



CINNAMON-BREADED WARBLER WARWICK TARBOTON

WINIFRED'S WARBLER
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Cinnamon-breasted Warbler's EASTERN ARC LINK

Recent systematic studies suggest that the southern tip of Africa is home to a variety of ancient bird lineages, many of which have links to tropical forest birds. The best known of these are the rock-jumpers (*Chaetops*), which are among the most ancient of oscine passerines outside Australasia and are sister to the West African rockfowl (*Picathartes*) and south-east Asian Rail-babbler *Eupetes macrocerus*. But there are other examples. The fynbos endemic Orange-breasted Sunbird *Anthobaphes violacea* is at the base of the sunbird radiation in Africa and is sister to the West African Reichenbach's Sunbird *Anabathmis reichenbachii*. Victorin's Warbler *Cryptillas victorini* is an enigmatic species in the Macrosphenidae, a small family of warblers endemic to Africa comprising the crombecs (*Sylvietta*), longbills (*Macrosphenus*), Cape Grassbird *Sphenoeacus afer*, Rockrunner *Achaetops pycnopygius* and Moustached Grass Warbler *Melocichla mentalis*. And most bizarrely, the closest relatives of the sugarbirds (*Promerops*) appear to be the Spot-throat *Modulatrix stictigula*, Dapple-throat *Arcanator orostruthus* and Grey-chested Babbler *Kakamega poliothorax*, three skulking, thrush- or babbler-like denizens of the forest floor.

The Spot-throat and Dapple-throat are both confined to the Eastern Arc montane forests of Tanzania, Malawi and northern Mozambique. Another monotypic genus confined to these forests is Winifred's Warbler *Scepomycter winifredae* from central Tanzania. Structurally, it resembles the two rufous warblers (*Bathmocercus*), which share its love of dense forest undergrowth. Indeed, the *Birds of Africa* subsumed them into the same genus. However, a paper just published by Urban Olsson and his colleagues (2013, *Molecular Phylogenetics and Evolution* 66: 790–799) reports that Winifred's Warbler is not particularly closely related to the rufous warblers, which are sister to the Grey-capped *Eminia lepida* and Oriole *Hypergerus atriceps* warblers. Instead, the closest relative to Winifred's Warbler is the Cinnamon-breasted Warbler *Euryptila subcinnamomea*.

The Cinnamon-breasted Warbler is a localised resident of rocky slopes in the Karoo and arid fynbos – a far cry from the montane forests of East Africa. Its indistinctly barred flanks have been argued to suggest a link to the wren-warblers *Calamonastes*. This character also has been used to suggest that Grauer's Warbler *Graueria vittata*, a monotypic genus confined to the Albertine Rift, also is related to *Calamonastes*. Unfortunately, it

was not included in Olsson's paper. One way that the Cinnamon-breasted Warbler differs from the wren-warblers and allied camaropteras is that it does not stitch leaves together to form its nest. The nests of Winifred's and Grauer's warblers have not been described.

Olsson's paper had several other interesting results. It confirmed that the eremomelas are indeed members of the Cisticolidae. The Red-winged *Heliolais erythroperus* and Red-fronted *Urorhipis rufifrons* warblers are nested within the prinias, and so should be placed in this genus. However, the Rufous-vented Prinia *Prinia burnesii* from Pakistan and north-west India is actually a babbler in the family Timaliidae. And moving in the other direction were the two Philippine miniature babblers (*Micromacronus*), which are in fact members of the Cisticolidae.

The African 'tailorbirds' (*Artisornis*) are not closely related to the Asian tailorbirds (*Orthotomus*); they are sister to the two *Oreolais* warblers (Black-collared and Rwenzori apalises) that traditionally were placed in *Apalis*, in a group that includes the Green Longtail *Urolais epichlorus*, and more distantly, Roberts's Warbler *Oreophilais robertsi* and the Namaqua Warbler *Phragmacia substriata*. As a result, it appears that stitching leaves together to form a nest has evolved independently in three of the four subfamilies within the Cisticolidae: the Eremomelinae (eremomelas, apalises and allies), Cisticolinae (cisticolas and allies), and Priniinae (prinias and tailorbirds). Only the basal Neomixinae, the three Madagascan jeries, lack this trait.

Olsson's paper shows that although we now have a better understanding of the relationships among Old World warblers, additional studies probably will reveal further surprises.

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