



DURBAN MUSEUM NOVITATES

Issued by the Durban Museum, Durban, South Africa

Vol. V

ISSUED 20TH DECEMBER, 1959

Part 18

MISCELLANEOUS TAXONOMIC NOTES ON AFRICAN BIRDS XIV

by

P. A. CLANCEY

(Director, Durban Museum, Durban)

1. GEOGRAPHICAL VARIATION IN THE NAMAQUA SAND- GROUSE *PTEROCLES NAMAQUA* (GMELIN)

The Namaqua Sandgrouse *Pterocles namaqua* (Gmelin), 1789: Namaqua country, is a locally common, gregarious species of the desertic regions of south-western Africa. While in the main resident, the populations in many parts of the species' range are given to movement in the non-breeding season, the full nature of which is still not known. The American systematist Rudolphe Mayer de Schauensee, *Proceedings of the Academy of Natural Sciences of Philadelphia*, vol. lxxxiii, 1931, p. 441, was the first worker to demonstrate the existence of subspecific variation in the species, when he arranged the populations into two races (*P.n.namaqua* and *P.n.ngami* de Schauensee, 1931: 25 miles north-west of Lake Ngami, northern Bechuanaland Protectorate) on the basis of a study of the totally inadequate material of five skins (*sic!*). The recommendations of de Schauensee have not been widely accepted, and following the opinion of White, *Ibis*, vol. 93, 3, 1951, p. 462,

Range: Natal and Zululand from about the basin of the Tugela River (once from as far south as the Umgeni River (Shelley)), eastern Swaziland, eastern and northern Transvaal, eastern and south-eastern Southern Rhodesia, southern Portuguese East Africa (on the Zambesi River extending to about Victoria Falls), southern Nyasaland and the southern parts of northern Portuguese East Africa. Intergrades to the west of its stated range with *T.f.leucomelas*.

Remarks: The name is derived from the Latin *parvus*, small, little, in recognition of the reduced size of the new race in comparison with the other South African form, *T.f.leucomelas*.

3. NOTES ON THE SOUTH AFRICAN SUBSPECIES OF *LYBIUS LEUCOMELAS* (BODDAERT)

The geographical variation exhibited by the South African sub-continental populations of the Pied Barbet *Lybius leucomelas* (Boddaert) is highly complex, affecting both plumage colouration and physical proportions. Roberts, *Birds of South Africa*, 1940, p. 177, admits no less than six races, as does Vincent, *Check List of the Birds of South Africa*, 1952, pp. 48, 49, while McLachlan and Liversidge, *Roberts' Birds of South Africa*, 1957, p. 230, recognise five. Winterbottom, *Annals of the South African Museum*, vol. xlv, 3, 1958, pp. 69-72, reduces the number of recognised forms in South Africa to three: *L.l.leucomelas* (Boddaert), 1783: Beaufort West, Cape Province, *L.l.namaqua* (Sclater), 1922: Klipfontein, Little Namaqualand, and *L.l.zuluensis* (Roberts), 1931: Mkuzi River, Zululand. Of the races admitted by Vincent, Winterbottom makes *L.l.centralis* (Roberts), 1932: Rustenburg, western Transvaal, *L.l.nkatiensis* (Roberts), 1932: N'kate, Bechuanaland, and *L.l.affinis* (Shelley), 1879: Weenen, Natal, synonyms of *L.l.leucomelas*. Macdonald, *Contribution to the Ornithology of Western South Africa*, 1957, pp. 88-89, also discusses the variation in the western populations of South African *L.leucomelas*, placing South-West African birds with the nominate race (*sic!*). Study of the large series of the Pied Barbet in the collection of the Durban Museum suggests that Winterbottom has gone too far in the lumping of races, and that *L.l.centralis* is not a synonym of *L.l.leucomelas*. The validity of *L.l.affinis* of the elevated interior of Natal is still not satisfactorily settled and must await the production of a really adequate series in fresh dress. Such examples of *L.l.affinis* as I have studied are like *L.l.leucomelas* in size, but have the yellow under-parts of the eastern littoral form, *L.l.zuluensis*.

In *L.leucomelas* the largest sized birds are found in the south of the species' range. Populations the birds of which have wings measuring from 83-88 mm. range throughout the Cape Province to the south of the Orange River, and in the Orange Free State, Natal (interior) and highveld of the Transvaal. In this group of populations there is marked variation in the colouration of the median ventral surface, and in the western and south-western populations the lower throat, breast and abdomen are variably spotted with drop-like spots of black on a dull white ground, and the flanks are strongly streaked. To such birds the name *L.l.namaqua* is currently applied. East of the range of *L.l.namaqua*, in the Cape Province, occur birds in which the median under-parts are an unspotted dull white, though the flanks retain much of the heavy streaking characteristic of *L.l.namaqua*. To such birds the name *L.l.leucomelas* is attached. While it is perfectly true that the name *leucomelas* was given by Boddaert to what appears to have been a plain breasted bird, the specimen so named need not have come from an eastern Cape Province population as postulated by Winterbottom, as it has now been determined that white breasted birds occur in the south-western Cape population. Winterbottom, *loc. cit.*, restricts the type-locality of *L.l.leucomelas* to Beaufort West, in the south central Cape Province. The reason for choosing such a type-locality for the nominate form is not clear, as it has been recorded by workers that a sample of the population at Deelfontein, north-east of Beaufort West, contains examples with spotted under-parts, and the Durban Museum possesses a series of typical *L.l.namaqua* from Mostertshoek, Tarkastad district, eastern Cape Province (see Clancey, *Ostrich*, vol. xxv, 1, 1954, p. 40, pl. ii). The ranges of the spotted breasted and white breasted forms of the Pied Barbet in the Cape Province appear on present data to interdigitate to a perplexing degree, and there is actually much merit in the suggestion made many years ago by the late Dr. Austin Roberts that Sclater, in describing his *L.l.namaqua*, had actually renamed the nominate race. I do not believe it possible to relate the presence or absence of spots on the median ventral surface of western, south-western, southern, central and west central Cape Province *L.leucomelas* with any degree of exactitude to geography or the disposition of botanical zones. I submit that it will be necessary to recognise that in *L.l.namaqua* the character of the presence of drop-like spots over the lower throat, breast and abdomen is not an entirely constant one.

North-east, east and south-east of the range of *L.l.namaqua* occur populations the birds of which are closely comparable except for the absence of the ventral spotting. As observed above, such

populations are currently called *L.l.leucomelas*, but in the event of the view which I have just expressed being confirmed and adopted by workers, *i.e.*, that the spotted under surface in *L.l.namaqua* is not an entirely constant character, it will be necessary to sink the name *namaqua* (1922) into the synonymy of the earlier *leucomelas* (1783), and to call the eastern Cape birds *L.l.affinis*, as Vincent, *loc. cit.*, has done. Birds agreeing with those of the eastern Cape range throughout Griqualand West (northern Cape), the Orange Free State and the highveld of the Transvaal.

In Natal the populations are very similar but consist of examples with the underparts usually tinged with yellowish. A buffish yellow suffusion to an unspotted ventral surface and smaller overall dimensions are the characters utilized by workers to differentiate the eastern littoral *L.l.zuluensis* from its racial congeners, but in size Natal birds are the same as those from the west and north-west. The view here held is that the population of the Weenen district, Natal, topotypical of *L.l.affinis*, is no more than an intergrading one between the large-sized, whitish breasted birds (*L.l.leucomelas*) and the small-sized, yellow breasted *L.l.zuluensis*. However, I defer making a formal pronouncement on the validity of the Natal race until such time as a more comprehensive material becomes available. In the event of the Natal populations (*affinis*) being shown to warrant nomenclatural recognition and the views on the synonymous status of the names *leucomelas* and *namaqua* being confirmed and adopted, it will be necessary to give consideration to the introduction of a new name for the populations currently called *L.l.leucomelas* resident in the eastern Cape, Griqualand West (northern Cape), Orange Free State and the Transvaal highveld.

North and east of the distribution of the populations the flattened wings of which measure 83-88 mm., occur much smaller birds. In a series of seventeen specimens from South-West Africa (northern Great Namaqualand and Damaraland) in the collection of the Durban Museum the wings measure 75-82 mm. Three from Southern Rhodesia (Gwaai Reserve, Bulawayo and Birchenough Bridge) have wings 77, 78.5 and 80 mm. In the eastern lowlands, similar small-sized birds are to be found, a series of thirteen skins in the Durban Museum from Swaziland, eastern Transvaal and southern Portuguese East Africa having wings 73-80.5 mm. The populations of small-sized birds are divisible into two races on the basis of the colouration of the ventral surfaces: in the eastern lowland populations the under-parts are strongly buffish yellow tinged, those of the interior and west white with a slight greenish overlay. For

the eastern yellow breasted birds the name *L.l.zuluensis* is available and for the others *L.l.centralis*, with *L.l.nkatiensis* a pure synonym. A single Rustenburg paratype of *L.l.centralis* in the Durban Museum has a wing of 78 mm., showing that this name is correctly applied to the small-sized, whitish breasted populations of the interior and west of the South African sub-continent.

Winterbottom, *loc. cit.*, without discussing the structural variation and using only breast colour as a character for racial differentiation makes *L.l.centralis* a synonym of *L.l.leucomelas*. Our material indicates that this is not so. I find *L.l.centralis* to be significantly smaller in all its critical measurements (wings ♂♀ 75-82, culmens 18-20 (22), tails 43-49, as against 83-86.5, 20-24.5, 49-54 mm. in *L.l.leucomelas*). The bill is appreciably smaller, finer and less strongly notched. On the upper-parts it is slightly less deep red on the forehead, is not such a deep blue-black on the crown, hind-neck and upper back, has broader white fringes to the scapulars, and is more copiously mottled with yellow over the lower back and rump. In *L.l.leucomelas*, as in *L.l.namaqua*, the yellow of the lower back and rump is flanked and constricted by black, which feature is absent in *L.l.centralis*. On the under-parts *L.l.centralis* is whiter than *L.l.leucomelas*, has the black throat patch more sharply defined, and the flanks are almost unstreaked. On the basis of all these differences I conclude that *L.l.centralis* is a comparatively well-marked race.

While much work still remains to be done on the status of the Cape and Natal populations, it seems that four races can be admitted in our formal arrangement of the populations, as follows:

(a) **Lybius leucomelas namaqua** (Sclater), 1922: Klipfontein, Little Namaqualand, Cape Province.

Forehead dull red; crown, hind-neck and upper back glossy blue-black; lower back and rump lemon yellow, flanked and constricted into a dorsal streak by lateral black patches. On under-parts dull white with variable overlay of pale green; lower throat, breast and abdomen usually with variable admixture of drop-like blackish spots; flanks strongly streaked with black. Wings ♂♀ 83-88, culmens 20-23, tails 49-54 mm.

Range: From Little Namaqualand and the western and south-western Cape, eastwards through the karroo districts to about Deelfontein in the north-east and Tarkastad in the south-east. Intergrades to the north of its range with *L.l.centralis* and to the east with the following race.

Note: Birds with the ventral characters of the eastern *L.l.leucomelas* have been obtained within the range of *L.l.namaqua* as defined above.

(b) **Lybius leucomelas leucomelas** (Boddaert), 1783: Cape of Good Hope. Restricted to Beaufort West, Cape Province.

Similar to *L.l.namaqua* but the median ventral surface without the drop-like black spots present in that race. Similar in size.

Range: North-east (western limits about Prieska), east and south-east of the range of *L.l.namaqua* in the Cape Province, Griqualand West, northern Cape, Orange Free State, Transvaal highveld and Natal.

Note: The choice of Beaufort West as the type-locality of this race seems to be most unsatisfactory, and the question should be reviewed. Natal birds are more yellowish below, and further study may warrant their separation under the name *L.l.affinis*.

(c) **Lybius leucomelas centralis** (Roberts), 1932: Rustenburg, western Transvaal.

Similar to *L.l.leucomelas*, but red of forehead slightly paler; crown, hind-neck and upper back less deep blue-black; scapulars with broader white fringes; lower back and rump not black laterally, thereby exhibiting more lemon yellow. On under-parts, black throat patch more sharply defined; rest of ventral surface whiter than in *L.l.leucomelas*, and with the flanks usually unstreaked. Smaller in size, and with a weaker and less strongly notched bill. Wings ♂♀ 75-82, culmens 18-20 (22), tails 43-49 mm.

Range: Districts of Bushmanland and northern Kenhardt, north-western Cape Province, South-West Africa, northern Cape Province (except Griqualand West), Bechuanaland Protectorate, western and northern Transvaal, western Southern Rhodesia, southern and south-western Angola and southern Barotseland, Northern Rhodesia.

(d) **Lybius leucomelas zuluensis** (Roberts), 1931: Mkuzi River, north-eastern Zululand.

Similar to *L.l.centralis* but with the under surface washed with buffish yellow. Averaging a trifle smaller. Wings ♂♀ 73-80.5 mm.

Range: Zululand, eastern Swaziland, eastern and north-eastern Transvaal, Sul do Save, southern Portuguese East Africa, and south-eastern Southern Rhodesia (one in Durban Museum from as far west as Bulawayo (June, 1955), while another in our collection from Birchenough Bridge is *L.l.centralis* (see also Smithers *et alia*, *Occ. Papers Nat. Mus. S.R.*, No. 23B, 1959, p. 241).