

BREEDING THE BLUE-TAILED OR BANDED PITTA

Pitta guajana AT VOGELPARK WALSRODE

by Dieter Rinke and Bernd Marcordes

Introduction

Although pittas have for a long time been kept in zoological institutions and by private aviculturists, little information about their maintenance in captivity has been published in scientific and avicultural journals.



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Adult female Banded Pitta



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Adult male Banded Pitta

Several species have been bred in captivity, of which the breedings of the Hooded Pitta *P. sordida*, Banded Pitta *P. guajana irena*, Noisy Pitta *P. versicolor*, Elegant Pitta *P. elegans* and Giant Pitta *P. caerulea* are well documented (Delacour, 1934; Lee et al. 1989; Vernon, 1974; Parrish, 1983; Pagel, 2001; McKelvie & Miller, 1979). In addition, Hooded Pittas are breeding prolifically in the huge tropical house at Burgers' Zoo, Arnhem (J. Wensing pers. comm.), while Blue-winged Pittas *P. moluccensis* at Frankfurt Zoo (S. Stadler pers. comm.), Blue-tailed Pittas at Copenhagen Zoo (F. Nielsen pers. comm.) and Gurney's Pittas *P. gurneyi* in the collection of a Thai bird fancier in the 1960s (cf. Collar, 2001) bred occasionally and reared young successfully.

Nevertheless, no pitta species has yet been bred to a sufficient level to achieve a sustainable captive population. In the regional collection plan for passerines in European zoos, the Hooded and Banded Pittas have been recommended for monitoring status with the aim of establishing viable populations within the institutions of the European Association of Zoos and Aquaria (EAZA). The North American Passerine TAG has recommended that the Hooded and Elegant Pittas be included in the regional collection plan (D. Rimlinger in litt.).

Maintenance

Three pairs of Banded Pittas were imported in 1999 from Indonesia, all of which were housed initially in the newly opened Nusantara Rainforest Paradise (NRP), a large tropical greenhouse for Indonesian birds. Two pairs could roam the entire area of 2,800sq m (approx. 30,000sq ft), while the third pair was placed in a 3m x 9m (approx. 10ft x 30ft) aviary. These are densely planted and offer a lot of hiding places.

The exhibit houses various frugivorous, insectivorous and carnivorous birds. Feeding places are distributed evenly, and the pittas take their share of livefood and freshly killed insects (mealworms, crickets, zophobas, waxmoth larvae, etc.) and dry insectivorous food, which is offered at all the feeding stations. The pittas also search the leaf and wood chip litter for insects and other invertebrates and often capture small earthworms. They use their bills intensively for turning over the ground.

At the same time that the Banded Pittas were introduced into the NRP, so was a small group of Hooded Pittas. Interactions between the pittas were observed very rarely, but it soon became clear that one pair dominated all the others, and it was only this pair that bred. When one pair was housed in one of the aviaries within the tropical house, the male of the dominant pair spent most of its time close by, and the pair in the aviary was very nervous. In small enclosures, male pittas may sometimes attack others and kill them; such attacks may happen even between young birds which have not yet

attained adult plumage. Consequently, except for the breeding pair of Banded Pittas, all the other pittas were removed from the NRP, even those in the separate aviary.

With our pairs of pittas we have rarely observed interactions between the male and female or between the pittas and other birds. Even juveniles do not seek close contact with their parents and approach them only when they are hungry. We have never seen pittas preening each other - the closest contact the male and female seem to have, apart from during copulation, is at the entrance of the nest, when they change over.

In November 2001, one of the aforementioned pairs of Banded Pittas was introduced into the large walk-through aviary (70m x 15m (approx. 230ft x 50ft)) in our old tropical house. This exhibit is similarly well planted and has three feeding stations spaced evenly throughout its length.

Reproduction

The nests of Banded Pittas are very rough constructions made of various kinds of materials, with the preferred material being dead leaves of various sizes. The materials are formed into a globular structure up to the size of a football, with the entrance at one side. There has been only one instance of the same nest being used twice.

The pair in the NRP has always chosen very similar nest sites, always at the meeting point of two sections of the exhibit's support structure, by the outside wall, and always at a height of 2.5m (just over 8ft) above the ground. Some of the nests have been hidden behind vegetation but others have been clearly visible from several metres (feet) away.

Although we learnt very quickly where to look for new nests, the pittas often constructed several new nests, so it has not always been easy to confirm the exact date that breeding began.

The pair in the old tropical house choose different nest sites, mostly close to the roof of the exhibit. This pair prefer to build in amongst or onto densely tangled vines. In addition, two nests have been built on tree trunks, one in a relatively open position between bromelias and the other in a thorny *Bougainvillea*. This pair is generally more secretive than the pair in the new tropical exhibit, and it took us quite a time to find most of the nests.

Banded Pittas lay clutches of three to four eggs; four eggs seems to be the normal clutch size. The eggs measure on average 26mm x 21mm and are whitish with dark brown spots mainly at the blunt end. We have not succeeded in determining the exact incubation period, which is approximately 13 days according to Lambert & Woodcock (1996). If the pittas are disturbed, they start to build a new nest after a short period of time. Even having successfully reared chicks, they commence a new breeding cycle soon afterwards. In both of our tropical houses, the pittas breed more or less all year round (see Tables 1 & 2).



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Male incubating in the NRP



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Young Banded Pittas at 13 days old

Table 1. Record of known breedings of the Banded Pittas in the NRP.

2000	07/06	25/07	07/08	22/09	11/10	16/11	
	3 eggs	3 juv.	4 eggs	3 eggs	2 juv.	2 juv.	
2001	21/05	25/06	20/07	07/09		28/09	04/10
	3 juv.	4 juv.	3eggs	x eggs destroyed		1 juv.	2 eggs
2002	10/03	02/04	06/05	20/05	05/06		
	3 juv.	4 eggs*	3 eggs*	4 eggs*	4 eggs		

* Eggs removed for artificial incubation and rearing.



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Young at 30 days - female to the left. The sexual dimorphism is clearly visible



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Fledgling reared by its parents in the old tropical house

Table 2. Record of known breedings of the Banded Pitta in the old tropical house.

2002	25/01	25/02	20/03	09/04	03/05	10/06
	1 juv.	2 juv.	x eggs destroyed	3 eggs*	4 eggs*	1 fledgling

* Eggs removed for artificial incubation and rearing.



Rinke, Dieter and Marcordes, Bernd. 2002. "Breeding The Blue-tailed Or Banded Pitta Pitta guajana at Vogelpark Walsrode." *The Avicultural magazine* 108(3), 113–117.

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