

Refining the distribution of the White Woodpecker (*Melanerpes candidus*) in the Caatinga biome

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Received on 21 March 2013. Accepted on 19 October 2013.

ABSTRACT: The occurrence of *Melanerpes candidus* (White Woodpecker) in Brazil has been documented in all biomes, but so far only marginally in the Caatinga. Herein we provide the first records of the White Woodpecker in the *Depressão Sertaneja Setentrional* ecoregion of the Caatinga biome, consisting of some of the farthest northeastern records for the species. Our results indicate that the White Woodpecker may be distributed throughout the Caatinga biome.

KEY-WORDS: Depressão Sertaneja Setentrional; distribution; Picidae.

The White Woodpecker, *Melanerpes candidus* (Otto 1796) occurs in association with open natural vegetation, such as fields, forest patches, and swamp borders, or in anthropogenic vegetation, such as plantations, pastures, parks, and gardens (Sick 1997; Sigrist 2009; Gwynne *et al.* 2010). The distribution of *M. candidus* extends from Argentina, Uruguay, Paraguay, Bolivia, and Brazil, to parts of Peru (Mata *et al.* 2006; Sigrist 2009; del

Hoyo 2002). In Brazil, the species has been recorded in all biomes (del Hoyo 2002; Gwynne *et al.* 2010), but so far only marginally in the Caatinga (Naumburg 1928; Snethlage 1928; Pereira *et al.* 2012). Previous records of *M. candidus* in the Caatinga include scattered observations in Maranhão, Piauí, midwestern Bahia, and northeastern Minas Gerais (Figure 1; Naumburg 1928; Snethlage 1928; Pacheco 2003).

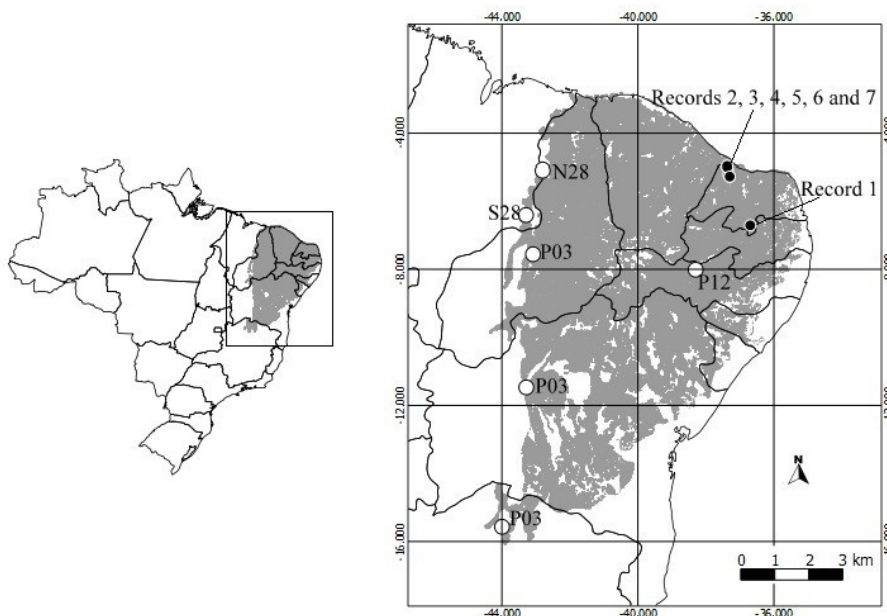


FIGURE 1. Map depicting the remaining Caatinga vegetation (in gray; MMA 2003) and the approximate location of *M. candidus* records obtained from literature (large open circles; P03 = Pacheco 2003; P12 = Pereira *et al.* 2012; S28 = Snethlage 1928; and N28 = Naumburg 1928) in addition to the exact location of records obtained in this study (smaller black dots).

In this study we report seven observations of *M. candidus* (Table 1; Figure 2) obtained in Caatinga sites nearby Mossoró and Parelhas, state of Rio Grande do Norte. These cities lie in the *Depressão Sertaneja Setentrional*, an ecoregion that occupies most of the

northern part of the Caatinga biome, stretching across the states of Paraíba, Rio Grande do Norte, and Ceará, with a small strip reaching Piauí (Velloso *et al.* 2002). This ecoregion is characterized by a rocky soil, with elevations varying between 20 and 500 m, perennial

TABLE 1. Records of *Melanerpes candidus* in the *Depressão Sertaneja Setentrional*, an ecoregion of the Caatinga biome.

| Record | Location (coordinates) | Habitat | Date | Nº of individuals |
|--------|---|-------------------------|--------------|-------------------|
| 1 | Parelhas/RN (06°41.40'S; 36°39.48'W) | farm | 26 July 2009 | 3 |
| 2 | Mossoró/RN (05°14.66'S; 37°15.99'W) | seasonally flooded site | January 2011 | 2 |
| 3 | Mossoró/RN (05°03.80'S; 37°24.04'W) | farm | March 2012 | 1 |
| 4 | Mossoró/RN (05°14.66'S; 37°15.99'W) | seasonally flooded site | May 2012 | 4 |
| 5 | Mossoró/RN (05°12.23'S; 37°19.72'W) | riparian vegetation | May 2012 | 2 |
| 6 | Mossoró/RN (05°14.92'S; 37°15.89'W) | farm | June 2012 | 2 |
| 7 | Mossoró/RN (05°03.71'S; 37°24.11'W) | farm | January 2013 | 3 |



FIGURE 2. Photographic records of *M. candidus*. (A) Individuals sighted in the Parelhas city (record 1) and (B and C) individuals sighted in the Mossoró city (records 6 and 7). Photos of Luiz Gonzaga de Sena Neto (A) and Pedro Teófilo Silva de Moura (B and C).

rivers, and shrubby or arboreal vegetation (Velloso *et al.* 2002). Our observations occurred during five months across four years, during the dry and wet seasons, with the farthest distance between observation points being ~200 km (between records 1 and 3; Table 1; Figure 1). This spatio-temporal distribution of records suggests that the species is resident in the *Depressão Sertaneja Setentrional* and that it occurs in the Caatinga associated with open natural and disturbed areas as reported previously by Naumburg (1928) and Sneathlage (1928).

These are the first records of *M. candidus* for the *Depressão Sertaneja Setentrional* region and the farthest northeast reported so far for the species, implying a range extension of about 350 km in a south-north direction (from a previously published record from Pereira *et al.* 2012; Figure 1), and about 600 km in a west-east direction (based on records from Naumburg 1928; Figure 1). Altogether, our records and those available in the literature (Naumburg 1928; Sneathlage 1928; Pacheco 2003; Pereira *et al.* 2012), along with those posted on the WikiAves web site (WikiAves 2013), support the presence of *M. candidus* year-round throughout the Caatinga biome.

ACKNOWLEDGMENTS

We thank FAPERN for their financial support to the Laboratório de Ecologia de Populações and CNPq for an undergraduate fellowship to P. T. M. We thank Luiz Gonzaga de Sena Neto for allowing us to use his photographic records.

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Associate Editor: Marcos Pérsio Dantas Santos