAO BLEEDING-HEART Gallicolumba criniger (1) THREATENED Recent records from RSNP are the first records for Bohol of this species. Buck et al. (1990) observed 'a vigorously calling bird...in display posture atop

a log' in early May 1989. One was seen on 25 February 1992 (B.K.), Gardner (1993) recorded the species in spring 1993, and P.D. saw a bird on 12 April 1994. Bohol birds apparently belong to the Leyte race, G. c. leytensis (Buck et al. 1990).

● PHILIPPINE COCKATOO Cacatua haematuropygia (1) THREATENED

This species still survives on Bohol, unlike on the adjacent islands of Cebu and Negros where it may be extinct (Brooks et al. 1992). In RSNP, Buck et al. (1990) recorded singles on 6 and 7 May 1989, F.L. saw two in January 1990, and Gardner (1993) recorded a single individual flying over the clearing at dusk, and five birds feeding in a corn field adjacent to the park. The PWCF is initiating a project to assess the status of Cacatua haematuropygia on Bohol.

- Blue-crowned Racquet-tail Prioniturus discurus (3) Near-threatened
- Colasisi Loriculus philippinensis (1)

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This conspicuous, but heavily-trapped, species must be either scarce or rapidly declining on Bohol. There is only a few records for RSNP. Jensen and Hornskov (1992) noted singles or pairs on four days in April 1987; Buck et al. (1990) recorded birds in May 1989; B.K. recorded one on 8 March 1990 and six on 21 March 1994; and Hornbuckle (1994) saw a single bird in January 1994. G.D. observed two captive birds in a house within the park on 24 July 1994.

Hodgson's Hawk-Cuckoo Cuculus fugax (3)

This species is frequently recorded in RSNP (with most records being of singing birds).

ORIENTAL CUCKOO Cuculus saturatus (W1)

The only record from RSNP is of one seen on 20 May 1987 (with singles probably of this species also seen on 8, 9 and 10 April 1987) by Jensen and Hornskov (1992).

PLAINTIVE CUCKOO Cacomantis merulinus (3)

Although collected by Everett (Tweeddale 1878) and McGregor (1907), Rand and Rabor (1960) regarded this species as 'of doubtful status' on Bohol. It is, however, fairly commonly recorded (mostly aurally) in RSNP. RUSTY-BREASTED CUCKOO Cacomantis sepulcralis (2)

The first Bohol records of this species were two specimens collected at 700-750 m altitude in 1955 (Rand and Rabor 1960). It has been recorded in small numbers (mostly aurally) at RSNP. This species was split from Brush Cuckoo *C. variolosus* by Sibley and Monroe (1990).

Drongo Cuckoo Surniculus lugubris (3)

Rand and Rabor (1960) collected nine specimens of this species, the first records for Bohol; it is fairly commonly heard (but only occasionally seen) in RSNP.

- PHILIPPINE COUCAL Centropus viridis (3)
- BLACK-FACED COUCAL Centropus melanops (3)

This species is common in RSNP. Birds are often seen in small flocks, and are frequently heard. We had a total of 58 records during 23-27 July 1994 (T.B., G.D.).

• PHILIPPINE SCOPS-OWL Otus megalotis (3)

Birds have been recorded in RSNP on a number of occasions, with most records being of birds calling near the clearing.

• Philippine Eagle-Owl Bubo philippensis (1) Threatened

The first records of this rare species for Bohol are of singles in RSNP. One was heard and seen perched by P.M. on 28 January 1994, and another was flushed in the forest in the daytime on 26 July 1994 (G.D.).

• PHILIPPINE HAWK-OWL Ninox philippensis (3)

The species was recorded for the first time on Bohol by Rand and Rabor (1960), and is heard fairly commonly in RSNP, often calling near the clearing.

• Philippine Frogmouth Batrachostomus septimus (3)

Although the first records of this species on Bohol were those of Rand and Rabor (1960), it has since been recorded, mainly aurally, in small numbers at RSNP. Greensmith (1990) recorded an adult with a tiny fledgling in March 1990.

Great Eared-Nightjar Eurostopodus macrotis (3)

• Philippine Nightjar Caprimulgus manillensis (3)

Sibley and Monroe (1993) split this form from the Sulawesi Nightjar C. celebensis.

Lesser Treeswift Hemiprocne comata (2)

• Grey Swiftlet Collocalia amelis (3)

McGregor (1907) lists a specimen of 'Salangana whiteheadi' for Bohol, but this bird is taken to refer to C. amelis by Dickinson et al. (1991). Sibley and Monroe (1990) split the C. vanikorensis complex into several species including C. amelis.

● Philippine Swiftlet Collocalia mearnsi (1)

Three birds (listed as *C. inexpectata amelis*) were collected by Rand and Rabor (1960) from nests in caves at 700-750 m. The only claimed records from RSNP are from Jensen and Hornskov (1992) who recorded it fairly commonly in April and May 1987. This species is largely an upland form (Dickinson *et al.* 1991).

GLOSSY SWIFTLET Collocalia esculenta (3)

• Pygmy Swiftlet Collocalia troglodytes (3)

• PHILIPPINE TROGON Harpactes ardens (3)

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Not uncommon in RSNP, but shy and much more often heard than seen. It is apparently trapped on Bohol (R. Rigor pers. comm. 1994).

RUDDY KINGFISHER Halcyon coromanda (W1)

This species is a rare winter visitor to forest in the Philippines, and has not been previously recorded on Bohol. Records from RSNP are as follows: one in April 1987 (Jensen and Hornskov 1992); one in spring 1993 (Gardner 1993); and one on 26 January 1994 (Hornbuckle 1994).

• RUFOUS-LORED KINGFISHER Todirhamphus winchelli (2)
THREATENED

*H. winchelli* is a rare specialist of lowland limestone forests, mainly on small islands, throughout the southern Philippines. On Bohol, one specimen was collected by McGregor (1907) and four by Rand and Rabor (1960). Single birds have been recorded at RSNP by nine observers.

SAMAR TARICTIC HORNBILL Penelopides samarensis (3) NEAR-THREATENED This species, split from the Philippine P. panini superspecies by Sibley and Monroe (1990), is endemic to the Eastern Visayas. It is common in RSNP, and is conspicuous in its small, noisy flocks. Although the species is presumably fairly common in remnant forest patches on Samar and Leyte, the extent of deforestation across the small global range of this species would indicate that it should be considered Near-threatened.

WHITE-BELLIED WOODPECKER Dryocopus javensis (3)

• PHILIPPINE PYGMY WOODPECKER Dendrocopos maculatus (1)

McGregor (1907) collected a single male near Tagbilaran, but mysteriously, the only subsequent records are of singles heard in RSNP on 3 July 1992 (M.H.) and 11 April 1994 (C.R.) and seen in March 1993 and March 1994 (two birds) (B.K.).

GREATER FLAMEBACK Chrysocolaptes lucidus (3)

• Wattled Broadbill Eurylaimus steerii (2) Threatened

Rand and Rabor (1960) collected a single specimen at about 700 m and inferred that 'the species was very rare and was found only in original forest'. It is scarce, but is unobtrusive and certainly under-recorded. The species is recorded not infrequently in deep forest at RSNP. Birds on Bohol belong to the Eastern Visayas race *E. s. samarensis*, which is very different from the Mindanao races, and may be a good species (Lambert and Woodcock in prep.).

RED-BELLIED PITTA Pitta erythrogaster (2)

HOODED PITTA Pitta sordida (1)

Although found to be 'abundant' on Bohol by McGregor (1907), the only subsequent records for the island are those of Jensen and Hornskov (1992) from Loboc, where one was heard on 27 May 1987, and of Buck et al. (1990) from RSNP in May 1989.

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• Azure-breasted Pitta Pitta steerii (3) Threatened

P. steerii, like Todirhamphus winchelli, Eurylaimus steerii and Ptilocichla mindanensis, is restricted to lowland forest, mainly on limestone, in the southern Philippines. It is quite common in RSNP; we had a total of 14 sightings of the species in 4 days of observation (T.B., G.D.). We heard two birds calling at dusk on 23 July, fitting with Lambert's (1993) observation that the species is regularly heard calling at RSNP in late May and June. P.M. heard many calling after rain in both January 1994 and February 1995.

BAR-BELLIED CUCKOO-SHRIKE Coracina striata (3)

• BLACK-BIBBED CICADABIRD Goracina mindanensis (1) THREATENED Listed for Bohol by Parkes (1971), but rarely recorded in RSNP. N.B. saw one on 6 March and three on 9 March 1993, B.K. recorded two birds on 22 March 1994, and P.M. saw three or four birds in a flock with C. striata, Dryocopus javensis and Oriolus steerii, by the clearing in January 1994. This species was split from the C. morio complex by Sibley and Monroe (1990). Ashy Miniver Pericrocotus divaricatus (M1)

Two on 25 February 1992 (B.K.) are the first records for Bohol.

SCARLET MINIVET Pericrocotus flammeus (1)

Records from RSNP are as follows: four on 9 April and a single on 11 April (Jensen and Hornskov 1992); Buck et al. (1990) in May 1989; Curio (1993) in February 1993; two on 22 March 1994 (B.K.); and one on 14 April 1994 (C.R.). These observations represent the first records of the species for Bohol.

- Yellow-wattled Bulbul Pycnonotus urostictus (3)
- Philippine Bulbul Hypsipetes philippinus (3)

Spangled Drongo Dicrurus hottentottus (3)

BLACK-NAPED ORIOLE Oriolus chinensis (3)

• PHILIPPINE ORIOLE Oriolus steerii (2)

The first record of this species for Bohol was a bird collected at 700 m by Rand and Rabor (1960). There have been nine subsequent records from RSNP.

• Philippine Fairy-bluebird Irena cyanogaster (2)

Rand and Rabor (1960) recorded this species on Bohol for the first time, collecting one specimen at about 300 m and 17 specimens at 700-750 m. It is not uncommon in RSNP.

• Stripe-headed Rhabdornis Rhabdornis mystacalis (2)

McGregor (1907) found this species in 'some abundance at Sevilla and Guindulman', but Rand and Rabor (1960) collected only three birds. The species is rare in RSNP, with records as follows: one on 9 April, eight on 11 April and four on 20 May 1987 (Jensen and Hornskov 1987); Buck *et al.* (1990) in May 1989; seen on four days in December 1993 with a maximum

day total of five birds (Redman and Mitchell 1993); a group of six in a flock in January 1994 (P.M.); and one flock in July 1994 (T.B.).

• STREAKED GROUND-BABBLER Ptilocichla mindanensis (2)

NEAR-THREATENED

Rand and Rabor (1960) collected 11 specimens at 700-750 m. The species is not uncommon in RSNP, but is difficult to see.

- BLACK-CROWNED BABBLER Stachyris nigrocapitata (2)
- Brown Tit-Babbler Macronous striaticeps (3)

ARCTIC WARBLER Phylloscopus borealis (W2)

- Philippine Leaf-Warbler Phylloscopus olivaceus (3)
- Rufous-fronted Tailorbird Orthotomus frontalis (3)

The species was collected by Everett (Tweeddale 1878), and described as 'very abundant in all parts of the island visited' by McGregor (1907), although Rand and Rabor (1960) collected only four specimens. It is fairly common in RSNP with birds heard daily, but is shy, arboreal and very difficult to see. Sibley and Monroe (1990) split *O. frontalis* from Philippine Tailorbird *O. castaneiceps*.

• Yellow-breasted Tailorbird Orthotomus samarensis (3)

NEAR-THREATENED

McGregor (1907) collected a single specimen of 'the rare Samar tailor-bird' at Sevilla, and Rand and Rabor (1960) found this Eastern Visayas endemic to be 'a very rare bird and encountered only in the dense undergrowth of original forest' (five specimens collected). It is regularly recorded in RSNP but, like *O. frontalis*, is very shy and difficult to observe. The small amount of forest remaining within the limited range of this species indicates that it is correctly listed as Near-threatened.

RUFOUS-TAILED JUNGLE-FLYCATCHER Rhinomyias ruficauda (2)

Unobtrusive and uncommon in RSNP.

Grey-streaked Flycatcher Muscicapa griseisticta (W2)

• Blue Fantail Rhipidura superciliaris (3)

Black-naped Monarch Hypothymis azurea (3)

ullet Yellow-bellied Whistler Pachycephala philippinensis (3)

Brown Shrike Lanius cristatus (W3)

Asian Glossy Starling Aplonis panayensis (3)

Purple-throated Sunbird Nectarinia sperata (2)

• METALLIC-WINGED SUNBIRD Aethopyga pulcherrima (2)

This species was collected by McGregor (1907) at Sevilla and Guindulman, and by Rand and Rabor (1960) at 700-750 m (10 individuals), and thus seems to be largely a bird of hill forest on Bohol, as elsewhere in its range

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(Dickinson et al. 1991). It has been recorded in RSNP in small numbers in May 1989 by Buck et al. (1990); B.K. in February 1992, March 1993, March 1994 and March 1995; in January 1994 by Hornbuckle (1994); and in April 1994 by C.R.

• OLIVE-BACKED FLOWERPECKER Prionochilus olivaceus (1)

A single female was collected at Sevilla by McGregor (1907), but the only subsequent records for Bohol are of singles seen in RSNP on 25 February 1993 (B.K.), 1 February 1994 (P.M.) and in January 1995 (A. Long and M. Heath).

- Bicolored Flowerpecker Dicaeum bicolor (2)
- Red-Keeled Flowerpecker Dicaeum australe (3)

ORANGE-BELLIED FLOWERPECKER Dicaeum trigonostigma (3)

- Buzzing Flowerpecker Dicaeum hypoleucum (2)
- Pygmy Flowerpecker Dicaeum pygmaeum (2)

EVERETT'S WHITE-EYE Zosterops everetti (3)

## OTHER FOREST BIRD SPECIES

Nine species of forest bird species recorded from Bohol have yet to be recorded in RSNP. These are listed and discussed below.

MALAYAN NIGHT-HERON Gorsachius melanolophus

This species is known from Bohol from a single specimen only (Dickinson et al. 1991) and is presumably a very low-density resident on the island.

BARRED HONEYBUZZARD Pernis celebensis

Known from Bohol only from a single specimen, collected at about 300 m by Rand and Rabor (1960), and from one unsubstantiated record, from Dimiao on the southern edge of RSNP, in January 1988 (Sargeant 1992).

• Philippine Falconet Microhierax erythrogenys

A single bird was collected by McGregor (1907) at Guindulman, but the species has not since been recorded on Bohol. This is a most conspicuous species and the lack of recent records may indicate that it is now extinct on Bohol.

TABON SCRUBFOWL Megapodius cumingii NEAR-THREATENED

Reported for Bohol by Meyer de Schauensee & duPont (1962) but there are no other records. The species is declining throughout its range (Collar et al. 1994).

Blue-naped Parrot Tanygnathus lucionensis Threatened

This species is now very rare throughout its range as a result of heavy trapping, and may be extinct on Bohol. McGregor (1907) noted that 'the "picóy" occurs in all the forested areas but is not abundant', and there are no subsequent records.

• SILVERY KINGFISHER Alcedo argentatus THREATENED

Rand and Rabor (1960) collected three specimens from along forest streams between 200 and 750 m, but this scarce southern Philippine endemic has not been recorded on Bohol since.

• Rufous Hornbill Buceros hydrocorax Near-Threatened

There are no recent records of this species from Bohol, although McGregor (1907) found it abundant at Sevilla and Guindulman, and Rand and Rabor (1960) collected 12 specimens. Only one of Rand and Rabor's specimens was from below 700 m, and so the species may be rare in the lowlands but, nevertheless, its absence from RSNP is curious. It is reported to occur in RSNP by DENR (1992).

MANGROVE BLUE-FLYCATCHER Cyornis rufigastra

Found to be 'abundant' by McGregor (1907) and two collected by Rand and Rabor (1960) at 300-350 m altitude. The lack of records of this species from RSNP is surprising.

LITTLE SPIDERHUNTER Arachnothera longirostra

Four specimens were collected by McGregor (1907) at Sevilla, and three by Rand and Rabor (1960) at several sites, and the lack of records of this species from RSNP is therefore rather puzzling.

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#### REFERENCES

Allen, D. (1994) Birds seen on a visit to the Philippines Feb-Mar 1994. Unpublished report.

Bangs, O. (1922) Notes on Philippine birds collected by Governor W. Cameron Forbes. Bull. Mus. Comp. Zool. 65: 77-84.

Brooks, T. M., Evans, T. D., Dutson, G. C. L., Anderson, G. Q. A., Asane, D. C., Timmins, R. J. and Toledo, A. G. (1992) The conservation status of the birds of Negros, Philippines. *Bird Conserv. Intern.* 2: 273-302.

Buck, H. A., Cooper, G. C. H. and Fisher, T. H. (1990) Notes on a visit to Bohol, Philippines. Unpublished report.

Collar, N. J., Crosby, M. J. and Stattersfield, A. J. (1994) Birds to watch 2. Cambridge, U.K.: BirdLife International (Conservation Series no. 4).

Curio, E. (1993) Report on bird species recorded during a (preliminary) Philippines Conservation Expedition, 3 July-26 August 1993. Unpublished.

Department of the Environment and Natural Resources [= DENR] (1992) Profile of national parks in the Philippines. Manila: Protected Areas and Wildlife Bureau.

Dickinson, E. C., Kennedy, R. S. and Parkes, K. C. (1991) The birds of the Philippines. Tring: British Ornithologists' Union (Check-list no. 12).

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Forest Management Bureau (1988) Natural forest resources of the Philippines. Philippine-German Forest Resources Inventory Project. Manila: Forest Management Bureau, Department of the Environment and Natural Resources.

Gardner, I. (1993) Philippines. Unpublished.

Greensmith, A. (1990) The Philippines, 4 March to 9 April 1990. Unpublished.

Heaney, L. R. (1986) Biogeography of mammals in S.E. Asia: estimates of rates of colonization, extinction and speciation. Biol. J. Linnean Soc. 28: 127-165.

Hornbuckle, J. (1994) Birdwatching in the Philippines. Unpublished.

IUCN (1991) The conservation atlas of tropical forests. Asia and the Pacific, London; Macmillan,

Jensen, S. and Hornskov, J. (1992) The Philippines Feb. 17 - July 5 1987. Unpublished.

Lambert, F. R. (1993) Some key sites and significant records of birds in the Philippines and Sabah. Bird Conserv. Intern. 3: 281-297.

Lambert, F. R. and Woodcock, M. (in prep.) Pittas and broadbills of the world. Mountford: Pica Press. McGregor, R. C. (1907) The birds of Bohol. Philippine J. Sci. 2: 315-335.

Meyer de Schauensee, R. and duPont, J. E. (1962) Birds from the Philippine islands. *Proc. Acad. Nat. Sci. Philadelphia* 114: 149-173.

Parkes, K. C. (1971) Taxonomic and distributional notes on Philippine birds. Nemouria 4: 1-67.

Rand, A. L. and Rabor, D. S. (1960) Birds of the Philippine islands: Siquijor, Mount Malindang, Bohol and Samar. Fieldiana, Zool. 35: 221-441.

Redman, N. and Mitchell, K. (1993) The Philippines. Unpublished.

Sargeant, D. (1992) The Philippines. Unpublished.

Sibley, C. G. and Monroe, B. L., Jr. (1990) Distribution and taxonomy of birds of the world. New Haven: Yale University Press.

Sibley, C. G. and Monroe, B. L., Jr. (1993) A supplement to distribution and taxonomy of birds of the world. New Haven: Yale University Press.

Swedish Space Corporation (1988) Mapping the natural conditions of the Philippines. Final report. Solna, Sweden: Swedish Space Corporation.

Steere, J. B. (1890) A list of the birds and mammals collected by the Steere Expedition to the Philippines, with localities, and with brief preliminary descriptions of supposed new species. Ann Arbor, USA: Courier Printers.

Tweeddale, Lord (1878) Contributions to the ornithology of the Philippines. No. X. On the collection made by Mr A. H. Everett in the island of Bohol. *Proc. Zool. Soc. London*, 708-712.

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# Taxonomy and names of *Carpococcyx* cuckoos from the Greater Sundas

NIGEL. J. COLLAR and ADRIAN. J. LONG

The ground-dwelling forest cuckoo known as Carpococcyx radiceus has since 1923 been regarded as polytypic, with forms on Borneo (nominate race) and Sumatra (race viridis). Comparison of six available skins of viridis with 10 of the form from Borneo showS that Sumatran birds are 20% smaller, oil green rather than purplish-blue on the wings and tail, buff rather than off-white below, lack the hood of Bornean birds, and appear to have a different periorbital colour pattern (green in Bornean birds, green, pink and blue in Sumatran). Immatures also appear to differ, Bornean being upmarked whitish-buff below, purplish-blue above, Sumatran strongly barred brown and black both above and below. The two forms are thus better regarded as distinct species, to be known as Bornean and Sumatran Ground-cuckoo; the proper scientific name of the former is Carpococcyx radiatus. The Sumatran species, known only from the Barisan Range, has not been seen since 1916, and urgently needs to be searched for.

## INTRODUCTION

The Sunda Ground-cuckoo Carpococcvx "radiceus", known from the islands of Borneo and Sumatra, has been treated as a threatened species for some years (Collar and Andrew 1988, Collar et al. 1994); we maintain below that its specific name should be radiatus, and refer to it hereafter by that name. While documenting specimens of this bird at the Natuurhistorisch Museum (RMNH), Leiden, the Netherlands, in preparation for its full review in BirdLife's planned Threatened birds of Asia, one of us (NTC) was surprised at the degree of difference between three specimens from Sumatra (race viridis) and other material from Borneo (nominate radiatus), but had no time on that occasion to take measurements or draw up descriptions. It happened that, from a personal long-standing interest, AIL had already compiled a substantial body of information on the species, and consultation between us quickly revealed that specimens of birds from Sumatra are in fact very rare in collections, the only other material apparently being a fourth mounted specimen in RMNH, three specimens in Museo Civico di Storia Naturale "Giacomo Doria", Genoa (MSNG), Italy, and one in the Zoological Reference Collection of the National University of Singapore (ZRCNUS).

It seemed to us that this paucity of Sumatran material might have resulted in long-term neglect of its true taxonomic status. We duly assembled the three skins (one of which is juvenile) from Leiden and the three (one of which is also juvenile) from Genoa at the Natural History Museum (BMNH), Tring, U.K., for comparison with the series of 10 specimens (nine adult, one subadult) of nominate *radiatus* held there. We also sought to trace every relevant reference in the literature as well as every unpublished record from