Range extension for Kaempfer's Woodpecker Celeus obrieni in Brazil, with the first male specimen

by Marcos Pérsio Dantas Santos & Marcelo Ferreira de Vasconcelos Received 23 April 2007

Kaempfer's Woodpecker *Celeus obrieni* was described by Short (1973) as a subspecies of Rufous-headed Woodpecker *C. spectabilis* based on a single female, collected by Emil Kaempfer on 16 August 1926, at 'Urussuhy' ($07^{\circ}14$ 'S, $44^{\circ}33$ 'W; 124 m), erroneously mentioned in the original description as 'Iruçui' (see Naumburg 1935, Paynter & Traylor 1991). This site is on the east bank of the rio Parnaíba, Piauí, north-east Brazil. The specimen (AMNH 242687) is housed at the American Museum of Natural History, New York (Short 1973). Remsen *et al.* (2007) considered *C. obrieni* as a valid species based on morphological features, and the distance between its type locality and the range of its postulated conspecific *C. spectabilis* (more than 3,000 km), a treatment intially advocated by Whittaker & Oren (1999). Recent surveys near the type locality of *C. obrieni* failed to locate it (Novaes 1992, Silveira *et al.* 2001, Tobias *et al.* 2006) and the paucity of data for *C.*



Figure 1. Map of localities where Kaempfer's Woodpecker Celeus obrieni has been recorded.



Figure 2. Dorsal view of male collected at Serra da Raposa, Maranhão, Brazil (MPEG 61549).



Figure 3. Ventral view of male collected at Serra da Raposa, Maranhão, Brazil (MPEG 61549).

obrieni led to it being treated as Not Evaluated and Data Deficient, respectively, on global and national lists of endangered birds (Machado *et al.* 2005, BirdLife International 2007). No additional records were known for *C. obrieni* until 21 October 2006, when it was rediscovered by Advaldo Dias do Prado (Prado 2006), who mist-netted and photographed a male in Goiatins municipality, Tocantins (08°14'S, 47°41'W), *c.*400 km south-west of the type locality (Prado 2006). Here, we report on a previously unpublished record and the first male specimen of *C. obrieni* obtained, respectively, in 2004 and 2007, at different localities in Maranhão, north-east Brazil. These records extend significantly the known range of *C. obrieni*.

On 26 September 2004, MFV tape-recorded and observed a *C. obrieni* in secondary riverine forest on the right bank of the rio Tocantins (05°09'S, 48°26'W; 100 m), São Pedro da Água Branca municipality, Maranhão (Fig. 1). Typical plant species in this area include: *Cecropia obtusa*, *C. sciadipholia*, *Inga capitata*, *I. heterophylla*, *Triplaris* sp., *Guarea guidonea*, *Celtis* sp., *Coccoloba* sp. and *Genipa*

americana. No bamboo was noted at the site. Bamboo is thought to be an important habitat component for *C. spectabilis* in parts of its range (Whittaker & Oren 1999, Clements & Shany 2001). The bird was perched on a *C. obtusa* near the forest edge, permitting all of the features typical of *C. obrieni* to be observed, including the yellow mantle barred blackish and the rufous head. The bird responded well to playback, approaching MFV and vocalising intensively for more than 20 minutes. Tape-recordings of these vocalisations were compared to others recently made by José Fernando Pacheco at Goiatins, thereby confirming the identification. Copies of the recordings have been deposited in the Arquivo Sonoro Prof. Elias Coelho (ASEC), Departamento de Zoologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil.

On 6 February 2007, MPDS tape-recorded and collected a male *C. obrieni* in a semi-deciduous forest with bamboo at Serra da Raposa ($06^{\circ}35$ 'S, $43^{\circ}37$ 'W; 292 m), on the left bank of the rio Parnaíba, São João dos Patos municipality, Maranhão (Fig. 1). Vegetation at this site is characterised by the presence of tall trees reaching 8–20 m, with a closed canopy and open understorey. Small patches of bamboos form stands 4 m tall. The bird was initially attracted using playback of *C. spectabilis*, to which it responded well while perched in a bamboo thicket. It was collected and prepared as a study skin (Figs. 2–3). The specimen, a subadult male (50% skull ossification; testes 4 × 2 mm; weight 95 g; total length 265 mm; wing 140 mm; tail 86 mm; culmen 24.8 mm; tarsus 20.38 mm; irides white), was deposited in the Museu Paraense Emílio Goeldi, Belém, Brazil (MPEG 61549). This is the second known (and first male) specimen of *C. obrieni*. Comparison of MPEG 61549 with photographs of the female type specimen presented by Short (1973) reveals that the male has broader black barring on the back and between the black chest and abdomen. Further studies of the taxonomy of the species are being conducted by MPDS and will be presented elsewhere.

The new records presented here offer a new perspective on the distribution of *C. obrieni*. The site at São Pedro da Água Branca is c.485 km north-west of the type locality and c.350 km north-west of Goiatins. Serra da Raposa is c.160 km north-east of the type locality and c.480 km north-east of Goiatins. By linking the four known sites, we estimate that the species' range comprises c.90,000 km². Probably *C. obrieni* was overlooked for many years within this fairly wide range due to the small ornithological sampling effort devoted to this area (see Silva 1989, 1995).

To date, it is unknown if *C. obrieni* is dependent on bamboo like its closely related western Amazonian counterpart *C. spectabilis* (Winkler & Christie 2002). The association of *C. spectabilis* to *Guadua* spp. bamboo is a phenomenon apparently limited to south-east Peru and Acre, western Brazil (Whittaker & Oren 1999, Clements & Shany 2001). In eastern Ecuador, it is a *várzea*/river island bird, inhabiting successional stands of *Cecropia* with *Gynerium* and *Heliconia*, in the absence of bamboo (Ridgely & Greenfield 2001). Bamboo tends to be patchily distributed in the known range of *C. obrieni*. Thus, if the species is heavily dependent on bamboo, its distribution will be similarly local. Nevertheless, the

absence of bamboo in the forest at São Pedro da Água Branca suggests that *C. obrieni* is apparently not highly dependent on such vegetation. Further surveys should be conducted for *C. obrieni*, especially in the Tocantins–Parnaíba interfluvium, to locate new populations, study its biology and habitat requirements, and to assess its true conservation status.

Acknowledgements

MPDS is grateful to CHESF/MRS Estudos Ambientais and CNPq/PELD/Site 10 for financial support during field work in the Boa Esperança region. MFV thanks Sete Soluções e Tecnologia Ambiental, CAPES, and the Brehm Foundation for financial support of his field work. J. F. Pacheco made available comparative tape-recordings from Tocantins. F. F. Vasconcelos helped estimate the range of *C. obrieni* and M. S. Werneck to identify plant species at São Pedro da Água Branca. We also thank A. Aleixo, K. J. Zimmer, J. F. Pacheco, G. M. Kirwan, A. D. Prado and F. Olmos for revising the manuscript.

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Santos, Marcos Persio Dantas and Vasconcelos, Marcelo Ferreira de. 2007. "Range extension for Kaempfer's Woodpecker Celeus obrieni in Brazil, with the first male specimen." *Bulletin of the British Ornithologists' Club* 127, 249–252.

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