



DESCRIPTION OF A FORAGING BEHAVIOR OF THE PAVONINE CUCKOO (*DROMOCOCCYX PAVONINUS* PELZELN, 1870) (CUCULIFORMES: CUCULIDAE)

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Abstract · The Pavonine Cuckoo (*Dromococcyx pavoninus*) usually inhabits forest interior, and, being very difficult to observe, little is known about its behavior. Here we describe a new type of foraging behavior based on observations in two different places, one natural and one anthropic. In both cases, the birds perched on the ground and used their wings and tail to disturb the vegetation, flushing and capturing insects while staying on the ground. As far as we know there are no previous published data on the foraging behavior of this species.

Resumo · Descrição de um comportamento de forrageio de Peixe-frito-pavonino (*Dromococcyx pavoninus* Pelzeln, 1870) (Cuculiformes: Cuculidae)

O peixe-frito-pavonino (*Dromococcyx pavoninus*) é um habitante de interior de florestas e por ser muito difícil de observar, pouco é conhecido sobre seus comportamentos. Aqui descrevemos um novo tipo de comportamento de forrageio baseado em observações em dois locais diferentes, um natural e um antropizado. Em ambos os casos as aves estavam pousadas no solo e usaram de suas asas e cauda para movimentar a vegetação, desentocando-perseguindo os insetos enquanto ainda permaneciam no solo. Pelo que se sabe não há qualquer registro prévio publicado sobre as táticas de forrageio da espécie.

Key words: Active pursuit · Brazil · Feeding methods · Prey-capture behavior

The Pavonine Cuckoo (*Dromococcyx pavoninus* Pelzeln, 1870) inhabits lowland and montane forests, commonly associated with bamboo groves (Ridgely et al. 2015). This species is solitary and is found at low densities (Payne 2017). Except when it sings, it is difficult to detect, and usually remains hidden in the foliage of the understory (Gwynne et al. 2010). Due to these cryptic habits, information on the foraging behavior of the species is almost inexistent. Here, we present the first observations of a peculiar foraging tactic of the Pavonine Cuckoo. Behavior descriptions follow the terms suggested by Volpato & Lima (2002).

During the morning of 5 September 2015, one Pavonine Cuckoo was observed by Gustavo Muniz in a well-preserved forest fragment (ca. 500 ha) of semi-deciduous seasonal forest, located in the city of Araras, São Paulo, Brazil (22°14'48.89"S; 47°14'46.01"O). The bird was detected vocalizing on a branch, at approximately 1 m above the ground, and shortly thereafter descended to the ground and started foraging (Figure 1). The foraging method consisted in wing flapping and tail shaking to disturb the nearby vegetation, which flushed insects that were captured by the cuckoo while on the ground (Figure 2). This individual foraged for almost half an hour, sometimes walking around in the ground foliage, performing the same movements to flush out potential prey. The bird did not seem to be affected by the presence of the observer, who was c. 5 m away.

Another individual was observed by Amanda P. Marcon foraging in the same manner during midday on 13 June 2016 in an urban area of Sarandi, Rio Grande do Sul, Brazil (27°57'0.53"S; 52°55'4.46"W). The bird was found on the lawn of a residential garden (Figure 3), quickly moving its wings and tail and trying to capture the insects that flew away. This individual was also oblivious to the presence of the observer, which could approach

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Figure 1. Pavonine Cuckoo (*Dromococcyx pavoninus*) observed foraging on the ground in a well-preserved forest fragment of semi-deciduous seasonal forest on 5 September 2015 at Araras, São Paulo, Brazil. Photo: Gustavo Muniz.



Figure 2. Feeding behavior sequence of the Pavonine Cuckoo (*Dromococcyx pavoninus*) as described by observations in São Paulo and Rio Grande do Sul, Brazil. 1) Individual resting on ground or walking; 2) wing and tail movements that flush insects from the vegetation, and 3) capture of flushed insects. Drawing by Amanda Perin Marcon.

the foraging bird to less than 1 m. After foraging in this manner for ca. 15 min the bird flew to the neighbor's house and was not seen again. In both observations, the prey consisted of small-sized unidentified flying insects. The birds were not always successful in their attacks, but we did not quantify success rates during our observations.

Little is known about the behavior of the Pavonine Cuckoo, which is considered to be one of the most poorly-known species of the order Cuculiformes (Sánchez-Martínez et al. 2017). As the species is considered to be very sensitive to human intervention (Stotz et al. 1996; Payne 2017), the presence of one

individual inside an urban area may have been rather a very punctual occurrence than representing a common pattern (authors in prep.). This individual most likely got disoriented and may have used the urban afforestation to move from a close forest fragment (c. 1 km away on a straight line) until the residential area. Because it is rarely seen, especially while feeding, there are no previous records in the literature on the foraging methods of this species. Although our sample size is extremely small, the fact that in both cases the same behavior was observed, in both natural and anthropic environments, suggests that this may be a relatively frequent feeding technique of the



Figure 3. Pavonine Cuckoo (*Dromococcyx pavoninus*) observed foraging on the ground on 13 June 2016 in a garden in Sarandi, Rio Grande do Sul, Brazil. Photo: Amanda Perin Marcon.

species. Similar feeding tactics were already observed in another species of the family, the Striped Cuckoo (*Tapera naevia* Linnaeus, 1766), which hops on the ground while moving the wings, agitating the substrate to capture flushed prey (Payne 2005).

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