Writing in *Durban Museum Novitates*, vol. xii, 9, 1980, pp. 87 - 127, I dealt with a collection of north-eastern South West African birds made by Mr M. O. E. Baddeley in 1978 and 1979 and received by the Durban Museum. In recent months I have carefully re-examined the material of some of the species dealt with and have revised my earlier conclusions in certain cases. These revised determinations of forms occurring along the Okavango R. are discussed and dealt with below along with further findings on South West African birds which may be of interest and moment to others engaged on research into the Namibian avifauna.

**Scopus umbretta** (Gmelin, 1789)

South West African birds are associated with the nominate race, the type-locality of which is Senegal in the far west of the Afrotropics. Currently two subspecies are admitted by specialists (*vide* Kahl, in the continuation of Peters’ *Check-List Birds of the World*, vol. i (revised edition), 1979, pp. 244 - 246), namely *S. u. umbretta* and *S. u. minor* Bates, 1931: near Bonthe, Sherbro Island, Sierra Leone, following the revision of Bates in *Ibis*, 1931, pp. 300 - 302. Some authors have considered *S. u. minor* to be a synonym of *S. u. umbretta* on the grounds that the size variation in the Hamerkop is somewhat irregular and perhaps largely clinal in West Africa and that the dimensional and colour parameters are not concordant. Authors adopting this approach have restricted *S. u. umbretta* (with *minor* a synonym) to part of Upper Guinea, placing all the other populations in *S. u. bannermani* C. H. B. Grant, 1914: Mt Leganisho, south-western Kenya, at 2011 m a.s.l. This taxonomic arrangement of the species is probably preferable as it takes cognisance of the more saturated nature of all the hygric populations from Senegal to Cameroun, size on its own being a poor character for the discrimination of races in the present species.

*Price R2,00 nett*
S. u. minor as described by Bates has wings 250 - 266, while specimens of the nominate race from Senegal, Guinea Bissau and The Gambia measured by Bates had wings of 280 - 296. In East Africa (topotypical of bannermani) wings range from c. 297 upwards. A series from South Africa gives wings of 292 - 325, while Bannerman takes the wing-length extreme of eastern and southern Afrotropical birds to 334 mm.

Two specimens of the Hamerkop recently examined from South West Africa, one from “Quickborn” Farm in the Otjiwarongo district, taken on 26 May, 1929, differs sharply from a more recent example taken on the Okavango R. at Andara on 19 August, 1979. The Okavango specimen differs in being distinctly darker, more olivaceous, less reddish over the upper-parts with reduced purplish sheen. The reduction in red is also noticeable over the wings, and the pale interstices to the rectrices are darker and the whole tail more shot with metallic purple. The crest is also darker and the venter colder and greyer. The “Quickborn” Farm example on the other hand agrees with material from the Cape, Natal, the Transvaal and other parts of South Africa at my disposal.

At my request, Mr M. P. Stuart Irwin of the National Museum of Zimbabwe, Bulawayo, has examined specimens in their collection, locating 2♂♂ and 2♀♀ from the Botletle R. to the south-east of the Okavango Swamps in northern Botswana which are in agreement with my findings on the single Andara skin. Mr Irwin found the Botletle R. birds to be darker both above and below than examples from eastern populations (lower Zambesi R. and Sabi R., in south-eastern Zimbabwe), but commented “that there is not a great deal in it”. He also remarked to the effect that Zambian specimens may fit in better with the characters demonstrated by the Okavango and Botletle R. specimens than with more eastern and southern elements.

The evidence, such as it is, indicates that two races of S. umbretta occur within South West African limits: a dark and somewhat saturated tropical race (probably S. u. umbretta, following Kahl, loc.cit.) coming within our limits in the mid and lower Okavango R. drainage, and a second form of comparable size but with the plumage paler, browner and redder of much of southern Africa lying to the south and east. This latter is currently unnamed and no name in synonymy is available. It is unlikely that S. u. tenuirostris Rand, 1936: Tananarive, Madagascar, could be adopted for it. Kahl places tenuirostris as a synonym of nominate umbretta, but Madagascar birds were in all probability not studied critically.

Accipiter minullus (Daudin, 1800)

The population of the Little Sparrowhawk considered to be resident in central and northern South West Africa and adjacent regions is
currently usually associated with the nominate race, the type-locality of which is the Gamtoos R. in the south-eastern Cape. Roberts, however, viewed their status differently, and South West African specimens collected by Bradfield and Wilde in the Transvaal Museum are all labelled as being applicable to *A. m. intermedius* Erlanger, 1904: Abela, Ethiopia. Yet a third view has been advanced in recent years, this to the effect that the populations occurring along the northern borders of the South African Sub-Region should be grouped in with those of East Africa on the basis of the whiter and less densely spotted underside of juveniles. This latter view was followed in the recent *S.A.O.S. Checklist of Southern African Birds*, 1980, pp. 40 - 41, the populations of the Zambesi R. valley, west to northern Botswana, Caprivi and South West Africa being assigned to *A. m. tropicalis* Reichenow, 1898: Tanga, north-eastern Tanzania.

A re-examination of the variation in this sparrowhawk indicates that adjustments require to be effected to the subspecies recognised from the Sub-Region. South West African breeders cannot be grouped in with *tropicalis* on account of the fact that the young birds are just as deeply coloured and densely spotted below as in the case of *A. m. minullus*. The adults on the other hand differ from nominate *minullus* in ranging paler above in both sexes, in being more finely transversely barred below and in exhibiting a sharply zoned area of vinaceous-cinnamon over either side of the breast. In these characters they also differ from both *A. m. tropicalis* and *A. m. intermedius*.

**Accipiter minullus infrequens**, subsp.nov.


*Diagnosis*: Associated with *A. m. minullus* on account of the juvenile in fresh dress being deep buff and densely spotted with black below. Differs subspecifically in that the adult female is paler above, more brownish, less blackish plumbeous from pileum to the lower back, and ventrally in being markedly more finely barred with dark grey, exhibiting over the sides of the breast a sharply zoned area of vinaceous-cinnamon. In the adult male in fresh dress the upper-parts range from being as dark as in the norm of nominate *minullus* to being markedly paler. On the underside more finely barred, the bars pure grey with no buff or light vinaceous admixture, and, as in the female, exhibiting extensive vinaceous-cinnamon over the lateral breast. Size as in nominate *A. minullus*.

*Measurements*: Wings of 3 ♀♀ 160 - 165 (163,3), of 8 ♂♂ 140 - 144 (142,1) mm.

*Material*: 14.
Range: South West Africa (Namibia) from about Windhoek northwards and north-east to the Kavango Woodland and the Caprivi Strip, northern Botswana, extreme western and north-western Zimbabwe and southern Zambia. Two specimens from the Mporokoso region of north-eastern Zambia appear applicable to this new taxon, supporting the view that there is post-breeding movement in many populations of *A. minullus*. *A. m. infrequens* must also occur in southern Angola, but freshly moulted material has not been available from that region.

*Measurements of the Type:* Wing (flattened) 142.5, culmen from cere 9, tarsus 40, tail 104 mm.

*Remarks:* Studying the views of others on the races to be admitted from the eastern Afrotropics from Ethiopia south to the Zambesi is a most unrewarding exercise, and it appears that the issue of the races to be recognised for East Africa can only be resolved by further collecting and a complete re-assessment using modern methods of analysis.

From material studied in Durban it would appear that *A. m. tropicalis* is restricted to the coastal lowlands from south-western Somalia and eastern Kenya, south to coastal Tanzania and Mozambique to about the mouth of the Zambesi. This race is shorter winged than either *A. m. minullus* or *A. m. infrequens*, wings in $\delta$ as low as 134 mm, and has reduced cinnamon over the sides of the breast in the same sex. Both sexes range rather paler than the former taxon over the upper-parts and are more finely barred below, while the juvenile is less saturated buffy, distinctly whiter, and more lightly spotted and streaked over the venter.

Britton et al., *Birds of East Africa*, 1980, p. 30, recognise *tropicalis* as the coastal race in East Africa, but place the interior populations as *A. m. minullus*, which they cannot be as this race seems not to extend north of the Zambesi in the east of southern Africa. Britton's nominate *minullus* is probably the race described from Ethiopia as *A. m. intermedius*, which ranges rather darker over the upper-parts than *tropicalis*, is more heavily barred below, and according to Sclater rather more washed with cinnamon over the sides of the breast. The size, particularly in males, seems to be larger, the flattened wings of which are 150 mm and above. Size variation has never been invoked as a possible parameter in arranging the populations of this small sparrowhawk into races. Judging by the data assembled for this study, size variation in single populations is very conservative.

Vanellus senegallus (Linnaeus, 1766)

Chapin, *Birds of the Belgian Congo*, part ii, 1939, pp. 81-84, in dealing with the present plover, demonstrates that in Zaire nominate *V. senegallus* disappears completely from the breeding grounds during the height of the main rains. In the case of the south-eastern
subspecies, *V. s. lateralis* Smith, 1839: Tugela R., Natal, the form also moves in sympathy with seasonal unsuitability of the habitat, but its post-breeding distribution still remains to be accurately ascertained. Irwin, *Birds of Zimbabwe*, 1981, p. 123, writing on this plover, states: “There is much seasonal movement and it has been suggested that more than one population might be involved, a non-breeding one arriving in March and April, with local (Zimbabwean) birds being nomadic, moving about during the rains.” Zimbabwean breeders agree with those nidificating in Mozambique, the Transvaal and upper Natal and are referable to *lateralis*.

The possible post-breeding movements of the recently described northern South West African and northern Botswana form, *V. s. solitaneus* (Clancey), 1979: Rundu, Okavango R., South West Africa, have yet to be established, but from evidence now available it appears that this far western breeding race winters along the humid south-eastern coast of Africa as far south as Zululand. Three specimens taken in Zululand in 1981 are clearly referable to *solitaneus*, which differs from *lateralis* in the greyer streaking to the hind neck, the darker back and adjacent wing surfaces (dull Olive-Brown (Ridgway (1912), pl. x1), versus Light Brownish Olive (pl. xxx)), more vinaceous tinged plastron and deeper black and more extensive lateral belly patches. The black over the upper forethroat is more extensive and the black neck streaking is heavier. The tipping to the central tail-feathers also appears greyer. The Zululand examples of *solitaneus* were collected on the property “Lalapanzi” in the Hluhluwe district on 16 April and 23 October, 1981.

The finding that the Wattled Plover form breeding in South West Africa spends the off-season in the humid eastern low country ties in with a similar finding in respect of the Pratincole race *Glareola pratincola riparia* Clancey, 1979, likewise discribed from the Okavango R. flood-plain.

**Prodotiscus zambesiae** Shelley, 1894

In my 1980 paper on mid-Okavango R. birds, *loc. cit.*, I recorded the first example of the present *Prodotiscus* for South West Africa, this an example collected at Andara on 17 August, 1979, by Mr M. O. E. Baddeley. In the discussion I pointed out that this particular specimen was darker and greener than eastern examples of *P. z. zambesiae*, the type-locality of which is Zomba, Malawi. In noting these differences, I overlooked the description of *Prodotiscus zambesiae lathburyi* Hall, 1958: Mt Moco, Huambo, Angola, the description of which agrees precisely with the characters of the Andara specimen when compared with Mozambique skins of the nominate race, namely darker head-top, greener, less golden, citrine dorsum, darker face, forethroat and
breast, and greener citrine edgings to the coverts and quills in the
wings.

Resulting from these findings, *P. z. zambesiæ* requires to be deleted
from the South West African list and *P. z. lathburyi* substituted. This
latter form is also new to the South African Sub-Region list. The range
of *lathburyi* is now seen to be much more extensive than sketched by
suggested by Traylor's treatment of the Angolan populations in his

The range of *P. z. lathburyi* appears to be western Angola from the
highlands of Huambo, south to the Okavango on the South West
Africa/Angola border. This adjustment to the race of *P. zambesiæ* to
be recognised for South West Africa further emphasises the strong
central Angolan bias exhibited by numerous bird species resident
along the course of the mid-Okavango.

*Hirundo semirufa* Sundevall, 1850

In my Okavango paper of 1980 (loc. cit., p. 103) I drew attention to size
and colour variation in the present nominate race of this swallow, the
type-locality of which is the Magaliesberg, south-western Transvaal.
Since preparing the aforementioned statement I have assembled and
studied all material available in southern African museums. This
enlarged panel of specimens tends to confirm that two size
differentiated populations exist as breeders in the South African Sub-
Region, but as much of the material currently available was collected
in the non-breeding season it has not been possible to define precise
ranges for the two forms, though the variation clearly polarises into a
small northern — large southern sequence rather than into a xeric
western — mesic eastern one as at first surmised. I have decided
against breaking down the nominate race at this stage, though I believe
that when good samples from single collecting points are obtained and
studied such action will prove desirable.

The tail-length as measured from the bifurcation of the innermost
pair of rectrices to the tip of the outer rectricial filament was found to
be the most reliable indicator of size and one which clearly varied
markedly in association with geography. The size variation in tail-
length shows up clearly in the following table:

<table>
<thead>
<tr>
<th>Region</th>
<th>Male</th>
<th>Female</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central South West Africa</td>
<td>11</td>
<td>35 - 167 (145,4),</td>
<td>8,79 mm</td>
</tr>
<tr>
<td>Botswana, northern Cape</td>
<td>5</td>
<td>121 - 128 (124,3),</td>
<td>2,59</td>
</tr>
<tr>
<td>Orange Free State and</td>
<td>14</td>
<td>122 - 135 (127,6),</td>
<td>4,17</td>
</tr>
<tr>
<td>Transvaal highveld</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transvaal lowveld,</td>
<td>13</td>
<td>97,5 - 124,5 (114,8),</td>
<td>8,31</td>
</tr>
<tr>
<td>Mozambique, Zimbabwe,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malawi, Zambia, Kavango</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Variation in the intensity of the ventral rufous was not found to be closely concordant with the variation in size demonstrated in the above table, but with eastern birds tending to be more vinaceous rufous below than in the case of breeders from the arid interior and west of the Sub-Region.

Material of *H. semirufa* from Zambia, while somewhat restricted, shows that very long tailed birds occur to the far north-east of that territory. A $\varnothing$ from 80 km N. N. E. of Mansa (Fort Rosebery) dated 24 November has a tail of 142,5, while a further $\delta$ from Luanshya dated 16 October has one of 155. Yet another from 35,5 km N. of Kasama has a tail of 154. On the other hand, a male from Mazabuka has a tail of only 112,5 mm. In the case of the Zambia sample, it would seem that breeders as well as migrant birds of both large and small sized forms from south of the Zambesi are involved. In the South African Sub-Region the species is a summer breeding resident, present mainly between mid-August — end March, with breeding at its height October - January.

In the event of *H. s. semirufa* being split into northern and southern races, Damaraland birds will require to be associated with nominate *semirufa*, with the new taxon being represented in South West Africa by the population which breeds along the Okavango and in the Caprivi Strip.

**Turdoides hartlaubii** (Bocage, 1868)

I believe it desirable to now follow qualified opinion in respect of considering that the southern *T. hartlaubii* (Bocage), 1868: Huila, Angola, and *T. leucopygius* (Rüppell), 1840: forest region along the coast of Abyssinia, are not conspecific (*vide* Wolters, *Die Vogelarten der Erde*, lief. 5, 1980, p. 398).

In the Okavango paper of 1980 (pp. 105, 106) I discussed a sample of six $\delta\varnothing$ collected on the Okavango R. by Mr Baddeley believing them to be intergrades between *T. h. hartlaubii* of the interior of Angola and *T. h. griseosquamatus* Clancey, 1974, described from the Botletle R., northern Botswana at 20° 30' S., 24° 30' E. Irwin, *Birds of Zimbabwe*, 1981, pp. 256, 257, has submitted that *griseosquamatus* does not seem distinguishable from nominate *hartlaubii*. As noted in my 1980 paper, sun induced fading and abrasion effected by constant contact with vegetation alters the appearance of this species markedly with the passage of time, and much material in collections is unsuitable for subspecific research.

While the specimen coverage of this species held in the Durban Museum is not extensive it does include paratypes of *T. h. griseosquamatus*, Mr Baddeley's Okavango R. series, single specimens from Kabuta in the Caprivi and from Mwinilunga in north-western Zambia, and two Angolan specimens from Fazenda do Cuito, Mt Moco, in Huambo. Comparison of the two Mt Moco birds with those from northern Botswana reveals a whole range of differences. In size
there is no significant difference, but in bill-length the examples of *griseosquamatus* are seen to have longer and on the whole finer and less stubby bills: culmen-length from skull 13.5 - 17, versus 11.5 and 11.75 mm in Angolan *hartlaubii*. Further differences between the western Angolan specimens and those of the subspecies *griseosquamatus* from northern Botswana and peripheral areas are the-blacker lores and orbits, greyer, less plain brownish, ear-coverts, and more silvered dorsal surfaces with the scale-like edges to the feathers of the hind neck and mantle greyer, the scaling carried further down the back than in the case of Angolan *hartlaubii*. Below, the forethroat is paler in series and the ground to the plastron lighter (Buffy Brown (pl. xi), versus Olive-Brown (same pl.)). The mid-ventral streaking is also less heavy and the entire medioventral area more extensively whitish.

On the basis of the differences in bill-length and the range of colour differences its seems that *T.h.griseosquamatus* is well-founded and not a synonym of nominate *T.hartlaubii*. The range of the said taxon appears to be centred on the arid Okavango Swamp region of northern Botswana, north of which it intergrades in its colour characters with *hartlaubii*, as demonstrated by the Okavango R. series and by a short sample of three skins from Kazungula near the Chobe/Zambesi confluence taken in 1967 by a Durban Museum party. None of the specimens in these samples of intergrades shows a shift towards the stubby bill of true *hartlaubii*. It is conceivable that the present taxon *hartlaubii*, with a range from western Angola, east to the upper Zambesi R. drainage, is divisible into western and eastern races on the basis of the bill-length variation, as the Mwinilunga specimen of nominate *hartlaubii* is certainly as long-billed as in the case of the norm of *griseosquamatus*. East of the upper Zambesi and north of the mid-Zambesi valley this babbler is represented by *T.h.ater* Friedmann, 1927: Kamaniola, Zaïre, at 2° 46' S., 29° 00' E. While Deignan in Peters’ *Check-List Birds of the World*, vol. x, 1964, p. 345, is followed in the range currently accorded *ater*, this may not be correct, and Zambian *ater* may in fact be undescribed. The characters of both size and dorsal colouration in Zambian birds do not correspond with those laid down for *ater* by its describer.

**Camaroptera stierlingi** (Reichenow, 1901)

In my 1980 Okavango paper I deferred placing the single ♀ taken at Andara in May, 1979, by Mr Baddeley in a subspecies. Two subspecies of this barred bush warbler occur in adjacent Zambia, and their ranges in that territory are discussed at some length by Benson *et al.*, *Birds of Zambia*, 1971, pp. 249, 250. The two taxa concerned are *C.s.irwini* Smithers and Paterson, 1956: Central Estates, Umvuma, Zimbabwe, and *C.s.buttoni* (White), 1947: Ndola, Zambia. *C.s.buttoni* is olivaceous brown over the upper-parts while *C.s.irwini* is rather lighter and distinctly more reddish. Traylor, in his 1963 *Check-list of
Angolan Birds, does not admit stierlingi from Angola, but it clearly occurs in the Miombo of the poorly explored south-eastern part of the said territory.

A careful re-examination of the Durban Museum’s series of Stierling’s Barred Bush Warbler suggests that the single South West African record should be associated with C.s.buttoni, which is a new subspecies to the South African Sub-Region list. Some specimens examined show that elements agreeing with both irwini and buttoni are present in the country to the north and north-east of L. Malawi in southern and south-eastern Tanzania. Benson et al., list irwini from as far north in the east of Zambia as Lundazi at 12° S. These indicators suggest that either irwini or buttoni may be synonymous with nominate C.stierlingi, the type-locality of which is Songea on the plateau of south-eastern Tanzania. The taxon irwini was originally described as subspecies of C.fasciolata (Smith) and not of stierlingi.

ACKNOWLEDGEMENTS

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