

# ARTICLES & REPORTS

## ABNORMAL NUMBERS OF RECTRICES

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All birds have a standard number of remiges and rectrices according to genus, although there are some specific variations. However, irregularities in feather number do occur in some individuals, usually in the tail.

In approximately 20 500 birds handled at Mopeia, Mozambique and Nchalo, Malawi, irregularities have been found in 0,6% of tails. Certain groups or genera appeared to have too few or extra rectrices in a higher percentage of birds than did others and some groups have not been found to have irregularities, despite a fairly large number having been examined.

Doves show the highest percentage of irregularities (5,6%), followed by honeyguides (3,7%), robins (3,0%), prinias (2,6%), Thick-billed Weavers *Amblyospiza albifrons* (2,0%), *Nectarinia* sunbirds (1,7%), nightjars and cisticolas (1,5%), canaries (1,4%), flycatchers (1,3%) and bulbuls (1,2%). Groups in which a lower incidence of tail abnormality was found are *Ploceus* weavers (0,9%), finches (0,8%), *Euplectes* spp. (0,7%), kingfishers and bee-eaters (0,6%) and *Acrocephalus* warblers (0,5%).

Abnormal numbers of rectrices have not been found in cuckoos,

woodpeckers, swallows, cuckoo-shrikes, drongos, orioles, warblers other than *Acrocephalus* (including crombek, *Apalis*, *Camaroptera* and *Sylvia*), wagtails, shrikes, *Anthreptes* sunbirds, sparrows, queleas, viduine finches and waxbills. This does not mean abnormalities do not occur in these groups, only that it has not been noted. It is possible that the percentage of irregularities may be greater than listed above, because in some cases, where a tail was entirely new or old, the actual number of feathers was not counted.

In general, where 12 rectrices normally occur, only 11 are found in an aberrant tail, although sometimes there may be 13 and very occasionally 10 or 14. In prinias and nightjars the only abnormality found was 11 (instead of 10). Missing or additional feathers occur among the five (or four) rectrices on either side of the central pair and the row of rectrices maintains an even line, although, where there is one missing, the remaining feathers may be slightly more spaced out, while the row is slightly more cramped where there is an extra feather.

One Scarlet-chested Sunbird *Nectarinia senegalensis* showed a rather different (abnormal) tail structure. There were 13 rectrices, 10 of which grew normally from the pygostyle, but on one side there were two feathers and on the other side one, growing 2 mm distant from the rest of the rectrices. They were not attached to the pygostyle, but were growing parallel to it from the skin at its base.

The Redfaced Mousebird *Colius indicus* appears to have more or less

completed the reduction of rectrices from 12 to 10, although 2,5% still have 12 or occasionally 11, whereas 3,0% of Speckled Mousebirds *C. striatus* have only 10 or occasionally 11. In this group the loss of the outer pair of rectrices is due to their being no longer a functional necessity, but in most of the other groups where abnormal numbers of rectrices are found, it was probably not the outer feathers which were missing. Also, since there was generally only one missing feather and not a pair, it does not suggest an evolutionary reduction, although there may be a genetic predisposition towards a reduction.

In the prinias and nightjars which had an extra rectrix, it may be that this was a genetic "hang-over" from the time when these groups had 12 rectrices. 0,2% of all birds caught had 13 or 14 rectrices and most of these were non-passerines (the only bird with 14 was a Green Pigeon *Treron australis*), but a few were passerines. This may suggest that even in passerines, where rectrix and remige reduction has advanced to a considerable extent, there is still the inherent possibility of extra feathers appearing by mutation; we are all the heirs of our ancestors.

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