

## A River Warbler *Locustella fluviatilis* 'wintering' and moulting in Zambia

by J. J. Tucker

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The River Warbler *Locustella fluviatilis* spends the Palaearctic winter somewhere in southern Africa, passing through east Africa, (Ash 1973, 1977, Backhurst *et al.* 1973) and possibly also west Africa. In December and January, individuals on southward passage occur in east Africa in Kenya and less commonly in Tanzania and Zambia and reappear there sparingly on northward passage in March and April (Backhurst *et al.* 1973, Benson *et al.* 1971, Dowsett 1972). The much larger number of records from east Africa in recent years—330 of a total of 359 caught there up to 1974 being trapped from only 1971 to 1974 (Backhurst 1973, 1974)—compared with a Zambian total of 10 up to November 1976 may not reflect a genuine difference in distribution; but may rather demonstrate the advantage of trapping (in the Tsavo National Park, Kenya) at an illuminated wall, which produces the same effect as a lighthouse in misty weather by attracting and grounding nocturnal migrants. In February, River Warblers seemingly disappear from east Africa and it has generally been assumed that they move south of the Zambezi River, to winter and moult in southern Africa. Paradoxically, in Africa south of the Zambezi the species is considered very rare and its status there requires further investigation (Dowsett 1972). This note reports the apparent "wintering" of a River Warbler in Zambia.

At Kabulonga (15° 25' S, 28° 21' E) near Lusaka, Zambia, a River Warbler was trapped on the evening of 19 Dec. 1975 and a second on the evening of 20 Dec. (Table 1). Both birds were ringed and released. The mist-net used was sited between a 2 m high clump of *Lantana camara* bush and low thorn scrub on well drained ground. Passage migration of species such as *Sylvia communis*, *S. borin*, *Acrocephalus arundinaceus* and *A. palustris* was in progress at the time. Habitats of River Warblers, summarised by Moreau (1972), vary widely from *Phragmites* reeds to short grass under miombo woodland.

TABLE I

Weights (g) and measurements (mm) of two *Locustella fluviatilis* at Kabulonga, Zambia

Date	Weight (time)	Wing	Tail	Tarsus	Culmen	Primary Molt	Notes
19.xii.75	16.5 (18 hrs)*	72	55	22	16	O <sup>6</sup> N <sup>4</sup>	tongue-spots present
20.xii.75	18.2 (20 hrs)	74	53	23	13.5	slightly worn	brood-patch absent

\* Next morning (06 hrs) weight before release was 15.1 g, on 23 Feb. (20 hrs) was 17.2 g and on 24 Feb. was 16.7 g (20 hrs).

The primaries on both wings of both birds were slightly worn but the 19 December bird had the outer 4 primaries very fresh; yet these same 4 primaries were moulted again in February (see below). The possibility of an arrested moult seems unlikely and the presence of tongue-spots indicate a first year bird (Svenson 1970), which should not normally by then have moulted, certainly not initially with the outer 4 primaries. Backhurst (*in litt.*, cited in Dowsett 1972) recorded 3 birds in Kenya in December with the identical combination of 4 new outer primaries and tongue-spots. Backhurst & Pearson (1976) discuss the phenomenon further, without mention of tongue-spots, stating that 9 autumn birds aged on skull ossification proved to be young birds with uniform primaries while 2 others so aged were adults with contrasting primaries. Ash (1973) records a River Warbler at Koka, Ethiopia on 16 September which was moulting its primaries and Mead & Watmough (1976) recorded arrested primary moult in the closely related *L. luscinoides* on the Iberian peninsula in autumn.

Nets had not been used at the Kabulonga site earlier in the year and were used further on 2-4, 15-22 and 26-30 January and 14-26 February. On 23 February the first of the two River Warblers caught in December was re-trapped in a net about 20 m from that in which it was originally captured 66 days before. The bird weighed 17.2 g at 20 hrs and when netted again about 5 m away the next day weighed 16.7 g at 20 hrs. It was moulting as follows:

Primaries: inner 6 fresh, 7th 3/5 grown, outermost 3 in pin.

Secondaries: outermost (6th) fresh, 5th 4/5 grown, 4th in pin, innermost 3 old.

Retrices: all 1/5 grown.

Head, underparts and back were in active moult as were the wing coverts, which were judged 9/10 fresh.

The only other record of active moult in the River Warbler is of one in Zambia on 23 January in which the mantle was in heavy moult and the primaries and secondaries in early moult (Dowsett 1972).

Weights are within the range, namely 16.0-19.2 g, for Zambian specimens given by Dowsett (1972), with the exception of the low morning weight on 20 December, and also within the range given by Backhurst & Pearson (1976), namely 13.6-21.2 g and Ash (1973), namely 14.8-19.8 g.

Extreme dates of sub-Saharan records of the River Warbler, taken from Dowsett (1972), Ash (1973, 1977) and Backhurst & Pearson (1976) are summarised as follows:

Ethiopia: 23 Sept.-19 Nov.      Kenya: 19 Nov.-14 Jan. 12-24 Apr.

Uganda: one in Nov.      Tanzania: one in "spring".

Malawi: 30 Jan.      Zambia: 25 Dec.-26 Jan. 26 Mar.

Rhodesia: 25-29 Jan.      South Africa: 12 Dec.-19 Jan.

There are 6 subsequent Zambian records. Singles were seen at one locality near Lusaka on 11 and 18 January 1975 (Stjernstedt 1975), followed by one near Kariba in the Zambezi Valley on 19 January 1975 (Aspinwall 1975). Griffin (*in litt.*) mist-netted 3 near Lusaka in December 1976/January 1977. Until the capture in March all birds had occurred between 19 December and 26 January.

The 19 December bird at Kabulonga, which appeared to be in a condition for flying any normal necessary distance, seems likely, but not necessarily, to have spent the next 2 months in the neighbourhood of the trapping site.

When retrapped on 23 February it was certainly not capable of more than local flights, owing to its moult. It still remains to be seen where the main population of the River Warbler winters.

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References:

- Ash, J. S. 1973. Six species of birds new to Ethiopia. *Bull. Brit. Orn. Cl.* 93: 3-6.  
— 1977. Four species of birds new to Ethiopia and other notes. *Bull. Brit. Orn. Cl.* 97: 4-9.  
Aspinwall, D. R. 1975. River Warbler in the Zambezi Valley. *Bull. Zam. Orn. Soc.* 7(1): 21.  
Backhurst, G. C. 1973. East African Bird Ringing Report 1971-1972. *Journ. E.A.N.H.S.* No. 144.  
— 1974. East African Bird Ringing Report 1972-73, 1973-74. *Journ. E.A.N.H.S.* No. 146.  
— Britton, P. L. & Mann, C. F. 1973. The less common Palaearctic migrant birds of Kenya and Tanzania. *Journ. E.A.N.H.S.* No. 140.  
— & Pearson, D. J. 1976. The southward migration of Palaearctic birds over Ngulia, Kenya. *Ibis* 118: 78-105.  
Benson, C. W., Brooke, R. K., Dowsett, R. J. & Irwin, M. P. S. 1971. *The Birds of Zambia* p. 234. London: Collins.  
Dowsett, R. J. 1972. The River Warbler, *Locustella fluviatilis*, in Africa. *Zam. Mus. Journ.* 3(1972): 69-76.  
Mead, C. J. & Watmough, B. R. 1976. Suspended moult of trans-Saharan migrants in Iberia. *Bird Study* 23(3): 187-196.  
Moreau, R. E. 1972. *The Palaearctic-African Bird Migration Systems* p. 98. London: Academic Press.  
Stjernstedt, R. 1975. River Warbler, *Locustella fluviatilis*, near Lusaka. *Bull. Zam. Orn. Soc.* 7(1): 21.  
Svenson, L. 1970. *Identification Guide to European Passerines* p. 66. Stockholm: Naturhistoriska Riksmuseet.  
*Address:* 1 Sutton Park Grove, Kidderminster, Hereford & Worcs. DY11 6LP.