# Systematic and taxonomic issues concerning some East African bird species, notably those where treatment varies between authors

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# Summary

The taxonomy of various East African bird species is discussed. Fourteen of the nonpasserines and forty-eight of the passerines listed in Britton (1980) are considered, with reference to treatments by various subsequent authors. Twenty-three species splits are recommended from the treatment in Britton (*op. cit.*), and one lump, the inclusion of Jackson's Hornbill *Tockus jacksoni* as a race of *T. deckeni*.

# Introduction

With a revision of Britton (1980) now nearing completion, this is the first of two papers highlighting the complexities that surround some East African bird species. All appear in Britton in one form or another, but since that landmark publication our knowledge of East African birds has increased considerably, and with the advances in DNA sequencing, our understanding of avian systematics and taxonomy is continually moving forward. A tidal wave of phylogenetic studies in the last decade has revolutionized our understanding of the higher-level relationships of birds. Taxa previously regarded as quite distantly related have been brought together in new classifications and some major groups have been split asunder (Knox 2014). As a result we are seeing the familiar order of families and species in field guides and checklists plunged into turmoil.

The speed at which molecular papers are being published continues at an unprecedented rate. We must remember, however, that while many molecular results may indicate a relationship, they do not necessarily prove one. The evidence presented is sometimes scant and the taxonomic sampling incomplete, so that further studies may be required to resolve recommendations. Elsewhere we see some less well-researched statements concerning species limits that appear to lack any real evidence or published arguments.

This paper is intended to bring to the attention of all with an interest in East African birds the advances in our knowledge of certain species that have been published since Britton (*op. cit.*), and also to highlight issues that require additional and often urgent attention in order to reach a reasonable conclusion. It is hoped that as a result of this publication, others will be encouraged to offer comments and recommendations.

For species occurring in Kenya, the order of families, English names and nomenclature follow those used in the *Checklist of the Birds of Kenya 4th Edition* (EANHS 2009). For species that occur only in Tanzania or Uganda, names and nomenclature follow the *Birds of Africa* volumes 1–7. Names shown in bold are those of East African taxa for which full species status is recommended here. The sign > signifies cases where a species name needs to be changed from that used in the Kenya Checklist.

#### **Taxonomic issues**

#### Family Phasianidae

# Orange River Francolin *Francolinus levaillantoides* > Archer's Francolin *Scleroptila gutturalis*

The acacia red-winged francolins of Africa have long been known under the name *Francolinus levaillantoides*. Recent published changes / corrections include:i) Correct spelling of the name to *levalliantoides* as originally spelt by Smith (1836).ii) Change of genus from *Francolinus* to *Scleroptila* following Crowe *et al.* (1992).

The Orange River Francolin has long comprised all the southern African subspecies of *levalliantoides* as well as the northern birds treated by Mackworth-Praed & Grant (1957) under *Francolinus afer* as *F. a. stantoni*, *F. a. friedmanni*, *F. a. archeri*, *F. a. lorti* and *F. a. gutturalis*. Hall (1963) regarded the red-winged francolins of the northern and southern acacia steppe as conspecific, an arrangement followed by White (1965), Snow (1978), Britton (1980), Zimmerman *et al.* (1996), Dickinson (2003) and Dickinson & Remsen (2013).

In the northern acacia belt these francolins occur in much the same habitat as southern birds, in sparse grass cover on rocky hillsides. In total there are five populations that range from Eritrea, Ethiopia and northern Somalia south to northern Kenya and northwest Uganda. Northern Kenya birds in the Huri Hills and on Mt Kulal appear identical with the form *friedmanni* (Grant & Mackworth-Praed 1934, type locality Bodessa, southern Ethiopia), while those collected on Mt Moroto in northeastern Uganda in 1963 are similar.

The name *gutturalis* Rüppell 1835 has date priority over *levalliantoides* Smith 1936. Following the revised taxonomy and nomenclature of Crowe *et al.* (1992, 2006), and as adopted by Dickinson & Remsen (2013), the species is therefore now known as *Scleroptila gutturalis*, and comprises three northern subspecies (*gutturalis, lorti* and *archeri*) and three southern ones (*jugularis, pallidior* and *levalliantoides*). Regarding a common name it may be preferable to regard our East African birds as Archer's Francolin rather than retain a purely southern African name, Orange River Francolin.

#### Family Procellariidae

# Audubon's Shearwater *Puffinus lherminieri* > Tropical Shearwater *Puffinus bailloni*

Current taxonomy surrounding Indian Ocean shearwaters traditionally known as Audubon's Shearwater *P. lherminieri* has long been an issue of debate. Several forms (including *persicus, nicolae, colstoni* and *temptator*) are all possible in East African waters. The Mascarene Shearwater *P. atrodorsalis* is not recognized, as DNA analysis has revealed it to be indistinguishable from *bailloni* (Bretagnolle *et al.* 2000). Meanwhile recognition of *bailloni* as a separate species from *lherminieri* follows Austin *et al.* (2004), Onley & Scofield (2007), Dickinson & Remsen (2013) and Safford & Hawkins (2013).

#### Family Laridae

#### Little Tern Sternula albifrons

[Saunders's Tern Sternula (a.) saundersi]

It is well known that the differences between Little and Saunders's Terns are minor,

and that separation of the two is almost impossible except when dealing with specimens or individuals in full breeding plumage, and that many East African records could apply to either form. Some authors, notably Clancey (1982), were of the opinion that the two are probably conspecific, and Cramp (1985), while treating *saundersi* as a separate species, felt that reasons for splitting it from *albifrons* were poor. With the two not always separable from one another (Hollom *et al.* 1987), many, if not most of the features that supposedly distinguish *saundersi* actually intergrade with characters of *albifrons* (Chandler & Wilds 1994), and second year *albifrons* in their post breeding plumage will often appear very similar in the field to *saundersi*. Variation in *albifrons* at the northern tip of the Red Sea is such that separation of the two forms is not possible unless in the hand (Itai Shanni *pers. com*), but when breeding, *saundersi* is always exclusively marine in its choice of habitat (Chandler & Wilds 1994).

Cramp (*op. cit.*) believed that *saundersi* was characterized in adult breeding plumage by its smaller size, deep black outer primaries with only a faint grey bloom, black outer primary shafts, more white on forehead and less above the eye making the forehead patch appear squarer, darker grey rump, and olive or brown feet with yellow only on the rear tarsus and soles. While the above characters hold true for the Red Sea population, they may not for all birds in other populations, and one out of six birds from northern and eastern Arabia and three out of twelve Karachi breeders had the colour of the outer primaries and shafts intermediate between *saundersi* and nominate *albifrons* (Cramp *op. cit.*).

Given the degree of uncertainty that surrounds the positive identification of these two forms in East African waters, together with the fact that intermediates do occur (Olsen & Larssen 1995), it would seem that pending molecular evidence to the contrary, *saundersi* is currently best considered a race of *S. albifrons*.

#### Family Psittacidae

#### Brown-necked Parrot Poicephalus robustus

Clancey (1997), Symes (1999), Hockey *et al.* (2005) and Perrin (2005) have all favoured recognition of *Poicephalus robustus* as a distinctive Cape endemic, with East African birds thus becoming *Poicephalus fuscicollis suahelicus*. However, others, including Dowsett-Lemaire (2004), Dowsett *et al.* (2008) and Dickinson & Remsen (2013), prefer to retain *Poicephalus robustus* with three distinct regional subspecies pending convincing evidence to the contrary.

#### Family Strigidae

#### White-faced Scops Owl Ptilopsis leucotis

### [Southern White-faced Scops Owl Ptilopsis (l.) granti]

According to DNA evidence the White-faced Scops Owls are very different from typical scops owls of the genus *Otus*. As a result Koenig *et al.* (1999) placed them in a separate genus *Ptilopsis*, on account of the much larger eyes, and ear-openings that are twice as large as those of any *Otus* species. Koenig *et al.* (*op. cit.*) also followed van der Weyden (1973) in considering the southern form *granti* worthy of species recognition as geographical variation in the song would seem to parallel that of the sub-specific division within *leucotis*. However, certain aspects of the voice of *leucotis* require further investigation, notably the nature and precise area of any supposed transitional dialect in Kenya and Uganda, and the existence of a reported secondary song in the northern form. To date there are scant data from critical areas astride the equator where the transition from one call to the other is alleged to take place. Pending fur-

ther molecular and vocal evidence to the contrary, southern birds would appear best treated for now as a race of *leucotis*, following Dickinson & Remson (2013).

#### Spotted Eagle Owl Bubo africanus

#### [Greyish Eagle Owl Bubo (a.) cinerascens]

Koenig *et al.* (1999) separated *cinerascens* on the basis of size and eye colour. However ,the presence of both yellow- and brown-eyed birds around Chanler's Falls, Samburu District and in the Lower Tana area suggests that many individuals, and particularly the form known as *tanae*, may be the product of intergradation. This, together with the absence of any vocal or other significant differences, suggests that *cinerascens* is best retained as a race of *africanus* pending molecular evidence to the contrary, a course followed by Dickinson & Remson (2013).

#### Fraser's Eagle Owl Bubo poensis

#### [Usambara Eagle Owl Bubo (p.) vosseleri]

Although *B. vosseleri* was treated as a full species by Zimmerman *et al.* (1996), Dowsett-Lemaire (2006) showed that *vosseleri* produces guttural trills identical to those of nominate *poensis*, referring also to Hunter *et al.* (1998) who successfully used recordings of *poensis* from Rwanda to stimulate *vosseleri* in the Uluguru Mountains, Tanzania. Pending convincing evidence to the contrary, treatment of *vosseleri* as a race of *poensis* follows Dowsett-Lemaire (2006) and Dickinson & Remsen (2013).

#### Family Caprimulgidae

#### Fiery-necked Nightjar Caprimulgus pectoralis

#### [Black-shouldered Nightjar Caprimulgus (p.) nigriscapularis]

While the *C. pectoralis* complex remains the subject of debate, there is much agreement that throughout its geographical range there appear to be no significant differences in calls, and that any presumed morphological distinctions are not diagnostic (Louette 1990, Dowsett & Dowsett-Lemaire 1993, Zimmerman *et al.* 1996, Jackson 2013). However, following Fry *et al.* (1988), Cleere (1995) and Cleere & Nurney (1998), some still regard *nigriscapularis* as a separate species. Pending further molecular evidence, it is felt that *nigriscapularis* remains best retained as the northern race of *C. pectoralis* following Dickinson & Remsen (2013) and Jackson (2013).

#### Montane Nightjar Caprimulgus poliocephalus

[Ruwenzori Nightjar Caprimulgus (p.) ruwenzorii

Usambara Nightjar Caprimulgus (p.) guttifer]

Some authors consider *C. poliocephalus* monotypic, with species status given to both *ruwenzorii* and *guttifer*, while others treat *guttifer* as a race of *C. ruwenzorii* following Cleere & Nurney (1998). Vocal differences between all three forms appear to be no more than dialectic, while morphologically there is a cline of decreasing white in the outer tail feathers from nominate birds through *ruwenzorii* to *guttifer* (Louette 1990, Dowsett & Dowsett-Lemaire 1993). Treatment of *ruwenzorii* and *guttifer* as races of *C. poliocephalus* follows Dowsett *et al.* (2008), Dickinson & Remsen (2013) and Jackson (2014).

## Family Bucerotidae

## Red-billed Hornbill Tockus erythrorhynchus

[Ruaha Hornbill Tockus (e.) ruahae]

While it has been proposed that the recently described ruahae be treated as a full spe-

cies, based on facial skin and eye colour, calls and displays, Hockey *et al.* (2005) considered it best retained as a subspecies, pending further study (as was initially suggested by Kemp & Delport 2002). Without more conclusive evidence to the contrary, treatment of *ruahae* as a race of the Red-billed Hornbill *T. erythrorhynchus* follows Hockey *et al.* (*op. cit.*) and Dickinson & Remsen (2013).

#### Von der Decken's Hornbill Tockus deckeni

#### [Jackson's Hornbill Tockus (d.) jacksoni]

*Tockus jacksoni* is often treated as a full species, but vocalizations are similar and displays are identical to those of Von der Decken's Hornbill. Pending conclusive molecular evidence to the contrary, treatment as a race of *T. deckeni* follows Kemp & Crowe (1985), Kemp (1995, 2001) and Dickinson & Remsen (2013).

#### Family Picidae

#### Bennett's Woodpecker Campethera bennettii

## [Speckle-throated Woodpecker Campethera (b.) scriptoricauda]

The status of *scriptoricauda* remains controversial. It has been variously treated as a race of *C. nubica* or *C. bennettii*, or as a separate species *C. scriptoricauda*. The extent to which it intergrades with either *nubica* or *bennettii* remains unclear, but it seems unlikely that *scriptoricauda* will ever prove to be reproductively isolated, and both Short (1973) and Dowsett & Dowsett-Lemaire (1993) recommended that it remain merged with *bennettii* pending evidence to the contrary. Treatment as a race of *C. bennettii* follows Short (1988), Zimmerman *et al.* (1996) and Dickinson & Remsen (2013).

#### African Grey Woodpecker Dendropicos goertae

[Grey-headed Woodpecker Dendropicos (g.) spodocephalus]

Prigogine & Louette (1983) and Winkler *et al.* (1995) both separated *P. spodocephalus* (including *rhodeogaster* of Ethiopia, Kenya and northern Tanzania) from the more lowland *P. goertae* (Uganda, northern and western Kenya). The lack of any known intergradation between the two forms in East Africa may be due to the fact they do not actually meet, though there is evidence of some interbreeding in Rwanda with the Olive Woodpecker *D. griseocephalus*. The forms *rhodeogaster* and *goertae* are behaviourally, vocally, morphologically and ecologically very similar, and with many topographical and human-induced barriers separating them, there is little opportunity for interbreeding (Short 1988). Treatment of both *spodocephalus* and *rhodeogaster* as races of *P. goertae* follows Short (1988), Dowsett & Dowsett-Lemaire (1993), Zimmerman *et al.* (1996) and Dickinson & Remsen (2013).

#### Family Platysteiridae

# Forest Batis Batis mixta

#### Dark Forest Batis Batis crypta

Fjeldså *et al.* (2006) presented morphological and molecular evidence to show that *Batis mixta* consists of two very different species that may not even be closely related to each other, with *B. crypta* near to birds of the Malawi Rift, and *B. mixta* clustering with *B. diops* of the Albertine Rift. Meanwhile, reported vocal differences between *mixta* in the northern Tanzania highlands and *ultima* in the Kenya coastal lowlands and East Usambaras may itself be worthy of further investigation.

#### Eastern Black-headed Batis Batis minor Western Black-headed Batis Batis erlangeri

Treatment of *Batis erlangeri* as a separate species from *B. minor* has been proposed by Louette (2005), and indeed calls of Kenya coastal birds (*B. m. minor*) are very different from those of *erlangeri* (Dowsett-Lemaire & Dowsett 2014). Pending molecular evidence to the contrary, the recognition of two species is recommended.

#### Family Malaconotidae

## Tropical Boubou *Laniarius aethiopicus* Coastal Black Boubou *Laniarius nigerrimus*

Recently it was demonstrated that the all-black birds on Manda Island, Lamu District, are vocally and behaviourally quite distinct from black-and-white *L.a. sublacteus* (Turner *et al.* 2011). Nguembock *et al.* (2008) in their phylogeny of some *Laniarius* bushshrikes, showed that an all-black bird (*erlangeri*) from Somalia was not closely related to *L. aethiopicus*, and pointed out that it warranted species status. Whether the black boubous of coastal Kenya represent the same species as *erlangeri* can be better determined when their DNA is compared. Although Nguembock *et al.* (*op. cit.*) recommended separating both *sublacteus* and *major* from the traditional *L. aethiopicus* complex, further study of vocalizations together with additional molecular work that includes representatives of *erlangeri*, *nigerrimus* and *somaliensis* would seem necessary to clarify relationships and species limits within this group of bushshrikes. In the meantime Turner *et al.* (2013) have proposed that the all-black coastal boubous in eastern Kenya at Kipini and Manda Island be separated from *L. aethiopicus* and treated again as *Laniarius nigerrimus* (Reichenow 1879).

#### Family Laniidae

#### **Common Fiscal** Lanius collaris

Fuchs *et al.* (2011a) found that the Common Fiscal *Lanius collaris* as traditionally defined does not form a monophyletic group, and that two clear lineages exist within the complex. The authors recommend that a Northern Fiscal (including *capelli, humeralis* and *smithii*) be given species status separate from a Southern Fiscal (including *collaris* and *marwitzi*). This is similar to an earlier arrangement proposed by Harris & Franklin (2000) on the basis of distinct vocal differences between the two groups. However pending further supporting evidence, most notably from critical areas in southwest Uganda and western Tanzania, continued recognition of two groups within a single species may be more appropriate.

#### Family Dicruridae

#### Velvet-mantled Drongo Dicrurus modestus coracinus

The true taxonomic status of *coracinus* remains unclear. Opinion as to whether this African mainland forest form belongs with *D. modestus* of Príncipe Island or with the Common Drongo *D. adsimilis* varies among authors. In all areas across equatorial Africa *coracinus* is very much a forest and forest-edge bird, while *adsimilis* is typically an open savanna bird, and while the two appear to behave as separate species where they meet, intergrades do occur (Chapin 1954, Pearson 2000). In Kenya, birds attributed to *coracinus* are known only from Kakamega (though due to continuing forest fragmentation there have been few if any post-1990 records), but in Uganda it is present both in and at the edges of several southern, western and south-western forests including forest edges along the northern shores of Lake Victoria. Meanwhile, in north-

east Tanzania, birds resembling and behaving like *coracinus* have been reported from the Usambaras at Amani and Mazumbai, and these deserve further scrutiny. Pending evidence to the contrary, continued treatment of *coracinus* as a race of *D. modestus* follows Zimmerman *et al.* (1996), Pearson (2000) and Dickinson & Christidis (2014).

#### Family Paridae

## Rufous-bellied Tit Melaniparus rufiventris

[Cinnamon-breasted Tit *Melaniparus* (r.) pallidiventris]

Sibley & Monroe (1990) treated *pallidiventris* as a separate species based on its different eye and belly colour. However, as noted by Hockey *et al.* (2005), belly colour varies clinally while eye colour varies from yellow in *rufiventris* to dark brown in *pallidiventris*, and pale brown in intergrades and intermediates. Dowsett & Dowsett-Lemaire (1993) questioned the use of eye colour as a species isolating mechanism, and later Dowsett *et al.* (2008) felt that with the distribution of the two forms contiguous there was no reason to suppose that two species were involved. The race *masukuensis* with its pale pinkish-cinnamon belly and pale yellowish-brown eyes may represent an intermediate form. Placement of all Afrotropical tit species in the genus *Melaniparus* follows Johansson *et al.* (2013) who despite recommending species status for *pallidiventris* showed little divergence between it and *rufiventris*. Dickinson & Christidis (2014) retain *pallidiventris* as a race of *rufiventris*.

#### Northern Black Tit *Melaniparus leucomelas* White-shouldered Black Tit *Melaniparus guineensis*

The true systematic position of *Parus niger, carpi, leucomelas, guineensis* and *insignis* has long been a subject of debate. The pale yellowish-eyed *guineensis* has often been treated as a full species (Sibley & Monroe 1990, Harrap & Quin 1996), despite some overlap with dark-eyed *insignis* in central Uganda where both pale- and dark-eyed birds reportedly occurred in the same foraging groups. Johansson *et al.* (2013) found that *leucomelas* and *insignis* were sister taxa, with *guineensis* divergent from both, and so recommended recognition of a dark-eyed *M. leucomelas* (including *insignis*) and a pale-eyed *M. guineensis*. Dickinson & Christidis (2014) follow Johansson *et al.* (*op. cit.*).

Family Hirundinidae

#### Black Saw-wing Psalidoprocne pristoptera

[Eastern Saw-wing *Psalidoprocne* (*p*.) *orientalis*] [Southern Saw-wing *Psalidoprocne* (*p*.) *holomelas*]

Treatment of East African birds under either *P. pristoptera* or *P. holomelas* has varied between authors. Features such as wing length, depth of tail fork, shade of gloss on the upperparts and colour of the underwing coverts have all played a part in determining which form belongs where. The under wing-coverts are brown or grey-brown in *massaica, ruwenzori* and *holomelas*, yet whitish in *oleaginea* and *orientalis*, and several of these forms have been regarded as incipient species. Sheldon *et al.* (2005), while leaving all options open, implied that more than one species may indeed be involved. The ranges of several forms appear to overlap with one another, with *orientalis*, for example, being recorded within the range of birds with brown under wing-coverts in several parts of southern and eastern Tanzania, and small-winged birds occurring in eastern and coastal areas of southeastern Kenya and Tanzania. Just how many such records refer to resident breeding forms as opposed to southern migrants remains unclear. Pending detailed evidence to the contrary, the continued treatment of all forms within *P. pristoptera* would appear most appropriate.

#### Family Alaudidae

#### Fawn-coloured Lark Calendulauda africanoides

[Foxy Lark Calendulauda (a.) alopex]

East African birds (*intercedens*) have long been treated as a race of *Mirafra africanoides*. Recently, however, de Juana *et al.* (2004) and Hockey *et al.* (2005), restricted *africanoides* to southern Africa, and treated east and northeast African birds as the Foxy Lark *Calendulauda alopex*. With no molecular data to confirm the placement of *intercedens* with *alopex*, and as divergence from the southern races is modest, treatment with *C. africanoides* is maintained pending more conclusive evidence, a course also adopted by Dickinson & Christidis (2014).

# Spike-heeled Lark Chersomanes albofasciata Beesley's Lark Chersomanes beesleyi

Beesley's Lark was formerly considered a race of *C. albofasciata*, but molecular evidence now suggests it is worthy of species status, having separated from *albofasciata* approximately three million years ago (Alström *et al.* 2013).

#### Somali Short-toed Lark Calandrella somalica

[Athi Short-toed Lark Calandrella (s.) athensis]

In the absence of any convincing evidence, there appears no justification to treat *athensis* as anything other than a race of *C. somalica*.

#### Family Cisticolidae

#### Winding Cisticola Cisticola galactotes

[Heuglin's Cisticola *Cisticola* (g.) *marginatus*]

[East Coast Cisticola *Cisticola* (g.) *haematocephalus*]

The *Cisticola galactotes* species complex has been considered by various authors to comprise 7–12 subspecies. Recent studies in northwest Zimbabwe found differences between some subspecies in both call and behaviour, leading to the suggestion that *C. galactotes* as currently defined represents a complex of three or more species each with different song types (Hustler 2001). On the basis of voice alone, West and East African birds may form the *marginatus* group (including among others *amphilectus, nyansae* and *suahelicus*); south central African birds (*luapula*) another group; with nominate *galactotes* of coastal KwaZulu Natal, southern Mozambique and Malawi a third group. Finally, the Ethiopian highland form *lugubris* and the coastal East African *haematocephalus* may both be considered worthy of monotypic species status (Hockey *et al.* 2005, Ryan *et al.* 2006). But just how much these vocal differences may simply reflect local dialects remains unclear. A more thorough review of this complex is required, including molecular information.

#### Tana River Cisticola Cisticola restrictus

Identified only from seven museum specimens collected in semi-arid bush in the Lower Tana basin. This remains a taxon of uncertain validity, with a very limited distribution in Tana River District at Sangole, Ijara, Mnazini, Garsen and Karawa (Traylor 1967, Britton 1980). There is the possibility that it may be a hybrid between Rattling Cisticola *C. chiniana* and Ashy Cisticola *C. cinereolus* (Dowsett-Lemaire & Dowsett 2014). Despite extensive fieldwork throughout the Lower Tana, there have been no recent records and there are no field or voice descriptions. Although considered distinct from both *C. chiniana* and *C. cinereolus* by Traylor (1967), specimens

closely resemble those two forms. It is therefore recommended that a re-appraisal of all specimens be undertaken.

#### Wailing Cisticola Cisticola lais

#### [Lynes's Cisticola *Cisticola* (*l.*) *distinctus*]

In East Africa the Wailing Cisticola contains two well-defined races, *distinctus*, considered by some authors a separate species, and *semifasciatus* in southern Tanzania. Dowsett & Dowsett-Lemaire (1993) found that the complex vocalizations of *distinctus* with rattles, low trills and repetitions were exact replicas of the repertoire of *lais*, thus clearly suggesting that the two forms are best considered conspecific. This treatment is adopted by Dickinson & Christidis (2014).

# Piping Cisticola Cisticola fulvicapilla Long-tailed Cisticola Cisticola angusticauda

Although these are treated as two species by several authors, *angusticauda* is known to hybridize with *fulvicapilla* in many parts of Zambia (Dowsett & Dowsett-Lemaire 1980, Irwin 1993, Dowsett *et al.* 2008), with no significant behavioural or ecological differences. However, just what transpires at their mutual distributional boundaries in eastern Tanzania is unclear. Both forms share song types but have distinct dialects, and their voices reportedly differ where they meet. Behaviour and ecology are similar, but there are differences in wing and tail structure, and *angusticauda* has a distinctive breeding dress (Tye 1997). Pending molecular and other evidence from critical areas in eastern Tanzania, a two-species arrangement would at the moment seem the most appropriate, a course followed by Dickinson & Christidis (2014).

## Bar-throated Apalis Apalis thoracica

#### [Taita Apalis Apalis (t.) fuscigularis]

In East Africa the Bar-throated Apalis is characterized by several endemic subspecies, and one, *fuscigularis* in the Taita Hills, is treated as a full species by several authors (Collar *et al.* 1994, Ryan *et al.* 2006). However, while several populations may be morphologically distinctive, all are genetically very closely related. In the Eastern Arc Mountains of Tanzania a 'leap-frog ' pattern of distribution is seen with the wide-spread "green-backed, yellow-bellied *griseiceps*" from the Udzungwas to the Ukagurus being replaced by a "grey-backed, white-bellied *pareensis*" in the South Pares, but then reappearing on Mts Meru and Kilimanjaro and in the Crater Highlands and the Chyulu Hills. Meanwhile the melanic *fuscigularis* is restricted to the Taita Hills, while an intermediate polytypic form *murina* occurs in the Usambaras and Ngurus and then re-occurs further south in the southern Tanzania highlands and along the Malawi Rift (Fjeldså *et al.* 2010). Pending detailed molecular evidence to the contrary, treatment as one highly variable species would seem the most appropiate, a course adopted by Dickinson & Christidis (2014).

## Yellow-breasted Apalis Apalis flavida

The 'brown-tailed' dry country *flavocincta* appears sympatric with the 'green-tailed' *pugnax* in some central Kenya areas where they behave as separate forms and are vocally distinct (Lewis 1989). Hall & Moreau (1970) considered *flavocincta* an incipient species, while Sibley & Monroe (1990) also treated 'brown-tailed' birds as a separate species. However, with reported intergrades between *flavocincta* and *neglecta*, *golzi* and *pugnax*, and also *caniceps* and *golzi*, reproductive isolation may not be complete (Irwin 1997). Pending detailed molecular evidence to the contrary, the entire *flavida*  complex seems best treated as a single polytypic species. Such treatment is adopted by Dickinson & Christidis (2014).

#### Buff-throated Apalis Apalis rufogularis

### [Kungwe Apalis *Apalis r. argentea*]

Hall & Moreau (1970) and Sibley & Monroe (1990) considered *argentea* an incipient species *contra* Traylor (1986) and Dowsett & Dowsett-Lemaire (1993). Meanwhile a comparison of sonograms of calls from western Uganda, Nyungwe Forest, Rwanda, and the Mahale Mountains NP, western Tanzania (Dowsett-Lemaire & Dowsett 1990, Moyer *et al.* 2006) shows that without DNA evidence to the contrary, there is no reason why *argentea* should be considered anything other than a race of *rufogularis*. This treatment is adopted by Dickinson & Christidis (2014).

#### Family Pycnonotidae

#### Shelley's Greenbul Arizelocichla masukuensis

There are two subspecific groups: a grey-headed western group (*kakamegae*/*kungwensis*) and a green-headed eastern group (*masukuensis*/*roehli*), each considered an incipient species by Hall & Moreau (1970) and Sibley & Monroe (1990). Meanwhile, with crucial vocalization material largely unavailable, both Dowsett & Dowsett-Lemaire (1993) and Roy *et al.* (1998) recommended further investigation, and recently Moyer (2006) found that the voice of *kungwensis* in the Mahale Mountains was indeed very similar to that of *roehli* from the Udzungwa Mountains in eastern Tanzania. Treatment of all forms as races of *masukuensis* appears to be the best course pending molecular evidence to the contrary. A return to the genus *Arizelocichla* follows Johansson *et al.* (2007) and Dickinson & Christidis (2014).

## Eastern Mountain Greenbul Arizelocichla nigriceps Southern Mountain Greenbul Arizelocichla fusciceps

Revised treatment of the montane greenbuls follows Roy *et al.* (1998) and Johansson *et al.* (2007) whereby the southern *fusciceps* complex (including *chlorigula* and *neu-manni*) represents a distinct phylogenetic branch separate from the *nigriceps* populations in the Usambaras, Pares, Crater Highlands and Ngurumans (Fjeldså *et al.* 2010). A return to the genus *Arizelocichla* follows Johansson *et al.* (*op. cit.*) and Dickinson & Christidis (2014).

## Tiny Greenbul *Phyllastrephus debilis* Montane Tiny Greenbul *Phyllastrephus albigula*

Fuchs *et al.* (2011b) have recommended that *albigula* be treated as a separate species from *debilis*, based on significant biometric differences between the lowland (*rabai*) and montane (*albigula*) populations in the Eastern Arc Mountains of Tanzania, with genetic divergence having occurred between 2.4 and 3.1 million years ago. Dickinson & Christidis (2014) follow Fuchs *et al.* (*op. cit.*), referring to *albigula* as the Greencrowned Greenbul.

## Sassi's Olive Greenbul Phyllastrephus lorenzi

Status of this form (vagrant to western Uganda), remains under review, as it may be nothing more than a very dark Icterine Greenbul *P. icterinus* (Fishpool 2006).

# Green-tailed Bristlebill Bleda eximius > Yellow-lored Bristlebill Bleda notatus

Following Chappuis & Érard (1992), the yellow-lored, dark-eyed *notatus* is treated as a distinct species from *B. eximius*. Meanwhile, the East African form (*ugandae*), ranging from the middle Congo River east to Uganda and the Minziro Forest in northwest Tanzania has bright lemon-yellow eyes, and although included within *notatus* by Chappuis & Érard (*op. cit.*) it may be worthy of further scrutiny.

## Common Bulbul Pycnonotus barbatus

### [White-eared Bulbul Pycnonotus (b.) dodsoni]

The small and more scaly-patterned *dodsoni* has often been considered worthy of species status despite much hybridization with *P. b. tricolor* in areas of contact. On the slopes of the Kenya highlands there are populations (formerly known as *peasei*) that appear intermediate between *dodsoni* and *tricolor*, and similar intergradation occurs on the Kenya coast from Sokoke to Vanga. One option would be to consider *dodsoni* as a separate species with *peasei* a hybrid form, the other to retain *dodsoni* (including *chyulu, teitensis, littoralis* and *peasei*) as a subspecies. Pending more conclusive evidence, continued treatment of *dodsoni* as a race of *barbatus* follows Fishpool & Tobias (2005) and Dickinson & Christidis (2014).

#### Family Sylviidae

### Little Rush Warbler Bradypterus baboecala Eastern Rush Warbler Bradypterus centralis

Alström *et al.* (2011) place the Kenya highland form *elgonensis* and northeast Nigerian *chadensis* in a different *Bradypterus* lineage from southern African *baboecala* races, demonstrating clearly that they represent a separate species. Indeed, *elgonensis/centralis* birds in Uganda, Rwanda, northwest Tanzania and west and central Kenya differ markedly in voice from *moreaui / tongensis / msiri* birds in the rest of Kenya, Tanzania, Zambia, Malawi and South Africa, and also from *abyssinicus* in Ethiopia (Benson 1946). Dickinson & Christidis (2014) recognize *B. centralis* (including *elgonensis and chadensis*) as a full species, with *sudanensis* of South Sudan and western Ethiopia ten-tatively placed here pending confirmation of voice. The *B. baboecala* complex may best now be treated as comprising two species.

## Southern Hyliota Hyliota australis

#### [Northern Hyliota *Hyliota* (a.) *slatini*]

Molecular data currently suggest that the hyliotas form a basal offshoot of the Sylviidae, and they are placed immediately before the Stenostiridae in Dickinson & Christidis (2014). Meanwhile, the position of the miombo Southern Hyliota *H. australis vis-à-vis* the tropical forest birds further north (*slatini* and *usambara*) requires further scrutiny. With differing habitats and reported vocal differences (Dowsett-Lemaire *pers. comm.*), it would seem that the widely separated northern forest birds might warrant consideration for separate species status.

## Family Muscicapidae

## White-headed Black Chat Myrmecocichla arnotti

[Ruaha Chat Myrmecocichla (a.) collaris]

The recently described Ruaha Chat was formerly considered an aberrant form of *M. arnotti*. However, Glen *et al.* (2011) showed that while all birds east of the Eastern Arc

Massif and southern highlands of Tanzania are nominate *arnotti*, those west of that mountain divide could all be ascribed to *collaris*. Moreover, they suggested that this taxon warranted full species status as the Ruaha Chat. This position has not been adopted by Dickinson & Christidis (2014) who treat the *M. arnotti* complex under one species, and also point out that an earlier name, *leucolaema*, given to a bird from the Ngurus, supercedes *collaris*.

## Bocage's Akalat Sheppardia bocagei Alexander's Akalat Sheppardia insulana

Formerly placed in *Cossypha*, the position of the '*bocagei*' and '*insulana*' groups has long been a subject of debate. While Prigogine (1987) maintained they were separate species others, notably Keith *et al.* (1992) and Dowsett & Dowsett-Lemaire (1993), preferred to retain *poensis* (= *insulana*) within *bocagei*. Recent fieldwork on both sides of Lake Tanyanika has shown that while the two groups may appear almost identical, their vocalizations and habitat choices are completely different. The song of *kungwensis* in western Tanzania is virtually identical to those of *kaboboensis* on the DR Congo side of the lake, and *S. insulana granti* on Mt Cameroon, yet very different from those of *S. bocagei ilyai*, only 60 km away, and *S. bocagei chapini* in southwest Tanzania and northern Zambia (Chappuis 2000, Moyer 2006, Moyer *et al.* 2006, Plumptre *et al.* 2008). For the use of *insulana* rather than *poensis* see Dickinson & Christidis (2014).

## Pale Flycatcher Bradornis pallidus

# [Wajir Grey Flycatcher Bradornis [p.] bafirawari]

The distinctive long-tailed and long-billed *bafirawari* is uniquely adapted to arid thorn bush in eastern Kenya where it occurs alongside the very similar but larger African Grey Flycatcher *B. microrhynchus neumanni*, and was accorded species status by Mackworth-Praed & Grant (1955). The two are so similar that Hall & Moreau (1962) noted that one of the paratypes of *bafirawari* collected on the same day as the type specimen had in fact been re-identified as a male *B. microrhynchus neumanni*. The long bill of *bafirawari* might link it to *subalaris*, which is the nearest race of *B. pallidus* geographically, though *bafirawari* and *subalaris* replace each other along the Tana River at Garissa and Bura respectively, without any suggestion of intergradation (Traylor 1970). More detailed scrutiny of both *bafirawari* and *subalaris* together with their relationships with *B. microrhynchus neumanni*, *burae* and *taruensis* would seem appropriate, particularly in those areas of eastern and southeastern Kenya where their ranges converge and in places appear to overlap.

## Family Turdidae

# **Olive Thrush** *Turdus olivaceus*

## > Abyssinian Thrush Turdus abyssinicus

Bowie *et al.* (2005) showed that the Olive Thrush complex includes species in two divergent clades, a southern '*olivaceus*' group and a northern '*abyssinicus*' group. The East African forms *abyssinicus, baraka, bambusicola, deckeni, oldeani* and *nyikae* appear best treated as races of *Turdus abyssinicus*.

# Taita Thrush Turdus helleri

## Usambara Thrush Turdus roehli

Treatment as full species follows Bowie *et al.* (2005). Both represent distinctive relict populations with a basal position in the "*abyssinicus*" group compared to other East African highland populations, and since they have been able to maintain their genetic integrity are probably indeed best regarded as species (Voelker *et al.* 2007).

#### Family Nectariniidae

#### Eastern Double-collared Sunbird *Cinnyris mediocris* Usambara Double-collared Sunbird *Cinnyris usambarica* Fülleborn's Double-collared Sunbird *Cinnyris fuelleborni* Moreau's Sunbird *Cinnyris moreaui*

Three double-collared sunbird forms, *mediocris*, *usambarica*, and *fuelleborni*, occupy between them the Kenya highlands, the Crater Highlands of northern Tanzania, the Eastern Arc Mountains and the southern highlands along the Malawi Rift. These have until recently been treated as races *C. mediocris* (e.g., by Fry *et al.* (2000) and Dowsett *et al.* (2008)). Moreau's Sunbird *Cinnyris moreaui* ranges from the eastern parts of the Udzungwa highlands north to the Ngurus. It thus occupies an area between *mediocris* and *usambarica* to the north and *fuelleborni* to the southwest. Molecular data have shown that *N. mediocris* (*sensu latu*) is paraphyletic, comprising three distinct clades, each worthy of monotypic species status (Bowie *et al.* 2004). The same authors also confirmed full species status for *C. moreaui*, itself sister to Loveridge's Sunbird *C. loveridgei* of the Uluguru Mountains.

#### Stuhlmann's Double-collared Sunbird Cinnyris stuhlmanni

[Montane Double-collared Sunbird *Cinnyris ludovicensis*] [Greater Double-collared Sunbird *Cinnyris afra*]

The montane sunbirds of the Albertine Rift (largely treated within *N. ludovicensis* by Britton 1980) continue to be the subject of debate. Prigogine (1979) discussed them in some detail, preferring to consider most forms as races of *stuhlmanni* rather than of *ludovicensis*. Dowsett & Dowsett-Lemaire (1993) were unconvinced that any were worthy of specific status on grounds that all were vocally and behaviourally indistinguishable from the *Nectarinia afra* complex. Later, Fry *et al.* (2000), while considering *afra* a southern African endemic, followed Prigogine (1979) in the recognition of *stuhlmanni* for all Albertine Rift birds, as do Dickinson & Christidis (2014).

Meanwhile, birds resembling *C. ludovicensis/afra whytei* from the Nyika Plateau, northern Malawi, are reported to occur along the drier eastern forest edges of the Udzungwa and Rubeho Mountains in southern Tanzania where they compete with *N. moreaui*, and these may belong to the *afra* complex (Fjeldså *et al.* 2010). Further details are awaited.

# Little Purple-banded Sunbird Cinnyris bifasciatus

# Tsavo Sunbird Cinnyris tsavoensis

The subspecific treatment of *Cinnyris bifasciatus* varies between authors, and is complicated by the largely unresolved status of *tsavoensis*. This form has a much narrower maroon breast band than *bifasciatus* and *microrhynchus* and appears also to differ in lacking an eclipse plumage. It is treated as a full species by Fry *et al.* (2000), Cheke & Mann (2001) and Dickinson & Christidis (2014) *contra* Zimmerman *et al.* (1996). While the range of *tsavoensis* does bisect that of *microrhynchus* in Kenya, there is no evidence to support the claim by Clancey & Williams (1957) that it is partly sympatric, and molecular evidence is still needed to confirm its full species status. Meanwhile Carswell *et al.* (2005), following Fry *et al.* (*op. cit.*), attribute Uganda birds to *C.b. strophium*. This race is not recognized by Cheke & Mann (*op. cit.*) or by Dickinson & Christidis (2014), so birds in Uganda, western Kenya and southern Tanzania would return to *microrhynchus*.

#### Family Passeridae

### Kenya Rufous Sparrow Passer rufocinctus >Rufous Sparrow Passer cordofanicus [Shelley's Sparrow Passer (c.) shelleyi]

The rufous sparrows of Africa have been considered to represent one, two, four or six species, and while there is a broad measure of agreement that they are all longisolated relicts of a formerly widespread single polytypic species, treatment has varied among authors. The three East African populations *cordofanicus, rufocinctus* and *shelleyi* were treated as races of the southern African *motitensis* by Britton (1980), Summers-Smith (1988), Dowsett & Dowsett-Lemaire (1993) and Dickinson (2003), but as separate species by Fry & Keith (2004). Pending molecular evidence to the contrary, East African birds appear best grouped together, but separate from those in southern Africa. Dickinson & Christidis (2014) treat both *rufocinctus* and *shelleyi* under *P. cordofanicus*, but admit full species status for *P. insularis* of Socotra.

#### Grey-headed Sparrow Passer griseus

Although traditionally treated as a single species, opinions have in recent years largely favoured a multi-species approach (Fry & Keith 2004), despite limited hybridization in zones of overlap. While in several areas some forms seem to behave as separate species, elsewhere others occur alongside one another producing both intermediate and indeterminate offspring. Currently in East Africa, the frequency of these hybrid birds and lack of any obvious vocal or behavioural distinctions suggest that all are best considered conspecific (Zimmerman *et al.* 1996). Meanwhile the status of *mosambicus*, and whether best placed with *griseus* or the Southern Grey-headed Sparrow *P. diffusus* remains unclear. While Pakenham (1979) and Dowsett-Lemaire & Dowsett (2006) have provisionally regarded it as a race of *P. griseus*. Fry & Keith (*op. cit.*) and Dickinson & Christidis (2014) treat it under *P. diffusus*.

#### Family Estrildidae

# Black-crowned Waxbill Estrilda nonnula Black-headed Waxbill Estrilda atricapilla

#### [Kandt's Waxbill Estrilda kandti]

Kandt's Waxbill *E. kandti* was originally described, from a juvenile specimen preserved in alcohol from Lake Kivu, eastern DR Congo, as a subspecies of the Blackcrowned Waxbill *E. nonnula*. It was later thought by Prigogine (1975) to be a form of the Black-headed Waxbill *E. atricapilla* rather than *nonnula*, so that this name would have precedence over *E.a. graueri*. This was despite the fact that Grote had earlier re-examined the *kandti* type, reaffirming that it undoubtedly belonged with *nonnula* (Chapin 1954). Prigogine (1980) further suggested that this form (*graueri*, renamed *kandti*) was specifically distinct from both *atricapilla* and *nonnula*, with which there was no evidence of hybridization. In the Kivu Highlands, Rwanda and southwest Uganda *kandti* and *nonnula* often occur side by side in the same habitat, but on the whole tend to be separated by altitude with *kandti* largely above 2100 m and *nonnula* below that level. *E. kandti* has been recognized as a distinct species by Fry & Keith (2004) and Payne (2010).

However, several authors, including Short *et al.* (1990), Dowsett & Dowsett-Lemaire (1993), Zimmerman *et al.* (1996) and Dickinson & Christidis (2014) have not been persuaded that *kandti* should be split from *E. atricapilla*, and have considered that a third species within this complex is unlikely. Also that Prigogine's argument

for replacement of the name *graueri* is unconvincing. Pending further DNA evidence to the contrary it therefore seems appropriate to leave the name *kandti* within *E. non-nula*, and treat all montane populations within *E. atricapilla*. Thus, in East Africa we would have two disjunct montane populations occurring from 2100 to 3300m: *E.a. graueri* in the Bwindi-Impenetrable-Virunga volcano region of southwest Uganda and Rwanda; and *E.a. keniensis* on Mt Elgon, the Aberdares and Mt Kenya.

# Black-faced Waxbill Estrilda erythronotos

# [Black-cheeked Waxbill Estrilda (e.) charmosyna]

Formerly considered conspecific, with two southern African forms (*erythronotos* and *soligena*) widely separated from the northeastern African forms (*delamerei* and *charmosyna*). While the two southern forms are black-bellied, in East Africa we have the black-bellied *delamerei* (to the south) and the pale-bellied *charmosyna* further north, which appear to be connected to *delamerei* by the grey-bellied *kiwanukae* (Wolters 1985). Fry & Keith (2004) separated *E. charmosyna* as a full species, but the reported presence of some dark-bellied individuals within the range of *charmosyna* cannot be fully explained, and there is evidence to suggest that birds at the base of the Ngong Hills and around Olorgesaillie (*kiwanukae*) may be hybridizing with *delamarei*, and that the entire population in the southern Rift Valley may involve hybrids. Pending a full molecular analysis, a return to single species treatment would appear to be the best option, and this course has been followed by Dickinson & Christidis (2014).

# Family Motacillidae

# Long-billed Pipit Anthus similis

Birds popularly referred to as the 'Nairobi Pipit' from Nairobi NP are very similar to birds collected in similar habitat in the Chyulu Hills, and indeed all Long-billed Pipits in Kenya are very closely related to each other irrespective of whether they occur at forest edge or in rocky savanna habitats (Finch *et al.* 2013). Meanwhile, in southern Tanzania the true systematic position of *winterbottomi* in high altitude grasslands/ downs in the Njombe highlands, at Mt Rungwe and in the Matengo Highlands remains unclear. It has been associated with Jackson's Pipit *A. cinnamomeus latistriatus* (Clancey 1990) but is more likely a synonym of *A. n. nyassae* (Pearson 1992, Dowsett 2008). Further study appears warranted.

## Buffy Pipit Anthus vaalensis goodsoni

The limits of *Anthus vaalensis* remain controversial, with some authors restricting it to southern Africa. Clancey (1990), however, treated *goodsoni* and Ethiopian *saphiroi* (earlier considered races of the Plain-backed Pipit *A. leucophrys* by Hall (1961) and Pearson (1992)) within an expanded *vaalensis*. *A. leucophrys zenkeri* (including *turneri*) approaches and may even meet *goodsoni* in parts of the Loita Hills and the eastern Serengeti grasslands, and as yet there is no clear evidence of any intergradation. The treatment of *goodsoni* within *vaalensis* is not without deep reservations, and it has been retained within *A. leucophrys* by Dickinson & Christidis (2014).

# Family Fringillidae

# African Citril *Cithagra citrinelloides* Southern Citril *Crithagra hyposticta* Western Citril *Crithagra frontalis*

*C. frontalis* and the 'grey-faced' *C. hyposticta* have been treated as two species separate from *C. citrinelloides* by van den Elzen (1985), Sibley & Monroe (1990) and Fry & Keith

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(2004), but their ranges are contiguous, and any vocal differences may simply be dialectical (Dowsett & Dowsett-Lemaire 1993). However, races *brittoni* and *kikuyuensis* appear to overlap in a small area of western Kenya, and it seems appropriate for all 'grey-faced' forms to be grouped together, with *brittoni* treated as a race of *C. hyposticta* along with birds from the Imatong Mountains, South Sudan. Dickinson & Christidis (2014) recognize three species, but with some reservation. This is currently perhaps the best position, but clearly further studies are required to clarify relationships within this complex.

## Black-throated Seedeater *Crithagra atrogularis* Reichenow's Seedeater *Crithagra reichenowi*

Reichenow's Seedeater is variably treated as either a race of *C. atrogularis* or as a species *C. reichenowi*, with Érard (1974) and Dowsett & Dowsett-Lemaire (1993) treating it within *atrogularis*, and Irwin (1964), van den Elzen (1985, 1999), Zimmerman *et al.* (1996), Fry & Keith (2004) and Dickinson & Christidis (2014) all considering it worthy of full species status.

#### Brimstone Canary Crithagra sulphurata

In East Africa there are three or four populations: one (*frommi*) in southern and south-west Tanzania from the Matengo, Njombe and Mbeya highlands and the Ufipa Plateau north to the Iringa and Dabaga highlands; the second (*shelleyi*) in Uganda and northwest Tanzania south at least to Ngara District, also from the western and central Kenya highlands south to Nyanza, Nairobi, Narok, the Mara GR, Serengeti and Loliondo; while a third population (*sharpii*) at south Kilimanjaro appears isolated, with occasional wanderers reported from Moshi and the nearby Taita Hills. Elsewhere birds reported from the southeastern Tanzanian coastal lowlands north to Lindi District and not racially assigned, may be more closely allied to birds (*loveridgei*) in northern Mozambique rather than to those elsewhere in Tanzania. Although all authors (including Dickinson & Christidis 2014) treat all East African birds within *sharpei* (the oldest name available), there remains a case for closer scrutiny of all four East African populations.

## Stripe-breasted Seedeater Crithagra reichardi

## > Northern Stripe-breasted Seedeater Crithagra striatipecta

## Streaky-headed Seedeater Crithagra gularis

#### > Northern Streaky-headed Seedeater Crithagra canicapilla elgonensis

Two forms (*striatipecta* and *elgonensis*) have in the past been treated as the northernmost races of two species well known in southern Africa, *C. reichardi* and *C. gularis* respectively. Zimmerman *et al.* (1996) examined this position, and despite considerable individual variation in ventral streaking, concluded that all Kenyan birds could be assigned to one species or the other. That two similar seedeaters thus appear to co-exist alongside each other in bushed and wooded savanna of northwest Kenya and south Sudan is nonetheless remarkable. The absence of *striatipecta* from Uganda may be real, but at the same time some sight records of *elgonensis* there may possibly refer to *striatipecta*.

Turner (2013) has suggested that East African *striatipecta* be treated as specifically distinct from the largely miombo endemic *C. reichardi*, and that the northern races *canicapilla* and *elgonensis* be treated under *C. canicapilla*, a separate species from the geographically distant southern *C. gularis*. This course has been followed by Dickinson & Christidis (2014).

# Streaky Seedeater Crithagra striolata

# [Yellow-browed Seedeater Crithagra (s.) whytii]

Several authors, including Sibley & Monroe (1990), Fry & Keith (2004), Nguembock *et al.* (2009) and Fjeldså *et al.* (2010), treat the distinctive *whytii* as a separate species. While Dowsett & Dowsett-Lemaire (1993) and Dowsett *et al.* (2008) disagreed on grounds that the two were ecologically and vocally alike, Fry & Keith (2004) referred to several structural differences that included a smaller bill, shorter wing and longer leg than in *striolata*. Dickinson & Christidis (2014) retain *whytii* as a race of *striolata*.

Family Emberizidae

# Cape Bunting Emberiza capensis

# [Vincent's Bunting Emberiza c. vincenti]

Fry & Keith (2004) treated *vincenti* as a separate species despite earlier reasons against such a move from Lowe (1932). With song and call notes identical to those of South African birds, there appears little justification for regarding *vincenti* as anything other than a dark plumaged race of *E. capensis* (Irwin 2007, Dowsett *et al.* (2008), Dickinson & Christis 2014).

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