

NEW FORMS OF AFRICAN BIRDS

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THE following new forms of birds have recently come to light in the course of studying new material acquired by the Transvaal Museum:

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PTERNISTIS CRANCHI ANGOLENSIS subsp. nov.

Somewhat intermediate between *P. cranchi cranchi* of the Lower Congo and *P. c. böhmi* of East Africa, in that the light markings of face and throat are white and not greyish and in size large like typical *cranchi*.

Crown and upper parts generally, except the hind neck, greyish olive, the crown, primary coverts and tail almost uniform, the rest with more or less blackish shaft stripes. Forehead, eyebrow and a mark below the eyes black, the hinder part of the black areas of eyebrows and cheeks, as well as the feathers round the neck, with white margins, merging into the greyish olive of upper and under parts of body; crop and sides of crop greyish olive with blackish shaft stripes and fine freckling and with more or less broad white margins. On the lower breast the feathers are conspicuously light chestnut, the outer margins of the feathers being broadly chestnut, the centres white

with broad black—partly freckled—shaft stripes; the belly not striped and dirty buffy on a dark grey base; under tail coverts greyish olive, more or less freckled with brown and white. Primaries uniform greyish brown, secondaries similar but externally like the back.

Type: T.M. No. 14707, adult male, with two pairs of sharp, flattened spurs, Mombola, Angola, C. P. Chapman, 12th November, 1927. Wing length 183, tail 81, tarsus 46, culmen without cere 21.7, with cere 29.7 mm. Two younger males, with shorter, blunter spurs, are exactly like the type in colour, with a wing length of 173 mm., but an older male differs in having much white in place of chestnut on breast and abdomen and a wing length of 190 mm. In another young male the breast is predominately blackish, with a very narrow white border followed by chestnut margins on the side—but not the end—of each feather. In a sixth specimen, sexed as a male, but most probably a female—as there is a small black knob in place of a spur—there is no chestnut on the breast, the feathers being creamy white with freckled black centres and the short feathers bordering the upper part of the nude gular patch white; the wing length in this female is 170 mm.

CHAETOPUS SWIERSTRAI sp. nov.

A species apparently unlike any previously described, the feathers of the back and wings with light centres and dark margins (as in *erckeli*) and the breast and middle of abdomen white on a black ground with a broad black collar across the crop and throat white above it.

Colour. Top of head very dark brown, blacker on forehead and side of crown; a broad white stripe extends over the eye from the side of forehead to side of neck, where it meets the white of throat behind the ear coverts; the black of the forehead extends over the lores to above the anterior half of eye and below the eye to the ear coverts, but over the lores with a few whitish dots, and below the eye with a white mark on each side of the shaft of the feathers, on the lower part becoming white with a black shaft stripe, until finally the feathers of throat become uniform white from chin to the black band on crop; the lower feathers of the throat and sides of neck, however, have black bases and more or less black shaft stripes, on the hind neck becoming black with more or less white marks on each side of the shaft; below this black and white area is a black bar extending in an arch from the shoulders across the crop; below this again white predominates, the feathers being black only at the base and all but the tip of the sides of each feather; on the flanks the long feathers are black with white stripes more or less present, and the thighs and under tail coverts much the same. From the black of the hind neck the feathers of the back retain the black broadly on the margins with a greyish olive centre and blackish shaft; over the wings and lower back the webs of each feather lose the black margins, which are still darker than the centre, however, and olive brown predominates. The upper tail coverts and tail are like the rump. Primaries dark greyish olive brown, with the coverts of the same colour; but the outer margins of the secondaries are vermiculated with rusty red and their coverts are rusty reddish with dark brown vermiculations. Bill orange red, lighter below and yellowish over the operculum and cere; legs dull orange red.

Type: T.M. No. 14713, young adult male from Mombola, Angola, C. P. Chapman, 7th June, 1927. Wing length 178, tail 90, tarsus 44, culmen without cere 20.5, with cere 28.5 mm. I have named it after Mr C. J. Swierstra, Director of the Transvaal Museum, as a tribute to his interest in this work.

EPICYSELUS HORUS AUSTRALIS subsp. nov.

Differs from *E. horus horus* (v. Heuglin), of the Blue Nile, in its darker grey-brown head and face and larger size, the wing length 158, tail 61, the middle tail feathers 46, as against wing 146-150, tail 57-65, middle feathers 36-46 mm. The white throat feathers show dark shaft stripes, which are only faintly visible at the base in the northern form; the edge of the wing buffy and eyebrows marked very faintly with the same colour.

Type: T.M. No. 12755, adult male shot at nest, Koster, Rustenburg District, 2nd May, 1922; also another adult male (wing 161 mm.) and feathered young bird from the nest, taken at the same time.

In von Heuglin's *Ornithologie N/O Afrikas* (1869), p. 146, we find the species first described and accredited to a manuscript name given by Hartlaub and Finsch. This is commonly quoted as a *nomen nudum*, but the description is clear and reads as follows, under the discussion of *Cypselus affinis*:

"var. *Cauda magis excisa*; margine albicante superciliari magis conspicua; albecine colli antici usque ad jugulum extensa; long. 5½'' [= 149 mm.], alae 5'' 4½''' [= 146 mm.], rectr. extima 2'' 1''' [= 57 mm.], rectr. intermed. 1'' 4''' [= 36 mm.]. *Cypselus horus*, Hartl. and Finsch, M.S."

In *affinis* the tail is practically squared and in *caffer* the difference between the middle and outer tail feathers (the forking) is over 25 mm., so that there can be no question as to which bird was described and named *horus*.

A specimen in the Transvaal Museum collection from "Steppe b. Dire-Daua," in Abyssinia, gives the following dimensions: wing length 149, tail, outermost feather 59, middle feathers 43 mm. In colour it may be described as follows: dull white on the throat, and rump, the former extending to the cheeks, lores (which are black-tipped) and eyebrows, becoming light, bleached brownish on the forehead, the bleaching changing posteriorly to the greyish brown of the crown and back and sides of head and neck. The white of the throat extends from chin to breast, on the lower part changing to greenish black over the breast, sides and abdomen; the under tail coverts are grey-brown, but worn; axillaries like the breast; under wing coverts grey, bleached to whitish on the exposed ends; edge of wing whitish; back and scapulars glossy purplish black; the wing coverts and primaries externally browner than back, slightly bronzy, the outermost primary with the outer edge narrowly margined with whitish; tail dark brown, glossed with greenish above and lighter brown below; the white of the rump extends to the edge of the flanks, the plumes tending to overlap the dark feathers at the sides of the abdomen.

The South African birds differ as stated above, but a Beira specimen represents another race, which may be described as follows:

EPICYSELUS HORUS BEIRENSIS subsp. nov.

Differs from *E. horus australis* in its more buffy forehead and face, duller white throat and smaller size, wing length 140, tail, outermost feather 56, middle feathers 43.5 mm. It differs also from *E. horus horus* in its smaller size, darker crown and face, and with the glossy black of the back extending as a suffusion over the back and sides of neck; the white of the throat does not extend so low down, nor over the cheeks, the edge of wing is not whitish and the under wing coverts are darker.

Type: T.M. No. 10162, Zimbiti, Beira, collected by P. A. Sheppard.

HYPHANTORNIS (ORIOLINUS) XANTHOPTERUS**MARLEYI** subsp. nov.

In general colour very similar to *H. xanthopterus xanthopterus* Finsch and Hartlaub, but with a greener tail and differing markedly in its larger, heavier, more corrugated bill, the tip of which is broader and less pointed.

For purposes of comparison it is only necessary to consider two forms of the subgenus which have been named and come nearest to it geographically and in characters. These are the typical *H. xanthopterus*, collected by Kirk on the Lower Shire River, and *H. castaneigula* Cabanis, collected by Holub on the Zambesi somewhere in the neighbourhood of Shesheke (to mention one of the well-known places he visited in his travels). English authors have regarded the latter as a synonym of the former, but Reichenow places it as a distinct species in his *Vögel Afrikas*, III, p. 85, characterised by having the back olive greenish, the outermost primary yellow on the inner web only and larger in size. It would be better to regard it as a subspecies of *xanthopterus*, as the characters mentioned are not likely to be well defined and both forms come from the same river valley.

There are no exactly topotypical specimens of either of these two forms available for comparison; but a male and two females from Nyasaland and two males and a female from Boror agree fairly well with the description of *xanthopterus*, and coming from localities not far removed from the Shire Valley may be taken to be typical. The Nyasa male is not so brightly coloured as the two from Boror, but the latter being in much worn plumage this may account for it; but as the dimensions of the Boror specimens are also somewhat less, it is possible that examination of longer series may show the necessity for separating them. Nevertheless, the present new subspecies is so very markedly different from them and also from the Upper Zambesi form as described that there can be no question as to the need for its separation.

In the male from Karonga, Nyasaland, the tail is mainly yellowish olive on the middle pair of feathers and on the outer web of the remainder, as seen from below broadly pale yellow on the inner parts of the feathers to very near the tip; in the Boror males the tail is much clearer yellow, perhaps on account of the feathers being much abraded. In the type of *marleyi*, and in two paratypes, the tail is more olive greenish and less yellow, the middle pair olive yellowish green to the base and the remainder with only narrow pale yellow inner margins near the base, as seen from below presenting a much more uniform olive yellowish green with narrow pale yellow inner margins at the base. The outermost primary has the yellow of the inner web extended across the base of the outer web in all these specimens examined, and this character therefore appears to separate these eastern forms from the western *castaneigula*. The lower back in the Boror males is uniform yellow in the centre, but with the lateral dorsal plumes partly covering it tipped with vinaceous on a grey ground; in the Karonga and St Lucia Lake males the back is rather duller yellow and the vinaceous-grey is more in evidence. This vinaceous-grey is present in females from Boror and Nyasaland and would seem to be of specific importance. In all three specimens of *xanthopterus* examined the chestnut of the throat extends downwards without well-defined limits on the crop, merging into the yellow of the breast; in the three specimens of *marleyi* the chestnut terminates abruptly on the crop.

As regards dimensions, the differences can be well seen by comparison of the following figures (given in millimetres, as also in like tabular comparisons hereafter):

	Wing	Tail	Tarsus	Culmen	Height of bill
Type of <i>xanthopterus</i> ¹	75	49	23	16.5	—
Karonga, Nyasa	75	51	22	18	9.5
Boror	70.5 +	45 +	20	16.5	8.8
Boror	69 +	45 +	22	17	9.2
Type of <i>marleyi</i> (St Lucia Lake)	78	53	22.5	19.8	10.5
St Lucia Lake	77.5	53	20.5	19	10.5
St Lucia Lake	76	51	23	20	10
Type of <i>castaneigula</i> ²	80	60	23	18	—

¹ v. d. Decken's *Reise*, 1870, IV, p. 399, and *Cat. B. Brit. Mus.* XIII, 1890, p. 444.

² *J. Orn.* 1884, p. 240.

Females are smaller than males, but have not yet been procured in Zululand for comparison. The following dimensions are noted, however, as the Boror specimen is rather smaller than those from Nyasaland:

	Wing	Tail	Tarsus	Culmen	Height of bill
Deep Bay, Nyasaland	67	48	19	16.2	8.5
Mpimbi, Nyasaland	67	45	18.5	16	8
Boror	62.5	42	19.5	16	8

The type of *H. xanthopterus marleyi* is T.M. No. 14648, an adult male in full breeding plumage, shot at a nest, Umzungazi River, St Lucia Lake District, Zululand, by H. W. Bell-Marley, 2nd November, 1927. The other two specimens mentioned above are a male in breeding plumage, shot at a nest on 24th October, 1924, a partly mutilated skin, and a similar male in alcohol shot at a nest on 21st November, 1926, both collected by Mr Bell-Marley and kindly donated to the Transvaal Museum. It may be mentioned that the discovery of this tropical Weaver in Zululand is entirely due to Mr Bell-Marley, who procured eggs of this bird and was so struck by their similarity to those described from the Zambesi that he first collected the skin of the male mentioned above, which was unfortunately partly mutilated by a mouse before it could be sent to the Museum. Subsequently the one in alcohol was procured, but being dubious about making either a type, yet a third specimen was procured and preserved in clean alcohol; the last was immediately removed and made up into a skin upon its arrival at the Museum. It does not differ in the slightest degree from the skin made up in the field.

There would appear to be a distinct extension of tropical birds southwards to the northern parts of Zululand which is worthy of special note. Besides this new Weaver-bird, the Transvaal Museum has also received a specimen of the Zambesi Collared Sunbird, *Anthodiaeta hypodila zambesiana*, and the Lesser Olive Sunbird, *Haagneria obscura olivacina*, from Mr Bell-Marley, and Neergaard's Sunbird, *Microcinnyris neergaardi*, from Mr Harold Millar, all taken in this area.

ORTYGOSPIZA POLYZONA BRADFIELDI subsp. nov.

A greyer and less brown form of the common Quailfinch of the Union, occurring in the South-west African Mandate. The crown dark grey, merging into the black of the forehead, and the whole of the upper parts of the same dark grey, but sides of neck and hinder parts of ear coverts lighter grey; forehead to above eyebrows, cheeks to below the eyes and thence over the throat, black, but a pure white line extends above and below the eyes,

separating the eyes from the black markings and with a large white chin patch; at lower edge of black of throat the feathers have white marginal bars; immediately below these black feathers with white bars the feathers are grey at the base, with four bars, the first one narrow, black, followed by broad white, then broader black and finally white at the tip; on the flanks there are usually three pairs of blackish and white bars; the middle of the breast brownish buffy, with a whitish patch in the middle on the lower part, this whitish extending to the under tail coverts. Wing feathers dark grey like the upper parts, but the two outermost primaries lighter, apparently older feathers; the penultimate primary margined externally with whitish; under tail coverts with blackish stripes in the middle at the base on a buffy white ground colour; axillaries and under wing coverts buffy white; tail dark grey brown in the middle feathers, lighter brown on the others, which have a broad white mark extending across both webs, but leaving a brown inner margin for the terminal half in the outermost pair, the next two pairs with more or less white near the tips. The bill is dark brown on the maxilla and red on the mandible; feet light brown.

The female co-type lacks the black face and throat markings and differs in the same way in its greyer parts from the female of eastern birds. Male, wing length 54, tail 28, tarsus 13, hind toe and claw 12.5, culmen 9.8, height of bill 7, width of maxilla 6 mm. Female, wing 55, tail 29, tarsus 12.5, hind toe and claw 12.5, culmen 9.5, height of bill 6.8, width of maxilla 5.9 mm. Quickborn, Okahandja, 14th October, 1927, R. D. Bradfield. Also a series of five more males taken at the same time.

As regards the standing of the name of *Fringilla polyzona* Temminck (1823), according to Zedlitz (*J.O.* 1911, pp. 601-603) the bird figured is that of a female like South African specimens, but the text describes a male of *atricollis* Vieillot (1817) from Gambia. It was not until many years later that *polyzona* was procured definitely in South Africa, from the North-eastern Cape Province. On the other hand, the species is recorded from Angola, Senegal (in *Cat. B. Brit. Mus.* XIII, p. 270), and East and North-east Africa, thus overlapping the range of *atricollis*, and there seems no reason why it should not have been originally procured in either West or East Africa. It seems to me possible that Temminck merely renamed Vieillot's *atricollis*, and a careful re-study of this question is called for.

REVIEW OF THE FORMS OF *APALIS THORACICA* FROM THE UNION OF SOUTH AFRICA

Members of the genus *Apalis* are essentially bush frequenting and particularly of heavy forest or the small patches of scrub found in the kloofs of our mountains. They are not found away from the mountains in the bush-veld districts, so that their habitat is often very restricted. Owing perhaps to this conservatism and the nature of the habitat, their coloration is much influenced by the climatic factor. They serve, indeed as a good illustration of the effect of climate upon coloration of birds. Although so local in habitat, however, the influence of adjacent conditions of climate is sometimes apparent, and linking up of the forms is not unexpected. Although linking up, it would be a mistake to ignore the perceptible differences, especially when there is a correlation between these differences and the conditions of environment. It is safe to say that if these birds were in more accessible places, such as in the palaeartic or nearctic regions, more subspecies would have been recognised ere this than the few that I am mentioning here.

The climatic effect is to be seen in the development of green or olive on the upper parts and yellow on the underparts of body in the moist eastern forested region and the prevalence of grey above and white below in the drier districts (where they occur) in the west; there is also a development of rufous grey on the crown in the dry districts of the tropics and plain grey or greenish on the head in the east, which may also be attributed to the effect of climate, correlated with a forest habitat.

The first ornithologist to bring this bird to our notice was Le Vaillant, who published, under the name of "Le Plastron Noir," a coloured figure of the male and female, briefly describing the colours in the text, in his *Oiseaux d'Afrique*, Tome III, pl. 123. This subsequently formed the basis of the Latin name of *Motacilla thoracica* of Shaw and Nodder (1812). Le Vaillant stated that he obtained it near the Olifants River and towards the Orange River, but also in Kaffraria. The bird figured, however, must have been procured in the east, as our specimens from the west are quite different. Probably Le Vaillant obtained specimens on his first journey of exploration, and although he saw it in the west at a later date did not think it worth while to collect specimens. In one respect the plate is over coloured, the upper parts being greenish instead of greyish olive ("grisolivatre" of the text), but the underparts are correctly shown as pale yellowish ("blanc-jaunatre" of the text), with a white gular patch, as in specimens from Grahamstown.

So few specimens seem to have been available to systematists in Europe that it was not until 1911 that W. L. Sclater (*Ibis*, 1911, p. 305, Pl. IV, fig. 2) recognised the Knysna birds as distinct under the name of *A. claudei*. In the same year I named five forms from the east and north, and in endeavouring to place these in his "Systema Avium," Mr Sclater borrowed some of the Transvaal Museum material. In forwarding them I suggested that the specimens we had from the western districts of the Cape Province might not be the same as those from Knysna. In returning them Mr Sclater has confirmed this suggestion and proposed that I name the western bird but place *claudei* as a synonym of *thoracica*. But there are good reasons for thinking that the Knysna birds are not typical, firstly, because Le Vaillant never regarded Knysna as the same as Kaffraria, as some other early writers were in the habit of doing and, secondly, because neither the description of *A. claudei* nor a specimen in the Transvaal Museum collection from Knysna agree with Le Vaillant's coloured figure and text. The coloured figure of *A. claudei* is not quite in agreement with our specimen from Knysna, which has been in the mounted collection in the public halls for many years and may have changed, the underparts being yellowish on the abdomen and the white of the remaining underparts also tinged with yellow, though by no means like the Grahamstown specimens. *Apalis claudei* should therefore remain as a subspecies of *thoracica*, but the western birds require a name and I propose for them that of

APALIS THORACICA SCLATERI subsp. nov.

Colour. Above mainly grey from the forehead to the tail and the wing coverts, but the plumes of the lower back and rump tinged with olive yellowish; lores and a broad stripe below the eyes to the lower part of the ear coverts, and obscurely connected with the pectoral band, black; throat above the pectoral band white, and the remaining underparts below the band also white, but slightly yellowish on the flanks and middle of abdomen; under tail coverts white tinged with yellow; primaries and secondaries greyish

brown, externally margined with pale grey on the upper portions where the webbing is broad, and below white on the inner webs for the basal two-thirds, as also under wing coverts and axillaries. Tail feathers grey like the crown on the middle ones, but the rest darker grey, the outermost white where exposed and the tips of the next two also white.

The female differs from the male in having less black on the lores and the stripe becoming grey on the lower half of the ear coverts; the pectoral band is well defined and not absent or very narrow as in the majority of females of other forms found to the east; but, like them, smaller than the male and with the tail about the same length as the wing.

Type: T.M. No. 11912, adult male, L'Ormarins, Paarl, taken by me on 7th September, 1917; co-type T.M. No. 11961, adult female taken at the same time and place. Dimensions tabulated hereafter.

A specimen in worn plumage from Lamberts Bay and another from Matjesfontein, C.P., are very similar, but pure white on the abdomen and with a mere trace of olive on the plumes of the rump. These differences may be due to wear, but at the same time it may be mentioned that a more pallid coloration is to be expected at Lamberts Bay and northwards, where the climate is much drier than in the neighbourhood of Paarl.

With regard to the typical *thoracica*, as stated before, specimens from Grahamstown agree best with Le Vaillant's description and coloured plate. This material is not altogether satisfactory, however, owing to faulty labelling and bad preparation of the skins. One is from Alicedale, and another merely marked "South Africa," but being like the Alicedale specimen and having been taken by the same collector, it was doubtless taken in the same district. Of two specimens said to have been taken at Port Elizabeth, one is exactly like those just mentioned, but the other is much yellower below and greener above, very much like Port St Johns specimens. *Apalis thoracica venusta* Roberts, described from Port St Johns, has the forehead and crown grey, but the remaining upper parts yellowish olive green, the underparts below the black pectoral band pale yellow as well as the lower part of the gular patch above the band; the flanks are only slightly olive tinted and the length of wing is as in *thoracica* rather than the other upland forms from the north presently to be mentioned; in males, however, the average difference between the length of the wing and tail is 3.5 in favour of the latter, instead of about 6 to 7 mm. It is important to note this, as the tail is relatively still shorter in the northern forms. In females the southern forms have the tail of about the same length as the wing; but in northern forms the tail is shorter than the wing in those which have the tail and wing of about the same length in males. Two factors may contribute to this difference in the length of the tail, one being that the female is more active in searching for food for her young, of which there is an analogy in the majority of birds of prey, and the other being the need for more sustained flight in the more open scattered and less sheltered forests in the north. In places such as Woodbush, where there are extensive forests, the tail is not so long as in the south, but we have doubtless in this case to make allowance for the general effect produced in adjacent scattered forests to the west, with which the Woodbush forest birds are akin in colour as well as proportions of wing and tail. It is possible that there may be another explanation of the longer tail in the southern birds, namely, the prevalence of stronger winds, especially in the breeding season, a longer tail serving to steady the bird in flight in windy weather; but whatever the explanation, the fact remains that southern birds have longer tails than the northern ones, and it is of importance to note this where the geographical forms are concerned.

A point of apparent importance to note is that *venusta* would appear not to develop so well-defined a pectoral band in the female as in other subspecies, except perhaps in the typical *thoracica*, which Le Vaillant figures as lacking this band. The form extends northwards to the coast at Durban, whence there are three female specimens in the Transvaal Museum, and at Drummond (altitude 2000 feet), where I procured a female at a nest with eggs when accompanying Admiral Lynes on his Cisticola exploration. Farther inland (at about 4000 feet altitude) occurs a somewhat larger and duller coloured form, which has the sides of breast and flanks very markedly olive greenish and the yellow more whitish. To this form I have given the name of *darglensis*. It has the tail shorter than the wing in the only two females examined, and this, together with its large size and more clearly defined pectoral black bands, would seem to link it up with a form found in the scrub forests of the Drakensberg at greater altitudes. The Drakensberg form I propose to name

APALIS THORACICA ALTICOLA subsp. nov.

A large form characterised by its uniform clearer yellow underparts of body and lower part of the gular patch, the flanks only slightly olive yellowish, the outer tail feather with more white and tail proportionately shorter than the wing. The type is an adult male in winter plumage, T.M. No. 10735, taken on 25th July, 1914, at Nelsberg on the Carolina-Barberton main road (altitude about 4500 feet) and a female taken a few days later at Devils Knuckles, at about the same altitude, is the same. In these two specimens the forehead only is grey, the remaining upper parts being yellowish olive green (much as in *darglensis*, or a little brighter), but the underparts are brighter yellow, with only a trace of olive on the flanks. In specimens from "Kastrol Nek" (altitude about 6500 feet) and "Windberg," east and west of the town of Wakkerstroom, the upper parts are greyer and the underparts more pallid yellow; but as this may be due to wear I am associating these with the Nelsberg specimens until better material can be procured. I am inclined to think they will prove to be different because the scrub forests about Wakkerstroom are of the same nature as those of the Orange Free State and Basutoland on the western side of the Drakensberg, and very likely this form is pallid yellow in the same way as *flaviventris* as compared with *spelonkensis* of the Western and North-eastern Transvaal respectively. Those which occur on the eastern face of the Drakensberg at Wakkerstroom are probably yellower, like the Nelsberg specimen. In any case, I may mention that the pair from "Windberg" are the longest-winged specimens in the series of the genus, as will be seen on comparing the table of figures hereafter. These birds are bright yellow at Nelsberg like specimens from Woodbush taken in mid-summer, but the latter I associate with my *Apalis spelonkensis*, which is smaller, rufous-shaded grey on the head and much brighter yellow in the typical specimens from Groot Spelonken and Zoutpansberg, taken so far only in winter. The Woodbush specimens taken in summer are not so bright yellow as the *spelonkensis* types and have the top of the head less rufous-shaded grey, but are of about the same size, so that very likely they are identical.

Turning now to the Western Transvaal, in the kloofs of the Magaliesberg and adjacent hills occurs what one might designate a "dry-climate" form, to which I have given the name *Apalis flaviventris*. The types are soot-stained like many other small birds taken near the city of Pretoria, but easily differentiated, whether in this condition or in fresh, clean plumage. The crown is of the same rufous-shaded grey as in *spelonkensis*, but more extended backwards

including the nape and often the hind neck, the remaining upper parts greyer olive green, the underparts white on the gular patch and below the pectoral band, but the lower breast and abdomen distinctly yellow, sometimes extending to the border of the pectoral band in a mere trace, but in this upper part always more white than yellowish, and never clear bright yellow such as is seen in *spelonkensis*, in which the yellow always extends on to the gular patch and even sometimes suffuses the whole of it; in size also averaging rather larger than *spelonkensis*.

Apalis rhodesiae from Matabeleland is a still further extension of the "dry-climate" form, in which the whole top of the head, and even the ear coverts, are of a uniform rufous grey, the remaining upper parts grey with olive yellowish shade only on the plumes of the rump, the underparts white with a yellowish suffusion confined to the abdomen, and the female with only the faintest trace of a pectoral band, which is, however, conspicuous in the male.

The Roman numerals given in the following table of dimensions refer to the month in which the specimens were collected.

Dimensions of Apalis.

Apalis thoracica sclateri

	♂♂					♀♀				
	Month	Wing	Tail	Tarsus	Culmen	Month	Wing	Tail	Tarsus	Culmen
Lamberts Bay	x	50·5	53 +	19·5	13·5	—	—	—	—	—
L'Ormarins, Paarl (type)	ix	50·5	57	19·5	13·3	ix	48·5	49	19	13
Matjiesfontein	—	—	—	—	—	i	50	50	19	13

Apalis thoracica claudei

Knysna (T.M.)	—	52	58	20	13·5	—	—	—	—	—
Knysna (type)	i	50	57	20	13	—	—	—	—	—

Apalis thoracica thoracica

Alicedale	i	52	59	20	13	—	—	—	—	—
"S. Africa" (Ivy)	—	—	—	—	—	—	51	54	19·5	13
Port Elizabeth	i	52	59	19	13	—	—	—	—	—
Port Elizabeth	viii	51	57	20	13	—	—	—	—	—

Apalis thoracica vemusta

Port St Johns (type)	xi	50	51·5	19·5	13·5	xi	49	49	18·5	12·5
Port St Johns	vi	52	56	20	14	—	—	—	—	—
Port St Johns	viii	50	52	20	13	—	—	—	—	—
Port St Johns	viii	52·5	57·5	19·5	13	—	—	—	—	—
Port St Johns	viii	53	56·5	20	14	—	—	—	—	—
Port St Johns	vi	55	60	19	14	—	—	—	—	—
Red Hill, Natal	—	—	—	—	—	ii	48	50	19	12·5
Durban, Natal	—	—	—	—	—	vi	49	47·5 +	18·5	12·5
Durban, Natal	—	—	—	—	—	vi	49	51	18	12
Drummond, Natal	—	—	—	—	—	i	52	49 +	18·5	12·5
Av. of 6 ♂♂ and 5 ♀♀		52·1	55·6	19·7	13·6		49·5	50	18·5	12·4

Apalis thoracica darglensis

Dargle Dist., Natal (type)	—	—	—	—	—	ix	52	50	20	13
Dargle Dist., Natal	—	—	—	—	—	vii	54	51	20·5	12·5

Dimensions of *Apalis* (continued).*Apalis thoracica alticola*

	♂♂					♀♀				
	Month	Wing	Tail	Tarsus	Culmen	Month	Wing	Tail	Tarsus	Culmen
"Windberg"	I	59	57 +	21·5	14·5	I	57	50·5	20	13
"Kastrol Nek"	I	56·5	58	20	14	—	—	—	—	—
"Kastrol Nek"	I	56	54 +	20·5	—	—	—	—	—	—
Nelsberg, Barberton (type)	V	56·5	57	21·5	13·5	—	—	—	—	—
Devils Knuckles, Bar- berton	—	—	—	—	—	V	54	50	20·5	—
Av. of 4 ♂♂ and 2 ♀♀		57	56·5	21	14		55·5	50·25	20·25	13

Apalis thoracica spelonkensis

Woodbush	I	53	49	19	12·5	I	51	50	20	13·5
Woodbush	I	55	52·5	20·5	13	XI	54	51	21	13
Woodbush	I	54	48·5	20	13	XII	52	47·5	20	13
Woodbush	XII	52·5	55·5	19·5	13·5	—	—	—	—	—
Woodbush	XII	54·5	54	19	13·5	—	—	—	—	—
Woodbush	XII	52	49	19	14	—	—	—	—	—
Groot Spelonken (type)	VIII	52	51	21	13	VIII	51	46	19	13
Zoutpansberg	VII	54	53	21	12·5	—	—	—	—	—
Av. of 8 ♂♂ and 4 ♀♀		53·4	51·5	20	13·1		52	49	20	13

Apalis thoracica flaviventris

Pretoria (type)	VIII	57	56	20·5	14	VIII	54	51	20	13
Pretoria	VIII	55	58	20	14	—	—	—	—	—
Pretoria	VI	54	55	18·5	13	VI	53	51	19	13
Pretoria	VI	54·5	56	19·5	13·5	X	53	53	19	13
Pretoria	IV	55	55	19	13·5	—	—	—	—	—
Pretoria	IV	55	58	19	13·5	—	—	—	—	—
Bleskop, Rustenburg	V	56	56	20	14	V	55	53	19·5	—
Koster, Rustenburg	X	55·5	54	19·5	14	—	—	—	—	—
Koster, Rustenburg	V	55·5	55	19·5	13	—	—	—	—	—
Av. of 9 ♂♂ and 4 ♀♀		55·3	56	19·5	13·6		53·7	52	19·4	13

Apalis rhodesiae

Matabeleland	X	54	53	21	13	IX	51	48	19·5	13
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