

First Nesting Observations of Wild Bronze-tailed Peacock Pheasant *Polyplectron chalcurem*, a Sumatran Endemic Species

WILLIAM MARTHY ROMBANG¹, LISMAIDY DARJO MALAU² AND WAGIMAN²

¹Harapan Rainforest, Desa Kunangan Jaya, Jambi-Indonesia. Email: serambirds@yahoo.com

²Conservation International-Indonesia, Medan office, Jl. Rajawali No. 38, Sei Sikambang B, Medan 20122, Indonesia.

Ringkasan. Burung Kuau-kerdil Sumatera *Polyplectron chalcurem* yang sedang berbiak terobservasi di Danau Sababegu, Sapotinjak, Sumatra Utara-Indonesia pada ketinggian 1200 m dpl pada tanggal 18 September 2008. Pada sarang tersebut terdapat dua butir telur berwarna putih. Sarang burung ini terletak pada pangkal sebuah pohon dan tersembunyi di antara rerumputan. Catatan ini menambahkan informasi berbiak jenis burung kuau-kerdil di Asia Tenggara.

The Bronze-tailed Peacock Pheasant *Polyplectron chalcurem* is a Sumatran-endemic pheasant (MacKinnon *et al.* 1998) that occupies lower montane forest both primary and logged forest between 800 – 2,400 m in the Sumatran mountains (Stattersfield *et al.* 1998). This species is one of 38 restricted-range birds in the Sumatra and Peninsular Malaysia Endemic Bird Area (Stattersfield *et al.* 1998) but does not warrant threatened status because it is still apparently common and widely distributed, and its habitat is generally considered safe from logging (Fuller & Garson 2000). Populations have not reached decline criteria thresholds of the IUCN (BirdLife International 2005).

Oriental pheasants typically have powerful vocalizations, but due to their cryptic behaviour and dense habitat, the breeding biology of South-east Asian rainforest phasianids in the wild is poorly known (McGowan 1994). McGowan and Gillman (1997) noted that the detection rate of mountain pheasants is markedly lower than their lowland counterparts, making assessments of their status difficult. Of the seven species of peacock pheasants, only four have been observed breeding in the wild (Table 1). In captivity, the female *P. chalcurem* is known to incubate a clutch of two eggs for 22 days, but to date the only breeding information from the wild concerns a downy chick that was collected on 14 June 1916 at Mount Kaba, Bengkulu, by Jacobson (Robinson & Kloss 1924, in Marle & Voous 1988).

On 18 September 2005 we found an active nest of this species near Sababegu Lake (0°42'N 99°31'E), Sopotinjak, North Sumatra (within the Batang Gadis National Park), approximately 1,200 m asl. The nest contained two white eggs (Plate 1). It was very cryptic and was noticed only because the incubating bird was flushed when we accidentally walked nearby. The nest was situated 25

m from the lake edge where the canopy cover was relatively open (about 70%) and the tree height was about 20 m. It was located at the base of a tree and was hidden in the middle of a patch of grass (c. 20 cm high), which also covered the ground surrounding the nest. The cup-shaped nest was approximately 15 cm wide and 10 cm deep and comprised dry, dark brown leaf litter and small twigs. Egg dimensions were not taken so as to avoid prolonged disturbance.

Additional brief observations were carried out from a distance of 5 m, on four days between 19 and 30 September 2005, to determine whether the bird returned to the nest and to describe the fate of the eggs. On 30 September 2005 the nest was empty, with eggshell from one egg present. The inside of the eggshell was already dry. The egg had apparently hatched naturally judging from the shape of the eggshell, and we presumed that the second egg had been taken by a predator. We were later informed that on 28 September 2005 a bird was flushed from the nest by the local forestry department officer, who noted the presence of a single egg. No male was observed or heard near the nest during our observations. However, a local man captured a male bird in the same area on about 5 September 2005 which we were able to photograph (Plate 2).

The site of the above nest is similar to those recorded for its congeners; Grey Peacock Pheasants are known to nest at the base of bamboo clumps (McGowan 1994) or on the ground, hiding in the cover of thick vegetation (Grimmett *et al.* 1998). The nest of *P. chalcurum* was inconspicuous, especially added with the brown colour of the female, which provided good camouflage against the brown tree trunk, covered by green grass. Moreover, as in other peacock pheasants, the nest materials were comprised of leaves and dead twigs (Beebe 1931), with dimensions roughly similar to the nest of the Mountain Peacock Pheasant (26 cm x 10 cm; Wells 1999), the only description of nest dimension available from the wild.

As the only previous record of breeding in the wild involves a downy chick collected in June (Marle & Voous 1988), suggesting egg laying in May, our observations substantially extend the breeding season for this species to September. However, the Malaysian Peacock Pheasant *P. malacense* is known to breed over a similar period (March-August; Table 1).

Our observations are the first to describe the nest and eggs of *P. chalcurum* in the wild and they clarify the breeding season of *P. chalcurum* in the wild. Unfortunately we were not able to confirm the incubation period of the species because we do not know how long the female had been incubating the eggs before we found the nest. However, assuming that the first egg hatched naturally on 29 September 2005 the minimum incubation time was 11 days, well within the incubation period reported for captive birds (Table 1). The peacock pheasants are unlikely to breed every year partly due to food constraints (McGowan 1994). The Bronze-tailed Peacock Pheasant was quite a common species in this area according to local hunters, who set live traps to catch this bird for bushmeat or to sell as pets.

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Table 1. Nesting and breeding information for peacock pheasants. An asterisk signifies records from the wild; all other records are based on captive birds. Sources: 1, McGowan (1994); 2, Marle & Voous (1988); 3, Wells (1999); 4, this report

Species	Breeding months	Geographical range	Clutch size	Incubation period (days)	Source
Bronze-tailed Peacock Pheasant		Sumatra	2	22	1
<i>P. chalcurum</i>	May, September		-	-	2*
Mountain Peacock Pheasant	Late February, January	Peninsular Malaysia	2	19-21	1*
<i>P. inopinatum</i>			-	-	3*
Germain's Peacock Pheasant	-	S Indochina	1-2	21	1
<i>P. germaini</i>					
Grey Peacock Pheasant	March-June	NE India & SE Asia	2	21	1
<i>P. bicalcaratum</i>					
Malaysian Peacock Pheasant	March, April, August	Peninsular Malaysia & S Thailand	1	22-23	1*
<i>P. malacense</i>					
Bornean Peacock Pheasant	-	Borneo	1	20-22	1*
<i>P. schleiermacheri</i>					
Palawan Peacock Pheasant	-	Palawan (Philippines)	2	18-20	1
<i>P. emphanum</i>					

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