The following notes deal with the racial systematics of five southern African birds. For the loan of additional material to supplement that in the collection of the Durban Museum, I am indebted to the Directors of the following museums: National Museum of Southern Rhodesia, Bulawayo (through Mr. M. P. Stuart Irwin), South African Museum, Cape Town (through Dr. J. M. Winterbottom), Transvaal Museum, Pretoria (through Mr. O. P. M. Prozesky), East London Museum, and the Coryndon Museum, Nairobi (through Mr. J. G. Williams). I am also indebted to Mr. P. A. Clancey, Director of the Durban Museum, for much valuable assistance during the preparation of these notes.

(1) GEOGRAPHICAL VARIATION IN THE TAXON

**UPUPA EPOPS AFRICANA BECHSTEIN OF SOUTHERN AFRICA**

The African Hoopoe *Upupa africana* Bechstein is usually regarded as being specifically distinct from *Upupa epops* Linnaeus of the Palearctic, but many modern workers now treat *U. africana* as a geographical representative of *U. epops*. In *U. epops* the primaries have a white bar, whereas in *U. africana* they are wholly black, but a specimen in the Durban Museum collection from Lake Naivasha, Kenya Colony, has vestigial white barring on some
primaries, and would appear to be an intergrade between *U.e.waibeli* Reichenow and *U.africana*. Such specimens have been reported by other workers and suggest that *U.africana* should be treated as conspecific with *U.epops*.

*U.e.africana*, as at present understood, ranges from southern Africa north to the Congo south of the rain forest, to Uganda, Kenya Colony and southern Ethiopia, no geographical variation within the component populations being currently recognised. A preliminary examination of material available in the Durban Museum revealed geographically connected variation in the populations placed as *U.e.africana*, and an examination of further material drawn from various institutions in southern Africa substantiates this initial finding.

The populations of the Cape Province to the south of the Orange River, Natal, the eastern Orange Free State and highland areas of the Transvaal differ from those breeding to the north-west, north and north-east of the range given above. The southern populations are characterized by having the neck and upper-parts of the mantle in males cinnamon, as against vinous red in the northern ones, while the white transverse barring on the lower mantle is more clearly defined and whiter than in those from the north, the barring of which is not so well marked nor as white as in the southern birds. In addition, the streak-shaped panels adjacent to the rhachis in the tertials are cinnamon in the southern populations, vinous red in the northern. The two forms do not appear to differ significantly in size.

The range of the southern race is confused owing to the form being subject to considerable migratory movement, as already adequately shown by many earlier workers, which results in birds attributable to it being found in the non-breeding season as far north as Northern Rhodesia. A critical examination of material and dates of specimens reveals that the southern form occurs only north of its breeding range in the cooler months of the year. The species as a whole seems given to a measure of erratic wandering as opposed to true migration, and northern birds also appear to move somewhat during the winter, occasional specimens examined being from within the established breeding range of the southern form. *Upupa epops africana* Bechstein, 1811: Malimbe, Portuguese Congo, is applicable to the northern vinous-coloured race, and for the southern cinnamon-backed form the name *Upupa minor* Shaw, 1812: Cape of Good Hope, Cape Province, South Africa, requires to be resuscitated.
Arising from the findings of this study, it is formally proposed that *U.e.africana* be split into two racial taxa, the nomenclature, characters and ranges of which are hereunder detailed:

(a) **Upupa epops minor** Shaw

*Upupa minor* Shaw, *Gen. Zool.*, vol. 8, 1, 1812, p. 139: Cape of Good Hope, Cape Province, South Africa.

Male with neck and upper mantle feathers cinnamon in colour, being appreciably yellower and more ochraceous tinged than in the following race. The broad white transverse bars on the lower mantle are prominent and clearly marked, and the streak-like panels on the medial plane of the tertials are cinnamon coloured.

**Measurements**: 10 ♂♂ wing 136.0-149.0 (141.0), tail 89.5-98.0 (92.8) mm.

**Material**: 89 (Cape Province 30, Natal 9, Swaziland 7, Transvaal 5, Orange Free State 4, Moçambique 9, Nyasaland 4, Southern Rhodesia 11, Northern Rhodesia 5, Bechuanaland Protectorate 1, South-West Africa 4).

**Range**: Breeds in the Cape Province to the south of the Orange River, Natal and Zululand, Swaziland, the adjacent areas of the Orange Free State, and the Transvaal highveld. Migrates north in the non-breeding season (winter), when it occurs sporadically in South-West Africa, the Bechuanaland Protectorate, Southern Rhodesia, Northern Rhodesia, Nyasaland and Moçambique.

(b) **Upupa epops africana** Bechstein


Separable from *U.e.minor*, as defined above, in having the upper mantle and neck in males vinous red, not cinnamon, and with the medial streaks to the tertials more vinous red, less cinnamon. Transverse bars on the lower mantle not as distinct, less sharply whitish, than in *U.e.minor*, having an overlay of cinnamon. Also inclined to be more vinaceous, less ochraceous tinged, over the throat and breast. Female not readily distinguishable.

**Measurements**: 10 ♂♂ wing 137.0-145.0 (140.9), tail 90.5-98.0 (93.7) mm.

**Material**: 63 (Cape Province 2, Orange Free State 2, Transvaal 1, South-West Africa 3, Bechuanaland Protectorate 3, Southern Rhodesia 29, Northern Rhodesia 12, Nyasaland 6, Tanganyika 3, Moçambique 8, Zululand 4).
Range: Breeds to the north of the range of *U.e.minor*, as defined above, from South-West Africa, the northern Cape and Bechuanaland, eastwards to the western Orange Free State, western, northern and north-eastern Transvaal and Southern Rhodesia to southern Moçambique. North of South African zoogeographical limits extends to Angola and the Gabon, the southern Congo, Northern Rhodesia, Nyasaland, northern P.E.A., and Tanganyika to Kenya. Intergrades to the north of its range with *U.e.waibeli*. Occasionally in Abyssinia.

(2) GEOGRAPHICAL VARIATION IN THE FAIRY FLYCATCHER *STENOSTIRA SCITA* (VIEILLOT)

This small aberrant flycatcher is endemic to the arid and semi-arid districts of South Africa, and was regarded as being monotypic until Clancey (1955) demonstrated the existence of geographical variation, when he introduced the name *S.s.rudebecki* Clancey: Umbeluzi River, near Lourenço Marques, southern Moçambique, for the populations occurring in Basutoland and adjacent areas of the Orange Free State, upper Natal, the Transvaal, and contiguous districts of southern Moçambique, confining the nominate race to the drier areas of the Cape Province and the contiguous districts of Great Namaqualand and the western Orange Free State.

In naming *S.s.rudebecki*, Clancey (1955) chose as his Type a specimen from the Umbeluzi River, near Lourenço Marques, southern Moçambique. This was unfortunate, because it has now been ascertained that this species is highly migratory in the eastern parts of its range, and the specimens collected by F. O. Noomé on the Umbeluzi River in May, 1911, were clearly visitors to the area, as the species has not been collected in Moçambique since then. It is now established that *S.s.rudebecki* is a subspecies of the montane regions of Basutoland and contiguous areas, and that it migrates north and east of its breeding range in the winter months to the Transvaal, interior regions of Natal, southern Moçambique and the Bechuanaland Protectorate. It was separated from the nominate race chiefly on its larger size and in being darker dorsally.

A reappraisal of the geographical variation shown by this diminutive flycatcher has revealed that a further geographical race requires to be admitted in our formal racial arrangement of the populations, and within the populations placed as the nominate race by Clancey I now propose to admit two subspecific groupings.

Material assembled from various collections in the Durban Museum, demonstrates that the populations of the south-west Cape, Little Namaqualand, Bushmanland and the northern Cape differ in colouration from those occurring in the Karoo regions, the