First observation of allopreening in Sennar Penduline Tit Anthoscopus punctifrons

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Première observation d'allolissage par la Rémiz du Soudan Anthoscopus punctifrons. L'histoire naturelle de la plupart des espèces de rémiz du genre africain Anthoscopus demeure largement inconnue. Ici, nous documentons la première observation, faite au nord du Sénégal en janvier 2020, d'allolissage par une Rémiz du Soudan A. punctifrons.

Sennar Penduline Tit Anthoscopus punctifrons is endemic to the Sahel region, from southern Mauritania and northern Senegal east to Sudan and Eritrea (Madge 2008). It inhabits semi-desert habitats and forages in small parties in Acacia canopy. Little is known concerning the species' natural history, including breeding ecology, movements, diet, and social behaviour. Whether it breeds cooperatively, like Cape Penduline Tit A. minutus (Lloyd et al. 2016), is unknown.

On 11 January 2020 at 16.25 hrs, while birdwatching near Keur Mbaye (16°28'23.88"N 15°36'36"W), c.9 km east of Richard Toll, Senegal, we observed a group of four Sennar Penduline Tits foraging in an Acacia tree alongside two Western Bonelli's Warblers Phylloscopus bonelli and a Western Orphean Warbler Sylvia hortensis. Two adults flew to an adjacent Acacia where they spent c.10 minutes preening and foraging. While they were preening adjacent to one another, one



Figure 1. A Sennar Penduline Tit Anthoscopus punctifrons preens a flock member near Keur Mbaye, Senegal, 11 January 2020 (Jenna M. McCullough)

Une Rémiz du Soudan *Anthoscopus punctifrons* lisse les plumes d'un membre d'un groupe près de Keur Mbaye, Sénégal, 11 janvier 2020 (Jenna M. McCullough)

individual began preening the cheek and crown of the other for a short time (Fig. 1). This behaviour was not reciprocal, and the recipient flew to a nearby branch afterwards. Both birds continued to preen their body and flight feathers until flying off together several minutes later.

These observations constitute the first-known instance of allopreening in the species and only the second in the Remizidae after the first report, for Cape Penduline Tit (Skead 1959). Although preening is a necessary behaviour to clean feathers and remove parasites (Lovette & Fitzpatrick 2016), allopreening generally is uncommon in birds documented instances of allopreening are available for only c.5% of species (Kenny et al. 2017). Mutual grooming is hypothesised to strengthen social bonds between a breeding pair (Harrison 1965). Other hypotheses point to the social functions of allopreening; for example, cooperatively breeding Green Woodhoopoes *Phoeniculus purpureus* increase allopreening following territorial conflicts (Radford 2011). Our observations of allopreening were outside the presumed breeding season, which extends from June to August in northern Senegal (Madge 2008). Because Sennar Penduline Tit does not exhibit sexual dichromatism, we were unable to determine the sex of the birds involved. Additionally, we observed no territorial disputes during our observations. Consequently, our brief observations are inadequate for determining the possible social functions of allopreening in this species.

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