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Authors: Costa, Thiago V. V., and Ingels, Johan

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The immature plumage of Ocellated Poorwill *Nyctiphrynus ocellatus* (Caprimulgidae)

by Thiago V. V. Costa & Johan Ingels†

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Ocellated Poorwill *Nyctiphrynus ocellatus* is a small, forest nightjar that occurs in southern Central America and across much of central South America east of the Andes (Cleere 1998, 1999). The sexes are similar, but males are generally more greyish brown on both the upper- and underparts, whereas females are paler and more rufous, with blackish-brown spots on the scapulars and some wing-coverts. Both sexes have a white band on the upper breast, lack white markings on the wings, and all but the central rectrices are narrowly tipped white (Cleere 1998, Holyoak 2001, Cleere 2010). The species' plumage is also characterised by the presence of conspicuous white spots on the belly, which are reportedly present in both juveniles and adults (Holyoak 2001, Cleere & Kirwan 2020).

Despite being widespread and locally not uncommon, but like many other Neotropical nightjars, the natural history and biology of *N. ocellatus* are surprisingly poorly known (Cleere 1998, Cleere & Kirwan 2020). The species' immature plumage is only imperfectly described, or reported as unknown, in the literature (Cleere 1998, Cleere & Kirwan 2020). It is variously stated to be more variegated on the top of the head and spotted buff or white on the upperwing-coverts and abdomen (Hartert 1892, Holyoak 2001, Cleere & Kirwan 2020), or to be similar to the adult female (Cleere 2010). Here we provide a detailed description of the species' immature plumage based on a single specimen, which shows distinct plumage traits compared to descriptions reported in the literature.

During work in the ornithological collection of the Museu de Zoologia da Universidade de São Paulo, TVVC came across an immature female specimen of *Nyctiphrynus ocellatus*, collected in Colatina, Espírito Santo, eastern Brazil, on 19 November 1940 (Figs. 1–2, MZUSP 33104). This specimen is undoubtedly attributable to *N. ocellatus*, due to its general brownish plumage, the presence of a few black spots on the scapulars, and the wing and tail patterns. Nonetheless, this immature differs from adults by the following characters: feathers finely barred dark brown on the breast, belly and undertail-coverts, lacking any white spots typical of adults, and with a greatly reduced white band on the upper breast; the chest is more finely barred, contrasting obviously with the belly, and the chin is tawny and faintly barred. Furthermore, the upperparts are less rufous-brown overall, with the forehead and crown brownish slightly spotted black, nape brown, barred tawny and cinnamon-buff, and wing-coverts brown finely barred dark brown; scapulars also barred dark brown and with a few large black spots, as in adults but less conspicuous. Remiges in this immature specimen are similar to adults, being black with brownish notches on the outer webs forming bars on the closed wing; and inner primaries and secondaries blackish with a few faint bars. Rectrices are also similar to adults, being black with faint tawny bars; r1 has no white tip, r2 with a small block of white at the tip and rr3–5 broadly tipped white.

The immature of *Nyctiphrynus ocellatus* has been only imprecisely reported in the literature, with the major monographs diverging concerning immature and juvenile plumages. It has been described as being similar to adults but with markings on the upperparts and breast more chestnut, and without white spots on the inner greater coverts (Cleere 1999). Alternatively, it has also been described as being more variegated on the

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Figure 1. Ventral view of specimens of Ocellated Poorwill *Nyctiphrynus ocellatus*. Top: juvenile female, collected in Colatina, Espírito Santo, Brazil, 19 November 1940 (MZUSP 33104); middle: adult female from Santa Cruz, Espírito Santo, Brazil, 18 October 1940 (MZUSP 33105); and bottom: adult male from Botucatu, São Paulo, Brazil, 9 September 1902 (MZUSP2802) (Thiago V. V. Costa)

Figure 2. Lateral view of the same specimens of Ocellated Poorwill *Nyctiphrynus ocellatus* as in Fig. 1 (Thiago V. V. Costa)

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crown, with buff or white spots on the wing-coverts and belly (Holyoak 2001, Cleere & Kirwan 2020), or as similar to adult females (Cleere 2010). Some of these descriptions appear to be derived from Hartert (1892), who mentioned the presence of white spots on the wing-coverts and belly in juveniles. MZUSP 33104 contrasts with the descriptions in the just-mentioned works mostly by the prominent barring both above and below, and by lacking any buff or white spots in the plumage. Two photographic records of immature *N. ocellatus* in Brazil on the Wikiaves platform (www.wikiaves.com.br; WA 2341812 and WA 3567308) reinforce this view, albeit natural variation can be observed among individuals regarding general appearance and the shade of the overall plumage.

The specimen also raises questions concerning moult limits and plumage sequences in the species, which aspects are poorly understood in most Neotropical nightjars, and for which no published information appears to exist for *N. ocellatus*. Like other groups, the family has a Complex Basic Strategy (*sensu* Howell *et al*. 2003), in which a pre-formative moult, or first pre-basic moult, is added into the first plumage cycle. In most nightjar species, some body feathers, wing-coverts and secondaries can be retained during pre-basic moult (Pyle 1997). MZUSP 33104 seems to possess two generations of feathers, most clearly observed in the contrasting breast and belly, indicating either a formative plumage or a pre-formative moult of the first cycle. Regarding the tail, most nightjars appear to replace their rectrices during pre-formative moult (Pyle 1997, Cleere 1998, Moreno *et al*. 2014), which may also be true of *N. ocellatus*. Nevertheless, only further studies, including of museum specimens or, preferably, in-hand examination of individuals in the field, may help understand the plumage sequences of this species, and of other Neotropical nightjars. This study reinforces the need for more studies of Neotropical caprimulgids, given that so many aspects of their biology and natural history remain poorly known.

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References:

Cleere, N. 1998. *Nightjars. A guide to nightjars and related nightbirds*. Pica Press, Robertsbridge.

Cleere, N. 1999. Family Caprimulgidae (nightjars). Pp. 302–386 *in* del Hoyo, J., Elliott, A. & Sargatal, J. (eds.) *Handbook of the birds of the world*, vol. 5. Lynx Edicions, Barcelona.

Cleere, N. 2010. *Nightjars, potoos, frogmouths, oilbird and owlet-nightjars of the world*. Princeton Univ. Press and WILDGuides, Old Basing.

Cleere, N. & Kirwan, G. M. 2020. Ocellated Poorwill (*Nyctiphrynus ocellatus*). *In* del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. & de Juana, E. (eds.) *Handbook of the birds of the world Alive*. Lynx Edicions, Barcelona (retrieved from https://www.hbw.com/node/55183 on 1 May 2020).

Hartert, E. 1892. *Catalogue of the birds in the British Museum*, vol. 16. Trustees of the Brit. Mus. (Nat. Hist.), London.

Holyoak, D. T. 2001. *Nightjars and their allies: the Caprimulgiformes*. Oxford Univ. Press.

Howell, S. N. G., Corben, C., Pyle, P. & Rogers, D. I. 2003. The first basic problem: a review of molt and plumage homologies. *Condor* 105: 635–653.

Moreno, I., Grosselet, M. O. & Michael, G. R. 2014. On the juvenile plumage of Spot-tailed Nightjar *Hydropsalis maculicaudus*. *Bull. Brit. Orn. Cl*. 134: 315–318.

Pyle, P. 1997. *Identification guide to North American birds*, pt. 1. Slate Creek Press, Bolinas, CA.

Address: Thiago V. V. Costa, Instituto de Recursos Naturais, Universidade Federal de Itajubá (UNIFEI), Av. BPS 1303, CEP 37500-903, Itajubá, Minas Gerais, Brazil; e-mail: tvvcosta@unifei.edu.br

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