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First records for Guinea-Bissau of Vitelline Masked Weaver *Ploceus vitellinus* and its nesting association with a paper wasp

João L. Guilherme and Piet Wit

Primeiros registos de tecelão-mascarado-vitelino para a Guiné-Bissau, e da sua nidificação em associação com uma vespa-do-papel. Relatamos os primeiros registos de tecelão-mascarado-vitelino *Ploceus vitellinus* para a Guiné-Bissau. As observações tiveram lugar no sector do Boé, no sudeste do país. Foram observados vários indivíduos e ninhos activos, quer isolados como em pequenas colónias de nidificação, confirmando-se o estatuto da espécie como reprodutor. Apresentamos também as primeiras evidências de nidificação deste tecelão em associação com uma espécie de vespa-do-papel do género *Polistes* (Vespidae, Polistinae).

On 14 October 2013, PW found a nest of Vitelline Masked Weaver *Ploceus vitellinus* suspended from the spiny branches of an *Acacia* tree (Fig. 1), near Béli village (11°50'24"N 13°56'01"W), in the Boé, a remote region in south-east Guinea-Bissau. A photograph of an adult male, taken on 21 October 2013 (Fig. 2) shows the typical head pattern of narrow black mask, black bill, reddish iris and chestnut crown (Borrow & Demey 2001). The underparts and rump are bright yellow, there is much yellow on the wings and the legs are pinkish. The rather similar Heuglin's Masked Weaver *P. heuglini*, which also occurs in the region (Guilherme 2014), can be excluded, as breeding males have a pale iris and a black mask reaching the central breast (Borrow & Demey 2001), and the nest shape is different, as Vitelline has a unique arrangement with grasses running parallel from the bottom entrance to the top without crossing each other (Collias & Collias 1984). This is the first record of Vitelline Masked Weaver for Guinea-Bissau (*cf.* Dodman *et al.* 2004). The species is common in savanna from West Africa to Kenya and Tanzania (Fry & Keith 2004). It is known from neighbouring Senegambia and Mali, but had not been recorded from Guinea-Bissau (Dowsett *et al.* 2013a–d).

Nesting association with a paper wasp

During a roadside survey of c.40 km from Béli to Tchétche (11°55'41"N 14°12'53"W), five trees with Vitelline Masked Weaver nests were found in October 2013. Furthermore, four trees with nests were identified during expeditions to the area in September and December 2014.



Figure 1. Nest of Vitelline Masked Weaver *Ploceus vitellinus* suspended from an *Acacia macrothyrsa* with a paper wasp nest nearby, Boé, Guinea-Bissau, October 2013 (Piet Wit)

Figura 1. Ninho de tecelão-vitelino-mascarado *Ploceus vitellinus* pendurado numa Acácia (*Acacia macrothyrsa*) na proximidade de um ninho de vespa-do-papel, Boé, Guiné-Bissau, outubro de 2013 (Piet Wit)



Figure 2. Adult male Vitelline Masked Weaver *Ploceus vitellinus* in full breeding plumage, Boé, Guinea-Bissau, 20 October 2013 (Piet Wit)

Figura 2. Tecelão-vitellino-mascarado *Ploceus vitellinus* macho adulto em plumagem nupcial, Boé, Guiné-Bissau, 20 de outubro de 2013 (Piet Wit)

Figure 3. Small colony of three nests of Vitelline Masked Weaver *Ploceus vitellinus*, with a paper wasp nest nearby, Boé, Guinea-Bissau, October 2013 (Piet Wit)

Figura 3. Pequena colónia composta por três ninhos de tecelão-vitellino-mascarado *Ploceus vitellinus*, na proximidade de um ninho de vespa-do-papel, Boé, Guiné-Bissau, outubro de 2013 (Piet Wit)

Figure 4. Nest of Vitelline Masked Weaver *Ploceus vitellinus* under construction, with an active paper wasp nest nearby, Boé, Guinea-Bissau, September 2014 (Piet Wit)

Figura 4. Ninho de tecelão-vitellino-mascarado *Ploceus vitellinus* em construção, na proximidade um ninho activo de vespa-do-papel, Boé, Guiné-Bissau, setembro de 2014 (Piet Wit)



Figure 5. (a) Old decaying nests of the Masked Weaver *Ploceus vitellinus*; (b) abandoned paper wasp nest found nearby in the same *Acacia macrostachya*, Boé, Guinea-Bissau, December 2013 (Piet Wit)

Figura 5. (a) Ninhos abandonados de tecelão-vitelino-masca *Ploceus vitellinus*; (b) ninho de vespa-do-papel abandonado encontrado na mesma árvore (*Acacia macrostachya*), Boé, Guinea-Bissau, dezembro de 2014 (Piet Wit)

The nests were isolated (Fig. 1) or in small colonies of three (Fig. 3) up to five nests. The nests were all in *Acacia macrostachya*, which is a common species of tree in Sudan-Guinea savanna (Geerling 1987). Both isolated nests and colonies were associated with at least one nest of paper wasps (Vespidae, Polistinae), belonging to the genus *Polistes*, nearby on the same *Acacia* tree (Figs. 1, 3). The nests found in September were still under construction (Fig. 4), but in these cases wasp colonies were already present. In October nests were in use by Vitelline Masked Weavers (Fig. 3). In December the nests found were already decaying and in one case the wasp colony was already abandoned (Fig. 5).

The association of birds nests with social insects has been described for several species. The exact ecological meaning of these associations is not fully understood (Quinn & Ueta 2008).

Some evidence suggests that birds benefit from protection by these aggressive or annoying insects (Haemig 2001) resulting in increased nesting success (Beier & Tungbani 2006). Earley (2013) lists 121 bird species associated with 28 wasps and three bees. Of these, 34 are African birds, almost all representatives of the Estrildidae, Nectariniidae and Ploceidae. Examples of such weaver-wasp associations in West Africa include Spectacled Weaver *P. ocularis* with the wasp *Polybioides tabidus* (Vespidae, Polistinae), reported from Cameroon (Dejean & Fotso 1995), and Heuglin's Masked Weaver with the wasp *Ropalidia cincta* (Vespidae, Polistinae) from Ghana (McCrae & Walsh 1974). Cheke & Walsh (1996) reported unoccupied nests of Vitelline Masked Weaver 'with attendant polistine wasp combs' in northern Togo. Here we have presented the first evidence of this association by breeding Vitelline Masked Weavers.

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