

New records and distribution of Kaempfer's Woodpecker *Celeus obrieni*

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RESUMO: Novos registros e distribuição do pica-pau-do-parnaíba *Celeus obrieni*. O pica-pau-do-parnaíba *Celeus obrieni* foi descoberto no Piauí, Brasil em 1926, descrito em 1972 e redescoberto no Tocantins em 2006. A gravação de seu canto tem permitido a efetivação de novos registros, como os realizados na bacia do rio do Côco, oeste do Estado do Tocantins, ampliando a sua área de distribuição em 600 km. A potencial dependência desta espécie à taboacais de *Guadua paniculata* em áreas de Cerrado, nos leva a crer que sua distribuição original e possivelmente atual seja muito mais ampla do que a atualmente conhecida para a espécie. Esta proposição se sustenta pela presença de um exemplar no Museu de Ornitologia de Goiânia, coletado em 1967 na localidade de Guapó, região centro-sul de Goiás, aproximadamente 1.200 km ao sul da localidade tipo. Considerando a acelerada destruição do bioma Cerrado na área de distribuição de *Celeus obrieni* e seu caráter de ameaça, torna-se urgente a realização de estudos visando suprir a lacuna de informações biológicas, ecológicas e de distribuição desta espécie.

PALAVRAS-CHAVE: *Celeus obrieni*, Novos Registros, Distribuição, Tocantins, Goiás.

KEY-WORDS: *Celeus obrieni*, New Records, Distribution, Tocantins, Goiás.

Kaempfer's Woodpecker, *Celeus obrieni* Short, 1973, was first discovered in Brazil by Emil Kaempfer in 1926, when he collected it during surveys to the Uruçui region, Piauí State, Brazil (Prado 2006). At that time, the specimen collected was considered *Celeus spectabilis* – the first record ever in the Brazilian territory. Prior to this date it was known only from east Ecuador to the Bolivian Andes (Short, 1973).

In 1972 it was given subspecies status as *C. spectabilis obrieni* when Lester Short acting on advice from Charles Obrieni, conducted a comparison between the specimen collected in Brazil and those from Ecuador, Peru and the Bolivian Andes (Short 1973). In 2007 it was given full species status (Remsen *et al.* 2007). The absence of new records led to a general belief that it was extinct (Tobias *et al.*, 2006, Sigris, 2006).

However, 80 years after its discovery in Piauí State, a Kaempfer's Woodpecker female was captured in Goiatins, northeast Tocantins State, located about 400 km southeast of where the type specimen was originally collected (Prado, 2006). Regardless of this expansion in its know range, Kaempfer's Woodpecker is still considered critically endangered (Birdlife, 2007).

After its rediscovery, the species became well-documented by photography and voice recordings (Santos e Vasconcelos 2007). In 2004, Marcelo F. Vasconcelos re-

corded Kaempfer's Woodpecker at São Pedro da Água Branca, Maranhão State region, 485 km away from the type locality. His report was established after comparing recent voice recordings obtained by J. F. Pacheco from Goiatins (Santos e Vasconcelos, 2007). In addition, Marcos P. D. Santos collected the first known male 285 km north-east of the type specimen location at Serra da Raposa, São João dos Patos Municipality, Maranhão State. Due to these additional records, Santos and Vasconcelos (2007) proposed a more expansive distribution area for Kaempfer's Woodpecker. However, this has not yet been confirmed due to the small number of surveys that have been conducted.

On September 18, 2007, during a bird survey in the Côco River basin, we captured an adult female in a mist-net along the right bank of the Piedade River (9°56'48,2"S, 49°22'32,4"W), Divinópolis Municipality, Tocantins, 1,500 m north-east from the Côco River. The Côco and Piedade riverside vegetation at this site is characterized by gallery forests with trees reaching 5-15 m with a closed canopy and semi-opened understorey, mixed with dense stands of 3-6 m tall bamboo (*Guadua paniculata*). The specimen (female, 102 g in weight, wing length 143.0 mm, tarsus 24.0 mm, gray iris, white bill, black tarsus) had its tail feather edges damaged in an extensive fire that had burned a considerable amount of

Riverside forests, including the bamboo patches, one day before we arrived at the study area.

We made a second record of Kaempfer's Woodpecker on October 28, 2007 along the roadside of TO 354 (10°01'946"S, 49°45'960"W), Pium Municipality, Tocantins. Using a conspecific play-back we succeeded in calling in a pair which we then photographed (Figure 1). The vegetation at this site is Cerrado-type, about 2-5 m tall and mixed with bamboo (*Guadua paniculata*, identified by Pedro Viana). Four months later, on February 06, 2008, another male was called using playbacks five kilometers west of the same TO 354 roadside. The new record presented here is c. 600-650 km southwest from the type locality, c. 550-600 km southwest of São Pedro da Água Branca, Maranhão and c. 280-320 km southwest of where the specimen was captured in Goiatins, Tocantins (Figure 2), making it the most southwesterly location ever reported for Kaempfer's Woodpecker.

Although our records are positioned on the left margin of Tocantins River, this is not the first one to ever be reported on the west side. Advaldo Prado (through personal communication) discovered it in several localities west of the Tocantins River. In addition, Túlio Dornas, in February 2007, observed it in a Cerrado-type mixed with bamboo vegetation close to Bois River at Mirante Municipalidade, Tocantins (9°18'S, 48°37'W). To date, however, our report is the first one associated with the Araguaia River basin.

The presence of Kaempfer's Woodpecker at São Pedro da Água Branca, bordering the Tocantins River where *Cecropia* spp. is dominant and bamboo vegetation is lacking raises interesting questions concerning the geographical distribution of this species. If its ecological needs (food, shelter, reproduction) are fulfilled in river-



FIGURE 1: Female Kaempfer's Woodpecker *Celeus obrieni* in bamboo *Guadua paniculata* along the roadside of TO 364 (10°01'946"S, 49°45'960"W), Pium Municipality, Tocantins.

side areas, without bamboos, like those found on Tocantins River margin, then Kaempfer's Woodpecker could be able to occupy riverside areas along the Araguaia River and its tributaries – an area with vast extensions of *Cecropia* sp. (Olmos *et al.* 2004).

In an optimistic conjecture based on *Cecropia* sp. distribution – it could be proposed that the range distribution might be extended even further south to the Bananal Island flood plains. However between February 03 and 06, the authors tried without any success to find Kaempfer's Woodpecker with playback at Javaés river margin.

On the other hand, based on recent records showing a deep association of Kaempfer's Woodpecker to Cerrado-type mixed with bamboo vegetation – identified as *Guadua paniculata* (Eduardo Campos personal communication and Pacheco *et al.* 2007 and Pedro Viana personal communication 2008) – we expect that *Celeus obrieni*'s occurrence to be coincident with this Bamboo species distribution.

Bamboo patches of *Guadua paniculata* occur in a vast Cerrado-type vegetation area, from the Federal District (Filgueiras 1988), Mato Grosso State, northwest Minas Gerais State (Tropic.org 2008) and along Goiás

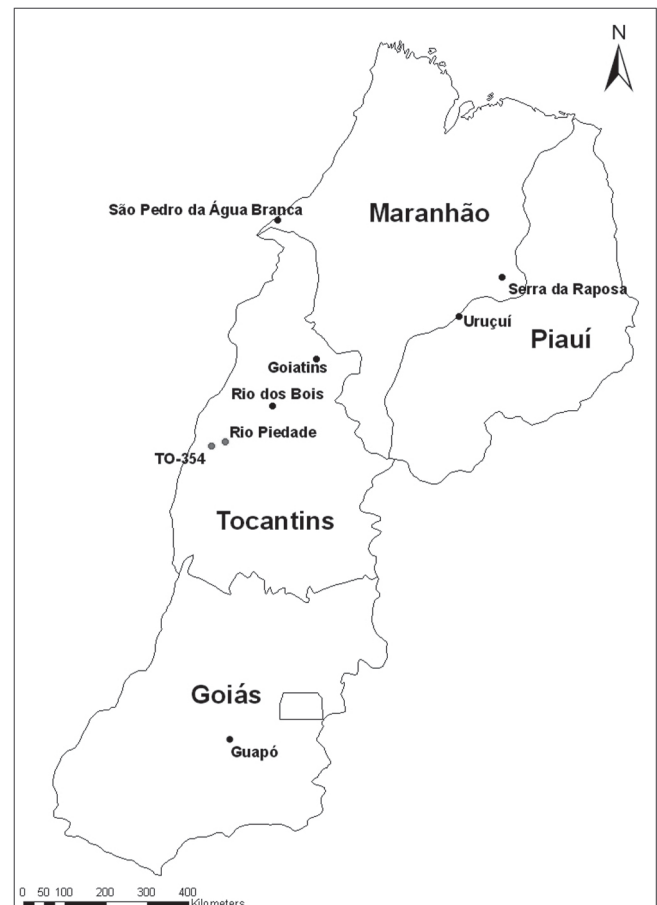


FIGURE 2: Kaempfer's Woodpecker *Celeus obrieni* new site distribution at Tocantins State.

State (Silva *et al.* 2004, Tropicos.org 2008). Its Bamboo type broad distribution arises as strong evidence that *C. obrieni* occurs or could occur in the above mentioned States, throughout the broad extension of this Cerrado biome. This hypothesis is confirmed by the presence of a specimen collect by José Hidasi in January 1967 at Guapó municipality (16°49'52"S, 49°31'08"W), south-central Goiás State, approximately 1200 km south of the type locality (Figure 2) which is deposited in the Museu de Ornitologia de Goiânia (José Hidasi personal communication; specimen observed at the Museum by T. Dornas in January 2008).

Due to the rapid destruction of the Cerrado – estimated at 3,000,000 hectare/year – no more than 15% of Cerrado's native areas remain intact in these States (Machado *et al.* 2004). Nevertheless, undiscovered populations of Kaempfer's Woodpecker may still exist in the remaining isolated fragments of Cerrado.

To test this assumption, it will be necessary to conduct further surveys in the unexplored gap between the original type locality and the new sites of the more recent sightings. To these ends, the Parnaíba-Tocantins interfluvium should also be considered a research target in order to further elucidate the biology and biogeography of Kaempfer's Woodpecker (Santos e Vasconcelos 2007). Another site recommended for study is the Tocantins-Araguaia interfluvium, because it has habitat suitable for Kaempfer's Woodpecker (abundant Cerrado-type landscape with patches of dense bamboo vegetation).

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