

DURBAN MUSEUM NOVITATES

Issued by the Durban Museum, Durban, South Africa

Vol. VII

ISSUED 4TH DECEMBER, 1964

Part 7

MISCELLANEOUS TAXONOMIC NOTES ON AFRICAN BIRDS XXII

by

P. A. CLANCEY

(Director, Durban Museum, Durban)

1. RACIAL VARIATION IN BENNETT'S WOODPECKER CAMPETHERA BENNETTII (SMITH)

Campethera bennettii (Smith), 1836: "about and beyond Kurrichaine", i.e., western Transvaal, was first discovered by the intrepid Dr. Andrew Smith during the course of his expedition for exploring central Africa from the Cape of Good Hope, and was described in the report of that pioneering effort. In South Africa, C.bennettii is one of the rarer woodpeckers, and it is only in the Brachystegia biome of Southern Rhodesia and areas to the north of the sub-continent that the species becomes tolerably common. At the present time two and sometimes three races are admitted by workers. Of two of these there is no doubt in the minds of most workers, though the ranges accorded both C.b.bennettii and C.b.capricorni Strickland have never been adequately worked out and vary according to the authority consulted. The populations strictly attributable to nominotypical C.bennettii are restricted to the eastern half of zoogeographical South Africa by workers who admit a northern race,

2. SUBSPECIATION IN THE BLACK TIT $PARUS\ NIGER$ VIEILLOT

In an earlier study reported in the *Ibis*, vol. c, 3, 1958, pp. 451, 452, the present author proposed to recognise two geographical races within the species *Parus niger* Vieillot, sens. strict., the forms being *P.n.niger* Vieillot, 1818: Sundays R., eastern Cape Province, and *P.n.xanthostomus* Shelley, 1892: Zambesi R., Moçambique. Hall, *Ibis*, vol. cii, 1, 1960, p. 117, expressed the view that the variation in the amount of white in the wings of adult Black Tits—the character employed by Clancey to arrange the populations of *P. niger* in two subspecific taxa—varied individually and variation in its extent had no geographical connection. Two independent studies of this question by assembled members of the S.A.O.S. List Committee resulted in the findings of Clancey (1958) being confirmed (see "Sixth Report of the S.A.O.S. List Committee", *Ostrich*, vol. xxxiii, 1, 1962, p. 17).

During the course of a recent visit to Salisbury, I was able to examine the Bechuanaland collection in the possession of Mr. Rudyerd Boulton, Director of the Atlantica Ecological Research Station, near Salisbury, which contained some three or four female specimens of P.niger which struck me at the time as being inordinately pallid and cinereous below. Even more recently I have been able to re-survey the variation exhibited by P.niger in the Durban Museum, utilizing the pooled specimen resources of several museums, some 396 specimens being critically examined. For the loan of material to augment that already in the Durban Museum I am grateful to the following institutions: East London Museum (through Mr. C. D. Quickelberge), Natal Museum, Pietermaritzburg, Transvaal Museum, Pretoria (through Mr. O. P. M. Prozesky), and the National Museum of Southern Rhodesia, Bulawayo (through Mr. M. P. Stuart Irwin). During the latter part of June, July and the first week of August, 1964, a party from the Durban Museum operated in the field in various parts of Matabeleland, Southern Rhodesia, collecting tits at every opportunity, and the material brought together has been of considerable value in throwing additional light on the incidence of pallid, greyish ventralled females in the dry interior of southern Africa.

Despite opinion to the contrary, *P.niger* shows quite marked geographical and surprisingly little individual variation within its widely distributed populations, the variation affecting corporal mass, as revealed by a study of variation in wing-length as an

indication of size, the amount of white displayed over the coverts and remiges of the wings, and in the extent to which the female is pigmented with melanin ventrally. In the nominate race of the south, which ranges from the eastern Cape, through Pondoland and Natal to Zululand and south-eastern Swaziland, the wings of 33 measure (coastal birds) 82-85, 99 76.5-81 mm., females are dark sooty brown or blackish slate below, and birds in basic plumage show black over the upper series of the lesser-coverts; the secondarycoverts are narrowly edged ventrally and more broadly tipped with white, and the white edging to the outer webs of the remiges exhibits a dusky shadow over the major secondaries and primaries, as opposed to the tertials. This condition results in the tertial stripe being more prominent in these austral populations than in those occurring further north. In studying the wings of P.niger, care must be taken to see that the specimens are in basic and not pre-basic dress, as in the latter plumage the vellowish edged secondaries (not tertials) and primaries of the juvenile plumage are retained along with the rectrices after the rest of the plumage has been moulted. Birds in pre-basic dress can usually be recognised by the faded and brownish tips to the remiges, which stand out in sharp relief to the deep black and white of the other wing-parts. Another factor which tends to make much available material unsuitable for study of this particular character is that in many museums the study material has been prepared by unskilled, primitive hands, and the ulna and radius have been crudely "stripped", resulting very often in the disarraying of the coverts and in general disfigurement of the whole facies of the wing. In arriving at my decisions I have utilized mainly material which I have personally collected in different parts of southern Africa, or which has been prepared under my immediate supervision.

To the north of the range of *P.n.niger*, from eastern Swaziland and the Maputo district, of Sul do Save, southern Mozambique, a demonstrable shift occurs in some of the variable characters. The wings of birds in basic dress show much more white. The upper series of lesser-coverts is less extensively black and more white, and the white edging and tipping to the secondary coverts is broader, the black on the innermost bank of feathers being completely obscured by white, resulting in the wing exhibiting a large white patch. In the case of the remiges, the margins to the primaries and secondaries are uniformly white with the broad lateral edging to the tertials, the dusky shadow present in *P.n.niger* absent.

In my 1958 report I showed that birds with more extensive white

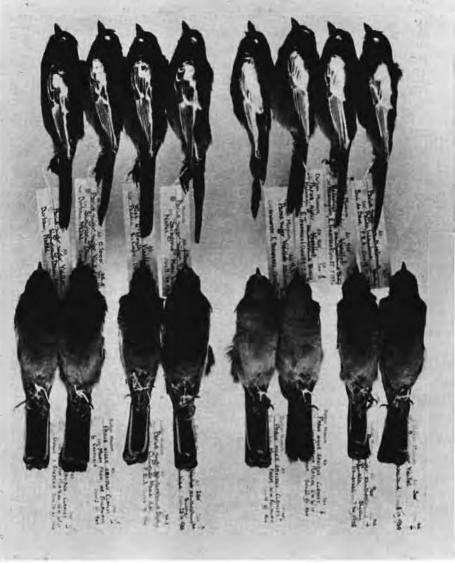
in the wings in basic dress ranged from north-eastern Swaziland, the Transvaal and southern Moçambique to the eastern and northern Bechuanaland Protectorate, Southern Rhodesia, parts of Northern Rhodesia, southern Nyasaland and northern Moçambique (to about the Lurio R.), placing all these populations in a new taxon, *P.n. xanthostomus*.

With the much more extensive material now available from this vast region. I find that there is more variation of significance than realized at the time of my earlier study. The populations of the eastern tropical littoral of southern Africa, i.e., from the eastern Transvaal lowveld and the region of Delagoa Bay northwards in Moçambique, have wings in 33.80-86, 99.77-82 mm., whereas in the birds of the plateau to the west, particularly from western Southern Rhodesia, Bechuanaland, and south-western Northern Rhodesia, the birds are distinctly larger, the wings of 33 84-91, ΩΩ 80-86 mm. While this variation in size is statistically significant, no arrangement of lowland and plateau populations into races on the basis of this character alone is feasible, owing to the wide range of overlap, and the rather irregular pattern presented by this variable in association with the more important criterion of variation in the colouration of the ventral surfaces of females, with which I will now deal.

As noted in the introductory section to this report, females of P.niger show variation in the extent to which the underparts are pigmented. In a critical study of the fine panel of Southern Rhodesian Black Tits available for research it was observed that a preponderance of females from the low rainfall areas of western Matabeleland were distinctly lighter and greyer, often quite bluish grey in freshly moulted condition, much less brown and sooty than those from Mashonaland, Northern Rhodesia, and the eastern littoral plain. While the material of female P. niger in the National Museum from parts of Bechuanaland noted for their plethora of discrete griseous races is inconclusive, specimens from critical areas in Bechuanaland in the collection of the Atlantica Ecological Research Station show, when studied in conjunction with the extensive western Matabeleland material available, that the populations of P.niger resident in northern and eastern Bechuanaland, the western Transvaal, western Southern Rhodesia and the Caprivi Strip, of north-eastern South-West Africa, must be treated as a distinct race, separable both from P.n.niger and P.n.xanthostomus on the basis of the lighter and clearer grey ventral surface of females.

In the populations resident in the desertic interior of southern Africa and immediately adjacent areas, the males likewise show demonstrable divergent characters in comparison with those of the populations resident in more mesic or hygric biomes. In the populations of *P.n.ravidus*, described below, the adult males likewise reveal the general trend towards greyness in the plumage more lucidly exhibited in females by revealing a marked extension of the greyish wash over the flanks and lateral body surfaces, the black over the medio-ventral and caudad parts being restricted to an ill-defined abdominal stripe, adumbrating a condition found in various non-melanistic species of *Parus*, such as *P.major*, *P.afer*, *P.griseiventris*, etc. (see photo).

In deciding to admit three races of P.niger in our formal grouping of the populations into races, the exact type-locality of Shelley's Parus xanthostomus requires to be ascertained. Shelley, Bull, Brit. Orn. Club, vol. i, 1, 1892, p. 6, gives the provenance of his new species, P. xanthostomus, as "Zambesia", but in his Birds of Africa, vol. ii, 1900, p. 236, states that the Type was "procured by (Dr.) Bradshaw during his travels between the Limpopo and Zambesi rivers, and when it passed into my (Shelley's) collection I noted it as coming from the Zambesi on account of the number on the label attached to that specimen." The so-called Yellow-mouthed Tit is simply based on a juvenile example of P.niger, the "specific" characters being those of immaturity, but the name is available for the northern populations of the Black Tit with the ventral surfaces in females and juveniles sooty brown or slaty black, as revealed by the Grönvold coloured figure in the Birds of Africa, vol. ii, pl. x, fig. 1. Dr. Bradshaw travelled widely in the western parts of Southern Rhodesia and eastern and northern Bechuanaland, and struck the Zambesi R. valley on its middle reaches, probably near the present town of Livingstone, the Victoria Falls, or towards the Chobe-Zambesi confluence, but as far as can be ascertained never collected in the district of Zambesia, in the southern part of northern Portuguese East Africa. I believe, therefore, that we should restrict the type-locality of P.n.xanthostomus to the Victoria Falls sector of the Zambesi R. Irwin, Bull. Brit. Orn. Club, vol. lxxvii, 1, 1957, p. 9, shows that most of Bradshaw's birds were taken south of the Zambesi R., in the Makalaka country, in the south-west of present Southern Rhodesia, the skins not being labelled at the time of collecting. The unlabelled collection was sold as a job-lot from the "Zambesi R." and in the interests of stability in the nomenclature of P.niger subspp., I believe we should acknowledge that the Type



Parus niger Vieillot, sens strict., races

Upper series; Left 33 Parus niger niger Vieillot

Right 33 Parus niger xanthostomus Shelley
Lower series; Extreme left 33 Parus niger ravidus Clancey
Centre left 33 Parus niger xanthostomus Shelley
Centre right 22 Parus niger ravidus Clancey

Extreme right Parus niger xanthostomus Shelley

In the upper series note greater extent of white over the wings in the case of P.n.xanthostomus. In the lower series, the extensive grey flanks and adumbrated abdominal stripe in P.n.ravidus 33 should be noted. The light greyish ventral surface of SQ P.n ravidus likewise shows up clearly in the photograph (centre right pair) when compared with P.n xanthostomus (extreme right). All specimens in Durban Museum collection.

(Photo: Dennis Cleaver)

of *P.xanthostomus* came from the Zambesi R. and not elsewhere. A series of females from riverine cover in the Victoria Falls area shows that this adjustment of the type-locality leaves the name available for the northern populations in which the female is predominantly sooty brown and not light bluish grey underneath.

The populations of the Black Tit can be arranged in three geographical races, the nomenclature, characters and ranges of which are as hereunder given:

(a) Parus niger niger Vieillot

Parus niger Vieillot, Nouv. Dict.d'Hist.Nat., vol. xx, 1818, p. 325: "Africa". Type locality restricted to Sundays River, eastern Cape Province, ex Levaillant, Hist.Nat.Ois.d'Afr., vol. iii, 1805, pl. 137, figs. 1 and 2 (La Mésange noire).

Male with head all round and entire upperparts deep Blackish Slate (Ridgway, Color Standards and Color Nomenclature, 1912, pl. liii) with distinct bluish sheen. Under-parts similar, but greyish over the caudad surfaces of the flanks, and under tail-coverts black, broadly fringed with white. Wings with lower lesser- and median-coverts white; secondary-coverts narrowly fringed and rather more broadly tipped with white; remiges edged with greyish white, the tertials broadly margined on outer webs with pure white.

Female much as in the male, but with a duller sheen to the upperparts, and with face and under-parts dull sooty brown, the breast laterally blackish (breast colouration about Mouse Grey or Deep Mouse Grey (pl. li). In pristine condition often with a leaden bloom.

Measurements: Wings of 15 Natal low elevation 33 82-85 (83.7), tails 69-73.5 (70.8) wings of 10 ?? ? 76.5-81 (79.0), tails 64.5-71 (67.5) mm.

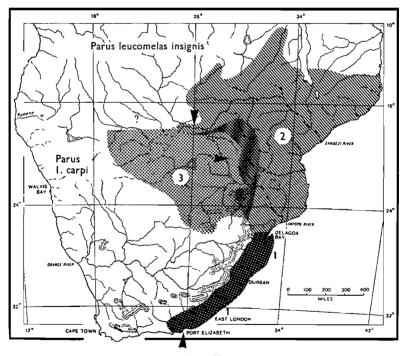
Material examined: 90. Eastern Cape Province, 38 (Fish River mouth, 4; Committees, Albany, 3; Grahamstown, 4; Debe Nek, 2; Kei Road, 2; Fort Jackson, 2; Bathurst, 3; Elliotdale, 1; Fort Beaufort, 2; East London, 4; Komgha, 1; Kei Bridge, 3; Peddie, 1; Cala, Tembuland, 1; Mt. Ayliff, 1; Ngqeleni, 1; Port St. Johns, 3). Natal and Zululand, 47 (near Scottburgh, 8; Nungwana Falls, Umbumbulu, 1; 10 m. S.W. of Richmond, 3; Ingeli Forest, near Harding, 1; Durban, 1; Inanda, Durban, 3; Hillcrest district, 8; Pietermaritzburg district, 14; Mooi River, 3; Estcourt, 1; Pongola R. at Candover, 2; Ingwavuma, Lebombo Mts., 1; Tschemula Pont, Pon-

gola R., 1). S.E. Swaziland, 5 (Lubuli, near Nsoko, 2; Sipofaneni, 3 (intergrades)).

Type: None. Based on the Levaillant reference cited.

Range: The eastern Cape Province from the valleys of the Sundays and Gamtoos Rivers, north-eastwards through Pondoland and East Griqualand to Natal, Zululand and the southern part of eastern Swaziland. Intergrades with P.n.xanthostomus in eastern Swaziland and the Maputo district, Sul do Save, Moçambique.

Remarks: This race shows some size variation in association with altitude, as revealed in a series of measurements of Natal birds. Coastal 33 have wings 82-85, two adult males from Mooi River, at c.4,500 ft. a.s.l., having wings 87 and 89 mm.



Map II

Sketch-map showing the ranges of the three races of the Black Tit Parus niger Vieillot

- 1. Parus niger niger Vieillot
- 2. Parus niger xanthostomus Shelley
- 3. Parus niger ravidus Clancey

Type-localities are indicated by means of black arrowheads. The cross-hatching between "2" and "3" indicates zone of intergradation.

(b) Parus niger xanthostomus Shelley

Parus xanthostomus Shelley, Bull.Brit.Orn.Club, vol. i, 1, 1892, p. 6: Zambesia. Type-locality restricted to the Victoria Falls, Zambesi R., Northern/Southern Rhodesia border (see above).

Male and female in basic dress showing more white over the wings than in *P.n.niger*. White over lesser-coverts more extensive, and white edging and tipping to secondary-coverts broader, the white on the innermost bank of feathers so broad as to completely hide the black, forming a distinct white patch; in remiges, primaries and secondaries uniformly white on the margin of the outer web with the tertials, not distinctly greyish in contrast to the broad white lateral tertial stripe. Female inclined to be a little less dark sooty brown below in series.

Measurements: Wings of 20 33 80-88 (84.7), tails 66.5-74.5 (71.5) wings of 20 Ω 77-82 (79.9), tails 64-72.5 (68.3) mm. (eastern Transvaal, Moçambique and southern Nyasaland birds measured).

Material examined: 205. Eastern Swaziland, 12 (Big Bend area, 5; Stegi district, 7). Southern Portuguese East Africa, 22 (Bela Vista (intergrades), 4; Manhica, 2; Chimonzo, Macia, 2; Panda, Inhambane, 9; Mzimbiti, near Beira, 2; Chineziwa, 60 m. N. of Beira, 1; Msussa, Zambesi R., 1; Messenguese, Zambesi R., 1). Nyasaland, 8 (Chididi Hills, 1; Chiromo, 2; Kanyimbe, Tangadzi, 2; Bwangu, Tangadzi, 1; Masona, Port Herald, 1; Mlakah Hill (not traced), 1). Transvaal, 23 (Newington, 20; Louws Creek, Barberton, 1; Hanglipberg at 24° 20′ S., 28° 35′ E., 2). Southern Rhodesia, 92 (Birchenough Bridge, 5; Chipinda Pools, 1; Sabi-Lundi confluence, 5; Banket, 1; Bindura, 1; Headlands, 1; Wedza, 2; Rusape, 3; Sabi R., 1; Hartley, 1; Sentinel Ranch, near Beit Bridge, 14; Selukwe, 7; Nuanetsi R., 12 (some near P.n.ravidus); Lonely Mine, 3; Gwelo R., 1; 30 m. N.W. of Que Que, 1; Ruenya R., Chikurro Res., 1; Chilo, Shashi R., 1; Urungwe R., 2; Ngadi, Semokwe Res., 1; Hwali R., 2; Redbank, 1; Victoria Falls, 12; Makwa, Zambesi R., 2; Nampini, Zambesi, 4; Chirundu, 3; Mlibisi-Siambolo confluence, 1; Gwaai Res., 3). Northern Rhodesia, 44 (Nangweshi, Barotseland, 1; Mashi, Barotseland, 2; Katima Mulilo, 1; Mambova, 2; Livingstone, 2; Sesheke, 1; Chiawa, 1; Feira, 2; Maweni, 1; Chiolola, 1; Kafue R. (mainly Chunga), 4; Mulanga, 1; Kalomo, 1; Nakabula, 2; Ngoma, 2; Choma, 3; Munyumbwe (16° 39′ S., 27° 47′ E.), 1; Namwala, 1; Lochinvar, 1; Rufunsa, 1; Chilanga, 5; Serenje, 2; Mpika, Broken Hill, 1; Katete, 1; Fort Jameson, 1). Northern Bechuanaland,

4 (Kasane, Chobe R., 2 (21st October, 1953); Mabeleapudi, S.W. of L. Ngami, 2 (\mathcal{J}^{\square} dated 9th May, 1930. ? Wanderers). (*Note:* Some of the samples from Southern Rhodesian localities clearly show the influence of *P.n.ravidus*, while in the case of $\mathcal{J}_{\mathcal{J}}$ it has not always been possible to allocate worn or badly prepared specimens with certainty as to race).

Type: In the British Museum (Nat. Hist.), South Kensington, London. Formerly in the Shelley collection ex Bradshaw.

Range: Extends from north-eastern Swaziland and the eastern and northern Transvaal to the midlands and eastern districts of Southern Rhodesia, Moçambique from Delagoa Bay northwards to about the Lurio River in the north of the territory, southern Nyasaland, and Northern Rhodesia (mainly in the valleys of the Luangawa, Kafue and Zambesi), ranging to west Barotseland, Northern Bechuanaland on the Chobe (Kasane), and, presumably, the adjacent districts of the Caprivi Strip and Angola in riverine cover.

Remarks: Intergradation between P.n.xanthostomus and P.n. ravidus occurs over a wide area in Matabeleland, and greyish ventralled females occur in populations as far east as the middle Nuanetsi R. The influence of P.n.ravidus is also observable in the populations of south-western Northern Rhodesia in dry woodland associations as opposed to riverine cover, and there may be some interdigitation or fragmentation of the ranges of the races P.n. xanthostomus and P.n.ravidus along ecological lines in this region.

As in the case of Natal *P.n.niger*, there is some size variation within the present race in association with altitude, eastern littoral males reaching the upper limits of wing-length at 86, whereas western plateau birds occasionally range to as much as 92 mm. There is also some variation in bill mass, lower Zambesi R. and southern Nyasaland birds having rather finer and less swollen bills in series when compared with high elevation examples, but wide overlap in both variables precludes any formal subspecific recognition being accorded such variation.

(c) Parus niger ravidus, subsp. nov.

Type: ♀, adult. Mkien Farm at 19° 57′ S., 28° 36′ E., near Bulawayo, Southern Rhodesia. 14th July, 1964. Durban Museum Expedition. In the collection of the Durban Museum. D.M.Reg. No. 16359.

Diagnosis: Similar to P.n.xanthostomus in the extent of the white in the wings, but which is not always quite so well developed, and like the plateau populations in size, i.e., ranging larger in size than the littoral populations and P.n.niger, but male differs from either of the aforementioned taxa in having a greater amount of greyish wash to the flanks and lateral body surfaces, the black over the medial and caudad ventral surfaces tending to form an abdominal stripe. Subspecific differences better marked in the female, which has the face and entire under surface distinctly lighter and more bluish or leaden grey in colour, less brownish or sooty than in either P.n.xanthostomus or P.n.niger. (Neutral/Deep Neutral Gray (pl. liii)).

Measurements: Wings of 20 33 84-91.5 (87.3), tails 74-78 (75.6), wings of 10 99 81-85.5 (83.1), tails 71-75 (73.3) mm.

Material examined: 102. Western Southern Rhodesia, 75 (Bulawayo district, 24; Syringa, 6; Matopos, 11; Sawmills, 2; Umguza Forest Reserve, 3; Nkai, 1; Fort Tuli, 1; Turgwe R., 2; Shangani R., 1; Matetsi, 1; Charama Plateau, c. 15-40 m. W. of Gokwe, 17; Malimasimbi, W. of Charama Plateau at 18° 20′ S., 28° 12′ E., 7). Bechuanaland Protectorate, 19 (Bathoen Dam, Kanye, 1; Francistown, 3; Nata, 3; Jehundi Well, 1; Sedibe, 1; Old Tati, 1; Tsane, 4; Kedia, Lake Dow, 1; Maun, 1; Toteng, 1; Nokaneng, 1; Tsodilo Hills, 1). Transvaal, 8 (Crocodile R., Pretoria, 1; Oliphants R., Pretoria, 1; Waterberg, 4; Ellisras, 1; Derdepoort at 24° 53′ S., 26° 10′ E., 1).

Measurements of the Type: Wing (flattened) 83, culmen from base 13, tarsus 19.5, tail 76 mm.

Range: From south-eastern Angola and the adjacent Caprivi Strip and north-eastern South-West Africa to Ngamiland, south-eastwards to the Makarikari and Lake Dow areas and the eastern districts of Bechuanaland, south certainly as far as Kanye, the dry western Transvaal, and low rainfall areas of western Matabeleland. In the north of Matabeleland east to the Sebungwe in dry Brachystegia woodland on Kalahari sand. Intergrades with P.n.xanthostomus to the east and north-east of its stated range.

Remarks: The female depicted in Roberts, Birds of South Africa, 1940, pl. xxxiv, is based on an example of P.n.ravidus.

The trinomial name is from the Latin ravidus, tending to greyness,

greyish, in allusion to the greyness of the ventral parts, particularly in females.

Note

For the purpose of this revision, the forms of the Parus leucomelas Rüppell group of black tits are considered to be specifically discrete from those assembled in P.niger, sens.strict. In south-central and south-western Africa P.l.insignis Cabanis, 1880: Malanje, Angola, and P.l.carpi Macdonald and Hall, 1957; Warmquelle, Kaokoveld, South-West Africa, replace P.niger subspp. to the west and north. In the forms of the P.leucomelas assemblage the sexes are virtually alike, whereas in P.niger the female is greyer or browner over the face and entire ventral surface, which parts are glossed blue-black in female P.leucomelas subspp. There is also a reduction or loss of white in the tail, and in P.l.carpi a marked reduction in size and bill mass.

In proposing P.l.carpi, Macdonald and Hall, vide Ann.Transv. Mus., vol. xxiii, 1, 1957, pp. 32, 33, describe it as a race of P.niger, though it is clearly a member of the P.leucomelas coterie of races, the under-parts of females being glossed black in fresh condition, though the face in two females in the Durban Museum is distinctly browner than either the upper- or under-parts. Traylor, Check-list of Angolan Birds, 1963, p. 126, following Hall, loc. cit., continues to keep carpi as a race of P.niger and not P.leucomelas, though the form rightly belongs with the P.leucomelas group.

3. ON THE SOUTH AFRICAN RACES OF THE LONG-BILLED PIPIT ANTHUS SIMILIS JERDON

When I reviewed the South African races of the Long-billed Pipit Anthus similis Jerdon in 1956 (vide Durban Mus.Novit., vol. iv, 17, 1956, pp. 284-288) limited material compelled me to follow convention in placing the Southern Rhodesian populations as A.s.nicholsoni Sharpe, 1884: Sigonell = Makwassi, near Wolmaransstad, south-western Transvaal (see also Smithers et al., Check List Birds Southern Rhodesia, 1957, p. 97). In the same revision, I placed a single dark coloured specimen from Gemsbok Pan, Bechuanaland Protectorate, as representing A.s.nyassae Neumann, 1906: between Sangesi and Songea, Southern Province, Tanganyika, noting that White and Winterbottom, Check List Birds Northern Rhodesia, 1949, p. 77, had suggested that Barotseland birds were deserving of further