Further observations of the Southern Black Tit *Melaniparus niger* and White-winged Black Tit *M. leucomelas* in southern Tanzania, and a note on the Southern Red-billed Hornbill *Tockus rufirostris*

Baker & Baker (2018) clarified the identity of black tits recorded in southeastern Tanzania as Southern Black Tit *Melaniparus niger*, not White-winged Black Tit *M. leucomelas* as had previously been assumed. This assumption had been based on the fact that *M. niger* was not considered to occur in Tanzania by most of the reference books, as explained by Baker & Baker (2018). A further source of confusion was the understanding that *M. niger* and *M. leucomelas* might be conspecific, but it has since been demonstrated that they are distinct species (Johansson *et al.* 2013). Further work has indicated that, while their respective ranges are mostly separate, they do overlap in parts of Zambia and Malawi (Gosler & Clement 2020a, 2020b, Harrap & Quinn 1996). The existence of *M. niger* in southeastern Tanzania was suggested by its presence just south of the Ruvuma River in Mozambique, where it was recorded by Parker (2005) in the Niassa National Reserve.

In general, the two species occupy different habitats, being largely with slightly higher rainfall and altitude in *M. leucomelas*, which also occupies riparian woodlands, and drier and lower altitude in *M. niger* (Baker & Baker 2018, Harrap & Quinn 1996). However, there is clearly some overlap and the use of the term '*miombo*' might not be consistent between observers. Harrap & Quinn (1996) make the point that local distribution and habitat occupancy are influenced by the presence or absence of other tit species. In Tanzania, Baker & Baker (2018) particularly noted the distance (252 km) and difference in altitude (570 m) in the closest pair of records between the two species.

The records of *P. niger* reported by Baker & Baker (2018) included the 27 observations that I made in and adjacent to Selous Game Reserve between 1991 and 1993, and that I submitted (mistakenly as *M. leucomelas*) to the Tanzania Bird Atlas but without more detailed geo-referencing. During 2019 I returned to one of the localities, Kingupira (8°28'16" S, 38°32'37" E, 123 masl), and confirmed that the black tits there are *M. niger* (as assumed by Baker & Baker (2018)) having become familiar with that species in Mozambique during 2014–2016. It should be noted that in 2019 Selous Game Reserve was divided, such that 30 893 km² of the west and north were gazetted as Nyerere National Park, while Selous Game Reserve now refers to the remaining 21916 km² in the east (Government of Tanzania 2019). In this paper I refer to the original Selous Game Reserve.

In fact, I recorded *M. niger* 40 times between 1991 and 1993, in all months, but some of these observations were redundant for the purposes of atlas recording. Kingupira is at the approximate geographical centre of 38 of these observations (Table 1). In addition, I observed black tits north of the Rufiji River on two dates, in the area approximately enclosed by Kinyanguru (7°25′01″ S, 38°00′27″ E), Kimeru (7°17′26″ S, 38°06′21″ E), Kidunda Station (7°18′20″ S, 38°19′25″ E, 73 m asl) and the Uhuru Railway line to the southeast.

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Locality	Number of records	Coordinates
Kingupira	13	8°28'S, 38°33'E
Kingupira-Lower Lihangwa River*	3	8°26'S, 38°31'E
Nahimba*	3	8°27'S, 38°33'E
Kingupira-Kilunda*	13	8°31'S, 38°29'E
Namkongo track (north of Lower Lihangwa River)*	3	8°22'S, 38°20'E
South of Ngarambe village*+	1	8°31'S, 38°38'E
South of Kingupira*	2	8°32'S, 38°33'E

Table 1. Observations of Southern Black Tit *Melaniparus niger* in the Kingupira area, Selous Game Reserve. * Coordinates are given at the approximate centre of these localities, + Ngarambe village is at 8°27′ S, 38°37′ E.

Each of these records comprises multiple sightings and it was noted that they were most common between Kimeru and the railway line. Unfortunately, when I returned to Kinyanguru in 2018 I did not get the opportunity to search for them, though the two other *M. niger* records north of the Rufiji River, referred to by Baker & Baker (2018), suggest that this is the species I saw. The vegetation certainly appears to suit *M. niger*. Nonetheless, it would be advisable to confirm identification as the opportunity arises, since this would extend the range of *M. niger* in Selous Game Reserve north to the Ruvu River.

These records are from various types of dry woodland or wooded grassland, dominated by either *Terminalia spinosa* or *Acacia nigrescens*, or mixed dry woodland with baobabs *Adansonia digitata*, on alkaline soils, often with impeded drainage. During 2014–2016 in Niassa National Reserve, Mozambique, I observed *M. niger* usually, but not invariably, frequenting similar habitat. These dry woodlands extend in a band on either side of the Lihangwa and Lower Lukuliro Rivers from the Rufiji River south through Kingupira and Ngarambe to and south of the Matandu River at Kitumbimkwera (8°56′S, 38°35′E). South of the Matandu River the appropriate habitat extends as far as the Ruvuma River through Nachingwea and Masasi. To what extent this is continuous I cannot say, but the northern half of the area is still wild and the relatively dense large mammal populations there (TAWIRI 2019) suggest that it may support suitable vegetation on alkaline soils. East of Liwale there are extensive *A. nigrescens* woodlands, which are also a favoured habitat.

Baker & Baker (2018) also noted a distribution gap in recorded observations between *M. niger* in the low dry country to the southeast, and *M. leucomelas* in the hills to the northwest. Therefore, it is of interest that on 8 November 2015, while walking the Mozambique bank of the Ruvuma River at the Mapanda Hills (11°18′ S, 37°51′ E, 272 m asl) in the Niassa National Reserve, I observed a party of two *M. leucomelas* cross from the Tanzanian bank. Excellent views of the wing pattern were obtained, but not of the undertail coverts. In addition, the call is very different from that of *M. niger* and was heard clearly. At this point on the river there are rocky hills and inselbergs on both banks. The hills in this area support a sparse *miombo* woodland, with areas of denser woodland and semi-evergreen thicket with scattered large trees, especially on the pediments of the inselbergs. *M. leucomelas* was observed on another inselberg in this locality close to the Ruvuma River in Mozambique, but was not identified elsewhere in the eastern part of Niassa National Reserve. Since this record of *M. leucomelas* is within the range of *M. niger* indicated by Baker & Baker (2018), it seems that the ranges of the two species overlap, or at least meet, especially where the *miombo* and dry woodlands interdigitate. In this respect, it is of interest that another southern species, the Southern Red-billed Hornbill *Tockus ru-firostris* was observed extensively in the same dry woodlands in Niassa National Reserve as *M. niger*. The most northerly records were a few kilometres south of Litumbo (11°23′41″ S, 38°25′30″ E). Red-billed hornbills, unidentified to species, were recorded on the Ruvuma River terrace between Nyati (11°41′36″ S, 37°23′31″ E, 347 m asl) and Chamba (11°38′00″ S, 37°08′40″ E, 382 m asl), in which locality unidentified black tits were also observed. Since the habitat on the northern, Tanzanian, bank also appeared suitable for *T. rufirostris* (albeit degraded in parts by human activities) it would be expected to occur there. However, I never observed it on the northern bank during extensive field work along the Ruvuma River in Niassa, and the species apparently remains unrecorded in Tanzania.

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Neil Stronach

Ballyspillane, Midleton, Co. Cork, P25HH51, Ireland. Email: neil.stronach@gmail.com

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