The status of Fairy Pitta in Indonesia with new records from Java and Riau Islands

SYAHRAS FATHIN AMINUDDIN 1 , ALEXANDER KURNIAWAN SARIYANTO PUTERA 2 , NAILA ZACKEISHA 3 , TAUFAN NURZAMAN SULAEMAN 2 AND ARFAH NASUTION 4

¹Bird Conservation Society, ²Department of Biology, Faculty of Mathematic and Natural Science, IPB University, ³University of Indonesia, ⁴Cikananga Wildlife Center. Author Email: yayasfathin19@gmail.com.

Summary. The Fairy Pitta *Pitta nympha* is an uncommon migrant known to visit Borneo during the non-breeding season. However, within Indonesia there are no published records of this species outside Kalimantan (Indonesian Borneo). We encountered single immature Fairy Pittas at Anambas island (Riau islands, Sumatra) in October 2019, and in Bogor and Jakarta (Java) in November 2019, suggesting an influx of young birds migrating beyond their normal wintering grounds.

Ringkasan. Paok Bidadari Pitta nympha di Indonesia lebih dikenal sebagai spesies jarang berkunjung ke Kalimantan selama musim tidak berbiak. Namun, di Indonesia belum pernah ada catatan perjumpaan spesies ini di luar Kalimantan. Kami berhasil menjumpai satu individu spesies ini masing-masing di kepulauan Anambas (Kep. Riau, Sumatra) pada bulan Oktober 2019, Bogor dan Jakarta November 2019, hal menunjukkan adanya sebagian kecil populasi yang bermigrasi di luar wilayah musim dinginnya.

Introduction

The Fairy Pitta *Pitta nympha* is a long-distance migrant that breeds in the forests of Taiwan, Korea, Japan and east and southeast China from April to July, and "winters" in Borneo and Vietnam (Lambert 1996; Lambert & Woodcock 1996). In Borneo, it is a rare non-breeding visitor from October to March, most records emanating from Sarawak, western Sabah and Brunei (Smythies 1981; MacKinnon & Phillipps 1993; Myers 2009; Phillipps & Phillipps 2014). In Indonesian Borneo (Kalimantan) it was first recorded from Riam, Central Kalimantan, where a female was collected in 1935 (Mayr 1938), and there have but several records since 2008 (van Berkel *et al.* 2012 Fischer *et al.* 2016; Brooks *et al.* 2018). Vagrants have been reported from the Philippines in late September (Jensen *et al.* 2015), from Lao People's Democratic Republic (Laos) in April (Coudrat & Nanthavong 2016), from Singapore in late November (Roddis & Loseby 2019; Sin *et al.* 2020) and from Cambodia in October (Gray & Roberts 2020).

Here we describe three recent records of this Globally Vulnerable species in Indonesia and collate all known Indonesian records of this species from the literature and secondary sources.

Observations

On 24 October 2019, while conducting a biodiversity survey for a Cikananga Wildlife Centre release programme in lowland coastal forest on Anambas Island, Sumatra, AN observed a Fairy Pitta hopping in leaf litter in lowland coastal forest at c. 100 m asl. Anambas Island is situated 150 nautical miles northeast of Singapore and Batam Island, between Peninsula Malaysia and Borneo (Fig. 1). The bird was in adult plumage (Plate 1a) but had small pale pink rictal flanges at the base of the bill, indicating it was in its first year (Lambert & Woodcock 1996).

On 3 November 2019, SFA and TNS found a Fairy Pitta (Plate 1c-d) while birdwatching in an open "green space" area, c. 70 m from a road in Bogor City, West Java, at an elevation of c. 245 m asl. The bird was watched for c. 90 minutes, during which it obtained several earthworms from the ground, in an area of dense garden vegetation. Eleven days later, on 14 November, NZ observed an immature Fairy Pitta (Plate 1b) in mangroves in Penjaringan District on the north-western coast of Jakarta at 07:15 hrs, and again at the same location at 15:00 hrs, for a total of c. 10 mins. The bird(s) did not call.



Plate 1. First-year Fairy Pittas *Pitta nympha* in Indonesia in 2019: A, on Anambas island (AN); B, in Jakarta (NZ); C, in Bogor (SFA); D, in Jepara (Teguh Dwi Herlambang).

In addition to the birds observed by the authors, four individuals were found in lowland forest near a spring in Donorojo District, Jepara (Panji 2019; Teguh Dwi Herlambang *pers. comm*). One of the birds, an immature, was watched for c.2.5 h from 09:00-11:30 hrs, during which time it obtained several small insects and earthworms from the ground (Teguh Dwi Herlambang *pers. comm*). This and other known records of the species in Indonesia are summarised in Table 1. There have been no recent records from Kalimantan (eBird 2020b).

Table 1. Summary of Indonesian records of Fairy Pitta (exact locations are shown in Appendix 1).

Region	Location	Habitat	Date	Elevation (m)	\mathbf{Age}^1	Ref. ²
Riau Islands	Anambas Is.	Coastal forest	24 Oct 2019	100	I	A
Central Kalimantan	Riam	Unknown	Dec 1935	-	U	В
	Murung Raya	Mixed dipterocarp	5 Jan 2011	184	I	C
			4 Feb-17 Mar 2013	160	I	D
			13 Apr, 10 Oct 2014	170	U	D
			15 Apr, 17 Oct 2015	170	U	D
	Sebangau	Swamp forest	17-19 Oct, 26 Nov 2008	c.30	A	Е
Java	Jakarta	Mangroves	19 Nov 2019	1	I	A
	Bogor	Urban park	3-5 Nov 2019	245	I	A
	Jepara	Lowland forest	24 Oct 2019	53	I (1), U(3)	F

¹I, immature; A, adult; U, unknown.

²A,this report; B, Mayr (1938); C, Van Berkel *et al.* (2012); D, Fisher *et al.* (2016); E, Brooks *et al.* (2018); F, Panji (2019) and Teguh Dwi Herlambang, *pers. comm.*

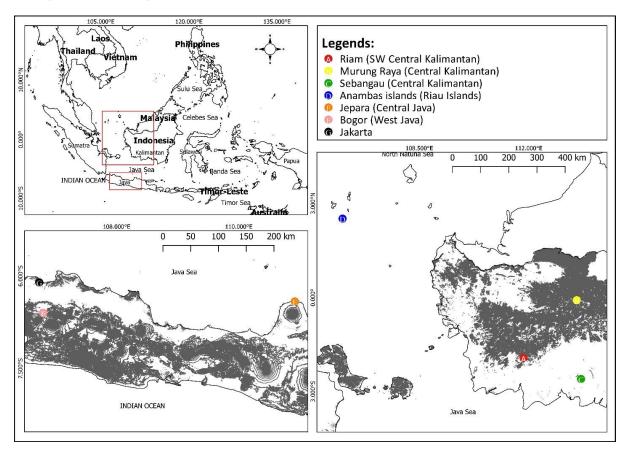


Figure 1. Locations of Fairy Pitta sightings in Sumatra, Kalimantan, and Java.

Discussion

In Borneo, the Fairy Pitta mainly inhabits primary lowland (dipterocarp) forest and lower montane forest up to 1,070 m (Lambert 1996; Myers 2009). Lambert (1996: 33) noted that the very similar and closely related Blue-winged Pitta *P. moluccensis* differed from the Fairy Pitta in favouring "secondary forest or forest edge, not usually....in primary forest, and although it may be found at high altitudes during migration, it usually winters in lowlands and hills".

However, our records of Fairy Pittas in Java show that this species may occur in open, non-forested habitats in its non-breeding range (Table 1). Moreover, all Indonesian records since 2000 have been from the lowlands (Table 1).

Our records of Fairy Pitta in Anambas islands and Java in October-November 2019 indicate either an expansion of the species' non-breeding range, which may be temporary, or increased field effort by ornithologists in recent years, or both. However, during the same northern winter (August 2019 to April 2020), there was an unprecedented influx of vagrants into Peninsular Malaysia and Singapore, involving ten species that were first records for these countries, and high counts of several uncommon migrants (Sin *et al.* 2020). Whilst Sin *et al.* 2020) related the high reporting rate of rarities to an increasing number of birdwatchers in the region, they also posited that many birds may have "over-shot" their normal wintering grounds, due to unfavourable regional climatic events or global climate change. Our records, and those of Sin *et al.* (2020), also highlight the dearth of ecological knowledge about the migration of many East Asian-Australasian songbird migrants (see Yong *et al.* 2015).

Most Indonesian records in 2019 were of immature birds (Table 1), indicating that young birds may disperse further than adult birds and/or are possibly being forced off normal non-breeding grounds soon after their arrival, due to competition with adults for decreasing forest habitat. Records from Kalimantan were in October and November, coinciding with their southward passage, as well as February to April, during their presumed northward (return) passage. Recent reports from Cambodia and Lao PDR were also from southward and northward passage periods, respectively (Grey & Roberts 2020; Coudrat & Nanthavong 2016) The first record of Fairy Pitta from northern Australia was in December 2007 (Wedderburn 2007) and the most recent, in February 2019 (eBird 2020a: checklists S52486469, S52509851). We concur with Sin *et al.* (2020) that the relationship between climatic conditions and the increase in reporting rates of migratory species, such as the Fairy Pitta, in Southeast Asia, merits a rigorous investigation.

Acknowledgements

During the completion of this article, one of the authors, Arfah Nasution, passed away before final submission of this article, at the young age of 29. We dedicate this report to Arfah who, as well as being our dear friend and colleague, was an enthusiastic and experienced ecologist who made significant contributions to wildlife conservation in Indonesia. We would like to thank Richard Noske, Colin Trainor and the reviewers for improving this manuscript. We also thank Resit Sözer and Bas van Balen for valuable comments on the manuscript, and Teguh Dwi Herlambang for sharing his observations and photos.

References

Benson, C.W. 1970. A Blue-winged Pitta on Christmas Island, eastern Indian Ocean. *Bulletin of the British Ornithologists' Club* 90: 24-25.

van Berkel, T.B.T., L.D. Rogers., H.J. Kilburn., M. Munir., D.M. Mortiboys & R. Goodchild. 2012. *A preliminary survey of a lowland rainforest in Batikap Protection Forest, Central Kalimantan, Indonesian Borneo*. Scientific Report, Heart of Borneo Project. Murung Raya expedition 2010–2011. Cornwall, UK.

BirdLife International. 2001. *Threatened birds of Asia: The BirdLife International Red Data Book*. BirdLife International, Cambridge.

BirdLife International. 2016. Species factsheet: *Pitta nympha*. http://www.birdlife.org. Accessed 9 January 2020.

Brooks, D.M., Adul & S.M. Cheyne. 2018. A camera-trap survey of avifauna in a Bornean peat-swamp forest. *Wilson Journal of Ornithology* 130: 969-980.

Coudrat, Z.C & C. Nanthavong. 2016. First record of Fairy Pitta *Pitta nympha* for Lao PDR. *BirdingAsia* 25: 112.

Eaton, J.A., S. van Balen, N.W. Brickle & F.E. Rheindt. 2016. *Birds of the Indonesian Archipelago: Greater Sundas and Wallacea*. Lynx Edicions, Barcelona.

eBird. 2020a. eBird Australia. https://ebird.org/australia. Accessed 20 November 2020.

eBird. 2020b. eBird: An online database of bird distribution and abundance. Cornell Lab of Ornithology, Ithaca, New York. Available at http://www.ebird.org. Accessed 20 September 2020.

Fischer, J.H., N.S. Boyd, A. Maruly, A.S. van der Kaaden, S.J. Husson & J. Sihite. 2016. An inventory of the avifauna of the Bukit Batikap Protection Forest, Central Kalimantan, Indonesia. *Forktail* 32: 26-35.

Gray, T.N.E & O. Roberts. 2020. First record of Fairy Pitta *Pitta nympha* for Cambodia. *BirdingAsia* 33: 135-136.

Jensen, A.E., T.H. Fischer & R.O. Hutchinson. 2015. Notable new bird records from the Philippines. *Forktail* 31: 24-36.

Johnstone, R.E. 1995. A Blue-winged Pitta (*Pitta moluccensis*) in Western Australia. Western Australian Naturalist 20: 120.

Lambert, F. 1996. Identification of pittas in the 'brachyura' complex in Asia. *Oriental Bird Club Bulletin* 23: 31-37.

Lambert, F. & M. Woodcock. 1996. Pittas, Broadbills and Asities. Pica Press, Sussex, UK.

MacKinnon, J., K. Phillipps & S. van Balen. 2000. *Burung-burung di Sumatera, Jawa, Bali, dan Kalimantan*. BirdLife International Indonesia Programme dan Puslitbang Biologi LIPI, Bogor, Indonesia.

Mayr, E. 1938. Notes on a collection of birds from south Borneo. *Bulletin of the Raffles Museum* 14: 5-46.

Myers, S. 2009. Birds of Borneo. Bloomsbury Publishing, London.

Panji. 2019. Catatan baru paok bidadari di Pulau Jawa. https://www.edubio.info/2019/11/catatan-baru-paok-bidadari-di-pulau-jawa.html. Accessed 20 November 2019

Phillipps, Q. & K. Phillipps. 2014. *Phillipps' Field Guide to the Birds of Borneo*. John Beaufoy Publishing, Oxford.

Roddis, S. & T. Loseby. 2019. From the field. BirdingAsia 32: 135-144.

Roddis, S. & T. Loseby. 2020. From the field. BirdingAsia 33: 148-160.

Smythies, B.E. 1981. *The Birds of Borneo*. Third edition. The Sabah Society and the Malayan Nature Society, Kuala Lumpur.

Sin, Y.C.K., D. Ng & M. Kennewell. 2020. An unprecedented influx of vagrants into Malaysia and Singapore during the 2019-2020 winter period. *BirdingAsia* 33: 142-147.

Singapore Birds Project. https://singaporebirds.com/species/fairy-pitta/. Accessed 2 March 2020.

Wedderburn, B. 2007. Bruce Wedderburn's Trip Reports - Fairy Pitta – December 2007. http://bruce-wedderburn.blogspot.com/p/fairy-pitta-december-07.html. Accessed 5 November 2019.

Yong, D.L., Y. Liu, B.W. Low, C.P. Espanola, C.Y. Choi & K. Kawakami. 2015. Migratory songbirds in the East Asian-Australasian Flyway: a review from a conservation perspective. *Bird Conservation International* 25: 1–37.

Appendix 1. Location of sites referred to in Table 1.

Region	Location	Latitude	Longitude
Riau Islands	Anambas Island	2°31' S	106°02′ E
Central Kalimantan	Riam	1°56′ S	111°50′ E
	Murung Raya	0°02' N	113°32′ E
	Sebangau	2°36′ S	113°40′ E
Java	Jakarta	6°05' S	106°44′ E
	Bogor (W. Java)	6°35' S	106°48′ E
	Jepara (C. Java)	6°24' S	110°54' E