

MORE ECCENTRIC PRIMARY MOULT IN JUVENILE BLACKCHEEKED WAXBILLS *ESTRILDA ERYTHRONOTOS*

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Most juvenile waxbills of the arid savannahs in southern Africa undergo a complete moult during the dry winter season (Craig 1983; Herremans 1995a). In a sample of 23 birds from Botswana, only 10 first-year Blackcheeked Waxbills were found to replace primaries, but all followed the rare eccentric pattern (Jenni & Winkler 1994), replacing the longest primaries in a descendant sequence, but retaining the inner 2-4 feathers (Herremans 1995a).

A further 17 Blackcheeked Waxbills were examined at the same locality in southeastern Botswana on 24-26 June 1996. Ten out of 15 juveniles were replacing primaries, all according to a descendant eccentric pattern (see Table). The other five birds had not yet, or only recently, started the post-juvenile moult, and might still have replaced primaries at a later stage. All birds moulting primaries had also renewed at least one, but usually all three tertials, but no other secondaries. Some birds also renewed tail feathers: mostly the inner pair(s), but occasionally the entire tail. Ageing was usually straightforward on the basis of the strong contrast in colour and structure between new and

old tertiaries, tail feathers or series of greater coverts (*cf.* Herremans 1995b), but all birds were also confirmed as juveniles on the basis of incomplete skull pneumatization.

Ten out of 23 first year birds were found replacing primaries during 1992-1995, all years with below average rainfall in the study region, but at least 10 out of 15 young birds renewed primaries after the above-average wet summer of 1996. Due to the still small samples, this difference is not statistically significant ($\chi^2_{df=1}=1.96, P=0.16$), but still hints to the possibility that the frequency in the population at which eccentric primary moult occurs in juvenile Blackcheeked Waxbills might be dependent on the veld conditions, and could therefore vary regionally and from year to year.

One adult had already completed its moult by late June 1996 and another had renewed seven primaries, number eight being more than half-grown. This confirms that primary moult in adults is indeed more advanced than in juveniles, as previously suspected (Herremans 1995a).

Table. Descendant eccentric primary moult in juvenile Blackcheeked Waxbills

		Primaries									
		1	2	3	4	5	6	7	8	9	10
24 June	AD11397	O	O	O	1	O	O	O	O	O	O
24 June	AD11394	O	O	O	2	O	O	O	O	O	O
24 June	AD11375	O	O	O	5	1	O	O	O	O	O
24 June	AD11393	O	O	O	N	6	O	O	O	O	O
24 June	AD11377	O	O	O	N	7	1	O	O	O	O
24 June	AD11396	O	O	O	N	8	2	O	O	O	O
26 June	AD11455	O	O	N	8	2	O	O	O	O	O
26 June	AD11452	O	O	O	N	6	O	O	O	O	O
26 June	AD11451	O	O	O	N	N	7	O	O	O	O
26 June	AD11449	O	O	O	N	N	8	2	O	O	O

O=unmoulted; 1=dropped; 2=pin; 3-9=x/10 of full grown length; N=renewed.

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