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Adamawa Turtle Dove *Streptopelia hypopyrrha* in The Gambia, with comparison of its calls in The Gambia and Nigeria

The Adamawa Turtle Dove *Streptopelia hypopyrrha* has been known in Senegambia only in the past 10 years (Baillon 1992, Barlow *et al.* 1997, Borrow 1997). *S. hypopyrrha* was seen in The Gambia in 1990, from 2 km south of Georgetown Island, upriver to Bansang, on both sides of the river (Barlow *et al.* 1997, Borrow 1997). In SE Senegal, one was observed in a flock of European Turtle Doves *S. turtur* that used gallery forest on the Niokolo River; it was captured, measured, photographed and released (Baillon 1992). Before this, the species was known mainly from Nigeria and Cameroon (Urban *et al.* 1986). These observations suggest a recent extension of range, and bring into question whether the western doves are recognizably distinct from the birds of Nigeria and Cameroon, as was suggested by Baillon (1992).

On 4 March 1999, CRB, John Hook and Paul Longley heard turtle doves calling in remnant indigenous forest at Kunkilling Forest Reserve (13°32'N, 14°41'W), 5 km east of Georgetown, near sea level on the south bank of the Gambia River. The call was like that of *S. hypopyrrha* tape-recorded by CRB at Bukuru, Jos Plateau, in northern Nigeria. When the Nigerian call was played to the Gambian doves, they reacted by approaching the call and perching nearby. The dove observed most clearly had a very dark earth-brown back with pale scallop marks, a contrasting pale face and forehead, and underparts pale pink-cinnamon. In size it was like African Mourning Dove *S. decipiens*. Other doves calling at the site were Red-eyed Dove *S. semitorquata*, Speckled Pigeon *Columba guinea*, Black-billed Wood Dove *Turtur abyssinicus*, and Bruce's Green Pigeon *Treron waalia*.

Calls of the Gambian dove were compared with calls recorded by RBP at Taboru on the Jos Plateau, Nigeria (Fig. 1). Although recording conditions differed, the calls appear to be identical. Calls of the Nigerian bird consisted of two long phrases and a

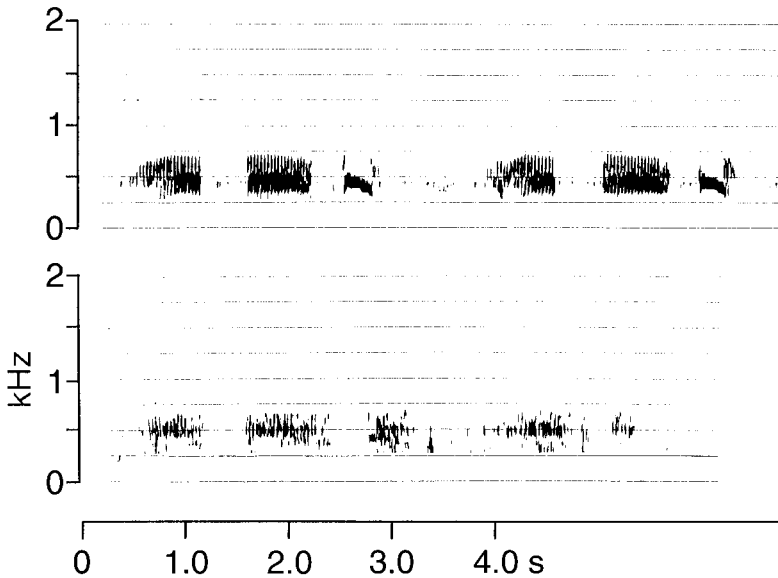


Figure 1. Audiospectrographs of *Streptopelia hypopyrrha*: above, two songs at Taboru, Nigeria; below, two songs at Kunkilling Forest Reserve, The Gambia.

third short phrase: a deep purring “croorr, croorr croo”, taking 2.2–2.4 s. The purr has a peak amplitude around 0.45 kHz, the pulse rate is 30 elements per s, and the phrases are 0.70, 0.70 and 0.44 s long. The third phrase has a smaller frequency envelope. The gap between the first two phrases is 0.40–0.43 s, and between the second and third phrases 0.30 s. In the Nigerian bird, the first phrase increases in amplitude and pitch through the first half, the second phrase slightly decreases in amplitude and pitch at the end, and the third phrase is more whistled, less pulsed, and decreases in pitch and has a terminal pulse. These details are not apparent in the Gambia bird, where the call was distorted by distance and reverberations in the field. The calls are like those of the perch call of *S. hypopyrrha* illustrated and measured by Slabbekoorn *et al.* (1999), though their call lacked the third phrase; the presence of a third phrase varied in the Gambia calls.

Calls of *S. hypopyrrha* were compared with calls of other individuals of this and other species of dove in W Africa (Chappuis 1974, Urban *et al.* 1986). No other W African doves have a purred call marked by low pitch and slow delivery of three phrases, the first two each longer than the third phrase, and all three on the same pitch. In particular, the excitement and perch call of *S. turtur* has only two phrases, the first increasing in amplitude through its first half (as in Nigerian *S. hypopyrrha*) and the second of a constant amplitude, while its nest call is a series of three purred phrases

with the first shortest and the last longest (Wood 1975, Cramp 1985). Both calls are higher in pitch (0.7 kHz) than the Taboru and Kunkilling doves, which have a low pitch like the larger Wood Pigeon *Columba palumbus* but a different song structure. *S. turtur* is common in dry country in a belt across sub-saharan Africa from Senegal to Ethiopia (Urban *et al.* 1986) and occurs in The Gambia in winter (Barlow *et al.* 1997), in more open habitat than Kunkilling. It generally does not call in W Africa and it is not known to call in The Gambia. Dusky Turtle Dove *S. lugens* of E Africa is similar and closely related to *S. hypopyrrha*; its call is a bisyllabic “koo-or, koo-oor” (Somerén 1956, Goodwin 1983), unlike the calls in The Gambia. In addition to its “croorr, croorr croo”, *S. hypopyrrha* also has a higher-pitched “croorr crr-croor” with a short second phrase (Wood 1975, Urban *et al.* 1986); we did not hear this call.

Measurements of the bird captured in Senegal were reported to differ from those of *S. hypopyrrha* taken in Nigeria and Cameroon (Baillon 1992). The Senegal bird had the tail 129 mm and bill 17 mm (measured by Baillon), whereas four specimens from Nigeria and Cameroon in the Tring museum had tails of 123–126 and bills 21–23 (measured by P. Colston, in Baillon 1992); measurements by other workers of Tring specimens had no tail greater than 125 and no bill greater than 18 (Urban *et al.* 1986). Because measurements of what may have been the same specimens made by different ornithologists differed as much as those between the Senegal bird and either set of museum measurements, Baillon’s (1992) idea that the western birds were perhaps a species distinct from eastern *S. hypopyrrha* is unsupported. Calls of the dove recorded in The Gambia do not differ from calls recorded in Nigeria, and there is no behavioural evidence that these western birds are different. In habitat the bird is in riverine forest and planted exotic trees around residences and gardens in Nigeria and Cameroon (Urban *et al.* 1986), while it is in lowland riverine forest in The Gambia.

The occurrence of *S. hypopyrrha* in The Gambia and Senegal extends the previously known range by more than 1000 km. It is otherwise known only from northern Nigeria, Cameroon and SW Chad (Louette 1981, Urban *et al.* 1986, Morel & Morel 1990, Elgood *et al.* 1994), with one record in Togo (Cheke & Walsh 1989). In The Gambia, CRB has seen and heard them call in November and March, Borrow’s (1997) observations were from November and February, and the Senegal observation was in April (Baillon 1992). These dates occur during the season when they breed in Nigeria and Cameroon (Bates 1930, Bannerman 1931, Urban *et al.* 1986); in Nigeria they are resident throughout the year (Elgood *et al.* 1994). This suggests that the doves in The Gambia and Senegal are not migrants from the east. Perhaps the quietness of the call of this dove has been responsible for its having been overlooked earlier in W Africa, and it should be searched for also in Guinea and Guinea-Bissau. We thank Mark Hopkins, Phil Hall, John Barker and Joy Agbor for assistance with recordings in Nigeria. In The Gambia, the Department of Parks and Wildlife Management Research and the Development Office allowed research, and the Director Mr. A. Danso of the Forestry Department allowed access to Kunkilling. We thank S. de Kort, R.J. Dowsett, S. Keith and the editor for comments.

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