Observations on the breeding of the Puff-throated Bulbul Alophoixus pallidus in north-east Thailand

ANDREW J. PIERCE, KIHOKO TOKUE, KORAKOCH POBPRASERT and PHILIP D. ROUND

The Puff-throated Bulbul *Alophoixus pallidus* is distributed from south and east Myanmar to Indochina and south China (King *et al.* 1975). It is a common resident in broadleaved evergreen forest up to 1,450 m in central, north-west and north-east Thailand (Lekagul and Round 1991, Robson 2000). The only previously documented breeding record is of a nest, with unknown contents, situated at 4–5 m height in a small tree in evergreen forest, Doi Suthep National Park, Chiang Mai Province, north-west Thailand (Round 1982).

Seven nests of Puff-throated Bulbul were found and monitored during March to June 2003 on the 30-ha Mo-singto permanent forest plot, Khao Yai National Park, Nakhon Nayok Province (14°26′N 101°22′E; see Brockelman 1998 for details of the plot).

Nests were situated 1–5 m above the ground in the horizontal forks of small branches of saplings or in the fallen branches of larger trees (Table 1). In each case the nest was a fairly deep neat cup made of dry leaves and lined with fine aerial roots of woody climbers. The nests were held together by, and attached to the branches at the nest rim with, silk from spiders' webs and fine black hair-like fibres of fungi fruiting bodies.

Four nests contained two or three eggs. Two further nests were deserted before egg-laying, and a seventh was slightly damaged, and contained one old egg when found (Table 1). This latter nest may have fledged one or two nestlings as predation events often involve the loss of the complete nest contents (Mayfield 1961). The eggs were whitish to pale cream with dark rusty-red blotches on the larger end, sometimes forming a cap, which broke up into small blotches or fine streaks around the middle of the egg. The tapered end was unpatterned.

Nest-building was recorded from 19 March and incubation was still ongoing at the last active nest on 8 July. Had this nest gone to completion, the young would have fledged in late July giving an overall nesting

Table 1. Details of nests of Puff-throated Bulbul found at Mo-singto, Khao Yai, 2003.

Date fou	and Situation	Height (m)	No. of eggs n	No. of estlin	Outcome
19 Mar	sapling	5	0	0	deserted
28 Mar	sapling	1.5	3	3	nestlings depredated
15 Apr	dead fallen branches	1	2	2	fledged two chicks
10 May	sapling	1	3	3	nestlings dead in nest
14 May	dead fallen branches	1.4	1 old	?	unknown
31 May	sapling	3.5	0	0	deserted
26 Jun	sapling	3	2	0	eggs depredated

period of mid-March to the end of July. Only one or possibly two nests fledged young, reflecting the apparently high predation rate on the nests of many tropical birds (e.g. Fogden 1972, Stutchbury and Morton 2001). The proven successful nest was discovered when being built on 15 April, and the first egg was laid on 20 April. Two eggs were being incubated two days later, and two chicks were ringed on 11 May when they were thought to be 7–8 days old, suggesting an incubation period of 12-13 days. On 13 May the chicks were being brooded after heavy rain, but the nest was empty on 14 May. Both chicks were proven to have fledged when the full-grown birds bearing their unique colourring combinations were subsequently seen. The nestling period was therefore about 10-11 days. The causes of failure at the other nests were unknown. However one nest, when visited on 15 May, contained three dead nestlings and the whole nest was swarming with ants.

At one of the nests it appeared that three different adults, including one individually recognisable, colour-banded bird, were feeding the nestlings. Puff-throated Bulbuls are regularly found in small social groups of three to four birds throughout the year (Round *et al.* unpublished data). Further work is required to confirm whether cooperative breeding occurs in this species, and, if so, to investigate the possible ecological reasons for it.

ACKNOWLEDGEMENTS

We are grateful to the Department of National Parks, Wildlife and Plant Conservation for permission to work in Khao Yai, and to the Superintendent of Khao Yai National Park, Prawat Woharndee, and his staff for their cooperation. We thank George Gale for his valuable comments on this note. This research was supported by grant BRT 346004 of the Biodiversity Research and Training Program, Thailand.

REFERENCES

Brockelman, W. Y. (1998) Long term ecological research plot for the study of animal diets in Khao Yai National Park. Pp. 307–310 in P. Poonswad, ed. The Asian hornbills: ecology and conservation. *Thai Studies Biodiv.* 2: 1-336.

Fogden, M. P. L. (1972) The seasonality and population dynamics of forest birds in Sarawak. *Ibis* 114: 307–343.

King, B., Dickinson, E. C. and Woodcock, M. W. (1975) A field guide to the birds of South-East Asia. London: Collins.

Lekagul, B. and Round, P. D. (1991) A guide to the birds of Thailand. Bangkok: Saha Karn Bhaet.

Mayfield, H. F. (1961) Nesting success calculated from exposure. *Wilson Bull.* 73: 255–261.

Robson, C. (2000) Field guide to the birds of South-East Asia. London: New Holland Round, P. D. (1982) Notes on breeding birds in North-West Thailand. *Nat. Hist. Bull. Siam Soc.* 30 (1): 1–14. Stutchbury, B. J. M. and Morton, E. S. (2001) Behavioral ecology of tropical birds. London: Academic Press.

Andrew J. Pierce, Kihoko Tokue and Korakoch Pobprasert, King Mongkut's University of Technology Thonburi, School of Bioresources and Technology, Bangkhunthien, Bangkok 10150, Thailand. Corresponding author: Andrew Pierce. Email: andrew@pdti.kmutt.ac.th

Philip D. Round, Department of Biology, Faculty of Science, Mahidol University, Rama 6 Road, Bangkok 10400, Thailand.

Significant bird records from north-east Cambodia in March-April 1999

J. MLÍKOVSKÝ

During 20 March–23 April 1999, I visited Stung Treng and Rattanakiri provinces in north-east Cambodia. I made a number of significant records, including three species recorded for the first time in Cambodia: White-browed Piculet Sasia ochracea, Eurasian Woodcock Scolopax rusticola, and Japanese Paradise-flycatcher Terpsiphone atrocaudata. Details of sites are given in Table 1.

SIGNIFICANT RECORDS

WHITE-BROWED PICULET Sasia ochracea

A pair was observed in dry bamboo thickets at Van Lok on 9 April. This is the first record for Cambodia as it pre-dates the record published in Steinheimer *et al.* (2000) and Eames *et al.* (2002). White-browed Piculet is widespread in adjacent southern Laos, close to the Van Lok area (Thewlis *et al.* 1996, Duckworth *et al.* 1998, Evans *et al.* 2000).

RUFOUS-BELLIED WOODPECKER Dendrocopos hyperythrus A female was seen in lowland deciduous dipterocarp forest at Phluk on 20 April. This is the first modern record in Cambodia. The only previous record is from 1875, when an individual was collected in 'Kouys' (= country of the Khoi people) by Harmand (Oustalet 1899; see also Duckworth et al. 1999, Thomas and Poole 2003). The presence of Rufous-bellied Woodpecker in deciduous dipterocarp forest in Stung Treng and Mondulkiri provinces was subsequently confirmed by Timmins and Ou Ratanak (2001) and Timmins et al. (2003).

LESSER YELLOWNAPE Picus chlorolophus

An individual was seen in primary lowland forest at Poi on 30 March. This is the second record for Cambodia. The species had previously been recorded at Lomphat in May–June 1998 by Timmins and Men Soriyun (1998). Lesser Yellownape is common and widespread in adjacent southern Laos (Thewlis *et al.* 1996, Duckworth *et al.* 1998, Evans *et al.* 2000). Subsequently, the species was found to be rather common in deciduous dipterocarp forest in the Mondulkiri Plateau in May–June 2000 (Timmins and Ou Ratanak 2001).

GREAT EARED NIGHTJAR Eurostopodus macrotis

Two birds were observed on each of the evenings of 13 and 14 April 1997 hunting over a large clearing in deciduous dipterocarp forest around the village of Van Lok. Previously this species was recorded in Cambodia only by Engelbach (1948, 1952) and Timmins and Mon Soriyun (1998). Subsequent records were made in March 2000 at the foot of Mount Khmaoch in the Cardamom Mountains (Steinheimer *et al.* 2000, Eames *et al.* 2002) and in November 2002 in western Siem Prang (Timmins *et al.* 2003).

EURASIAN WOODCOCK Scolopax rusticola

A single individual was flushed in forest in the foothills at the Lalay between Vun Say and Van Lok on 4 April. This is the first record of this species for Cambodia.

RIVER LAPWING Vanellus duvaucelii

Overall, 11 individuals were seen on the Tonle San river shores between Taveng and Vun Say on 2 April, including nine singles and two together. Goes (1999) observed 20 scattered individuals on the same river stage in June 1997. The nearby Sesan river supports an important population of this species (Timmins and Men Soriyun 1998).

SMALL PRATINCOLE Glareola lactea

A breeding colony of c.20 pairs was found on a flat sand and shingle islet in the Tonle San river in the front of Taveng on 1-2 April. One nest contained two eggs on 2 April (J. Hošek verbally 1999). In the hot weather (36-37°C in shade), adults were observed wetting their breast feathers before going to their nests, apparently in order to cool the eggs. Two other breeding colonies of Small Pratincole, each with less than 10 pairs, were found on the Tonle San river shores on 4 April. A few individuals were seen also on the Srepok river between Stung Treng and Phluk on 20 April, and on the Mekong river north of Stung Treng on 23 April. However, breeding could not be confirmed for the latter two sites. These rivers in north-east Cambodia are now known to be important sites for the species (Timmins and Men Soriyun 1998).