

## SHORT NOTE

**On *Pterocles namaqua* (Gmelin)  
in South West Africa**

by

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In recent years Mr J. E. W. Dixon, Principal Nature Conservator, Etosha National Park, has been engaged on an in-depth study of the Namaqua sandgrouse *Pterocles namaqua* (Gmelin) in the northern half of South West Africa. During the early course of this work he collected numerous samples within the confines of both the Namib Desert and Etosha National Parks. Mr Dixon has now kindly placed at my disposal much of the preserved material, inviting my comments on the subspecies involved. The material from the Etosha region is particularly interesting, as the specimens from this arid region represent the largest corpus of skins of the northern subspecies of the two endemic to the territory.

The American specialist on the birds of Colombia, R. M. de Schauensee (1931), was the first author to show that the Namaqua sandgrouse was a polytypic species when he proposed *P. n. ngami* from north-western Botswana. White (1951; 1965), for no very cogent reason, did not accept de Schauensee's northern subspecies, while Clancey (1959, 1959a), in accepting that the species comprised subspecies, initially declined to admit *P. n. ngami* because of the inadequacy of comparative material, treating *ngami* as a tentative synonym of nominate *P. namaqua* (Gmelin), 1789: lower Orange R., north-western Cape. At the same time he recognised the far southern elements as a darker, less xeric, race under the name *P. n. furvus* Clancey, 1959: 16 km NE of Van Wyksvlei, north-central Cape. In three later contributions by Clancey (1965, 1967, 1967a), this same author finally admitted *ngami*, establishing its range as the Kaokoveld and the Etosha region, east to northern Botswana as far east as the Makarikari Salt Pan. Following this lead, *P. n. ngami* was accorded recognition in the South West African *Checklist* (Winterbottom, 1971), although it was earlier admitted for Botswana and the Caprivi Strip by Smithers (1964).

In 1940, Hoesch and Niethammer demonstrated that the Etosha population probably represented an undescribed race on the basis of material from Onguma. Later, Macdonald (1957) commented that skins also from Onguma in the British Museum (Nat. Hist.), Tring, collection were not separable from specimens from further south in South West Africa. A careful re-examination of the subspecifically significant variation in this sandgrouse within the limits of South West Africa on the basis of Mr Dixon's two large samples from the Namib Desert and the Etosha National Park, augmented by the material from the same territory in the collections of the Durban and Transvaal Museums, confirms the arrangement of the populations laid down in my *Bull. Brit. Orn. Club* paper of 1967, and adopted in my *Gamebirds of Southern Africa* published in the same year. During the course of this research some 120 specimens of *P. namaqua* from South West Africa were examined.

Geographically related and subspecifically significant variation in this xeric species is relatively well-marked despite the reservations of some specialists who have

had neither the material nor necessary patience to resolve the complex issues involved. The populations polarize broadly into two groups: a far west true desertic population with sandy dorsal colouration in both sexes, and reduced metallic spotting to the upper-parts in males, which latter also have the lower half of the venter reddish as opposed to dark brown or greyish. The eastern and southern populations have males with vinaceous white, less sandy, dorsal spotting, with more numerous and larger silver tips, and the bellies darker and greyer brown. In the case of the females of this group, those breeding on calcrete and saline encrusted soils, as at Etosha, are much lighter, less reddish, and not as coarsely marked with black.

the light scapular and tertial spotting at the same time starkly whiter than those from the redder substrates and more heavily vegetated karoo regions of the Cape, the Orange Free State, and the south-western Transvaal and some adjacent areas. While the arenaceous desert birds of the extreme west are largely resident within the range defined for them in the formal treatment of the subspecies hereunder, the eastern populations are more vagile when not breeding, especially so in the case of the southern and eastern karoo elements. Post-breeding movement in the latter takes itinerant parties far north in both South West Africa and Botswana, when they occur alongside the local breeding birds at the time these are nidificating.

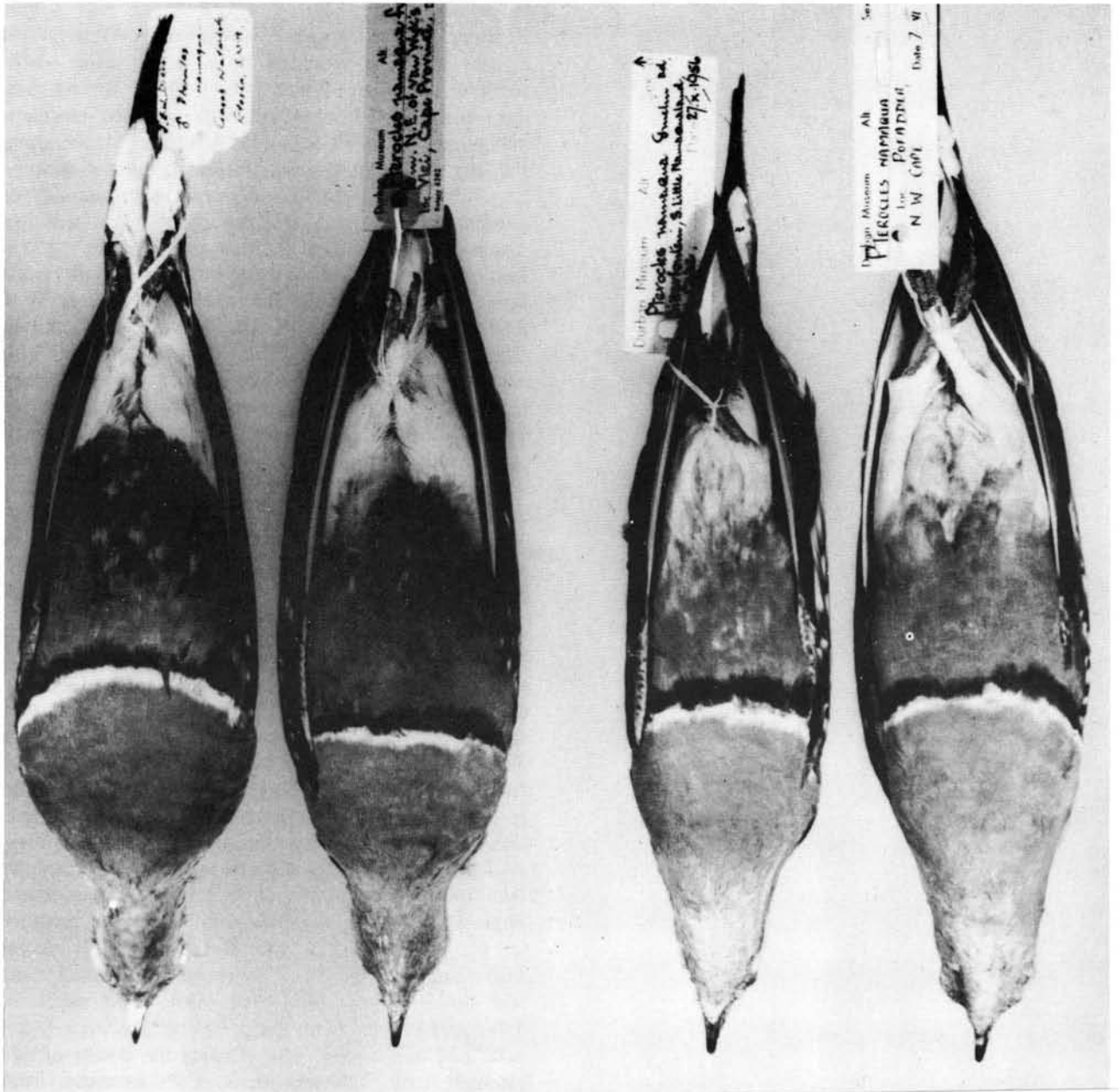


PLATE 1: Ventral surfaces of males of two subspecies of the Namaqua sandgrouse occurring in South West Africa. Left pair: *Pterocles namaqua fuscus* Clancey. A non-breeding visitor to South West Africa. Specimen on left was taken on its wintering grounds in the Etosha Pan region and specimen on the right is the *Type* of the subspecies. Right pair: *Pterocles namaqua namaqua* (Gmelin). Two near topotypes from north-western Cape Province. Photo: W. S. Yerbury.

Mr Dixon's two samples reveal that while the sandy desertic subspecies, nominate *namaqua*, meets the lighter *ngami* in parts of the Namib Desert Park, as shown by small lots of specimens taken on the Mirabib Flats, east of Tumasberg and the Hotsas Waterhole, there is no indication from the material that nominate *namaqua* ranges normally to the Etosha Pan region. All but one specimen from Etosha are clearly of the race *P. n. ngami*, the exception being a fine ♂ of *P. n. furvus* shot during 16/17 August, 1974, at Gaseb Waterhole by H. Berry. Examination of the South West African material in the Transvaal Museum collection has resulted in the finding of examples of *furvus* from Gobabeb in the Namib, localities in the Kaokoveld, and from Gemsbok Pan in Botswana, and Mata Mata, in the northern Cape, taken between 27 April and mid-August. The presence of this dark race on the breeding grounds of northern *P. n. namaqua* and *P. n. ngami* ties in neatly with its absence from much of its breeding range at this time.

The present enquiry confirms that the Namaqua sandgrouse is a moderately polytypic species of three races, all of which occur within the limits of South West Africa, two as endemics and the third as a non-breeding visitor during the cool, dry winter months from breeding grounds lying to the south and south-east of present limits. Variation is relatively well-marked, the races perhaps more clearly defined in the females than in the males. This geographical variation follows a pattern type common to a whole range of xeric birds resident within the confines of the South West Arid District of Chapin.

While the characters of the three races are already available in the literature, this new research has enabled me to effect certain refinements, especially in the case of the subspecific characters of females, and to adjust the breeding ranges.

The subspecies of *Pterocles namaqua*

(a) *Pterocles namaqua furvus* Clancey, 1959:

16 km NE of Van Wyksvlei, north-central Cape.

Darkest race. ♂, ad. Pileum and lower hind neck dull umber brown; hind and sides of neck yellowish olive; ground to entire dorsum dark umber brown; scapulars and tertials with sub-apical spots of chamois, reddening caudad; tips of same metallic silver. Below, chin and fore-throat deep rusty ochraceous; breast light drab; belly variable but with much piceous overlay. ♀, ad. Dorsum sayal brown, yellowish over hind and side surfaces of neck; striations and barring strongly black. Below, throat ochraceous yellow; plastron about avelaneous or darker, broadly streaked sepia; rest of venter finely transversely barred blackish, the interstices buffy; belly often washed dark brown.

Wings of 18 ♂♂ 162,5 – 180,  $\bar{x}$  173,5, SD 5, 10, SE 1,20, wings of 10 ♀♀ 156,5 – 170,5,  $\bar{x}$  164,9, SD 4,24, SE 1,34 mm.

*Range:* South-western and Karoo districts of the Cape, south to the Little Karoo and locally east to about Matatiele in Natal, Griqualand West in northern Cape, the Orange Free State, the lowlands of Lesotho, and dry southern and western parts of the Transvaal. Perhaps south-eastern Botswana. Occasionally to interior of Natal during droughts. Many winter north of the breeding range during the period April – August, ranging to the Kaokoveld (specimens from Kowares, Sanitatas and Orupembe); also the Namib (Gobabeb), Etosha (Gaseb) and Botswana (Gemsbok Pan).

*Breeding:* Mainly a summer breeding population group (September – February). Southern Transvaal in November.

(b) *Pterocles namaqua ngami* de Schauensee, 1931:  
40,25 km NW of Lake Ngami, Botswana.

Male similar to *furvus*, but pileum and lower hind neck paler and greyer; hind and sides of neck lighter, greener, olive; ground to entire dorsum greyer; spots to scapulars and tertials much paler buff with less red posteriorly. Below, with chin and fore-throat paler ochraceous; upper breast lighter drab; white upper breast cincture broader; lower breast often more overlaid with cinereous in fresh condition. In wings, with broader white panels to inner vanes of remiges. Female more sharply differentiated than the male. Much paler and less reddish above than *furvus*, with ground pale vinaceous or wood brown, the sides and hind surfaces of neck much lighter yellowish; dark dorsal streaking finer, and pale sub-apical spots to scapulars and tertials much whiter. Wings with whiter mottling. Below, with much paler fore-throat; plastron with ground lighter, more vinaceous, the streaking finer; rest of venter with the pale interstices whiter. In wings, with broader white panels to the inner vanes of the remiges.

Wings of 16 ♂♂ 165 – 184,  $\bar{x}$  172,8, SD 5,69, SE 1,40, 10 ♀♀ 155 – 168,  $\bar{x}$  161,0, SD 3,80, SE 1,20 mm.

*Range:* Eastern aspects of the Kaokoveld, Ovambo-land and the Etosha Pan, in northern South West Africa, east as far as the Makarikari Salt Pan and the Nata R., northern Botswana, thence south to the Kalahari. Also occurs in southern Huila, Angola. Resident within these limits, but records from the Mababe Depression and the Nata R., in the north-east of the stated range, are well east of the known breeding limits and may have been of nomads from established western breeding grounds.

*Breeding:* Recorded nesting (at Ghanzi) in April and May (Ginn), and in the Kaokoveld in June. A winter breeder.

(c) *Pterocles namaqua namaqua* (Gmelin), 1789:  
lower Orange R., north-western Cape.

Lightest and sandiest race. Male differs from *furvus* as defined above in being paler and more sandy brown, with the sub-apical spots to the scapulars and tertials

sandy, less light vinaceous, buff, and with the silver apices much reduced. Below, with paler ochraceous rusty to fore-throat; breast warmer, more buffy, less greyish vinaceous; lower red-brown breast-band lighter, often near tawny; lower breast warmer, more reddish, less grey, brown (buckthorn brown); mid-belly usually without piceous overlay.

Female lighter and more yellowish sandy than in *furvus*, less red, with finer and less blackish streaking and barring, this latter most marked over the hind neck and mantle. Below, with fore-throat and plastron paler, the latter with finer streaking; barring over rest of venter on whole finer with whiter pale interstices. In wings, with more white over inner vanes of remiges. A little smaller than in the two previous taxa.

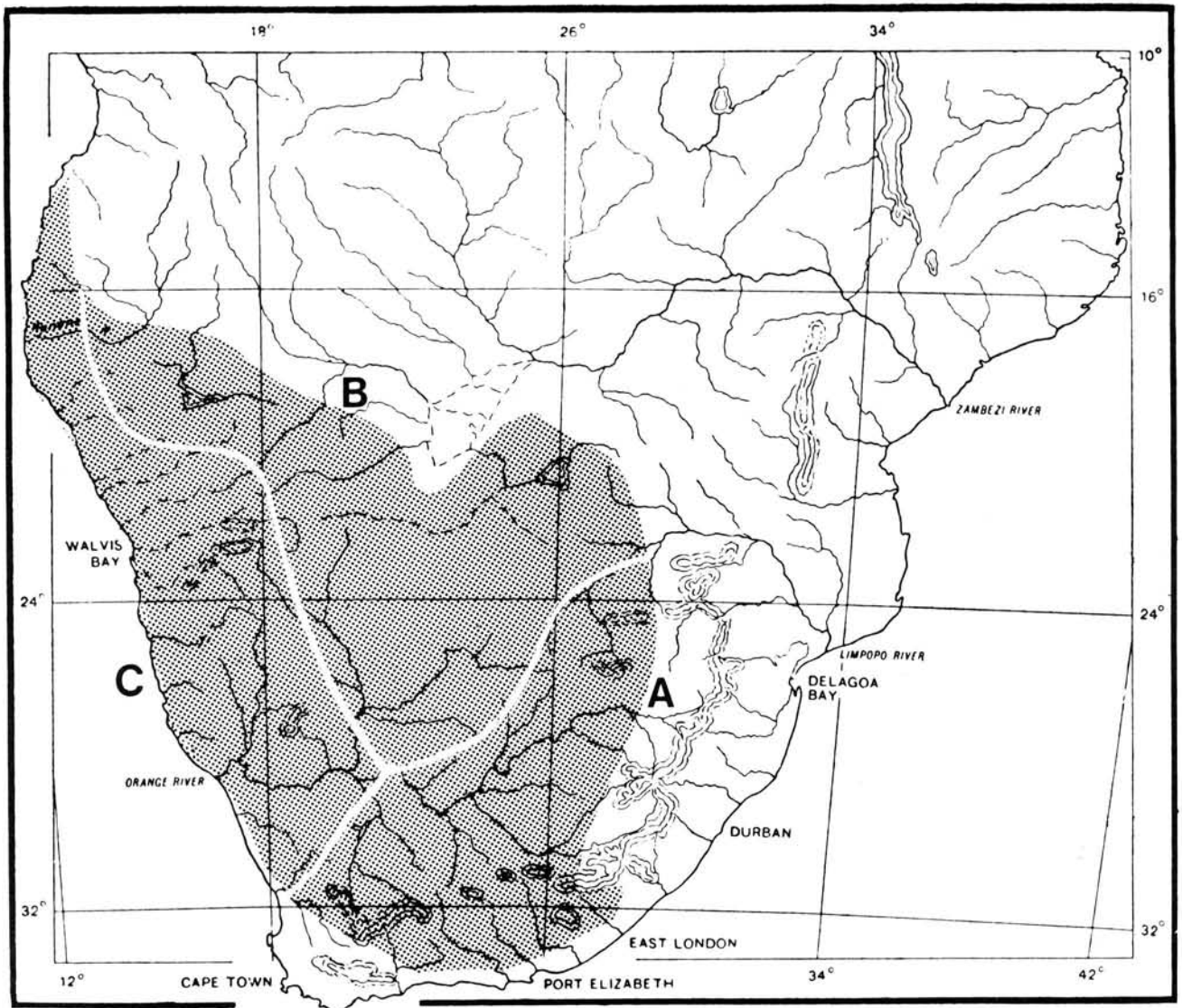
Wings of 20 ♂♂ 158 – 175, × 168, 0, SD 4,26, SE 0,95, of 20 ♀♀ 156 – 171, × 163,6, SD 4,41, SE 0,99 mm.

*Range:* Western Cape north from about the lower Berg R. and Little Namaqualand, east through Bushmanland to about Upington, western northern Cape in Gordonia, and South West Africa north to about 20°S in the centre and east, and north in the west through the western Kaokoveld to the desert coast of Angola. Largely resident within these limits.

*Breeding:* Similar to *ngami*, in the main a winter breeder. North-western Cape in early May, Namib in July. One or two males from the Namib Desert Park taken in February still retain belly feathering heavily abraded through water carrying activities.

*Remarks:*

The range of this subspecies corresponds very closely to the "Karoo" of Winterbottom's *Preliminary Check List* of 1971.



MAP 1: Sketch-map showing the revised disposition of the three subspecies of the Namaqua sandgrouse. (a) *Pterocles namaqua furvus* Clancey; (b) *Pterocles namaqua ngami* de Schauensee; (c) *Pterocles namaqua namaqua* (Gmelin). The distributions of all three are not necessarily continuous within the ranges as shown.

## ACKNOWLEDGEMENTS

For kindly placing his South West African specimens of the Namaqua sandgrouse at my disposal and requesting I report on them I am grateful to Mr J. E. W. Dixon, Principal Nature Conservator of the Etosha National Park. I am also indebted to Dr A. C. Kemp, Ornithologist of the Transvaal Museum, Pretoria, for the loan of the entire series of sandgrouse in the collection in his care, much of it from South West Africa and adjacent arid areas of southern Africa. Further South West African specimens examined are in the collection of the Durban Museum. Mr W. S. Yerbury, of the Durban Museum, kindly took the photograph.

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