

BIRDS OF THE INYANGA NATIONAL PARK, RHODESIA

by

G. F. MEES

Rijksmuseum van Natuurlijke Historie, Leiden

With 2 text-figures and 5 plates

In October and November 1964, after attending the Second Pan African Ornithological Congress at Pietermaritzburg, Natal, I spent some six weeks at Rhodes Inyanga Orchards in the Inyanga National Park, Rhodesia, at the kind invitation of Mr. and Mrs. C. B. Payne. During my stay I observed and collected birds in the Park and its immediate surroundings. In this paper the ornithological results of my stay are recorded.

A collecting permit had been obtained for me in advance by Mrs. Payne, and by kind permission of the Chief Warden I was allowed to collect in the National Park. Authorities of the Umtali Museum placed a shotgun and dustshot at my disposal. Mrs. Payne was greatly interested in my activities; she also presented to me several bird-skins, including a specimen of the rare *Sarothrura affinis antonii*. Recently she has contributed to ornithological knowledge by the discovery of an even rarer rail, *Sarothrura lugens lynesi* (cf. Benson & Irwin, 1966).

To the authorities of the British Museum (Natural History) I am indebted for the loan of material and for help with the identification of *Cisticola* species and an immature *Ploceus velatus*. Loans were further received from the South African Museum, Cape Town, the Durban Museum, and the Koninklijk Museum voor Midden-Afrika, Tervuren. To Mr. A. de Roo of the last-mentioned institute I owe the identification of some specimens of *Euplectes* in off-season plumage. Mr. J. Hull of the University Museum, Oxford, sent information on specimens of *Ploceus velatus* in the Burchell collection.

Financially, my visit to Africa was made possible by grants from the Jan Joost ter Pelkwijk Fonds and the Nederlandsche Organisatie voor Zuiver-Wetenschappelijk Onderzoek (Z.W.O.).

As it is unlikely that during my short stay I would have observed more than a fraction of the avifauna of the National Park, I did not, originally, intend

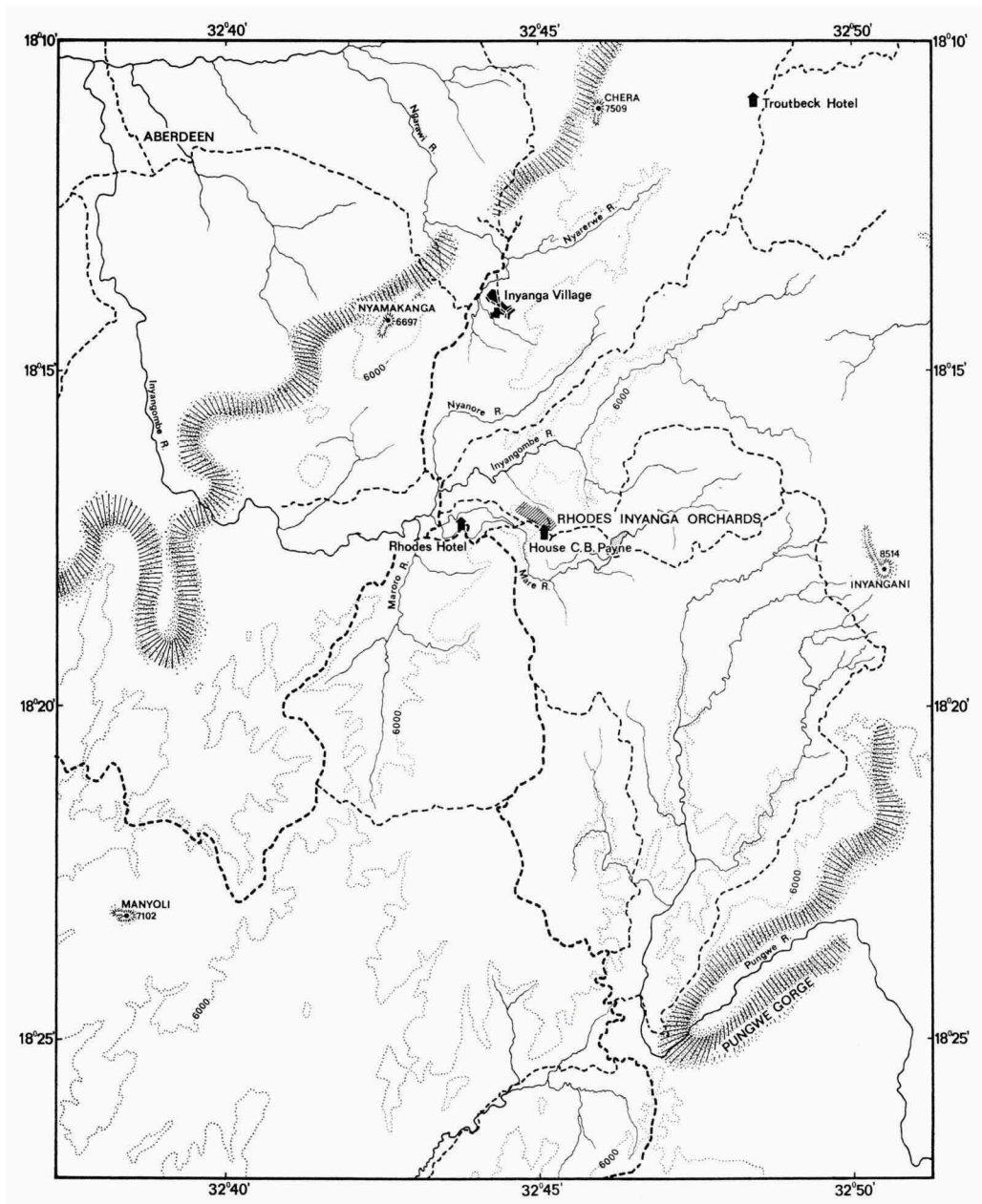


Fig. 1. — Map of Inyanga National Park, showing localities mentioned in the text, scale 1 : 200000. The broken lines indicate roads, the bands indicate escarpments. Altitudes in feet.

to publish my results. In the course of identification of the material collected, I had occasion, however, to examine some old specimens in the Rijksmuseum van Natuurlijke Historie, including types of species described by Vieillot, Temminck, Stephens, etc. Sometimes the identity of these species has been misunderstood in later years, and finally I decided that a general paper on the birds of the National Park would provide a good opportunity for discussing these. Some African birds of species not observed by me, or not occurring in Rhodesia, are discussed in an appendix.

The Inyanga Highlands, situated between $18^{\circ}05'$ and $18^{\circ}25'S.$, $32^{\circ}40'$ and $32^{\circ}55'E.$, near the eastern border of Rhodesia, rise steeply from the adjacent lower country; the general level of the Highlands is from 1700-2000 m, but in the eastern part of the National Park (which occupies a large proportion of the Highlands) they ascend to include Mt. Inyangani, 2596 m, the highest mountain in Rhodesia. Several rivers originate in the Highlands; the most important of these are the Inyangombe, Mare, Maroro, Nyanore, and Pungwe Rivers. The latter leaves the Highlands in spectacular falls, below which it runs through Pungwe Gorge, cut deeply into the Highlands.

Much of the Inyanga Highlands consists of open country, covered with a vegetation of grasses and bracken. Bush-fires are of regular occurrence, and in such burnt places there was a wealth of flowers at the time of my visit. *Brachystegia*-woodland occurs widely, especially on the mountain slopes, but not very well developed. Along creeks a richer vegetation of shrubs and small trees may be found.

In the central part of the National Park, near Rhodes Inyanga Orchards and the Raffles Hotel, are extensive plantations of wattle (*Acacia*) and pine.

Evergreen forest is rare, but there is a good stand of it on the upper slope of Pungwe Gorge at an elevation of 1700-1800 m, and again along the Pungwe River in the Gorge, at about 1200 m.

The lower, north-western part of the National Park consists of fairly flat savanna, with riparian woodland and some good *Brachystegia*-stands. Most of my observations in as well as specimens from this area are from a locality named Aberdeen on the map, which is actually something less than a mile outside the border of the National Park. It has a very nice creek and the riparian woodland provided a rich habitat for birds.

Besides birds, I devoted much attention to collecting insects. The flowers in burnt places, amongst which *Dolichos buchmanani* was conspicuous, swarmed with Hymenoptera of which a great diversity of species was collected. Apart from the description of two new species of masonbees of the genus *Megachile* (Pasteels, 1966), the material remains unidentified.

My observing and collecting was almost confined to the National Park (with adjacent Aberdeen), but one day a few hours were spent along the Gairezi River near the crossing to Inyanga Downs. As this locality is very near the National Park, the few birds observed and collected are included in this paper. One day I visited two small pieces of surviving rain forest in the Lower Pungwe Valley, at about 650 m. Birds observed and collected there are not mentioned in the text except one that was also obtained in the National Park (*Phyllastrephus flavostriatus*), but I list them here. Collected in the forest were: *Phyllastrephus flavostriatus* (♀), *Hypargos niveoguttatus* (♂), *Dicrurus ludwigii* (♂,♀). Observed were: *Apaloderma narina*, *Bycanistes* sp., *Cossypha natalensis*, *Phylloscopus trochilus*, *Symplectes bicolor* (nesting), and outside the forest *Bubulcus ibis* and *Eurystomus glaucurus*.

Though Rhodesia is, generally speaking, ornithologically extremely well known, I know of only one paper in recent literature specifically dealing with the avifauna of the Inyanga Highlands; it is one by Snell (1963) who investigated an even slightly higher level than that of Rhodes Inyanga Orchards, viz. 7000-7600 ft (2100-2280 m). Mrs. Snell described her area of observation as part of Inyanga Downs, for which she gave the situation 18°S, 33°E. This indication is too inexact to pinpoint her locality (18°00'S, 33°00'E, is in Moçambique), but the only place in the area with an elevation of 7000 ft and over is the ridge of the escarpment between Chera and Rukotso, and somewhere between these two peaks she must have made her observations. This area is adjacent to the Inyanga National Park.

Snell recorded only 51 species of birds, but our lists are not directly comparable as I have included many species from the north-western edge of the National Park, at only 1300 m. In the Highlands proper (1700 m and over), I found 88 species. The larger number recorded by me would reflect the slightly lower level at which my observations were made, as it is likely that at these levels the number of species decreases sharply as the altitude increases. Part of the difference is also due to the fact that I included an area of evergreen forest in my observations, whereas Snell confined herself to the more open habitats, although at least one of the species she listed, *Seicercus ruficapillus*, is in my experience a typical forest-bird (cf. Smithers et al., 1957: 117).

Of Snell's list, 18 species were not observed by me: *Terathopius ecaudatus*, *Circus macrourus*, *Falco fasciinucha*, *Falco tinnunculus*, *Coturnix delegorguei*, *Columba guinea*, *Bubo africanus*, *Apus barbatus*, *Hirundo rustica*, *Cecropis cucullata*, *Ptyonoprogne fuligula*, *Delichon urbica*, *Motacilla capen-*

sis, *Anthus lineiventris*, *Emberiza tapahisi*, *Estrilda subflava*, *Onychognathus morio*, *Corvus albicollis*. There is little doubt that all or nearly all these species occur also in the Inyanga National Park.

In view of the staggering amount of systematic work that has been done in southern Africa over the past twenty years, I expected that the identification to the subspecific level of the material collected would be a matter of routine. In this, however, I was disappointed: the five or six writers who contribute most to the field of systematic ornithology of southern Africa, appear rarely to agree on matters of geographic variation and nomenclature. The harm this situation does is well realised by southern African workers, for example by Clancey (1967c: 477): "Tiresome arguments in the periodic literature on the validity of minor subspecies, which interest a mere handful of systematists at any one time, do science no good. To those moderately interested but not involved the arguments often appear lambent and lacking in objectivity".

The result of this situation was that, contrary to expectations, I have had to make a renewed study of the geographic variation of many species and also that in a number of cases, lacking adequate material for comparison, the subspecific identity of the specimens collected has had to be left open.

Because workers on the avifauna of southern Africa hold widely divergent views on the validity of numerous recently described subspecies, it appears necessary that I say something about my own views on this subject, and the criteria applied in accepting or rejecting subspecies. Africa is a compact continent, and notwithstanding the existence of numerous ecological and geographical barriers (as admirably described by Moreau, 1966), at least in the southern part of Africa that concerns us here, the distribution of many species is more or less continuous. All attempts to divide a species with a continuous continental range into subspecies are bound to have an element of subjectivity, and to be more or less artificial. Ternary nomenclature is not an end in itself, but a tool to simplify an understanding of geographical variation. As a formal division in subspecies of a species with an unbroken range suggests discontinuity where continuity exists, I believe that only those populations should be named which show either a very restricted area of intergradation, or are well differentiated. This means that my natural inclination is towards a fairly broad subspecies concept. Referring to the quotation from Clancey above, I would say that a rejection of names based on slightly differentiated populations need not necessarily mean a lack of objectivity in the judgment of such names, but be rather a matter of common sense.

ARDEIDAE

Ixobrychus sturmi (Wagler)

On several occasions, an individual of this species was flushed from the reedbeds along the creek at Aberdeen, 1300 m. Identification was by small size, plain bluish grey upperparts, and yellow legs.

SCOPIDAE

Scopus umbretta umbretta J. F. Gmelin

Scopus umbretta J. F. Gmelin, Syst. Nat., 13th ed. 1: 618 — Africa = Senegal (for partly based on d'Aubenton, pl. 796: L'Ombrette, du Sénégal).

♂, 1 November, along a creek near Inyanga village, 1700 m, testes 10 × 4, 7 × 4 mm, light orange in colour, weight ca. 500 g. Iris dark brown, bill and legs black. Stomach contents: two specimens of *Amphilius platychir* Günther, ca. 10 and 12 cm in length respectively. Wing 303, tail 153, tarsus 76, entire culmen 97, exposed culmen 86 mm. No fat. Heavy moult, skull fully ossified.

This was the only individual seen at such a great altitude, but I have also observed the species at Aberdeen (1300 m) and elsewhere at lower levels, always near water. *Amphilius platychir* Günther is the only native fish known from the Highlands.

ANATIDAE

Anas sparsa Eyton

During my stay several pairs of these ducks were present in the Inyangombe River near the Orchards, 1800 m.

SAGITTARIIDAE

Sagittarius serpentarius (Miller)

I have only a single observation of this striking bird: 10 November, when an individual was seen striding through the fresh vegetation of a wet vlei west of the road to Inyanga, the same place where *Tyto longimembris* was found, 1750 m.

ACCIPITRIDAE

Elanus caeruleus (Desfontaines)

This species was observed only once, 27 October, when an individual was seen resting and hunting in open country a little distance north of the Orchards, 1800 m.

Accipiter exilis exilis (Temminck)

Falco exilis Temminck, 1830. Recueil d'Ois. 1. livr. 84, pl. 496 — le pays des Caffres; on la voit rarement dans la colonie du Cap.

♂, 23 October, near Inyanga Orchards, 1750 m, testes 6×3 , 6×3 mm, weight 135 g. Iris dark yellow, eye-rim greenish yellow, cere greenish yellow, bill basal half blue-grey, apical half black, legs ochre, nails black. Stomach contents: remains of a bird, including a leg with foot and toes. Wing 205, tail 146, tarsus 52, bill from cere 11 mm. No moult.

This bird was shot from a small tree along the Inyangombe, perhaps a mile downstream from Rhodes Inyanga Orchards. If we ignore the thin, not even continuous line of shrubs and small trees along the river, we can say that the bird was taken in open country, although extensive pine plantations were nearby. Nowhere in the far surroundings was there any natural evergreen forest.

The species appears to be rare in Rhodesia; I know of only two certain previous records: Himalaya, at 7000 ft (Smithers et al., 1957: 41), and Rusape, at 4600 ft (Smithers et al., 1959: 236). A record from south or south-west of Plumtree (Brooke, 1964) is somewhat vague and perhaps not quite satisfactory. As the two Rusape birds were taken in *Eucalyptus*, and my individual in more or less open country, the opinion that in Rhodesia this species is associated with evergreen forest requires modification.

As I have shown elsewhere (Mees, 1967a), the name *Accipiter rufiventris* Smith hitherto used for the species is not applicable, as Smith (1830) did not bestow a new name, but identified his specimen with *Falco rufiventris* Daudin (1800) from Cayenne. The identity of *Falco rufiventris* is not certain, it may be a synonym of *Harpagus bidentatus* (Latham), which, fortunately, antedates it.

When Temminck described this species he had several individuals: "Cette espèce, que le Musée vient de recevoir en plusieurs états d'âge et de mue, habite le pays des Caffres; on la voit rarement dans la colonie du Cap." His description is based on at least three individuals: an adult male, figured, a male "en livrée de passage", and a female. It appeared of interest to find out more about this type material. In our collection I found four mounted individuals which have certainly or probably been in Temminck's hands when he drew up the description.

♂ ad., merely labelled: "Afr. austr.", no precise locality, date or collector's name. This bird is without the slightest doubt the individual figured on plate 496; see also Schlegel (1862: 30). Schlegel cat. no. 3.

♂, not quite as deeply coloured as the figured individual. Label with the

same information. This may be the male "en livrée de passage" described by Temminck. Schlegel cat. no. 4.

♀ ad., label with the same information. Presumably the female described by Temminck. Schlegel cat. no. 5.

♂ ad., labelled: "Baie d'Algoa, Voy. de Brehm", no date. Schlegel, cat. no. 2.

In our old mounted material much useful information is often written underneath the pedestals; the reason so little information is attached to the specimens here discussed is because they have apparently been re-mounted and placed on new socles. Such information as is given, is written on cards nailed to the socles, and dates from the time Schlegel (1862) prepared his catalogue.

Specimen no. 2 is the only one provided with locality and collector's name. J. Brehm was a resident of Uitenhage, whose correspondence in the archives of our museum covers the period from 1821 to 1829. He forwarded a first shipment of objects of natural history in 1823, and several more in subsequent years. In view of Temminck's words ("le Musée vient de recevoir"), it is likely that the specimen was received in one of the later shipments, which arrived in Leiden in 1828 or 1829. In 1827 Brehm mentioned in one of his letters that he had been residing at the Cape for fourteen years. This Brehm is, as far as I know, no relation to the famous C. L. Brehm whose sons Alfred and Oskar travelled and collected in north-east Africa from 1847-1852. Brehm's letters are written in Dutch, but after ten years at the Cape he would have known Dutch anyway, and some of the words he used suggest that he may have been of German extraction.

Though the other specimens bear no collector's name, there is little doubt that they have been received from Dr. H. B. van Horstok, who in the years 1826-1835 enriched our museum with large collections from the Cape. The archives, with letters and lists of material from van Horstok, are complete, and on a number of occasions undescribed species of *Falco* (a name applied at the time to all birds of prey) are listed, but it is no longer possible to relate these lists with certainty to the specimens now present. In one list, of the fourth shipment, dated 23 June, 1827, there appears however: "*Falco nisus* (Sperwer)", collected: "in de nabijheid van de Kaap". Inasmuch as every author from Temminck onwards has stressed the similarity between *A. exilis* and *A. nisus* (Schlegel, 1862: 30, even regarded the former as a subspecies of the latter, listing *A. nisus* as *Astur fringillarius* and *A. exilis* as *Astur fringillarius rufiventer*), there can be little doubt that this specimen actually was *A. exilis*.

It is necessary now to recapitulate what is certain and what is inference.

Two specimens were certainly in Temminck's hands, cat. no. 3 (the figured individual), and cat. no. 2, as no shipments from Brehm were received after the middle of 1829. The other two individuals are surmised to be types, but definite proof is no longer possible. This leaves us with one figured specimen without exact type locality, and one specimen from Algoa Bay. Those who believe in exact type-localities may want to restrict the type-locality to Algoa Bay, but the figured individual, without locality but doubtless from somewhere in the Cape Colony, is perhaps more clearly entitled to be considered lectotype. The "pays des Caffres" was what nowadays is the eastern Cape, so that all Temminck's material may be assumed to originate from within the limits of the present-day Cape Province.

Buteo rufofuscus (Forster)

Probably the most common bird-of-prey of the Highlands, regularly observed near the Orchards and elsewhere.

Kaupifalco monogrammicus monogrammicus (Temminck)

Falco monogrammicus Temminck, 1824, Recueil d'Ois. 1, livr. 53, pl. 314 — Sénégal.

♀, 11 November, Aberdeen, 1300 m, ovaries 9×4 , $5 \times 1\frac{1}{2}$ mm, weight ca. 270 g. Iris dark red, cere orange, bill black, base of mandible orange, legs orange. Stomach contents: a mole-cricket, bones. Wing 226, tail 142, tarsus 58, culmen from cere 17 mm. No moult, plumage slightly abraded.

Collected in open woodland along a creek.

Discussion. The type, figured by Temminck, is a mounted individual (cat. no. 1). The socle is inscribed in Temminck's handwriting: "*Falco monogrammicus*/mâle/Sénégal". The specimen has the grey parts tinged slightly brownish, but is otherwise in good condition.

There has been controversy over the recognition of subspecies, the latest revision being by Irwin & Benson (1966b). In a very large material these authors found such variation as exists in colour and pattern too indefinite to serve for subspecific distinction, but nevertheless accepted a race *merid* (perhaps better *meridionalis*) from Angola on the basis of larger measurements.

Compared with the 289 specimens measured by Irwin & Benson, the material available to me is negligible and cannot really add anything of consequence; nevertheless I list here the wing-measurements of the material in our collection.

Senegal ♂ 229 (type of the species; its size suggests that it is a female rather than a male).

Bissao (Port. Guinea) ♂ 211; ♀ 222.

Liberia ♀ 226, 231.

Lado (extreme southern Sudan), unsexed 236.

Bongoland ♂ 215.

Galalat (W. Abyssinia) ♂ 222.

Tanganyika (various localities) ♂ 209, 209, 212, 217, 231; ♀ 210, 227, 227, 231 (one may assume that the largest male and the smallest female are incorrectly sexed).

(South Africa) ♀ 216.

Huila (Angola) ♀? 237.

It will be seen that the specimen from Angola is the largest of the series, entirely in accordance with the findings of previous authors. Though I doubt the advisability of recognising a little-differentiated size-race in a species with a continuous continental distribution, the evidence at present available tends to support the validity of *meridionalis*.

Lophaetus occipitalis (Daudin)

As a pair of these eagles lived near the Orchards, the unmistakable wild cry was heard almost daily, and the birds were seen on numerous occasions. Evidently a common species for I have also observations from other parts of the National Park.

Polemaetus bellicosus (Daudin)

A large bird-of-prey seen soaring high over the mountainside east of the Mare Dam on 24 October, was identified, by its black head and chin, white underparts, and white tail banded with grey, as belonging to this species.

PHASIANIDAE

Francolinus afer swynnertoni (W. L. Sclater)

Pernistes afer swynnertoni W. L. Sclater, 1921, Bull. Brit. Orn. Cl. 41: 134 — Chirinda forest in Gazaland.

♂, 9 November, hill west of the road to Inyanga village, 1750 m, testes very large, 17 × 8, 11 × 6 mm. Iris dark sepia-brown, bill and bare skin of throat and around eye light carmine, legs light carmine. Stomach contents: tubers of an unidentified plant, and some larvae. Wing 201, tail 75, tarsus 56, entire culmen 32, culmen from cere 21½ mm. Light moult.

The specimen was solitary, collected in light woodland on the slope of a hill adjacent to a wet vlei. On several other occasions francolins were seen in more or less open country near shrubbery; they might have belonged to this species but being new to the country and its avifauna I could not be certain.

NUMIDIDAE

Numida meleagris (Linnaeus)

Guinea fowl were observed repeatedly within the limits of the National Park near Inyanga village, at about 1700 m altitude.

GRUIDAE

Grus carunculatus (Gmelin)

A pair of these large cranes was permanently present at Rhodes Inyanga Orchards.

RALLIDAE

Limnocolox flavirostra (Swainson)

This beautiful waterhen was not uncommon in the reedbeds of the creek running through Aberdeen, where I have observed it on several occasions.

Sarothrura affinis antonii Madarász & Neumann

Sarothrura antonii Madarász & Neumann, 1911, Orn. Mber. 19: 186 — Ndassekera an der Grenze von Deutsch und Englisch Ost-Afrika zwischen Schirati und Nguruman.

♂, 10 November 1963, Rhodes Hotel, 1800 m, testes 5×13 , 5×8 , weight ca. 30 g. Maxilla grey, mandible flesh colour, legs fleshy grey. Stomach empty. Very fat. Wing 76, tail 31, tarsus $19\frac{1}{2}$, culmen from skull $13\frac{3}{4}$, exposed culmen 11, middle toe with nail 25 mm. Moulting of body feathers.

The first record of this species for Rhodesia was as recently as 1951, at Pungwe Rest Huts, Inyanga (Smithers et al., 1959), and it is known from but few specimens. The present individual crashed at night into the lighted Rhodes Hotel, whence it was brought to Mrs. Payne, who prepared it and presented it to me. I have compared this specimen with a male from the Cape in our collection, which has the brown of the throat less extensive, shows perhaps slightly more white on the underparts and is slightly smaller (wing 73 mm).

CHARADRIIDAE

Afribyx senegallus lateralis (Smith)

Vanellus lateralis Smith, 1839, Ill. Zool. S. Afr. 2: pl. 23 — U'Tugale river, some fifty miles eastward of Port Natal.

♀, 8 November, near Inyanga village, 1700 m, near laying, largest oöcyte over 4 mm in diameter, weight ca. 250 g. Iris white, bill, eyelid and wattle ochre, wattle on forehead dull red, legs greenish ochre. Stomach contents large beetles. Wing 231, tail 96, tarsus 82, exposed culmen 35 mm.

A few pairs of this species could always be counted upon on the burned slope going down to Inyanga village; the maximum number I saw together was six. It is peculiar that Smith (1839) recorded the species as extremely shy and wary. My experience was that on my approach the birds would always fly towards me, crying loudly, and cruise boldly overhead until I withdrew.

Stephanobyx coronatus (Boddaert)

Two individuals were seen on 7 November, near Inyanga village, 1700 m, at almost the same place and in the same habitat as the preceding species.

SCOLOPACIDAE

Tringa hypoleucos Linnaeus

On 26 October an individual of this species was observed along the Gairezi River, Inyanga Downs, and a fortnight later one along the Pungwe River in Pungwe River Gorge, within the Inyanga National Park.

COLUMBIDAE

Streptopelia capicola tropica (Reichenow)

Turtur capicola tropica Reichenow, 1902, Orn. Mber. 10: 139 — Ost-afrika.

♂, 15 November, Aberdeen, 1300 m, testes $9 \times 2\frac{1}{2}$, $7 \times 2\frac{1}{2}$ mm, weight 118 g. Iris dark brown, bill black, inside of mouth dark vinaceous, legs anteriorly dark dirty vinaceous, posteriorly grey. Wing 152, tail 99, tarsus 20, exposed culmen 16 mm. Moults in wings and tail.

A few pairs of this species lived also at the Orchards, at 1800 m.

MUSOPHAGIDAE

Tauraco livingstonii livingstonii (G. R. Gray)

Turacus livingstonii G. R. Gray, 1864, Proc. Zool. Soc. Lond.: 44 — Manganja Highlands, 3000 or 4000 feet.

♂, 28 October, forest above Pungwe Gorge, 1800 m, testes 9×5 , 4×3 mm, weight ca. 280 g. Iris light brown, bill and rim of eye vinous red, inside of mouth dark rose, legs black. Wing 186, tail 190, tarsus 48, entire culmen $24\frac{1}{2}$, exposed culmen 18 mm. In full moult of remiges, rectrices and body feathers.

A common species in the evergreen forest at Pungwe Gorge, where it was usually seen in pairs, hopping from branch to branch.

When Moreau (1958) decided to treat *livingstonii* as a race of *T. corythaiix*, he did so with considerable hesitation. The situation in Natal (cf. Clancey, 1964b) makes me incline to the view that they are better treated as different species.

Tauraco porphyreolophus porphyreolophus (Vigors)

Corythaiix porphyreolopha Vigors, 1831, Proc. Zool. Soc. Lond. 1: 93 — immediately from Algoa Bay; but ... supposed to have been collected far in the interior of the country = Durban, Natal, designated type-locality (Clancey, 1955).

♂, 4 November, near Inyanga village, 1700 m, testes 10×6 , 18×5 mm, weight ca. 275 g. Iris dark brown, rim of eye vinaceous, bill and legs black. Stomach contents pulp and pips of berries. Wing 172, tail 180, tarsus 38, entire culmen $29\frac{1}{2}$, exposed culmen $24\frac{1}{2}$ mm. Heavy moult.

This individual was obtained in *Brachystegia*-woodland, and on other occasions the species was observed in similar habitat. As the rainy season had not yet set in during my stay, these observations are at variance with the opinion expressed by Smithers et al. (1957: 72) that movements to levels above 4000 ft would take place only at the commencement of the rains.

Crinifer concolor (Smith)

This very plain coloured member of the family Musophagidae was observed several times in savanna woodland at Aberdeen.

CUCULIDAE

Chrysococcyx klaas (Stephens)

Cuculus Klaas Stephens, 1815, Gen. Zool. 9: 128 — Senegal, and from Caffraria to the Cape of Good Hope.

♀, 21 November, Aberdeen, 1300 m, laying, diameter of largest oöcyte 5 mm, weight 31.0 g. Iris light grey-brown, bill black, basal half of mandible

blue-grey, inside of mouth black, legs greyish blue-green. Wing 101, tail $63\frac{1}{2}$, tarsus $14\frac{1}{2}$, entire culmen $19\frac{1}{2}$, exposed culmen 15 mm. No moult, plumage slightly worn.

Chrysococcyx caprius (Boddaert)

A single individual, continuously uttering its melancholic ascending whistle, was observed in a small bush between the Orchards and Inyanga village, 1750 m, on 10 November.

TYTONIDAE

Tyto longimembris punctata (G. R. Gray)

[*Strix (Glaux)*] *punctata* G. R. Gray, 1869, Hand-List Birds 1: 53 — based on Smith, 1845, Ill. Zool. S. Afr. 2: pl. 45: near Cape Town, close to Table Mountain.

Strix Capensis Smith, 1834, S. Afr. Quart. J. (n.s.): 317 — South Africa, pre-occupied by *Strix bubo capensis* Daudin, 1800.

[*Strix*] *punctata* Lichtenstein, 1854, Nomencl. Avium: 6 — nomen nudum (Kafferland).

♂, 10 November, between the Orchards and Inyanga village, 1750 m, testes small, both $6 \times 1\frac{1}{2}$ mm, weight ca. 360 g. Iris dark brown, bill white, inside of mouth flesh colour. Stomach empty. Wing 324, tail 119, tarsus 76, culmen from cere 21 mm. Heavy moult of body feathers, particularly on the rump.

This bird was flushed from the ground in daytime, in tall grasses in a wet vlei where a small creek originated; it flew two or three hundred metres downstream and disappeared again in the grass. This performance was repeated five or six times, over a distance of about a mile. As my gun contained dust-shot only, shooting as it flew at any great distance was out of the question, but finally I managed to sneak up and procure it.

I have recently discussed the nomenclature of this species (Mees, 1964, 1967b), and have shown that the name given above is the correct one. Clancey (1967a) has proposed suppression of *Strix bubo capensis* Daudin, to save for use *Strix capensis* Smith, but as the African Grass-Owl is only a race of a polytypic species, which is generally known as *Tyto longimembris* Jerdon, 1839, actually fewer changes (e.g. only in the name of the one African subspecies) result from rejecting *capensis*, which would otherwise replace *longimembris* as the specific name, than from retaining it. Therefore I regard it, in anticipation of a decision by the International Commission on Zoological Nomenclature, justified to use the nomenclaturally correct name. Incidentally, Clancey & Winterbottom (1968) have quite mistakenly questioned the identity of *Bubo capensis* (Daudin) with *Bubo capensis* Smith. The size of the claw in the original water-colour drawing, reproduced

by me at slightly less than half its actual size (Mees, 1967b: pl. 3), precludes its belonging to *Bubo africanus*, as the mentioned authors suggested.

CAPRIMULGIDAE

Caprimulgus rufigena rufigena Smith

Caprimulgus rufigena Smith, 1845, Ill. Zool. S. Afr. 2: pl. C and text — Cape, chiefly found in the eastern districts of the colony.

♀, 20 November, Aberdeen, 1300 m, laying, ovary with an almost full-grown egg, weight 61.6 g. Iris brown, bill black, inside of mouth flesh colour, legs pinkish grey. Stomach contents: an unrecognisable mass of insects. Very fat. Wing 155, tail 104, tarsus 14, exposed culmen 11 mm.

This bird was flushed from the ground in savanna-woodland; it is the only nightjar I have seen during my stay in Rhodesia.

APODIDAE

Apus caffer (Lichtenstein)

A flock of this species was present near Maroro River Crossing, 1800 m, on 30 October.

COLIIDAE

Colius striatus rhodesiae Grant & Mackworth-Praed

Colius striatus rhodesiae Grant & Mackworth-Praed, 1938, Bull. Brit. Orn. Cl. 58: 65 — Umtali, Southern Rhodesia.

♀, 4 November, near Inyanga village, 1700 m, laying, diameter of largest oöcyte 7½ mm, weight 54 g. Iris dark brown, maxilla black, mandible blue-white, inside of mouth greyish flesh colour, legs carmine. Wing 91, tail 203, tarsus 17, exposed culmen 13 mm. No moult.

A fairly common species in the Highlands, usually seen in small flocks.

The difference in leg-colour between this subspecies and *C. s. minor*, from which *rhodesiae* was separated only in 1938, is striking. Grant & Mackworth-Praed differentiated the form *rhodesiae* as follows: "Similar in colour and size to *Colius striatus minor* Cabanis; but has the feet and toes rose-pink instead of dark wine colour". This description was probably made after preserved specimens and does not entirely agree with my observations, hence I give here a comparison between the bird from Rhodesia and an adult female of *C. s. minor* from Pietermaritzburg, Natal, collected on 26 September 1964.

	<i>C. s. minor</i>	<i>C. s. rhodesiae</i>
iris	red	dark brown
bill	max. black, mand. pale grey-blue	max. black, mand. blue-white
inside of mouth	light flesh colour	greyish flesh colour
feet	brown-black	carmine

I am not aware that a difference in iris colour has previously been noted, and as Clancey (1964b: 247) describes the iris of *minor* as brown, further investigation is needed. There does not appear to be any difference in measurements between the two subspecies, for the female of *minor* has wing 89, tail 193, tarsus 21, exposed culmen 13 mm, weight 54.3 g. I cannot find any difference in plumage between the two specimens, though series may show such differences (see Clancey, 1957a).

ALCEDINIDAE

Ceryle maxima maxima (Pallas)

Alcedo maxima Pallas, 1769, Spic. Zool., fasc. 6: 14 --- Promontorio B. Spei.

♂, 28 July, Mare Dam, 1900 m, testes 9 × 5, 6 × 4 mm, weight 360 g. Iris brown, bill and legs dark grey. Wing 195, tail 116, tarsus 19, entire culmen 92, exposed culmen 81 mm.

♀, 11 August, same locality, ovary well developed, weight 300 g. Stomach contents: a trout of ca. 12 cm long. Iris dark brown, bill dark grey, legs grey. Wing 195, tail 112, tarsus 18, entire culmen 94, exposed culmen 85 mm.

These birds, which were presented to me by Mrs. Payne, were shot at the trout-hatchery at Mare Dam, where they had been a bit of a nuisance.

Halcyon leucocephala pallidiventris Cabanis

Halcyon pallidiventris Cabanis, 1880, J. f. Orn. 28: 349 — Angola.

♂, 21 November, Aberdeen, 1300 m, testes 3½ × 3, 3 × 2½ mm, weight 46.3 g. Iris dark brown, bill, inside of mouth, and legs light red. Stomach contents: Hymenoptera. Wing 101, tail 55, tarsus 13½, entire culmen 37½, exposed culmen 32½ mm. No moult, tips of wings and tail abraded, skull fully ossified.

This individual was seen in savanna woodland, on several consecutive days, until it could be collected. I have no other observations.

The bird compares well with some specimens from Angola in our collection.

MEROPIDAE

Merops bullockoides Smith

Merops Bullockoides Smith, 1834, S. Afr. Quart. J. (2): 320 — South Africa.

♂, 30 October, near Maroro River crossing, 1800 m, testes $4 \times 1\frac{1}{2}$, 3×1 mm, weight 30.2 g. Bill black. No fat. Stomach contents large insects, Coleoptera, Saltatoria, etc. Wing 113, tail 88, tarsus 11, entire culmen 39, exposed culmen 35 mm.

Half a dozen of these beautiful bee-eaters were found along an erosion gully surrounded by open country, not far from Maroro River crossing. The call of the birds, continuously uttered, was: "karará ... karará ... kara ...".

The latest word on this form is from Irwin & Benson (1966b), who differ from White (1965) and agree with Clancey (1965-1966) that it is a separate species, not a race of *M. bullocki*.

Merops pusillus meridionalis (Sharpe)

Melittophagus meridionalis Sharpe, 1892, Cat. Birds Brit. Mus. 17: 45 — South-eastern Africa from Natal to the Zambesi, and thence to the Zanzibar district on the east coast, and to Angola and the Lower Congo on the west = Pinetown, Natal (restricted type locality).

♂, 7 November, near Inyanga village, 1700 m, testes $4 \times 2\frac{1}{2}$, $2\frac{1}{2} \times 2$ mm, weight 14.3 g. Iris bloodred, bill and legs black. Stomach contents insects: flies and small Hymenoptera. Wing $78\frac{1}{2}$, tail 61, tarsus $10\frac{1}{2}$, entire culmen $27\frac{1}{2}$, exposed culmen 23 mm.

Besides near Inyanga village, I have repeatedly observed this species at Aberdeen.

Merops apiaster Linnaeus

On 20 November an individual of this migrant was observed at Aberdeen.

UPUPIDAE

Upupa epops Linnaeus

An individual of this species was seen near Inyanga village, 1700 m, on 29 October.

Phoeniculus purpureus (Miller)

A single observation from Aberdeen, 1300 m.

CAPITONIDAE

Pogoniulus chrysoconus extoni (Layard)

Barbatula extoni Layard, 1871, Ibis (3) 1: 226 — near Kanye, Bechuana (lat. 24°50'S., long. 25°40'E.).

♂, 4 November, near Inyanga village, 1700 m, testes $3 \times 2\frac{1}{2}$, $2\frac{1}{2} \times 2$ mm, weight 13.2 g. Iris very dark brown, bill and legs black. Stomach contents large berries. Wing 61, tail 31, tarsus 14, entire culmen 12, exposed culmen, $10\frac{1}{2}$ mm. No moult.

This bird was found calling from the top of a shrub. The call was a kind of quaver :“kěkòr.r.r.”, and when it was uttered, the whole throat and breast vibrated.

The latest word on the nomenclature of Rhodesian birds comes from Irwin & Benson (1967) who advise against recognition of the race *rhodesiae*, accepted by Clancey (1961a).

Lybius torquatus bocagei (Sousa)

Barbatula Bocagei Sousa, 1886, Journ. Sci. Math. Phys. Nat. Lisboa 11: 158 — Caconda.

♂, 20 October, near Rhodes Inyanga Orchards, 1800 m, testes 7×5 , $5 \times 4\frac{1}{2}$ mm, weight 59 g. Iris orange-red, bill black, inside of mouth pinkish white, legs blackish grey. Stomach contents fruitpulp and large seeds. Wing 91, tail 56, tarsus 24, entire culmen 26, exposed culmen $24\frac{1}{2}$ mm. No moult, skull fully ossified.

This barbet was moderately common and widely distributed in the more open habitats of the highlands, where it lived in pairs.

Rhodesian birds were described by Clancey (1956) under the name *lucidiventris*. This name was accepted by Smithers et al. (1957), and Irwin & Benson (1966), but rejected by Mackworth-Praed & Grant (1962) and White (1965). The authors who rejected the name, placed it as a synonym of *L. t. zombae* Shelley. In view of this controversy, I have tried to form an own opinion on the subspecific identity of my bird. As the name *lucidiventris* has been synonymised with *zombae*, comparison with the last-mentioned race was obviously a necessity. The subspecies *zombae* is not represented in our collections, but from the British Museum I received a loan of four topotypical specimens from Zomba (three of these were collected by A. Whyte, and formed part of the collection from which *zombae* was described, they are therefore definitely topotypical). These specimens were found to agree with Shelley's (1893) description and to differ strikingly from my bird: forehead throat and upper breast are pale pinkish buff, instead of scarlet,

and the bills are conspicuously smaller: entire culmen: ad. unsexed $20\frac{1}{2}$, 22: ♀ $21\frac{1}{2}$; im. unsexed 23; exposed culmen: ad. unsexed $17\frac{1}{2}$, 19; ♀ 19; im. unsexed $20\frac{1}{2}$.

It is evident that the synonymy as suggested by Mackworth-Praed & Grant and White cannot possibly be accepted. The population on which *L. t. zombae* is based is probably transitional between *L. t. albigularis* and the red-headed population to the South and West, but appears closer to the former.

From the nominate race, my specimen differs by its bright sulphur-yellow underparts, with hardly a trace of scaly brown so conspicuous in the nominate subspecies. Three specimens from Tanganyika (*L. t. irroratus*) are much smaller, with shorter bills, more vermilion-red, and more strongly vermiculated upper parts. Four specimens from the south-eastern Congo (*L. t. congicus*) differ by their smaller bills and brighter yellow underparts. From four specimens of *L. t. bocagei*, from Huila and Benguela, and almost topotypical of that race, I am unable to distinguish the Rhodesian bird.

The preceding notes will make clear that I am not convinced that *congicus* should be synonymized with *bocagei*, as Traylor (1965) and White (1965) suggested.

INDICATORIDAE

Prodotiscus regulus Sundevall

Prodotiscus regulus Sundevall, 1850, Oefv. K. Sv. Vet.-Akad. Förh. 7: 109 — Caf-fraria inferiori et superiori.

♀, 24 October, neighbourhood of Rhodes Inyanga Orchards, 1800 m, laying, diameter of largest oöcyte $3\frac{1}{2}$ mm, weight 15.2 g. Iris brown, bill black, inside of mouth light flesh colour, legs black. Wing 78, tail 47, tarsus 11, entire culmen $12\frac{1}{2}$, exposed culmen $10\frac{1}{2}$ mm. No moult.

♀, 27 October, Rhodes Inyanga Orchards, 1800 m, ovary 4×7 mm, weight 13.4 g. Iris brown, bill black, inside of mouth flesh colour, legs black. Wing 80, tail 48, tarsus 11, entire culmen $12\frac{1}{2}$, exposed culmen $10\frac{1}{2}$ mm. No moult, skull fully ossified.

The first specimen was obtained from a solitary *Acacia*-tree in open country, hundreds of metres away from the nearest *Acacia*-plantations. The second individual was also found in a large solitary tree surrounded by grass and bracken. A third individual was seen on 31 October, in an *Acacia*-tree standing just free of a large plantation. All three birds were silent and generally inconspicuous by their small size and quiet movements, though not concealing.

The fact that during my short stay I observed this inconspicuous species three times, indicates a fairly common occurrence in the Highlands; this is worth recording as Smithers et al. (1957: 90) regard it as rare and sparsely distributed except apparently in the Matopos.

Besides the two individuals mentioned above, our collection contains only three specimens of *P. regulus*: ♀ Natal, 1840, leg. J. Wahlberg, syntype of the species, received from the Stockholm Museum; ♂, 6 February 1888, Gambos River, leg. P. J. van der Kellen; ♂, 15 October 1938, Barberton, Transvaal, leg. A. G. White. Whereas the two recent specimens are greyish brown, the three others, even the bird collected in 1938, differ by being conspicuously browner. Evidently the birds become strongly discoloured in collections and therefore I follow Friedmann (1955: 257) and White (1965) in not recognising any races (which have been based on slight differences in colour).

PICIDAE

***Dendropicos fuscescens intermedius* Roberts**

D[endropicos] fuscescens intermedius Roberts, 1924, Meded. Transvaal Mus. 10: 83 — Weenen, Natal.

♀, 17 November, forest above Pungwe Gorge, 1800 m, ovary 3×3 mm, weight 26.7 g. Iris grey-sepia, bill horn-black, legs grey. Wing 95, tail 49, tarsus 15, entire culmen 18, exposed culmen $15\frac{1}{2}$ mm.

The individual collected was the only one seen of its species.

In applying the name *intermedius* to this specimen, I have followed White (1947) and Clancey (1965a) without own investigation.

ALAUDIDAE

***Mirafra africana transvaalensis* Hartert**

Mirafra africana transvaalensis Hartert, 1900, Novit. Zool. 7: 45 — Rustenburg.

♂, 7 November, near Inyanga village, 1700 m, testes $3 \times 1\frac{1}{2}$, 4×2 mm, weight 44.8 g. Iris brown, bill, maxilla black, mandible dirty white, inside of mouth pale flesh colour, legs pale brownish. Stomach contents: chitine parts of insects including beetles. Wing 99, tail 65, tarsus $28\frac{1}{2}$, entire culmen $20\frac{1}{2}$, exposed culmen $16\frac{1}{2}$ mm. Light moult of wings and body feathers, skull ossified.

♂, same data, testes $10 \times 6\frac{1}{2}$, $7\frac{1}{2} \times 6$ mm, weight 49.5 g. Stomach contents insects. Wing 101, tail 62, tarsus 30, bill damaged. Moult of wings, but no moult of body feathers.

This species was widely distributed in the Highlands, up to an altitude of at least 1800 m (6000 ft), in open plains. Near Inyanga village, where the two specimens were taken, the species was particularly common. The pre-tentionless song, a high double tone, would be uttered from some elevated position, usually the top of a small shrub or a termite mound.

Neither in measurements nor in colour pattern do these birds differ from two males collected at Ashburton, Natal, in October 1964, but the Rhodesian birds are very slightly paler underneath, and have slightly more slender bills: differences quite insufficient for subspecific separation. According to White (1961), birds of interior Natal belong to *transvaalensis* as do birds from eastern Rhodesia, and it is for this reason that I call my birds from Natal and Rhodesia *transvaalensis* though I doubt that they are satisfactorily separable from the nominate race.

Mirafra rufocinnamomea (Salvadori)

Observed at Aberdeen, and near the base of Mt. Inyangani at about 2000 m.

HIRUNDINIDAE

Pseudhirundo griseopyga (Sundevall)

Although I did not manage to collect an individual, this species was fairly common, and repeatedly observed at Aberdeen, where the birds came to drink in flight from the clear water of a pool in the creek. The birds reminded me of House Martins, except that their rumps were not white but pale grey.

Riparia cincta subsp.

♀, 7 November, near Inyanga village, 1700 m, ovary $7 \times 4\frac{1}{2}$ mm, weight 20.1 g. Iris dark sepia-brown, bill and legs black, inside of mouth light flesh colour. Stomach contents: insects. Wing 124, tail 54, tarsus 11, entire culmen 13, exposed culmen 8 mm. No moult, plumage fresh.

The bird obtained was flying together with a second individual; I have no other observations.

The birds from Rhodesia have usually been included in the nominate race, but recently Clancey & Irwin (1966) brought them to *R. c. suahelica*. As our collection contains only two other specimens of *R. cincta*, one from the Cape and one from Dembea, Abyssinia, both collected over a century ago, I am unable to discuss the racial affinities of my Rhodesian specimen. The nominate race is known to be migratory, and therefore my bird could belong either to it or to *suahelica*.

Hirundo albigularis Strickland

Hirundo albigularis Strickland, 1849, in Jardine's Contr. Orn.: 17-4, pl. 15 — South Africa.

♀, 26 October, along the Gairezi River, breeding, several oöcytes to 1½ mm in diameter, weight 22.3 g. Iris dark brown, bill and legs black, inside of mouth pale flesh colour. Wing 133, tail 74, tarsus 11, entire culmen 12, exposed culmen 8½ mm. No moult.

Hirundo atrocaerulea Sundevall

Hirundo atrocaerulea Sundevall, 1850, Oefv. K. Sv. Vet.-Akad. Förh. 7: 107 — In Caffraria inferiore.

♂, 25 October, along the Inyangombe River near Rhodes Inyanga Orchards, 1750 m, testes 6½ × 5, 5½ × 4 mm, weight 14.0 g. Iris dark brown, bill and legs black, inside of mouth yellow. Much subcutaneous fat. Wing 115, tail 142, tarsus 9½, entire culmen 11¼, exposed culmen 6½ mm. No moult.

Fairly common in the Highlands, especially near water. The birds were usually seen in pairs.

Cecropis sp.

Several times birds of this genus were seen near the Orchards and also near Inyanga village. As I could not get a close view, and was insufficiently familiar with the field-characters of the several species known from Rhodesia, any attempt at identification would be guess-work, my guess being *C. abyssinica*.

Psalidoprocne orientalis orientalis Reichenow

Psalidoprocne petiti orientalis Reichenow, 1889, J. f. Orn. 37: 277 — Lewa, Usumbara, Ostafrika.

♂, 23 November, Rhodes Hotel, 1800 m, testes 4 × 3, 3½ × 2½ mm, weight 11.4 g. Iris dark brown, bill and legs black. Wing 108, tail 78½, tarsus 8, entire culmen 9, exposed culmen 4¾ mm. No moult.

My only observation is of two individuals at Aberdeen, on 19 November. The specimen listed was killed flying into a window, and subsequently brought to me.

MOTACILLIDAE

Motacilla aguimp Dumont

A pair of these birds was observed at the Gairezi River crossing, Inyanga Downs, on 26 October. I have also seen one near the bridge of the Odzi River between Inyanga and Umtali.

Motacilla clara torrentium Ticehurst

Motacilla clara torrentium Ticehurst, 1940, Bull. Brit. Orn. Cl. 60: 81 — Ngoye Forest, Zululand.

♀, 30 October, Mare River near Orchards, 1750 m, ovary 8×3 mm, weight 18.3 g. Iris brown, bill, inside of mouth, and legs black. Wing $76\frac{1}{2}$, tail 93, tarsus 23, entire culmen 17, exposed culmen $13\frac{1}{4}$ mm. No moult.

The bird was collected when busily moving about on stones in the Mare River (a small creek). In November I observed several pairs along the river in Pungwe River Gorge, 1200 m.

Macronyx capensis colletti Schou

Macronyx capensis colletti Schou, 1908, Orn. Mber. 16: 119 — Sululand.

♂, 18 October, near Rhodes Inyanga Orchards, 1800 m, testes 3×2 , $2 \times 1\frac{1}{2}$ mm, weight 51 g. Iris dark sepia-brown, bill black, basal half of mandible light grey-blue, inside of mouth light flesh colour, legs dirty light brown. Wing 95, tail 60, tarsus 36, entire culmen 22, exposed culmen 17 mm. Moult of body feathers, skull fully ossified.

♂, 1 November, near Inyanga village, 1700 m, testes $8\frac{1}{2} \times 3\frac{1}{2}$, 6×3 mm, weight 51.5 g. Stomach contents insects, amongst which termites. Wing 100, tail 62, tarsus $38\frac{1}{2}$, entire culmen 22, exposed culmen $17\frac{1}{2}$ mm. Full moult of body feathers and tail, skull fully ossified.

Fairly common and widely distributed in open country throughout the Highlands, usually seen in pairs. The song consists of a rather unattractive harsh cry, uttered at regular intervals, while the bird is perched in the top of a shrub or some other high point.

On the first specimen a hippoboscid fly was collected.

In applying the subspecific name *colletti* to these birds, I have followed Smithers et al. (1959), who expressed the opinion that, despite the remarks by Irwin (1954), *M. c. stabilior* Clancey is insufficiently differentiated for recognition.

Anthus novaeseelandiae cinnamomeus Rüppell

Anthus cinnamomeus Rüppell, 1840, Neue Wirbelthiere, Vögel: 103 — Simen, Ethiopia [reference not verified].

♂, 26 October, Inyanga National Park, near northern boundary, not far from the Troutbeck Hotel, 2000 m, testes $8\frac{1}{2} \times 6\frac{1}{2}$, $7\frac{1}{2} \times 5\frac{1}{2}$ mm, weight 23.0 g. Wing 89, tail 58, tarsus $27\frac{1}{2}$, entire culmen $16\frac{3}{4}$, exposed culmen $13\frac{1}{4}$ mm. No moult, skull fully ossified.

♂, 30 October, Inyanga National Park, above Maroro River crossing, 1800 m, testes 8×5 , $6\frac{1}{2} \times 5\frac{1}{2}$ mm, weight 25.4 g. Wing 89, tail 56, tarsus $25\frac{1}{2}$, entire culmen 17, exposed culmen $14\frac{1}{4}$ mm. No moult, plumage moderately abraded.

♂, 10 November, Inyanga National Park, between the Orchards and Inyanga village, 1750 m, testes $7 \times 6\frac{1}{2}$, 7×6 mm, weight 24.8 g. Wing 89, tail $58\frac{1}{2}$, tarsus 27, entire culmen $16\frac{1}{2}$, exposed culmen $13\frac{1}{4}$ mm. No moult.

♀, 30 October, collected with male of the same date, ovary 10×4 mm, weight 24.9 g. Stomach contents insects. Moderately fat. Wing 83, tail 56, tarsus 25 mm, bill with damaged tip.

♀, 8 November, near Inyanga village, 1700 m, laying, largest oöcyte 5 mm in diameter, weight 26.2 g. Wing $84\frac{1}{2}$, tail 59, tarsus $27\frac{1}{2}$, entire culmen $16\frac{1}{4}$, exposed culmen 13 mm. No moult.

♀, 10 November, collected in one shot with male of the same date, laying, largest oöcyte 9 mm in diameter, weight 28.5 g. Wing $85\frac{1}{2}$, tail 57, tarsus 26, entire culmen $15\frac{3}{4}$, exposed culmen $12\frac{1}{4}$ mm. No moult.

In all specimens, iris dark brown or dark sepia-brown, maxilla black, mandible dirty yellow with a greyish tip, legs beige or dirty brownish.

This pipit was common in open country throughout the Highlands, either solitary or in pairs. The condition of the gonads of collected specimens indicates breeding in November.

This is a very uniform series, and I cannot find any difference from six Natal birds collected in September 1964, except that the latter average slightly larger, as follows.

sex	locality	weight	wing	tail	tarsus	ent. cul.	exp. cul.
♂	Pietermaritzburg	26.1	93	66	$28\frac{1}{2}$	$17\frac{1}{2}$	$12\frac{3}{4}$
♂	Ashburton	25.9	92	$61\frac{1}{2}$	$27\frac{1}{2}$	$17\frac{1}{4}$	13
♂	Colenso	26.1	91	63	$26\frac{3}{4}$	$17\frac{1}{4}$	$13\frac{1}{2}$
♀	Pietermaritzburg	24.6	87	57	$27\frac{3}{4}$	$16\frac{1}{4}$	$11\frac{3}{4}$
♀	Colenso	24.4	89	63	$27\frac{1}{2}$	$16\frac{1}{2}$	$12\frac{1}{2}$
♀	Colenso	24.7	85	55	$26\frac{1}{4}$	16	$12\frac{1}{4}$

The three birds from Pietermaritzburg and Ashburton show a faint pinkish-cinnamon tinge on the underparts, probably stain, which is absent in the birds from Colenso and Inyanga, the latter being identical in all plumage characters.

White (1957, 1960) and Hall (1961) have recognised, besides some aberrant subspecies with a local distribution, two races in eastern and southern Africa, namely *cinnamomeus* from Ethiopia to the Zambezi valley, and *rufuloides* from there southwards. As only valid differential character, White (1957) mentioned the well marked streaking above of *cinnamomeus* as compared with *rufuloides*, though he apparently contradicts this opinion in the following sentence where it is stated that: "The upper side is too variable in colour to be very reliable". Comparison of my twelve skins from Natal and Rhodesia with a small series (seven specimens) from various localities in Tanganyika, collected 1964-1966, fails to bring out this or any other difference. White already mentioned very wide belts of intergradation, and in this case where there appears to be a smooth transition between populations which differ in no more than average characters, I consider it more logical to unite them under one name, *cinnamomeus*.

It may be of interest to mention that our museum contains the type of *Anthus Raalteni* Finsch & Hartlaub (1870), nec Layard (1867), previously published as a nomen nudum by Bonaparte (1850: 248). The bird was collected at the Cape by H. Kuhl and J. C. van Hasselt on their way to the East Indies, in September 1820. It was named after Gerrit van Raalten, the artist accompanying Kuhl and van Hasselt. Many letters from Kuhl and van Hasselt have been published, but the one describing their stay at the Cape was lost by shipwreck, and that may be the reason the name has remained unpublished. A second individual of historical interest is one taken in April 1826 at Algoa Bay, by H. Boie on his way out to Java. This bird is very rufous all over. Additional early specimens were sent to our museum by H. B. van Horstok.

PYCNONOTIDAE

***Pycnonotus barbatus layardi* Gurney**

Pycnonotus layardi Gurney, 1879, Ibis (4) 3: 390 — Rustenburg, Transvaal.

♂, 18 October, about three kilometres north of the Orchards, 1800 m, testes $5\frac{1}{2} \times 3\frac{1}{2}$, $4 \times 3\frac{1}{2}$, weight 42.5 g. Iris dark brown, bill black, inside of mouth yellow, legs black. Wing 98, tail 84, tarsus $22\frac{1}{4}$, entire culmen $20\frac{1}{2}$, exposed culmen $17\frac{1}{2}$ mm. No moult.

♂, 16 November, same locality, testes $7\frac{1}{2} \times 5\frac{1}{2}$, $6 \times 5\frac{1}{2}$ mm, weight 44.7 g. Iris very dark sepia-brown, bill black, inside of mouth dark yellow, legs black. Stomach contents: figs. Wing 98, tail 80, tarsus $22\frac{3}{4}$, entire culmen $19\frac{1}{2}$, exposed culmen $16\frac{1}{4}$ mm. No moult, plumage slightly worn.

Common in the more open kinds of habitat. The species is often found in fig-trees, being particularly fond of the fruits of *Ficus* (*Sycomorus*) spec.

A specimen from Pietermaritzburg, collected in September 1964, agrees entirely with the two skins from Rhodesia and is therefore also referable to *layardi*.

Andropadus milanjensis milanjensis (Shelley)

Xenocichla milanjensis Shelley, 1894, Ibis (6) 6: 9, pl. I fig. 1 — Milanji Hills, Nyasaland.

♂, 21 October, forest above Pungwe Gorge, 1800 m, testes $4\frac{1}{2} \times 3\frac{1}{2}$, $4 \times 3\frac{1}{2}$ mm, weight 35 g. Iris dull brown, bill black, inside of mouth yellow, legs brown-black. Wing 95, tail $84\frac{1}{2}$, tarsus $24\frac{1}{2}$, entire culmen $21\frac{1}{4}$, exposed culmen 16 mm. No moult.

♀, 17 November, same locality, ovary 9×4 mm, weight 39 g. Iris sepia-brown, bill black, inside of mouth yellow, legs brown-black. Stomach contents: small green berries. Wing 91, tail 82, tarsus 23, entire culmen 20, exposed culmen $15\frac{1}{2}$ mm. No moult, skull fully ossified.

A common species in the evergreen forest above Pungwe Gorge, the only place I have met with it. McLachlan & Liversidge (1957: 291) describe the species as solitary and retiring, which does not agree with my observations. The first bird obtained was in company with three or four others in the crown of a tree. They were extremely noisy, a loud call: "chak-chak-chak-chak ..." being continuously uttered. On other occasions too, the birds were seen in small and noisy parties.

Phyllastrephus flavostriatus flavostriatus (Sharpe)

Andropadus flavostriatus Sharpe, 1876, Ibis (3) 6: 53 — Macamac, Lydenberg district, Transvaal.

♀, 14 November, Rumbise, Pungwe Valley, 650 m, laying, containing a fullgrown but shell-less egg, weight 30.1 g. Iris brown, bill black, inside of mouth light yellow, legs light grey. Wing 87, tail 78, tarsus $22\frac{1}{2}$, entire culmen 22, exposed culmen 17 mm. No moult.

♀, 17 November, forest above Pungwe Gorge, 1800 m, ovary 8×7 mm, largest oöcyte $2\frac{1}{2}$ mm, weight 31.3 g. Iris brown, bill black, inside of mouth

yellow, legs plumbeous. Wing 86, tail $81\frac{1}{2}$, tarsus 23, entire culmen 21, exposed culmen 17 mm.

Ecologically this species agrees with the preceding one. Smithers et al. (1957: 101) call this the commonest bulbul, and *Andropadus milanjensis* less common. In the Pungwe Gorge forest, however, the latter is definitely the more common of the two. The name *dendrophilus* proposed by Clancey (1962) for birds from Rhodesia has not been generally accepted, but may be valid (White, 1968).

LANIIDAE

Dryoscopus cubla subsp.

♂, 30 October, *Acacia* plantation near the Rhodes Hotel, 1800 m, testes left $8\frac{1}{2} \times 5\frac{1}{2}$ mm, right damaged, weight 27.5 g. Iris deep orange, around pupil more yellowish, bill, inside of mouth, and legs black. Stomach contents remains of Coleoptera. Wing 82, tail $65\frac{1}{2}$, tarsus $22\frac{1}{2}$, entire culmen $22\frac{1}{4}$, exposed culmen $16\frac{3}{4}$ mm. No moult, skull fully ossified.

♂, 6 November, *Acacia* plantation near the Rhodes Hotel, 1800 m, testes $5\frac{1}{2} \times 4$, 4×3 mm, weight 24.4 g. Iris bloodred, bill, inside of mouth, and legs black. Wing 85, tail 66, tarsus 22, entire culmen $22\frac{1}{2}$, exposed culmen 17 mm. No moult.

♀, same data, taken in one shot with the male, ovary 7×5 mm, oöcytes to 1 mm, weight 27.7 g. Iris bloodred, bill, inside of mouth, and legs black. Wing 85, tail 67, tarsus 23, entire culmen 22, exposed culmen 17 mm. No moult.

This species was not uncommon; it belonged to the few species inhabiting the dense and monotonous wattle-plantations, for which it appeared to have a preference. Also observed at the Orchards, in light secondary growths. As Smithers et al. (1957: 133) give the species a vertical distribution of up to 5500 ft, its fairly common occurrence at 1800 m (6000 ft) is worth recording.

The nomenclature of the Rhodesian birds is not settled. Clancey (1954) included them in *D. c. chapini*, a new race with type locality Newington, Transvaal. This was not followed by Smithers et al. (1957) and White (1962), who synonymized *chapini* with *D. c. hamatus* Hartlaub. Rand (1960: 318), on the other hand, recognized *chapini*, and so did Clancey (1961a, 1964b, 1965-1966). Irwin & Benson (1967) expressed the opinion that: "... it does not seem separable from *hamatus*".

Lacking adequate comparative material, I am unable to take a definite stand in the controversy, but want to draw attention to some facts which indicate that my specimens cannot be called *chapini*.

Clancey (1961a) diagnosed *chapini* as follows: "Compared with *D. c. hamatus* similar in colour in both sexes but of markedly smaller size, thus: wings of adult ♂♂ of *D. c. chapini* 76.5-81, ♀♀ 75.5-80.5, as against 84-89 (90) in ♂♂ of *D. c. hamatus* and 81-86.5 mm. in ♀♀. In *D. c. hamatus* the male is larger than the female". As Clancey included 52 specimens from eastern Rhodesia in his measurements, it is surprising that all three of my specimens are larger and fall, in fact, in his measurements for *hamatus*.

About the iris colour, Clancey (1954) remarked that *chapini* differs from nominate *D. c. cubla* as follows — ♂ adult: "Iris colouration quite different, being scarlet-lake as opposed to orange ... ♀ adult: Iris colouration dull red". Clancey (1964b: 408): "Iris colouration in males scarlet, not orange as in *D. c. cubla*; iris of female reddish brown, not golden as in *D. c. cubla*". My material, however scant, proves that the iris colour can vary in one population; the female had the iris just as red as the male it was collected with. Perhaps there is seasonal variation in this character.

None of my birds is: "pure white without a grey wash" (Clancey, 1964b: 408) on the underparts, all three are tinged with pale grey below.

Leaving alone the question of the validity of *chapini* as such, it is clear that my specimens cannot belong to that race. The last word on *chapini* is from Clancey (1967c), who now maintains that the eastern coastal populations of Moçambique consist of smaller-sized birds than *D. c. hamatus*, and must be called *chapini*. Unfortunately he fails to inform us about the 52 specimens from the highlands of eastern Rhodesia which he had originally included in this small race, and, as one may presume, had measured. Also, the type-locality, Newington, cannot really be said to be in the coastal lowlands.

***Tchagra senegala orientalis* (Cabanis)**

P[omatorhynchus] orientalis Cabanis, 1869, in v. d. Decken's Reisen 3: 27 — Mombasa (= Mombasa).

♂, 20 November, Aberdeen, 1300 m, testes $6 \times 4\frac{1}{2}$, 4×3 mm, weight 55.7 g. Stomach contents insects: flies, a large grasshopper, a small green caterpillar. Iris violet-grey, bill and inside of mouth black, legs light green-grey. Wing 85, tail 98, tarsus 30, entire culmen $25\frac{1}{2}$, exposed culmen $21\frac{1}{2}$ mm. Plumage moderately worn, tail strongly abraded. Skull fully ossified.

The individual collected, in riparian woodland, was the only one encountered.

Laniarius ferrugineus mossambicus (Fischer & Reichenow)

Dryoscopus major mossambicus Fischer & Reichenow, 1880, J. f. Orn. 28: 141 — Mossambique.

♂, 19 November, Aberdeen, 1300 m, testes $6 \times 3\frac{1}{2}$, $4\frac{1}{2} \times 3\frac{1}{2}$ mm, weight 55 g. Stomach almost empty (shot at 15.30 hrs). Iris dark brown-red, bill black, inside of mouth black, legs leaden. Wing 100, tail 96, tarsus 31, entire culmen $25\frac{1}{2}$, exposed culmen $21\frac{1}{2}$ mm. Moderately fat, plumage worn, slight moult of body feathers.

This species was repeatedly observed in the woodland bordering the creek at Aberdeen; it drew attention by its high whistle.

Telephorus olivaceus makawa (Benson)

Chlorophoneus rubiginosus makawa Benson, 1945, Ostrich 16: 134 — Chirobwe Mt., Ncheu dist., Nyasaland, 6000 ft.

♂, im., 6 November, near Maroro River Crossing, 1800 m, testes $3\frac{1}{2} \times 2$, $2\frac{1}{2} \times 2$ mm, weight 30.5 g. Iris brown, bill black, inside of mouth light yellow, legs blue-grey. Wing 82, tail 77, tarsus 25, entire culmen $21\frac{1}{2}$, exposed culmen $17\frac{1}{2}$ mm. Skull fully ossified.

♀, 17 October, Rhodes Inyanga Orchards, 1800 m, ovary $7\frac{1}{2} \times 2\frac{1}{2}$ mm, diameter of oöcytes to 1 mm, weight 31.0 g. Iris chocolate-brown, bill and inside of mouth black, legs light blue-grey. Stomach contents: beetles and other insects, and unidentifiable matter. Wing 85, tail 83, tarsus $24\frac{1}{2}$, entire culmen 21, exposed culmen $17\frac{1}{2}$ mm. No moult, skull fully ossified.

♀, 17 November, forest above Pungwe Gorge, 1800 m, ovary $8 \times 3\frac{1}{2}$ mm, diameter of oöcytes to 1 mm, weight 35.5 g. Iris dark brown-red, bill and inside of mouth black, legs blue-grey. Stomach contents: diverse insects. Wing 81, tail 77, tarsus 25 mm, bill with damaged tip. No moult, skull fully ossified.

A common bird throughout the Highlands, not only in evergreen forest, but also in secondary growths.

The immature male is in a very interesting plumage. On the upperparts it is not different from the adults, except that there is a slight suffusion of green in the grey of crown and nape; the cheeks are light grey, paler than the crown, and the lores are of the same colour, not whitish as in adults. The underparts are entirely devoid of rufous-buff colouring; the throat and upper breast are off-white scalloped with grey (the outer edges of the feathers); the breast has the same pattern, but a yellowish olive tinge comes in here, and increases in intensity towards the abdomen, which is strongly

tinged with this colour. The tail is olive, without yellow tips, though the inside of each rectrix has a very narrow edge of yellow.

Smithers et al. (1957: 135) gave *T. nigrifrons* a vertical range of from 2200 ft to the upward limit of evergreen forest, but later (Smithers et al., 1959: 248) mentioned that *T. olivaceus* and *T. nigrifrons* appear for replace each other altitudinally, the former occurring principally above 4500 ft, the latter between 2000 and 4500 ft. It corresponds with this view that I have observed only *T. olivaceus*.

Lanius collurio subsp.

♀, 11 November, Aberdeen, 1300 m, ovary $8 \times 2\frac{1}{2}$ mm, weight 26.8 g. Stomach crammed with remains of insects. Iris dark brown. Wing 89, tail 68, tarsus 24, entire culmen 18, exposed culmen 14 mm. Skull fully ossified, tailmoult, wings moderately worn, not in moult.

Sex?, immature, 19 November, Aberdeen, 1300 m, weight 28.1 g. Iris dark sepia-brown, bill blue-grey with black tip, legs dark grey, Wing 87, tail 68, tarsus $23\frac{1}{2}$, entire culmen 18, exposed culmen $13\frac{1}{2}$ mm. Much subcutaneous fat over the whole body, skull already fully ossified.

During my stay this shrike was common at Aberdeen, but I have not seen it in the higher parts of the National Park.

The immature bird has a brighter, more rufous plumage than the adult female.

I have not attempted a subspecific identification of these specimens, as there is too much controversy in literature about the number of subspecies to be recognised. In the more recent literature Meinertzhagen (1954) does not recognise any races; White (1957) admits, besides the nominate race, only *pallidifrons* and includes all wintering birds from Africa except two (from Abyssinia and Zeyla) in the nominate race. Vaurie (1959: 97), on the other hand, admits four, and Clancey (1961b) lists two subspecies as wintering in southern Africa, *kobylini* and *pallidifrons*. In a later publication he has added the nominate race (Clancey, 1965-1966: 530). Neither Johansen (1952), nor Vaurie (1959), nor even Clancey (1961b) mention any character by which the females of the various races might be differentiated, so that I must assume that none exist. In the circumstances application of a trinomial would evidently be meaningless.

Lanius collaris subsp.

♀, 9 November, between the Orchards and Inyanga village, 1750 m, ovary 6×4 mm, largest oöcyte 1 mm, weight 39.3 g. Iris dark brown, bill black,

inside of mouth light flesh colour, legs black. Stomach contents: a great mass of insect remains. Wing $91\frac{1}{2}$, tail 94, tarsus $24\frac{1}{2}$, entire culmen $20\frac{1}{4}$, exposed culmen 14 mm. No moult.

This species was not uncommon in the more open parts of the Highlands, living in pairs.

There is no agreement as to the geographic variation of this species, and its nomenclature. Clancey (1953, 1954), Smithers et al. (1957) and the S.A.O.S. List Committee (Clancey, 1960) would call the Rhodesian birds *predator*. Other authors (Rand, 1960; White, 1962a; Mackworth-Præd & Grant, 1963) use the name *pyrrhostictus* and place *predator* as a synonym. I have not enough material to base an own opinion on, and therefore am unable to take a stand in this controversy. In shape and colour pattern of the tail my bird agrees with specimens from the Cape in our collection, but it is slightly smaller.

TURDIDAE

***Erythropygia leucophrys zambesiana* Sharpe**

Erythropygia zambesiana Sharpe, 1882, Proc. Zool. Soc. Lond.: 588, pl. XLV, fig. 2 — Teté, Zambesi.

♂, 13 November, Aberdeen, 1300 m, testes $6\frac{1}{2} \times 4$, $6 \times 3\frac{1}{2}$ mm, weight 18.7 g. Bill black, basal half of mandible yellow, inside of mouth yellow. Wing 70, tail 61, tarsus 23, entire culmen 16, exposed culmen 12 mm. No moult.

This bird, which was loudly singing from a bush in the savanna, was the only member of its species I met with.

From three specimens collected in Natal, near Pietermaritzburg and Ashburton, the Aberdeen specimen differs by its much warmer brown upperparts, and conspicuously by the rusty brown tail. Weights of the Natal birds are: ♂ 18.3, 19.7; ♀ 23.0 g.

***Pogonocichla stellata transvaalensis* (Roberts)**

Tarsiger stellatus transvaalensis Roberts, 1912, J. S. Afr. Orn. Un. 8: 21 — Woodbrush, Transvaal [reference not verified].

♂, 28 October, Pungwe Gorge forest, 1800 m, testes $7 \times 4\frac{1}{2}$, $5\frac{1}{2} \times 3\frac{1}{2}$ mm, weight 21.1 g. Iris dark sepia-brown, bill black, inside of mouth black towards the bill-tips, remainder yellow, legs dirty flesh. Stomach contents fragments of insects. Wing 90, tail $65\frac{1}{2}$, tarsus $27\frac{1}{2}$, entire culmen 17, exposed culmen $12\frac{1}{2}$ mm. No moult, skull fully ossified.

A common inhabitant of the lower stages of the evergreen forest at Pungwe Gorge; not seen elsewhere.

This specimen shows the racial characters: light grey outer edges to the remiges and almost white edges to the feathers of the alula, very clearly (cf. Moreau, 1951). Compared with a male from Bulwer, Natal, 1500 m, the mantle is slightly more olive.

Cossypha heuglini intermedia (Cabanis)

Bessornis intermedia Cabanis, 1868, J. f. Orn. 16: 412 — Ost-Afrika (no exact locality given).

♂, 19 November, Aberdeen, 1300 m, testes $4 \times 2\frac{1}{2}$, $3 \times 2\frac{1}{2}$ mm, weight 42 g. Iris dark brown, bill, inside of mouth and legs black. Stomach contents unidentifiable remains of insects. Wing 96, tail $84\frac{1}{2}$, tarsus $32\frac{1}{2}$, entire culmen 22, exposed culmen 18 mm. No moult, plumage worn, much subcutaneous fat.

The bird collected was the only one of its species seen; it moved about in a dense thicket.

Rhodesian birds are often given the subspecific name *euronota*, but this race is not generally recognised, and even those authors who do admit it, agree that it is not well differentiated (Clancey, 1964a). In the circumstances I prefer to list my specimen as *C. h. intermedia*.

Cossypha caffra subsp.

♂, 19 October, along Inyangombe River not far from the Orchards, 1800 m, testes $5\frac{1}{2} \times 4\frac{1}{2}$, $4 \times 3\frac{1}{2}$ mm, weight 26.7 g. Iris dark brown, bill black, legs grey-black. Stomach contents remains of insects. Wing 89, tail $76\frac{1}{2}$, tarsus 31, entire culmen $19\frac{1}{2}$, exposed culmen $14\frac{3}{4}$ mm. No moult, plumage abraded.

This species was common in the Highlands, wherever shrubs and trees provided sufficient cover, particularly along creeks but also in drier habitat.

According to Clancey (1952), followed by Smithers et al. (1957) birds from the eastern highlands of Rhodesia are intermediate between the races *drakensbergi* and *iolaema*. White (1962: 143) does not recognise *drakensbergi*, and calls the Rhodesian birds intergrades between the nominate race and *iolaema*. Compared with two specimens of the nominate race from near Pietermaritzburg, Natal, the Inyanga bird differs by its darker grey crown, and an upper back which is slightly darker and greyer, less brown.

Saxicola torquata subsp.

♀, 19 October, near the Orchards, 1800 m, ovary large, $7 \times 4\frac{1}{2}$ mm, weight 14.5 g. Iris dark brown, bill and legs black. Wing 67, tail $46\frac{1}{2}$, tarsus $21\frac{1}{2}$, entire culmen 15, exposed culmen $11\frac{1}{2}$ mm.

♀, 2 November, some distance north of the Orchards, 1800 m, laying, with a fullgrown shell-less egg in the oviduct. Wing 66, tail 44, tarsus $21\frac{1}{2}$, entire culmen $14\frac{3}{4}$, exposed culmen $10\frac{1}{2}$ mm. No moult, plumage worn.

Stonechats were common and widely distributed in the more open parts of the Highlands.

Both skins are rather poor, and on the basis of this material I am unable to judge if they should be placed in the nominate race, or be called *oreobates* or *promiscua* (cf. Clancey, 1968a).

Oenanthe pileata (J. F. Gmelin)

[*Motacilla*] *pileata* J. F. Gmelin, 1789, Syst. Nat., ed. 13, I (2): 965 — Caput bonae spei & in Sina = Cape of Good Hope.

♂, 8 November, near Inyanga village, 1700 m, testes $3\frac{1}{2} \times 3$, $2\frac{1}{2} \times 2$ mm, weight 29.2 g. Bill, inside of mouth, and legs black. Stomach contents remains of insects. Wing 91, tail 55, tarsus 33, entire culmen 20, exposed culmen 15 mm. No moult, plumage worn.

In open, recently burnt country near Inyanga village wheatears were common, conspicuously displaying their black and white tails as they flew from termite mound to shrub. They were probably about to breed as they showed a great interest in aardvark-holes, hopping in and out, or resting above the entrances.

Turdus olivaceus swynnertoni Bannerman

Turdus swynnertoni Bannerman, 1913, Bull. Brit. Orn. Cl. 31: 56 — Chirinda Forest, Rhodesia.

♂, 17 November, Pungwe Gorge forest, 1800 m, testes $8 \times 5\frac{1}{2}$, $6\frac{1}{2} \times 4\frac{1}{2}$ mm, weight 70.5 g. Iris dark sepia-brown, bill orange, a streak over the ridge of the culmen black, inside of mouth orange, legs yellow. Stomach empty (shot at 7.15 a.m.). Wing 112, tail 79, tarsus 32, entire culmen 25, exposed culmen 21 mm. No moult, but plumage extremely abraded; in unworn condition the wings would probably have been several millimetres longer.

Fledgling of unknown sex, 21 October, Pungwe Gorge forest, 1700 m, 46.7 g. Iris sepia, inside of mouth yellow.

This species was common in the forest of Pungwe Gorge and also in forest along the Gairezi River, outside the National Park.

The fledgling, obviously just from the nest, was shot in the mistaken notion that it was some rare ground-bird, when it scuttled through the leaves on the forest floor. Compared with the adult male, this specimen differs by having the upperparts darker, greyer, without olive tinge. Some of the wing-coverts are tipped with buffish, and the scapulars have a buff central streak. On the underparts the difference is much greater; they are not plain, but all feathers of breast and flanks are broadly edged with black. The throat, on the other hand, the only part of the adult bird that is spotted, is immaculate buffish white in the young.

***Turdus libonyanus tropicalis* Peters**

Turdus tropicalis Peters, 1881, J. f. Orn. 29: 50 — Inhambane.

♂, 25 October, Rhodes Inyanga Orchards, 1800 m, testes $10 \times 5\frac{1}{2}$, $7 \times 5\frac{1}{2}$ mm, weight 53.8 g (?). Iris sepia-brown, bill, inside of mouth and rim of eye deep orange, legs light yellow-brown. Stomach empty (shot at 8 a.m.). Wing 119, tail 94, tarsus 31, entire culmen 25, exposed culmen 21 mm. No moult, plumage fresh, skull fully ossified.

♂ juv., 13 November, Aberdeen, 1300 m, testes 1×1 , 1×1 mm, weight 55.3 g. Iris dark sepia. Wing 109, tail 81, tarsus $28\frac{1}{2}$, entire culmen $20\frac{1}{2}$, exposed culmen 16 mm. Skull still entirely cartilaginous.

In the Highlands this species was only observed in the Orchards (where several pairs resided), and elsewhere only the specimen collected at Aberdeen was seen. This species appears to find its optimum habitat in gardens and similar more or less open places.

The juvenile bird differs from the adult in having buffish tips to the upper wing-coverts, and most conspicuously by having the whole breast with roundish black spots.

The weight noted for the adult male is remarkably low for a healthy adult bird, and possibly I have made a mistake in writing down its weight. It may have been 73.8 instead of 53.8 g.

From two birds collected near Pietermaritzburg, Natal, in September 1964, the adult Inyanga specimen differs by slightly lighter, more olive-grey upperparts. The measurements of the specimens from Pietermaritzburg are:

sex	weight	wing	tail	tarsus	entire culmen	exposed culmen
♂	75.5	120	91	32	$24\frac{1}{2}$	19
♀	75.0	113	88	30	24	20

The latest revision of this species was by Clancey (1965b), who stated

that the most important difference between the nominate race and *tropicalis* is the shorter bill of the latter. Clancey examined a material of over 400 skins from all parts of the range of the species, so that I am in no position to contradict his conclusions; nevertheless a few obvious points have to be raised. Clancey mentioned for twenty specimens of *peripheris* an entire culmen of 23.5-26 (24.8), for twenty nominate *libonyanus* 23.5-26(24.9), and for twenty *tropicalis* 20.5-23.5 (22.5) mm. My specimens from Pietermaritzburg are topotypical of *peripheris*, and their measurements agree with those given by Clancey. Therefore it is surprising that my specimen from Inyanga has a culmen-length which even exceeds that of the two Pietermaritzburg birds (though viewed from above and from below the bill is more slender). Clancey included in his material of *tropicalis* two specimens from Inyanga. Clancey found in twenty specimens of *tropicalis* a wing-length of 106-117 mm; my bird has it 119 mm. As my measurements suggest a difference in size between males and females, it is a pity that Clancey did not separate the sexes. Clancey mentioned that *tropicalis* usually has the throat suffused with buffy; in both of my specimens it is pure white. My two specimens of *peripheris*, on the other hand, of which race Clancey described the throat as pure white, have pinkish buff throats with some blackish streaks; perhaps, however, the pinkish tinge may have been caused by stain, a possibility against which Clancey has warned.

From the preceding remarks it will be clear that I do not consider Clancey's work as final, and in this connection one other point merits discussion. Under *T. l. tropicalis*, Clancey lists, among other localities in Rhodesia, specimens examined from Selukwe (2), Salisbury (3), and Rusape (1). Under the nominate race, *T. l. libonyanus*, he lists specimens from Selukwe (7), Salisbury (6), and Rusape (1). Surely it goes against the philosophy of ternary nomenclature to have two subspecies co-existing? (migration has not been recorded in the species). Or must we assume that this whole area is inhabited by intermediate populations? In that case the arbitrary application of trinomials would seem futile, and the difference in culmen-measurements (without overlap!) found by Clancey remains unexplained.

In his more recent publications, Clancey has treated the name *libonyana* as a substantive, not changing gender with its genus. In the original description, as *Merula libonyana*, no explanation is given of the derivation of the name, though later Smith transferred it to the genus *Turdus* as *T. libonyana*. This provides an argument in favour of Clancey's opinion, but from many of the names he gave it is abundantly clear that Smith was not a very accomplished latinist, and mainly for the sake of continuity and simplicity, I prefer to use the masculine ending.

TIMALIIDAE

Turdoides jardineii kirkii (Sharpe)

Crateropus kirkii Sharpe, 1876, in Layard, Birds South Africa, new ed., 1875-1884: 213 — near rivers in the Zambesi country.

♂, 13 November, Aberdeen, 1300 m, testes $7\frac{1}{2} \times 5$, $6 \times 4\frac{1}{2}$ mm, weight 65.5 g. Iris vermilion with yellow inner circle, bill black, legs blue-grey. Wing 102, tail 94, tarsus $33\frac{1}{2}$, entire culmen $24\frac{1}{2}$, exposed culmen 20 mm. No moult.

This specimen was collected in riparian woodland, where it was hopping from branch to branch in a tree. I have not otherwise met with the species.

In identifying this specimen as *kirkii*, I have followed Clancey (1958), according to whom the nominate race which inhabits the greater part of Rhodesia, has a wing-length of $107\frac{1}{2}$ - $118\frac{1}{2}$ mm, and *kirkii* of northeastern Rhodesia one of 95 - $103\frac{1}{2}$. My specimen fits in this last range.

SYLVIIDAE

Sylvia borin (Boddaert)

Much less common than *Phylloscopus trochilus*; my only observation was on a mountain slope with scattered bushes near Inyanga village, where on 8 November I observed two individuals in full song.

Acrocephalus baeticatus subsp.

♂, 27 October, along the Inyangombe River, near Rhodes Inyanga Orchards, 1800 m, testes $2\frac{1}{2} \times 2$, $2 \times 1\frac{1}{2}$ mm, weight 8.3 g. Iris brown, maxilla black, tomia and mandible pinkish, inside of mouth deep orange, legs brown-grey. Wing 58, tail 49, tarsus 25, entire culmen 16, exposed culmen $11\frac{1}{2}$ mm. No moult.

During my stay several individuals of this minute reed-warbler resided in the reeds along the Inyangombe River where they drew ready attention by their loud song, but managed to keep very well concealed. The birds usually kept very low in the reeds, just above the water.

According to the available literature the resident race of Rhodesia is *cinnamomeus*, but migrants of the nominate race may also be expected, and therefore I do not apply a subspecific name to this specimen, especially as the species is not otherwise represented in our collection. White (1960: 412) states that the difference between the two races is largely one of size; wing of the nominate race 58-62 in South Africa, 56-60 in East Africa, and of *cinnamomeus* 52-57 mm. Grant & Mackworth-Praed (1963: 214-215), however, give the nominate race a wing length of 53-63 mm, so that the

difference in size appears to be largely imaginary. In wing-length my specimen just exceeds the maximum (57 mm) allowed for *cinnamomeus* by White and Grant & Mackworth-Praed. Clancey (1963b) includes birds of the Rhodesian plateau in the nominate race, and comes with another, slightly different set of measurements.

***Chloropeta natalensis natalensis* Smith**

Chloropeta natalensis Smith, 1847, Ill. Zool. S. Afr. II: pl. 112 fig. 2 — near to Port Natal.

♂, 20 October, about a mile north of the Orchards, 1800 m, testes $4 \times 2\frac{1}{2}$, $1\frac{1}{2} \times 1\frac{1}{2}$ mm, weight 11.9 g. Iris dull brown, maxilla black, mandible brownish-pink, inside of mouth orange, legs horn black. Wing 64, tail 61, tarsus $21\frac{1}{2}$, entire culmen $15\frac{3}{4}$, exposed culmen $10\frac{1}{2}$ mm. No moult.

♂, 30 October, near Maroro River crossing, 1800 m, testes $4 \times 2\frac{1}{2}$, 2×2 mm, weight 12.8 g. Iris dull brown, maxilla black, mandible brownish pink, inside of mouth orange, legs black. Wing $62\frac{1}{2}$, tail 59, tarsus 21, entire culmen $15\frac{1}{4}$, exposed culmen $11\frac{1}{4}$ mm. No moult.

A common species of the Highlands, inhabiting small shrubs and shrubbery in the grasslands. It has an attractive loud song.

***Bradypterus barratti priesti* Benson**

Bradypterus (Caffrillas) barratti priesti Benson, 1946, Ostrich 17: 197 — Vumba highlands, near Umtali, Southern Rhodesia, at an altitude of 5000-5500 ft.

♂, 27 October, Rhodes Inyanga Orchards, 1750 m, testes $2\frac{1}{2} \times 2$, $2 \times 1\frac{1}{2}$ mm, weight 18.6 g. Iris brown, maxilla black, mandible pale blue with dark grey tip, legs grey-brown. Wing 64, tail 66, tarsus $22\frac{1}{2}$, entire culmen $15\frac{1}{2}$, exposed culmen $12\frac{1}{2}$ mm. No moult.

♂, 5 November, Rhodes Inyanga Orchards, 1800 m, testes 6×4 , 4×3 mm, weight 19.8 g. Iris brown, bill black, underside of mandible grey, legs brown-grey. Stomach contents remains of small insects in a solid mass. Wing 67, tail 66, tarsus $23\frac{1}{2}$, entire culmen $16\frac{1}{2}$, exposed culmen $12\frac{1}{2}$ mm. No moult, plumage fresh, skull fully ossified.

♀, 21 October, above Pungwe Gorge, 1800 m, ovary $6 \times 4\frac{1}{2}$ mm, weight 19.1 g. Iris brown, bill black, basal half of mandible light grey, legs dirty flesh colour. Stomach contents insects. Wing 63, tail 62, tarsus $22\frac{3}{4}$, entire culmen $14\frac{1}{2}$, exposed culmen $11\frac{3}{4}$ mm. No moult, skull fully ossified.

This species was common in dense vegetation: in secondary growths, scrub, and open places in the forest (in Pungwe Gorge); I found it not nearly as secretive as literature had made me believe (cf. Smithers et al., 1957: 117:

“very secretive”). The first specimen was obtained in scrub country with a dense undergrowth of grasses, bordering the Pungwe Gorge forest. The second bird was obtained, quite unexpectedly, from the low branch of a pine tree, at the edge of a plantation of old pines, about 25 cm above the ground: the branch was not very dense, and there was no other cover. The third bird was taken in dense scrub mixed with reeds along the Mare River, near the Orchards. An *Ornithoctona laticornis* (Macq.) ♀ (Hippoboscidae) was obtained from this specimen.

In each case the birds drew my attention by their harsh alarm calls: “tr.r.r.r.r....tår...t.r.r.r.”, and usually it was not long before they showed themselves, though rarely for more than a moment.

Schoenicola brevirostris brevirostris (Sundevall)

Bradypterus brevirostris Sundevall, 1850, Oefv. K. Sv. Vet.-Akad. Förh. 7: 103 — *Caffraria inferiori* = Upper Umlaas River (Umlazi River), Natal.

♂, 16 October, Rhodes Inyanga Orchards, 1800 m, testes, left 1 × 1 mm, right damaged, weight 15.1 g. Wing 61, tail 78, tarsus 18, entire culmen 13½, exposed culmen 10 mm. No moult.

♂, 25 October, same locality, testes 4 × 2½, 4 × 2½ mm, weight 15.3 g. Stomach contents insects. Wing 63, tail 82, tarsus 18½, entire culmen 14, exposed culmen 10¼ mm. No moult, skull fully ossified.

♂, 6 November, near Maroro River crossing, 1800 m, testes 5½ × 4, 4 × 3 mm; weight 16.2 g. Wing 61, tail 81, tarsus 18¾, entire culmen 14, exposed culmen 10½ mm. No moult.

♀, 16 October, Rhodes Inyanga Orchards, 1800 m, ovary 5 × 2½ mm, weight 15.4 g. Wing 62, tail 82, tarsus 19, entire culmen 13½, exposed culmen 11 mm. No moult.

Iris brown, maxilla black, mandible light bluish grey, legs pink.

A common inhabitant of areas with dense and coarse grasses.

White (1960: 408) has made *S. brevirostris* conspecific with Indian *S. platyura*, but he has not been followed by other workers. I am insufficiently familiar with these species to have an own opinion.

The species is in general appearance close to the Australian *Eremiornis carteri*, and one wonders if the latter should not be returned to the Sylviidae (s.s.), from which family it has been removed to the Maluridae.

Phylloscopus trochilus trochilus (Linnaeus)

[*Motacilla*] *Trochilus* Linnaeus, 1758, Syst. Nat., ed. 10, 1: 188 — Europe.

♂, 18 October, about three kilometres north of Rhodes Inyanga Orchards, 1800 m, testes very small, weight 8.8 g. Iris dark sepia-brown, maxilla dark

horn grey, tomtia and mandible dirty yellow, legs dirty yellowish brown. Wing 67, tail $46\frac{1}{2}$, tarsus 20, entire culmen 13, exposed culmen 10 mm. No moult, plumage slightly worn, skull ossified.

♀, 6 November, wattle plantation east of Rhodes Hotel, 1800 m, ovary $2\frac{1}{2} \times 1\frac{1}{2}$ mm, weight 7.7 g. Iris dark brown, bill brownish black, basal half of mandible dirty yellowish, legs dirty brownish. Wing 66, tail 45, tarsus 18, entire culmen 11, exposed culmen $7\frac{1}{2}$ mm. No moult, skull ossified.

During my stay this was a common bird wherever there were trees and bushes. To a visitor new from Europe it was a moving experience to hear the familiar happy song in such a different environment. Besides in the Highlands, I have also seen and heard the species in the Rumbise forest at 650 m, a truly tropical environment.

Compared with specimens from Holland these birds have the upperparts slightly duller green. The male, notwithstanding the fact that its skull was already completely pneumatised, is evidently a young bird; its underparts are strongly tinged with yellow. They are greener than *P. t. acredula*, which is more brownish, though the difference is very slight, and I believe it justified to bring these specimens to the nominate race. According to Irwin & Benson (1966a), *acredula* is the more common of the two subspecies in Rhodesia.

***Seicercus ruficapillus johnstoni* W. L. Sclater**

Seicercus ruficapilla johnstoni W. L. Sclater, 1927, Bull. Brit. Orn. Cl. 48: 13 — Kombi, Masuka Range, north-west of Lake Nyasa at about 9000 ft.

♂, 28 October, forest above Pungwe Gorge, 1800 m, testes $6 \times 4\frac{1}{2}$, $5 \times 4\frac{1}{2}$ mm, weight 8.6 g. Iris sepia-brown, maxilla black, mandible orange, inside of mouth orange. Wing 56, tail 38, tarsus 21, entire culmen $12\frac{1}{2}$, exposed culmen $8\frac{1}{4}$ mm. No moult.

♀, same data, collected with the male, ovary 4×3 mm, weight 8.2 g. Iris sepia-brown, maxilla black, mandible orange, inside of mouth orange. Stomach contents numerous small insects. Wing $53\frac{1}{2}$, tail 39, tarsus 20, entire culmen $11\frac{1}{2}$, exposed culmen $8\frac{1}{2}$ mm. No moult.

A common species in the evergreen forest above Pungwe Gorge, living in pairs in the foliage.

***Apalis thoracica* subsp.**

♂, 17 October, Rhodes Inyanga Orchards, 1800 m, testes $4 \times 2\frac{1}{2}$, $3 \times 2\frac{1}{2}$ mm, weight 10.9 g. Wing 58, tail 51, tarsus 21, entire culmen 15, exposed culmen $11\frac{3}{4}$ mm. No moult.

♂, 25 October, Rhodes Inyanga Orchards, 1800 m, testes $3\frac{1}{2} \times 3$,

$3 \times 2\frac{1}{2}$ mm, weight 10.4 g. Wing 57, tail $50\frac{1}{2}$, tarsus $20\frac{1}{2}$, entire culmen $15\frac{1}{4}$, exposed culmen $12\frac{1}{4}$ mm. No moult.

♂, 28 October, forest above Pungwe Gorge, 1800 m, testes $5\frac{1}{2} \times 3\frac{1}{2}$, $3 \times 2\frac{1}{2}$ mm, weight 11.1 g. Wing 55, tail $49\frac{1}{2}$, tarsus $21\frac{1}{2}$, entire culmen 15, exposed culmen 12 mm. No moult.

♀, 25 October, Rhodes Inyanga Orchards, 1800 m, ovary 7×4 mm, weight 9.8 mm. Wing 52, tail 44, tarsus damaged, entire culmen $15\frac{1}{2}$, exposed culmen 11 mm. No moult.

Iris yellow-white, bill and inside of mouth black, legs light brown to pinkish brown.

A common bird, occurring in forest, and also in shrubs in gullies and similar habitat.

This species is known to show considerable geographical variation (see the map in Clancey, 1965-1966: 479), and the Inyanga specimens might belong either to *A. t. rhodesiae* Gunning & Roberts or to *A. t. arnoldi* Roberts. The latest reviser, Irwin (1966) calls birds from: "the drier, western, rain-shadow of the Inyanga Highlands" *arnoldi*, and those from "Inyanga" *rhodesiae*. Evidently there is little point in assigning single specimens to a subspecies. I might add that my four specimens show considerable variation, especially on the upperparts which vary from strongly tinged with olive green to brown-grey with only the slightest touch of olive green on the rump.

***Apalis chirindensis* Shelley**

Apalis chirindensis Shelley, 1906, Bull. Brit. Orn. Cl. 16: 126 — Chirinda forest, 4000 ft.

♂, 21 October, forest on the upper slopes of Pungwe Gorge, 1800 m, testes $6\frac{1}{2} \times 4$, 5×3 mm, weight 9.8 g. Iris pale yellow-brown, maxilla black, mandible pinkish white, legs light brown. Stomach contents small insects. Wing 50, tail 55, tarsus 20, entire culmen $13\frac{3}{4}$, exposed culmen $10\frac{1}{2}$ mm. No moult, tail extremely worn, skull fully ossified.

♂, 17 November, same locality, testes $6\frac{1}{2} \times 5$, $4\frac{1}{2} \times 4$ mm, weight 8.7 g. Unfeathered parts as above. Wing 50, tail $52\frac{1}{2}$, tarsus 20, entire culmen 14, exposed culmen $10\frac{1}{2}$ mm. Plumage strongly abraded, tail in moult, skull fully ossified.

♂, same data, testes $5\frac{1}{2} \times 4\frac{1}{2}$, $5\frac{1}{2} \times 4\frac{1}{2}$ mm, weight 8.3 g. Unfeathered parts as above. Wing $50\frac{1}{2}$, tail 60, tarsus $19\frac{1}{2}$, entire culmen 14, exposed culmen $11\frac{1}{2}$ mm. Moult of remiges and body feathers.

♀, same data, ovary $4\frac{1}{2} \times 3$ mm, weight 7.7 g. Unfeathered parts as above. Wing 48, tail 48, tarsus $19\frac{1}{2}$, entire culmen 13, exposed culmen 10 mm. No moult, plumage very worn.

This small warbler was common in the evergreen forest of Pungwe Gorge, and occurred also in the lower trees and bushes along its upper edge, but I have not observed it anywhere else. The birds usually move about in pairs, often high, and from the foliage of the tree crowns it is also that they deliver their light but charming song.

Clancey (1968a) has expressed the opinion that *A. chirindensis* is specifically different from *A. melanocephala*, of which it has usually been regarded as a subspecies. The two have now been found sympatrically in the Makurupini Forest, eastern Rhodesia, thus confirming Clancey's opinion (Clancey, 1969b).

Here is an example of the kind the keen bibliographer finds fairly often: Priest (1935: 229), Smithers et al. (1957: 119), White (1962: 708), Mackworth-Praed & Grant (1963: 240), and Clancey (1965-1966: 480) all state that *A. chirindensis* has been published on page 12 of the Bulletin, whereas page 126 is the correct reference. I traced this slight error to Sclater (1930: 522), where it may have originated as an innocent misprint.

Eremomela scotops scotops Sundevall

Eremomela scotops Sundevall, 1850, Oefv. K. Sv. Vet.-Akad. Förh. 7: 103 — Hab. in Caffraria superiori = Mohapoani, Bechuanaland (Gyldenstolpe, 1926).

♀, 21 November, Aberdeen, 1300 m, laying, weight 10.6 g. Iris yellowish white, bill black, inside of mouth black, legs grey-brown, toes light brown. Wing 59, tail 44, tarsus $19\frac{1}{4}$, entire culmen 14, exposed culmen $10\frac{1}{2}$ mm. No moult, wings and tail moderately worn.

This bird was collected in bushes along the creek at Aberdeen; it was the only individual seen of a species known to be common throughout the higher parts of Rhodesia.

Sphenoeacus afer transvaalensis C. H. B. Grant

Sphenoeacus transvaalensis C. H. B. Grant, 1908, Bull. Brit. Orn. Cl. 21: 92 — Woodbush Hills, N. E. Transvaal.

♀, 7 November, near Inyanga village, 1700 m, ovary $5\frac{1}{2} \times 5\frac{1}{2}$ mm, largest oöcytes 1 mm, weight 33 g. Iris dark red, maxilla black, tomia and mandible light blue-grey, inside of mouth black, legs pinkish-grey. Stomach contents chitine rings of a large insect larva. Wing 69, tail $78\frac{1}{2}$, tarsus 25, entire culmen $18\frac{1}{4}$, exposed culmen 14 mm. No moult.

This bird was shot in a small shrub, surrounded by reeds and rushes

bordering a creek near Inyanga village. On previous visits to this place I had seen glimpses of reed birds presumably of this species, but it was difficult to get adequate views of them.

***Cisticola ayresii ayresii* Hartlaub**

Cisticola ayresii Hartlaub, 1863, Ibis 5: 325, pl. VIII fig. 2 — Port Natal.

♀, 7 November, near Inyanga village, 1700 m, ovary $6 \times 2\frac{1}{2}$ mm, diameter of largest oöcytes 1 mm, weight 9.4 g. Iris light brown, bill, maxilla black, tomia and mandible pinkish white, inside of mouth near tips of bill pink, deeper black, legs pale pink. Wing 47, tail 26, tarsus $18\frac{1}{2}$, entire culmen $12\frac{1}{4}$, exposed culmen 9 mm.

This specimen was one out of two or three, found in a special habitat: a small patch of very moist land, covered with fresh green grass of about 10 cm tall, surrounded by open burnt country.

***Cisticola lais mashona* Lynes**

Cisticola lais mashona Lynes, 1930, Ibis (12) 6, Suppl.: 229 — Chirinda, 3800 ft., Southern Masetter Mashona-land.

♂, 20 May 1964, Rhodes Inyanga Orchards, 1800 m, testes 1 mm. Collected by Mrs. H. A. W. Payne. Iris brown, maxilla dark grey, mandible light grey, legs flesh colour. Wing 60, tail 63, tarsus $21\frac{3}{4}$, entire culmen 14, exposed culmen 11 mm. Moults of wings and body feathers.

♂, 25 October, Rhodes Inyanga Orchards, 1800 m, testes $5\frac{1}{2} \times 3, 4 \times 2\frac{1}{2}$ mm, weight 15.2 g. Iris (light) brown, maxilla and tip mandible black, remainder of mandible light grey, inside of mouth black, legs light pinkish brown. Wing 60, tail $54\frac{1}{2}$, tarsus $21\frac{1}{4}$, entire culmen $13\frac{1}{2}$, exposed culmen $10\frac{1}{2}$ mm. No moult, tail abraded, skull fully ossified.

♂, 26 October, near Inyanga village, 1700 m, testes $5 \times 3, 4\frac{1}{2} \times 3$ mm, weight 15.4 g. Iris brown, maxilla black, tomia and mandible greyish white, inside of mouth black, legs pale brownish pink. Wing 60, tail $52\frac{1}{2}$, tarsus $21\frac{1}{2}$, entire culmen $13\frac{1}{2}$, exposed culmen $10\frac{1}{4}$ mm. No moult, tail extremely abraded, skull fully ossified.

♂, 29 October, near Inyanga village, 1700 m, testes $3\frac{1}{2} \times 2\frac{1}{2}, 3 \times 2$ mm, weight 17.3 g. Iris brown. Stomach contents remains of insects. Very fat. Wing 60, tail $54\frac{1}{2}$, tarsus 21, entire culmen 14, exposed culmen 11 mm. Moults of body feathers and tail; the tail consists of old and extremely abraded rectrices, and two new ones, still growing; skull fully ossified.

♀, 19 October, along the Inyangombe River near the Orchards, 1800 m, ovary damaged, weight 11.6 g. Iris brown, maxilla black, tomia and mandible

grey, inside of mouth blackish grey, legs dirty pink. Wing 53, tail 47, tarsus $20\frac{1}{4}$, entire culmen 13, exposed culmen $10\frac{1}{4}$ mm. Full moult of body feathers and tail.

♀, 29 October, near Inyanga village, 1700 m, ovary 5×3 mm, weight 12.3 g. Iris brown, maxilla black, mandible pink, legs light brown. Wing 54, tail 50, tarsus $20\frac{3}{4}$, entire culmen 12, exposed culmen 10 mm. The tail is in full moult, skull fully ossified.

♀, 9 November, between the Orchards and Inyanga village, 1750 m, ovary 2×2 mm, weight 11.2 g. Iris brown, bill black, basal portion of mandible greyish white, inside of mouth black, legs pale yellowish pink. Wing 53, tail 54, tarsus 20, entire culmen 13, exposed culmen $10\frac{1}{2}$ mm. No moult.

The dominant *Cisticola* in the Highlands, occurring wherever there is open country with some low vegetation providing cover. On the slopes of Mt. Inyangani I found it common right to the summit area at over 2500 m (see also Smithers et al., 1959). Though to the newcomer *Cisticola's* are by no means easy to identify, the characteristic high "wail", preceded by a short murmur, made recognition in the field of this species no problem.

Clancey (1968a) has drawn attention to the name *Cisticola lais gaza*, published by Sclater (1930), whose publication antedates *C. l. mashona* by about seven months. The name is, however, definitely a nomen nudum, not validated by an incomplete reference to a work not yet published. Clancey thought that under the International Rules the name *gaza* would be valid, but actually it is quite clear that if the validity of a name depends on a bibliographic reference, this must be to a previously published description, definition or figure (Stoll et al., 1961, art. 16 (a) (i)).

***Cisticola cantans münzneri* Reichenow**

Cisticola münzneri Reichenow, 1916, J. f. Orn. 64: 163 — Mahenge (Südliches Deutsch-Ostafrika).

♂, 23 October, along the Inyangombe River, near the western border of the Inyanga National Park, 1750 m, testes, left $3\frac{1}{2} \times 4$ mm, right damaged, weight 14.6 g. Iris cinnamon, bill black, legs flesh colour. Wing 56, tail $44\frac{1}{2}$, tarsus 24, entire culmen 14, exposed culmen $10\frac{1}{2}$ mm. Heavy moult; only one fullgrown rectrix, skull fully ossified.

This specimen, unfortunately a poor skin, was shot in a vegetation of shrubs and reeds bordering the Inyangombe River. Being unfamiliar with habitat, behaviour and song of the species, I am unable to say anything about its status in the Highlands.

Cisticola natalensis natalensis (Smith)

Drymoica natalensis Smith, 1843, Ill. Zool. S. Afr. 2: pl. 80 — Port Natal.

♀, 15 November, Aberdeen, 1300 m, ovary damaged, weight 18.2 g. Iris yellow-brown, bill, maxillary black, tomia and mandible pinkish white, legs pinkish beige. Stomach contents insects. Wing 64, tail 51, tarsus $25\frac{3}{4}$, entire culmen $15\frac{1}{4}$, exposed culmen $12\frac{1}{2}$ mm. No moult, plumage very worn, especially the tail, skull ossified.

♀, 21 November, Aberdeen, 1300 m, ovary 7×3 mm, weight 17.9 g. Iris yellow-brown, maxilla black, mandible pinkish white, inside of mouth pale pinkish, legs beige. Wing 65, tail 57, tarsus 23, entire culmen $15\frac{1}{2}$, exposed culmen 12 mm. Moult in remiges and body feathers.

Fairly common in the reeds along the creek at Aberdeen, where these two specimens were collected. Not seen elsewhere.

Cisticola aberrans nyika Lynes

Cisticola aberrans nyika Lynes, 1930, Ibis (12) 6, Suppl.: 564 — Nyika Plateau of northern Nyassaland, c. 6500 ft.

♀, 11 November, Aberdeen, 1300 m, laying, largest oöcyte 4×4 mm, weight 12.2 g. Iris cinnamon, maxilla horn black, mandible grey-white, legs beige. Wing $51\frac{1}{2}$, tail 53, tarsus 21, entire culmen 13, exposed culmen $9\frac{1}{2}$ mm. No moult.

Shot in vegetation bordering the creek at Aberdeen; the species was not otherwise seen.

This bird differs from two specimens collected near Pietermaritzburg, Natal by its distinctly more buffy posterior underparts; crown and mantle are slightly darker. The Natal specimens are two males, with wings 52, 52, tails 60, $60\frac{1}{2}$ mm, weight 13.1, 14.2 g. The small size and pale underparts place these birds in the race *C. a. minor* Roberts.

Cisticola fulvicapilla subsp.

♀, 19 November, Aberdeen, 1300 m, testes $4 \times 2\frac{1}{2}$, $2\frac{1}{2} \times 2$ mm, weight 8.6 g. Iris light brown, maxilla horn black, tomia, and mandible pale pinkish, inside of mouth black, legs pinkish beige. Wing 50, tail 36, tarsus 19, entire culmen $12\frac{3}{4}$, exposed culmen 10 mm. Tail-moult, no wing-moult, skull fully ossified.

Collected out of a presumed pair, in a dead shrub near the creek.

This bird was identified in the British Museum, and according to Galbraith (in litt., 31-X-1967): "The *C. fulvicapilla* agrees best with our *muelleri*:"

Lynes considered specimens from Southern Rhodesia to be intermediate between *muelleri* and *ruficapilla*, whereas Smithers et al. (1957) ascribe them to *ruficapilla*. Naturally, your fresher specimen is greyer, with darker and less gingery crown, than most of our more "foxed" ones". In view of this comment I regard it as prudent not to attach a subspecific name to the specimen.

Prinia robertsi Benson

Prinia robertsi Benson, 1946, Bull. Brit. Orn. Cl. 66: 52 — Vumba, near Umtali, Southern Rhodesia, at an altitude of about 5500 ft above sea-level.

♂, 16 October, near the Orchards, 1800 m, testes left $4\frac{1}{2} \times 3$ mm, right damaged, weight 9.2 g. Iris light yellow-brown, bill black, inside of mouth black, legs dirty pinkish. Wing $53\frac{1}{2}$, tail 60, tarsus $21\frac{1}{2}$, entire culmen 14, exposed culmen 10 mm. Slight moult of body feathers, skull fully ossified.

The only place where I have seen this species was in the piece of woodland between the Paynes' house and the Maro River, and upstream along that river. In this restricted area the birds were common and conspicuous; they moved about in small noisy flocks, keeping to the higher shrubs and lower trees along the edges of the woodland. The call, continuously uttered, was a relatively loud whinnying noise: "ki.hi.hi.hi.hi..."; obviously the call described in slightly different words by Benson (1946).

MUSCICAPIDAE

Muscicapa striata striata (Pallas)

Motacilla striata [Pallas], 1764, Cat. Vog. Vroeg, no. 168 — no locality = Holland.

♂, 15 November, Aberdeen, 1300 m, testes minute, weight 14.8 g. Iris dark sepia-brown, bill black, yellow at gape, inside of mouth yolk-yellow, legs black. Wing $91\frac{1}{2}$, tail 60, tarsus 14, entire culmen $16\frac{1}{4}$, exposed culmen 12 mm. No moult.

Though this bird is slightly more greyish above, slightly whiter below than the majority of specimens from Holland (the type-locality) in our collection, I believe that it is referable to the nominate race, from which adjacent *neumanni* is only poorly differentiated. I note that Smithers et al. (1957: 103) recognise only the nominate race for Rhodesia, though the astute Clancey (1963a) admits two, but even he had to put aside a large proportion of his material as not being subspecifically identifiable. To this I can add that specimens from Holland show a considerable individual variation in the

characters on which Vaurie (1959) and Clancey (1963a) rely for the separation of *neumanni* from the nominate race. The same can be said of the white marginations to the feathers of the forehead and forecrown which Benson & Irwin (1967: 66) considered "a particularly useful character" to distinguish *neumanni* from the nominate race. Note that Dunajewski (1939), in his careful revision, made no mention of this character.

It is interesting to note that when Pallas (1764) described this bird, he confused it with *Prunella modularis*; this is clear from the Dutch names he applied to it: Hofzanger and Basterd Nagtegaal, as well as from the Latin diagnosis in which we find: "Canta excellit". The Spotted Flycatcher is about the least vocal of all small passerine birds of the Netherlands.

***Batis capensis erythrophthalma* Swynnerton**

Batis erythrophthalma Swynnerton, 1907, Bull. Brit. Orn. Cl. 19: 109 — Chirinda Forest, 3900 feet.

♂, 17 October, near Rhodes Inyanga Orchards, 1800 m, testes 6×4 , $4\frac{1}{2} \times 3\frac{1}{2}$ mm, weight 12.0 g. Iris orange, outwards red, bill, inside of mouth and legs black. Wing 63, tail 40, tarsus 20, entire culmen $15\frac{3}{4}$, exposed culmen $11\frac{3}{4}$ mm. No moult.

♀, 28 October, forest above Pungwe Gorge, 1800 m, ovary $4\frac{1}{2} \times 2$ mm, weight 11.3 g. Iris red, bill, inside of mouth, and legs black. Wing 60, tail 39, tarsus 20, entire culmen 16, exposed culmen $11\frac{1}{2}$ mm. No moult.

A common species in the Highlands, both in evergreen forest and in secondary vegetation, though not in the more open types of woodland.

An important character on which this subspecies was based, and from which it takes its name, is the red iris. Two males which I collected in Natal (Bulwer and Balgowan), in September and October 1964, had the iris yellowish orange and bright orange respectively. Though my male from the Inyanga Highlands has the iris partly red, partly yellow, my material does not contradict the validity of this character, and therefore I follow all recent authors except Mackworth-Praed & Grant (1963: 119) in accepting *erythrophthalma*.

According to the views of Clancey (1952a, 1964b), Natal specimens belong to the race *hollidayi*, not recognised by Mackworth-Praed & Grant (1963) and White (1963). Clancey (1952a) differentiated *hollidayi* on the width of the pectoral band: "Similar to *Batis capensis capensis* (Linnaeus), 1766: Cape of Good Hope, but ♂ differs in having the black pectoral band distinctly narrower, thus, 17 mm. as against 19-21 mm. in *B. c. capensis*. Differences more marked in ♀, which has the orange-brown pectoral band much narrower in the centre, as follows: 9, 10 mm., in *B. c. capensis*

11-14 mm". In my males from Natal, the width of the breast-band is 21 and 24 mm, in a female from Balgowan, Natal, the width of the breast-band is difficult to measure, as it is not sharply demarcated against the remainder of the underparts, but fades out on both sides; nevertheless it is certainly not under 11 mm. Therefore I agree that *hollidayi* is a synonym. The width of the pectoral band in the two Inyanga specimens is 22 mm in the male, about 11 mm at the narrowest point in the female.

Clancey (1952a) based *hollidayi* on specimens from the Lebombo Mountains, Zululand, which he believed to be isolated from the populations inhabiting Natal, and when he described *hollidayi*, he compared it with Natal specimens which he regarded as representing the nominate race. On the plate illustrating his paper, the differences between *hollidayi* and supposed nominate *capensis* from the Drakensberg are shown. Nevertheless in his later work Clancey (1964b, 1965-1966) expands the range of *hollidayi* to include the whole of Natal and restricts the nominate race to the western Cape. Probably he followed Lawson (1964), who gave a definition of range and characters of *hollidayi*, entirely different from those given in the original description.

Batis molitor (Hahn & Küster)

Muscicapa molitor Hahn & Küster, 1850, Vögel aus Asien, Lief. 20, pl. 2. — Baviaans River, Cape Province [reference not verified].

♂, 13 November, Aberdeen, 1300 m, testes $4\frac{1}{2} \times 3\frac{1}{2}$, $3\frac{1}{2} \times 3$ mm, weight 11.9 g. Iris citrine, bill and legs black. Wing $65\frac{1}{2}$, tail 47, tarsus 21, entire culmen 15, exposed culmen 12 mm. No moult.

♀ juv., 20 November, Aberdeen, 1300 m, weight 11.8 g. Iris greyish white, bill black, inside of mouth yellow, legs black. Wing $60\frac{1}{2}$, tail $40\frac{1}{2}$, tarsus 19, entire culmen 13, exposed culmen $9\frac{1}{2}$ mm. Many bodyfeathers still growing.

Found in open woodland along the creek, where apparently not uncommon.

White (1963) has argued binomial treatment of this species, and for the sake of convenience I follow him, though more recently Irwin & Benson (1967: 16) recognised at least three races.

Trochocercus albonotatus swynnertoni Neumann

Trochocercus albonotatus swynnertoni Neumann, 1908, Bull. Brit. Orn. Cl. 23: 46 — Chirinda Forest, Gaza-land, 3800-4000 feet.

♂, 26 October, Inyanga Downs, in forest along the Gairezi River, testes $4\frac{1}{2} \times 3\frac{1}{2}$, $3\frac{1}{2} \times 3$ mm, weight 7.9 g. Wing 63, tail 70, tarsus 18, entire culmen 13, exposed culmen $7\frac{3}{4}$ mm.

Sex uncertain, 21 October, forest above Pungwe Gorge, 1800 m. Wing 64, tail 71, tarsus 18, entire culmen 12, exposed culmen 8 mm.

Common in the two forest localities where the specimens were collected, but not seen elsewhere. Both specimens were badly shot and are in poor condition.

Terpsiphone viridis plumbeiceps Reichenow

Terpsiphone plumbeiceps Reichenow, 1898, in Werther, Mittl. Hochl. D. Ost Afr.: 275 — Milanje, Angola [reference not verified].

♀, 11 November, along Inyangombe River at north-western boundary of the Inyanga National Park, 1300 m, ovary $6 \times 3\frac{1}{2}$ mm. Iris dark brown, eyelid deep ultramarine, bill with tip black, middle grey blue, base and especially at gape ultramarine. Stomach contents insects. Wing $91\frac{1}{2}$, tail 78, tarsus 15, entire culmen $16\frac{1}{2}$, exposed culmen $11\frac{3}{4}$ mm. No moult, plumage fresh, skull fully ossified.

Observed a few times in woodland along the Inyangombe and at Aberdeen, and also once in the evergreen forest above Pungwe Gorge, at 1800 m.

NECTARINIIDAE

Anthreptes collaris subsp.

♀, 12 November, Pungwe Gorge, 1200 m, weight 6.9 g. Iris dark sepia-brown, bill and legs black, inside of mouth orange-yellow. Wing $47\frac{1}{2}$, tail 31, tarsus $15\frac{1}{2}$, entire culmen $16\frac{1}{2}$, exposed culmen 14 mm. No moult.

This species was never observed in the Highlands, and I was surprised to find it common at the bottom of Pungwe Gorge, but nowhere higher. It is one of the commonest birds of gardens and parks in Umtali.

As there is much confusion concerning the subspecific identity of the birds inhabiting this part of Rhodesia, I prefer not to give a trinomial to this single female. My bird does not have much olive on the flanks, the character ascribed to the geographically nearest race *patersonae*. Clancey (1968b) expressed the opinion that *patersonae* can be distinguished by large size, but my specimen does not support this. Neither can I confirm Clancey's speculation that *A. collaris*: "is apparently a montane evergreen forest element of the forests of the eastern aspects of the mountains of eastern Rhodesia", as will be evident from the description of habitat and altitudinal ceiling given above.

Nectarinia olivacea sclateri (Vincent)

Cyanomitra olivacea sclateri Vincent, 1934. Ibis (13) 4: 90 — Chirinda Forest, S. Rhodesia, 3900 ft.

♂, 21 October, forest above Pungwe Gorge, 1800 m, testes $3\frac{1}{2} \times 2\frac{1}{2}$, $3\frac{1}{2} \times 2\frac{1}{2}$ mm, weight 11.8 g. Iris dark brown, bill and legs black. Wing $64\frac{1}{2}$, tail 57, tarsus $17\frac{1}{2}$, entire culmen 24, exposed culmen $21\frac{1}{2}$ mm. No moult, skull fully ossified.

This species was fairly common in the evergreen forest above Pungwe Gorge, I have not seen it elsewhere.

Nectarinia senegalensis gutturalis (Linnaeus)

[*Certhia*] *gutturalis* Linnaeus, 1766, Syst. Nat., ed. 12, 1: 186 — Brasilia = Cape of Good Hope.

♂, 21 November, Aberdeen, 1300 m, testes 7×5 , $5\frac{1}{2} \times 3\frac{1}{2}$ mm, weight 15.1 g. Iris dark brown, bill, inside of mouth, and legs black. Wing 74, tail 48, tarsus $16\frac{1}{2}$, entire culmen 28, exposed culmen $25\frac{1}{4}$ mm. No moult.

Nectarinia senegalensis was observed a few times at Aberdeen, but never in the Highlands which appear to be above its usual upper limit of distribution.

Nectarinia venusta falkensteini (Fischer & Reichenow)

Cinnyris Falkensteini Fischer & Reichenow, 1884, J. f. Orn. 32: 56 — Naiwascha-See (Massai) (1500-2000 Meter Meereshöhe).

♂, 17 October, Rhodes Inyanga Orchards, 1800 m, gonads not found, but the bird is evidently an adult male, weight 7.4 g. Wing 53, tail $32\frac{1}{2}$, tarsus 16, entire culmen $20\frac{1}{4}$, exposed culmen $18\frac{1}{4}$ mm.

♂, 5 November, same locality, gonads small, length 1 and 1 mm, weight 7.0 g. Wing $51\frac{1}{2}$, tail 32, tarsus $15\frac{1}{2}$, entire culmen $20\frac{1}{4}$, exposed culmen 18 mm.

♀, 16 October, same locality, ovary $3 \times 1\frac{1}{2}$ mm, weight 7.2 g. Wing $50\frac{1}{2}$, tail 32, tarsus $15\frac{3}{4}$, entire culmen 21, exposed culmen 18 mm. Skull ossified, no moult.

Unfeathered parts, all three specimens, iris dark brown, bill and legs black. Both males are in full moult, their mantles are dull grey-brown with scattered metallic green and, on the heads, blue-violet feathers. The small gonads further indicate that October-November is outside the period of reproduction.

This small sunbird was, near the Orchards and along creeks where there were flowering shrubs, by far the commonest member of its family. During my stay they showed a great partiality for the flowers of *Freylinia tropica*.

Nectarinia chalybea manoensis (Reichenow)

Cinnyris manoensis Reichenow, 1907, Orn. Mber. 15: 200 — Missale in Mano, westlich des Niassasees.

♂, 18 October, Rhodes Inyanga Orchards, 1800 m, testes $3\frac{1}{2} \times 3\frac{1}{2}$, $3\frac{1}{2} \times 3$ mm, weight 9.8 g. Iris dark brown, bill and legs black. Wing $63\frac{1}{2}$, tail 44, tarsus $17\frac{1}{2}$, entire culmen $24\frac{1}{4}$, exposed culmen $20\frac{1}{4}$ mm.

Individuals of this species regularly came into the garden of the Paynes, attracted by the flowering shrubs; generally speaking, however, it did not appear to be particularly common.

Nectarinia famosa (Linnaeus)

This species was far less common than *N. kilimensis*. On 24 October I observed a pair on flowering *Freylinia tropica* along the Mare River, 1800 m, and on 31 October a male was seen on the slope of Mt. Inyangani, 2250 m.

Nectarinia kilimensis arturi P. L. Sclater

Nectarinia arturi P. L. Sclater, 1906, Bull. Brit. Orn. Cl. 19: 30 — "Helvetia", about 50 miles south of Melsetter, south-eastern Rhodesia.

♂, 17 October, near the Orchards, 1800 m, testes $3\frac{1}{2} \times 2\frac{1}{2}$, $3\frac{1}{2} \times 2\frac{1}{2}$ mm, weight 14.9 g. Wing 73, tail 50, central pair of rectrices 108, tarsus 18, entire culmen $31\frac{1}{2}$, exposed culmen 29 mm. No moult, skull fully ossified.

♂, 19 October, about a mile-and-a-half north of the Orchards, 1800 m, testes $5 \times 3\frac{1}{2}$, $4\frac{1}{2} \times 3$ mm, weight 18.1 g. Stomach contents small insects. Wing 72, tail 57, central pair of rectrices 118, tarsus 19, entire culmen 32, exposed culmen 29 mm. No moult, skull fully ossified.

♀, 20 October, same place, ovary $8\frac{1}{2} \times 2\frac{1}{2}$ mm, largest oöcytes more than one millimetre in diameter, weight 15.2 g. Wing 66, tail 52, tarsus $17\frac{1}{2}$, entire culmen 30, exposed culmen 27 mm. Light moult of body feathers, skull fully ossified.

♀, same data, ovary $5\frac{1}{2} \times 3$ mm, largest oöcytes more than one millimetre in diameter, weight 15.5 g. Wing 65, tail 56, tarsus $17\frac{1}{2}$, entire culmen 29, exposed culmen 28 mm. No moult, skull fully ossified.

All specimens had the iris dark brown, bill, inside of mouth and legs black.

In the open habitat of the Highlands this was the most common sunbird; it was especially attracted by Kaffer Trees, *Erythrina caffra*, which were in flower at the time of my stay.

This is a well-differentiated subspecies; the males have a red-copper

gloss, whereas two males of the nominate race in our collection have a green-bronze gloss. Recently Irwin & Benson (1966b) have also remarked on the distinctness of this subspecies.

ZOSTEROPIDAE

Zosterops senegalensis stierlingi Reichenow

Zosterops stierlingi Reichenow, 1899, J. f. Orn. 47: 418 — Iringa in Uhehe.

♂, 21 October, forest above Pungwe Gorge, 1800 m, testes 7×5 , $5\frac{1}{2} \times 4$ mm, weight 10.4 g. Wing 60, tail 39, tarsus 17, entire culmen $13\frac{1}{4}$, exposed culmen $9\frac{3}{4}$ mm. No moult.

♂, 21 October, same locality, testes $5\frac{1}{2} \times 3\frac{1}{2}$, $5 \times 3\frac{1}{2}$ mm, weight 10.3 g. Wing 61, tail 42, tarsus 16, bill damaged.

♂, 28 October, same locality, testes $8 \times 5\frac{1}{2}$, $7\frac{1}{2} \times 5\frac{1}{2}$ mm, weight 10.8 g. Wing 60, tail 39, tarsus $15\frac{3}{4}$, entire culmen 14, exposed culmen 10 mm. No moult.

♂, 28 October, same locality, testes $7\frac{1}{2} \times 5$, $6\frac{1}{2} \times 5$ mm, weight 10.8 g. Wing 61, tail 40, tarsus $17\frac{3}{4}$, entire culmen $13\frac{1}{2}$, exposed culmen 10 mm. No moult.

♂, 6 November, near Maroro River Crossing, 1800 m, testes 7×5 , $5\frac{1}{2} \times 4\frac{1}{2}$ mm, weight 10.3 g. Wing $60\frac{1}{2}$, tail $39\frac{1}{2}$, tarsus 17, entire culmen $12\frac{3}{4}$, exposed culmen 10 mm.

♂ juv., 8 November, near Inyanga village, 1700 m, testes minute, weight 10.7 g. Wing 60, tail $38\frac{1}{2}$, tarsus 16, entire culmen $11\frac{1}{2}$, exposed culmen $8\frac{1}{4}$ mm. In full moult of body feathers; skull largely cartilaginous.

♂, 12 November, Pungwe Gorge, 1200 m, testes $8\frac{1}{2} \times 5$, $8\frac{1}{2} \times 5\frac{1}{2}$ mm, weight 11.5 g. Wing 62, tail 41, tarsus $16\frac{1}{2}$, entire culmen $13\frac{1}{4}$, exposed culmen $9\frac{3}{4}$ mm. No moult, skull fully ossified.

Iris dull brown, in the juvenile bird sepia, bill black, basal half of mandible light grey, tarsus lead-grey, inside of mouth flesh colour. Stomach contents berries, pulp, seeds and skins of small fruits, remains of insects. A hippoboscid fly, *Ornithoctona laticornis* (Macq.) ♀, was taken from one of the birds (28 Oct.).

A common bird in forest, especially along the edges, and in wooded country along the rivers. Less common in trees in more open country.

Elsewhere I have discussed the song of these birds (Mees, 1969: 333).

Apparently Smithers et al. (1957: 164) were the first to observe that birds from the Inyanga Highlands differ from those of the lower regions of Rhodesia by: "having dark green backs, flanks dark olivaceous, and stouter proportions in their bills and feet". The authors mentioned made no attempt

to separate these birds nomenclaturally, and Moreau (1967) also included them in *anderssoni*. Clancey (1965-1966: 566; 1967b: 325), on the other hand, brought them to *tongensis*. Now, however, Clancey (1968b, 1968c) calls the Inyanga birds *stierlingi*. On the basis of a comparison of the material listed above with some fresh topotypical specimens of *stierlingi*, I had independently come to the same conclusion as Clancey, and this agreement of opinion causes me to use the name *stierlingi* for the Inyanga birds with some confidence.

EMBERIZIDAE

***Emberiza flaviventris flaviventris* Stephens**

Emberiza flaviventris Stephens, 1816, in Shaw's Gen. Zool. 9 (2): 374 — Cape of Good Hope, and Cayenne (Cayenne in error).

♀, 15 November, Aberdeen, 1300 m, near breeding, largest oöcyte 2 mm, weight 18.3 g. Iris dark brown, maxilla black, mandible brownish pink, legs grey-brown. Wing 80, tail 62½, tarsus 16, culmen 12 mm. No moult, remiges fairly fresh, rectrices abraded.

The species was seen a few times at Aberdeen; I have no observations from greater altitudes.

Compared with a female from Natal, this bird shows just about the opposite of the differences mentioned by Clancey & Winterbottom (1960): the white coronal streak is less distinct, and the reddish-brown upper back is deeper in colour and darker. As the diagnosis given by Clancey & Winterbottom indicates that the differences between birds from the Cape and from Rhodesia are slight, I consider it cautious to retain the Rhodesian specimen in the nominate race, thus agreeing with Mackworth-Praed & Grant (1963).

In all literature consulted, the year of publication of *Emberiza flaviventris* Stephens is given as 1815. The copy of General Zoology 9 (2) available to me has, however, two title-pages. The first, a general one, is dated 1815, the second more specific one is dated 1816. Mathews (1925) dates the whole volume as published in August, 1816.

***Emberiza cabanisi orientalis* (Shelley)**

Fringillaria orientalis Shelley, 1882, Proc. Zool. Soc. Lond.: 308 — Mambio.

♀, 11 November, extreme north-western corner of Inyanga National Park, 1300 m, ovary 6 × 5, oöcytes to 1½ mm, weight 25.8 g. Iris brown, bill black, basal half of mandible pinkish, legs dirty pinkish beige. Wing 85, tail 71, tarsus 19½, bill 13 mm. No moult, plumage fresh.

This bird was collected out of a pair, flying from tree to tree in recently burnt sandplain country with scattered trees. It was my only observation of this species which is known to be widely distributed but not common (Smithers et al., 1957: 160).

The fairly small size of the specimen confirms its subspecific identity (Clancey, 1965c).

***Emberiza capensis plowesi* (Vincent)**

Fringillaria capensis plowesi Vincent, 1950, Bull. Brit. Orn. Cl. 70: 15 — Matopos Research Station, near Bulawayo, Southern Rhodesia, at circa 4600 feet.

♀?, 4 November, near Inyanga village, 1700 m, weight 18.1 g. Iris dark brown, bill black, basal half of mandible grey, legs pinkish grey. Wing 75, tail 60, tarsus $17\frac{3}{4}$, culmen 10 mm. No moult, plumage fresh.

This bird was taken out of a presumed pair on a rocky outcrop in *Brachystegia*-savanna; it was my only observation of the species.

The skin was compared with four topotypical specimens of the race *plowesi*, received on loan from the British Museum, and was found to be identical.

FRINGILLIDAE

***Serinus canicollis griseitergum* Clancey**

Serinus canicollis griseitergum Clancey, 1967, Durban Mus. Novit. 8: 112 — Stapleford Forest Reserve, Umtali, Rhodesia.

♂, 27 October, near Rhodes Inyanga Orchards, 1800 m, testes $6 \times 4\frac{1}{2}$, $5\frac{1}{2} \times 4$ mm, weight 13.0 g. Bill horn-blackish brown, basal half of mandible dirty white, legs black. Wing 78, tail 51, tarsus $15\frac{1}{2}$, culmen $9\frac{3}{4}$. No moult, plumage worn.

♀, 24 October, near Rhodes Inyanga Orchards, 1800 m, ovary $5\frac{1}{2} \times 3\frac{1}{2}$ mm, weight 13.0 g. Iris dark sepia-brown. Wing 74, tail 49, tarsus 15, culmen $9\frac{1}{2}$ mm. No moult, plumage moderately abraded.

This species was common in the Highlands, in pairs or small parties, and, as also noted by Clancey (1967d), particularly associated with pine plantations. I observed them working on the pine-cones, pushing their bills between the scales, but was unable to see if they extracted the seeds.

These two specimens differ from three males collected in Natal, in September 1964, by having the yellow parts of the body less dark, and by more conspicuous grey stripes on the head. In the description of *S. c. griseitergum*, based on very adequate material, Clancey noted these same differences, and my specimens therefore appear further to support the validity of that race (I have not seen topotypes of *thompsonae* from the northern Transvaal).

Serinus sulphuratus subsp.

♂, 26 October, Gairezi River, Inyanga Downs, testes $6 \times 5\frac{1}{2}$, $6 \times 5\frac{1}{2}$ mm, weight 21.7 g. Stomach contents peas of wild Papilionaceae. Wing 78, tail 54, tarsus 17, bill $12\frac{3}{4}$ mm. No moult, plumage slightly worn.

♂, 6 November, Maroro River Crossing, 1800 m, testes left damaged, right $7 \times 6\frac{1}{2}$ mm, weight 18.3 g. Wing $77\frac{1}{2}$, tail 57, tarsus 18, bill $12\frac{3}{4}$ mm. Very slight moult in body feathers only, wing and tail slightly worn.

♀, 4 November, near Inyanga village, 1700 m, ovary small, 5×3 mm, weight 19.2 g. Stomach contents unidentified seeds. Wing 76, tail 55, tarsus 17, culmen 13 mm. No moult, slightly worn.

♀, 16 November, Rhodes Inyanga Orchards, 1800 m, near laying, oöcytes to $1\frac{1}{2}$ mm, weight 18.5 g. Wing 75, tail 55, tarsus $16\frac{1}{2}$, culmen 13 mm. No moult, plumage worn.

Iris dark brown, maxilla dirty brown to grey-brown or dark yellowish grey, mandible dirty yellow, inside of mouth yellowish, legs brown-grey or pinkish grey.

This finch was moderately common, ranging throughout the Highlands, particularly along the rivers where there was some scrub and other cover.

The Rhodesian population of this species has usually been placed under the name *sharpii* (Smithers et al., 1957; Skead, 1960; Clancey, 1965-1966, etc.). The specimens listed above differ from *wilsoni* of Natal by their smaller size (of wing), and definitely smaller bills, but the bills are larger than in specimens of *sharpii* from Tanganyika, and the plumage is greener, less bright. Comparison with a small series (6 ♂, 2 ♀) of *S. s. languens* showed that the latter have slightly larger bills and are brighter in colour. Two specimens from Stapleford Forest Reserve, Umtali, June 1967, which would almost certainly be consubspecific with my Inyanga birds, are in very fresh plumage and are conspicuously brighter and yellower (these birds have been discussed by Clancey, 1968b). This makes me suspect that colour differences should be treated with some caution, and though Mr. Clancey (in corr.) has suggested to me that birds from the highlands of eastern Rhodesia represent an undescribed race, I prefer to leave their subspecific identity open.

The latest revision of the species is by Rand (1968a), who leaves us two choices, either to recognise only two races in the species, and call the Rhodesian birds *sharppei* (recte *sharpii*), or to recognise five races, and call the Rhodesian birds *shelleyi*. It is the latter classification that he has used in the "Check-List of Birds of the World" (Rand, 1968b). In one respect I cannot follow Rand: he states that the nominate race is the only population clearly

separate from all others, and treats Natal birds (*wilsoni* or *sharpii*) as different. Specimens from Natal examined by me are, however, similar to the nominate race in all respects, except that they average very slightly brighter yellow; in measurements there is no difference (see also Rand's table of measurements). If *wilsoni* is not recognised, it should in my opinion be united with the nominate race, and not with any of the smaller and brighter northern races. Rand is right that *languens* and the Rhodesian populations only represent steps in a gradient towards the smallest and brightest birds as found in Tanganyika. It is a matter of subjective judgement how many intermediate subspecies one wishes to recognise.

***Serinus gularis gularis* (Smith)**

Linaria gularis Smith, 1836, Rep. Exped. C. Afr.: 49 — Inhabits the colony and country as far as Latakoo.

♂, 14 October, Rhodes Inyanga Orchards, 1800 m, testes 6×4 , $5\frac{1}{2} \times 4$ mm, weight 16.3 g. Iris cinnamon, maxilla horn-black, mandible pinkish grey, inside of mouth pale flesh colour, legs blackish brown. Stomach contents grains of a cereal. Wing $76\frac{1}{2}$, tail 58, tarsus $15\frac{3}{4}$, culmen 12 mm. Slight moult of body-feathers.

This species was not common, occurring in bushes and scrub bordering open country.

Besides the bird listed, I have a male from Wingrove near Pietermaritzburg, Natal. Measurements of this bird are wing 77, tail $58\frac{1}{2}$, tarsus $15\frac{1}{2}$, bill 13 mm. Weight 19.6 g. This bird agrees in plumage characters and in measurements with the specimen from Rhodesia, except that its bill is longer. Clancey (1952b) stated that Natal birds, which he described as *Poliospiza gularis endemion* are smaller than the nominate race, wing 76-79 mm, as against 79-84 mm. It appears, therefore, that my Rhodesian bird is exceptionally small.

ESTRILDIDAE

***Lagonosticta rhodopareia jamesoni* Shelley**

Lagonosticta jamesoni Shelley, 1882, Ibis (4) 6: 355 — Umvuli river (Mashoona land, lat. $17^{\circ} 35'$, long. $30^{\circ} 30'$) and Tatin river (Matabele land, lat. $21^{\circ} 25'$, long. $27^{\circ} 55'$).

♂, 21 November, Aberdeen, 1300 m, testes 1×1 , 1×1 mm, weight 11.1 g. Iris dark brown, bill black, base of mandible blue-grey, legs blackish grey. Stomach contents seeds. Very fat. Wing 52, tail 40, tarsus $14\frac{1}{2}$, culmen $10\frac{3}{4}$ mm. Light moult of body feathers.

This specimen, the only one seen, was shot in the tall grasses along the creek in Aberdeen.

***Uraeginthus angolensis niassensis* Reichenow**

[*Uraeginthus bengalus*] var. *niassensis* Reichenow, 1911, Mitt. Zool. Mus. Berlin 5: 228 — Songea am Niassasee.

♀?, 13 November, Aberdeen, 1300 m, weight 10.3 g. Iris greyish red (dull red). Wing $53\frac{1}{2}$, tail 48, tarsus 14, culmen 10 mm. Moults of primaries and body feathers.

These little finches were fairly common in the vegetation along and near the creek of Aberdeen.

***Estrilda astrild cavendishi* Sharpe**

Estrilda cavendishi Sharpe, 1900, Ibis (7) 6: 110 — Mapicuti, Mozambique.

♂, 24 October, Rhodes Inyanga Orchards, 1800 m, testes $3 \times 2\frac{1}{2}$, $2\frac{1}{2} \times 2$ mm, weight 7.8 g. Iris dark brown, bill wax-red, inside of mouth white, legs black. Wing 48, tail $47\frac{1}{2}$, tarsus $14\frac{3}{4}$, culmen 9 mm.

Not very common; small flocks were seen only a few times near the Orchards and elsewhere in the National Park.

Compared with four specimens of the nominate race from Balgowan, Natal, 1350 m, I cannot see any differences in colour, but the birds from Natal are slightly larger and heavier, as shown by the following figures:

sex	weight (g)	wing (mm)	tail (mm)
♂	8.6	50	53
♂	8.8	50	$52\frac{1}{2}$
♂	9.2	50	46
♂	9.4	51	52

***Estrilda melanotis kilimensis* (Sharpe)**

Coccygia kilimensis Sharpe, 1890, Cat. Birds Brit. Mus. 13: 307 — Kilimanjaro.

♀, 5 November, Rhodes Inyanga Orchards, 1800 m, ovary $2 \times 2\frac{1}{2}$ mm, weight 7.4 g. Much subcutaneous fat. Iris brown, maxillary black, mandible wax-red, legs black. Wing 49, tail 33, tarsus 13, culmen 8 mm. No moult.

Sex uncertain, 21 October, Pungwe Gorge, 1600 m, weight 5.9 g. Wing 45, tail 33, tarsus $13\frac{3}{4}$, culmen $8\frac{1}{4}$ mm. No moult.

Fairly common in secondary growths, going about in small flocks of about a dozen individuals. Rather more common than Smithers et al. (1957: 156) had led me to believe.

These two skins agree well with a series of seventeen specimens from Kenya, Uganda, Tanganyika and Nyasaland, received on loan from the British Museum. This material differs strikingly from the nominate race, of which the type-material is in our collection, but I cannot see much difference from our five old specimens of *E. m. quartinia*, amongst which are two syntypes of *Estrela Ernesti II* Heuglin (1862) collected at Kéré in June, 1861.

PLOCEIDAE

Vidua macroura (Pallas)

Fringilla macroura [Pallas], 1764, Cat. Vog. Vroeg, no. 144 — Oostindien (errore!) = Africa.

♂, 16 November, Rhodes Inyanga Orchards, 1800 m, testes $5\frac{1}{2} \times 4$, $4\frac{1}{2} \times 3\frac{1}{2}$ mm, weight 15.5 g. Iris dark brown, bill light red, legs black. Wing 74, tail 44, central pair of rectrices 180, tarsus 17, culmen 11 mm. No moult.

♀, 19 November, Aberdeen, 1300 m, ovary $3\frac{1}{2} \times 2$ mm, weight 13.2 g. Iris dark sepia-brown, bill wax-red, legs blackish grey, Crop contents seeds. Wing $67\frac{1}{2}$, tail 42, tarsus $14\frac{1}{2}$, culmen $9\frac{3}{4}$ mm. Moult in remiges, light moult of body feathers.

This species was fairly common in and along the edges of grasslands, usually in small flocks. The occurrence in the Orchards, where a small flock was permanently present during my stay, slightly increases the vertical range ("below 5500 ft") as given by Smithers et al. (1957).

Ploceus xanthops (Hartlaub)

Hyphantornis xanthops Hartlaub in Monteiro, 1862, Ibis 4: 342 — Angola = Mas-sangano, Lower Cuanza River.

♀, 1 November, near Inyanga village, 1700 m, ovary $5\frac{1}{2} \times 5\frac{1}{2}$ mm, largest oöcytes 1×1 mm (near breeding), weight 38.3 g. Iris light cinnamon-yellow, bill black, inside of mouth black, legs light pinkish-brown. Stomach contents: insect larvae. Wing 82, tail 56, tarsus $24\frac{3}{4}$, culmen 19. No moult, skull fully ossified.

I have also collected a specimen in Natal: ♀, 24 September 1964, farm "Wingrove" near Pietermaritzburg, 900 m, breeding, largest oöcyte $2\frac{1}{2}$ mm. Iris pale orange-yellow, bill black, inside of mouth black, legs brown. Wing 86, tail 64, tarsus 24, culmen 19. Light moult of body feathers, plumage otherwise fresh, skull ossified.

Throughout the Inyanga National Park this species was generally common along creeks. I have included the Natal specimen, as according to Clancey (1964b: 450) it is an uncommon species in Natal, of which he could mention but four breeding-localities: Albert Falls near Pietermaritzburg, Hammarsdale, Inchanga, and Clairmont near Durban. My specimen was collected when attending a nest, attached to reeds hanging over a shadowy small pool in a little creek. As at the time I was not aware that the record was unusual, and as the nest was difficult to reach, I did not inspect it. Wingrove is situated eight miles south of Pietermaritzburg, near Thornville, and constitutes a new breeding-locality for the species. The Albert Falls are on the other side of Pietermaritzburg.

I have followed Hall (1960: 447) in not admitting any subspecies, though I note that Clancey (1964b: 450; 1968b: 167) disagrees. Hall (l. c.) has restricted the type-locality of *P. xanthops* to the Lower Cuanza River, and this was accepted by Moreau (1962: 41). Though this restriction in itself is perfectly correct, there was no need for it. The type material was collected by J. J. Monteiro, and many years ago Bocage (1881: 328) published exact localities of the specimens: Cambambe and Massangano, whereas Reichenow (1886: 124) mentioned material from Massangano. As it appears that the majority of the specimens was collected at Massangano, that place may stand as type-locality of the species; it is, indeed, on the Lower Cuanza River.

***Ploceus velatus arundinarius* (Burchell)**

Oriolus arundinarius Burchell, 1822, Trav. S. Afr. 1: 464, footnote — Grootte Fontein.

♂, 20 November, Aberdeen, 1300 m, testes 7×5 , $5\frac{1}{2} \times 5$ mm, weight 27.0 g. Iris yellowish red, bill and inside of mouth black. Stomach contents insects. Wing 79, tail 49, tarsus 21, culmen $15\frac{1}{2}$ mm. No moult, skull fully ossified.

♂ im., 8 November, near Inyanga village, 1700 m, testes minute, weight 25.9 g. Stomach full with (ca. 20) small green caterpillars, each about 1 cm in length. Iris pale orangeish, bill maxilla horn-brown with blackish tip, mandible whitish, tinged slightly pinkish brown, inside of mouth flesh colour, legs pink. Wing 78, tail 48, tarsus 21, bill 15+ (tip damaged). Moult of body feathers.

The adult male was shot in the riparian woodland at Aberdeen, where it drew attention by its call: "chèk ... chèk ...". The juvenile comes from dry scrub on a mountain slope near Inyanga village; it was singing busily, though

somewhat subdued, the most conspicuous part of the song being a kind of hissing.

No two authors appear to agree on number of races to be recognized and their respective ranges. The latest and by far the most thorough revision is by Clancey (1959), who was the first and only author to attempt a revision covering the whole southern part of Africa, instead of just making a few remarks based on odd specimens from a single locality. Nevertheless, Clancey's classification has to be modified in several respects.

Ploceus velatus Vieillot (1819) was based entirely on Temminck's (1807) description of two individuals from Namaqualand. In subsequent years this name has been associated with the smaller northern birds rather than with the large-sized southern populations of the species. For example, Sclater (1930) listed the nominate race as occurring in: "Damaraland, Namaqualand, and southern Angola". Macdonald (1957: 160-161) found small birds (wing 6 ♂ 74-80 mm) on the lower Orange River and commented: "The species was described by Vieillot on a specimen in Temminck's collection from the country of the Namaquas. It is highly probable that the specimen was obtained by Levillant and it is likely that he found it on the lower Orange River, about Goodhouse or Pella". Clancey (1959) subsequently accepted this as a restriction of type-locality, and thus applied the name *P. v. velatus* to the small northern birds which appear to reach their southern limit of distribution along the Orange River. On the same occasion, Clancey described the large birds from the western Cape as a new race, *P. v. inustus*, type locality Lokenburg, Calvinia. The type-specimens of *Ploceus velatus*, however, still available in Leiden and in remarkably good condition for birds probably collected before the end of the 18th century, belong to the large Cape race, and therefore do not originate from the Orange River, but from southern Namaqualand. It follows that the large Cape birds, from which I do not consider it expedient to separate *nigrifrons*, are the nominate race, with *P. v. inustus* as their synonym, and that the nomenclature of the smaller northern birds must be reconsidered.

Our museum also contains three of the four syntypes of *Ploceus finschi* Reichenow (the fourth specimen was presented to the Berlin Museum in January 1903). They are very much smaller in measurements than the types of *velatus*, and their bulk and weight would probably not be over half that of *velatus*. Besides, the black of the forehead is restricted in extent. Obviously, Clancey (1959) and Moreau (1962) cannot be right in synonymizing one with the other. Clancey, though placing *P. finschi*, with type-locality Moçamedes, in the synonymy of the nominate race, described birds from South-West Africa and Huila as a new race *P. v. caurinus*, and on the distribu-

tional map accompanying his article, includes the whole of Moçamedes in the range of this new race, and eastern Angola in that of the nominate race. Traylor (1962: 122-123) commented that in Angola *Ploceus velatus* is confined to the west, and accordingly he listed all Angola birds as *caurinus*. Neither of these authors appears to have realised that the range of a newly-described race can never include the type-locality of one described previously (unless, of course, the latter is a migrant or has a name that is pre-occupied or otherwise unavailable). If therefore a separate race with the range outlined by Clancey is to be recognised, its name is *finschi*, not *caurinus*.

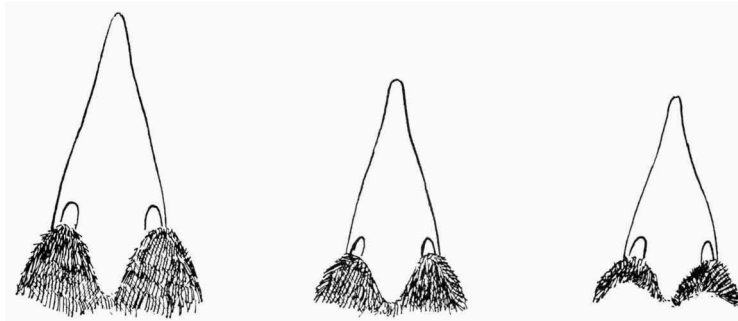


Fig. 2. — Bills of *Ploceus velatus* seen from above. Left, syntype of *Ploceus velatus*, male in breeding-plumage, from Namaqualand; middle, *Ploceus velatus arundinarius*, male in breeding-plumage, from Inyanga; right, syntype of *Ploceus finschi* male in breeding-plumage, from Moçamedes. $\times 2$.

In fact, however, the Moçamedes specimens are very puzzling; they are smaller than any other member of the species I have seen, including one from Gambos, Huila, very near Moçamedes, though agreeing with published measurements of *P. v. katangae* Verheyen (1947). The specimens are, however, old and in rather poor condition. I am unfamiliar with the geography of Angola, and do not know if the occurrence of a separate subspecies in coastal Moçamedes, distinct from the birds of Huila, is at all feasible.

Remains the problem of how the birds of intermediate size, that in the latest lists (Clancey, 1959, 1965-1966; Moreau, 1962; White, 1963; Winterbottom, 1968) had been regarded as the nominate race, should be called. They range very widely, and have in the older literature been known by various names: *tahatali*, *auricapillus*, *shelleyi*, etc.

Chronologically the oldest name, and therefore the first one to merit consideration is *Oriolus arundinarius* Burchell, the type locality of which is Groote Fontein, near the present place Campbell, Griqualand West. The

type, a male in breeding-dress, was collected on 18 November 1811 (cf. Burchell, 1822: 464).

As the Burchell collection is known to be in the University Museum Oxford, I wrote to that institute to enquire if Burchell's type could still be found. A very full reply was received from Mr. J. Hull, Principal Museum Technician, the relevant parts of which I quote here.

The Burchell birds were investigated c.1954 by A. J. Cain (then Curator) and W. D. L. Ride in an attempt to identify type material and reconstruct Burchell's catalogue. At that time, no suspicion arose that our skins of *P. velatus* might include a type, largely because Cain & Ride noted that in the B.M.C. Cat. Birds III p. 217, *O. arundinarius* Burchell appeared in the synonymy of *Oriolus larvatus* Licht. and as a result, 3 Burchell skins of *O. larvatus* (O.U.M. nos. B/2227-9) were regarded as possible type(s) of *O. arundinarius* Burchell. The identifications of Burchell birds were checked by R. E. Moreau, and 4 skins (O.U.M. nos. B/2208-11) hitherto named *Sitagra velata* were revised by him to subspecies *velatus*.

In 1967, while recataloguing our collections, I noted that in Vol. XV of Peters Checklist of Birds of the World, *O. arundinarius* Burchell had been placed in the synonymy of *Ploceus velatus velatus* Vieillot. As our 4 specimens (B/2208-11) were undoubtedly Ploceids, whilst the 3 *O. larvatus* were correctly identified, I realised that an error had occurred and that one of our 4 *P. v. velatus* skins might be a type. I wrote to Moreau, who had then retired from work in Oxford, explaining the problem & requesting advice. In reply, Moreau regretted that being separated from his files & c., he could be of little assistance & concluded his letter:

"All I can say is:

- (1) that I see Sclater accepted *O. arund.* Burch. as a *Ploceus velatus*.
- (2) that the latest S. African book accepts *arund.* as a "brighter subsp."
- (3) what material I saw to convince me that it wasn't distinguishable I have now no idea."

Pending further investigation, I labelled skins B/2208-11 as possible type(s) of *Oriolus arundinarius* Burchell.

As regards the 4 specimens, all are of typical Burchell appearance, being flat, open and unstuffed. Each bears a Burchell Coll. number tag. At no time have they borne any details of locality or date, the museum labels merely being noted "(S. Africa)". B/2211 is the only skin sexed by Burchell, the others being unsexed, though B/2208 appears to be ♀, & B/2209, 10 appear to be ♂ ♂.

MS notes by Cain & Ride indicate that in Burchell's Diary (held in the Library of the Hope Dept. of Entomology, O.U.M.), there is a reference on 31 July 1812 to a "Fringilla" ("the same as") no. 61. Ride assumed that having numbered one specimen, Burchell in references to specimens of that species taken later refers to such numbers in the sense of "the same as". On this basis, it appears that Burchell's no. 61, while perhaps being the first specimen numbered, is not that referred to in his type description, which is a male.

Data on the 4 skins of *Ploceus velatus* Vieillot:

O.U.M. no.	Sex	Burchell Coll. number	Wing	Tail	Tarsus	Bill (exposed culmen)
B/2208	(? ♀)	61	78	56	21.5	17.5
B/2209	(? ♂)	151	85	58.5	22	17
B/3310	(? ♂)	153	78	54.5	22	16.5
B/2211	♂	B.233m	81	56.5	22.5	17.5

This, unfortunately does not solve the problem of the subspecific identity of *O. arundinarius*. As noted, B/2208 cannot be the type, as the type was a male. Of the remaining three specimens, two would on the basis of wing-measurement belong to the nominate race rather than to the smaller northern race. It is likely that one or more of these three specimens were collected later than the type (e.g. on 31 July 1812). There does not appear to be any way of ascertaining which specimen is the type (assuming that the type is amongst this material), and therefore it is impossible to be sure if *O. arundinaceus* is applicable to the smaller race.

Obviously there is another method of establishing the subspecific identity of *O. arundinarius* — it is that of examining topotypical material. A loan received from the South African Museum contained specimens of *P. v. velatus* from Williston, De Aar, Vredendal, Fraserburg, Calitedorp, Victoria West, Montagu and Potchefstroom; of the smaller race a specimen from Upington. There were no specimens from Griqualand West amongst this material. At the time of writing no reply has been received from the Transvaal Museum, from where I have also requested a loan. In the circumstances, I have to rely on published information, as fortunately given with much detail by Clancey (1959); see also Winterbottom (1968: map 39). On this basis it appears that the name *Oriolus arundinarius* is acceptable for the smaller race, which therefore will be known as *Ploceus velatus arundinarius* (Burchell), even though I note that Clancey (1965-1966: 577) refers to *arundinarius* as intermediate between the large and the small forms. A further investigation of the distribution of the subspecies in South Africa might be rewarding, especially as in many places the boundaries appear to be abrupt rather than gradual.

Quelea quelea lathamii (Smith)

Loxia Lathamii Smith, 1836, Rep. Exp. Central Afr.: 51 — Kurrichaine.

♂, 10 November, between the Orchards and Inyanga village, 1750 m, testes 2×1 , $2 \times 1\frac{1}{2}$ mm; weight 19.4 g. Iris dull brown, bill light red, legs beige. Crop contents seeds of diverse sorts. Wing 68, tail $34\frac{1}{2}$, tarsus 18, culmen 14 mm. Moulting of body feathers.

The individual collected was taken out of a flock of several hundred individuals, singing busily in the shrubbery bordering a wet vlei.

Euplectes orix orix (Linnaeus)

Emberiza Orix Linnaeus, 1758, Syst. Nat., ed. 10, 1: 177 — Africa interiore = Angola (based on *Passer angolensis*, Edwards).

♂, 4 November, near Inyanga village, 1700 m, testes $2\frac{1}{2} \times 1\frac{1}{2}$,

$2 \times 1\frac{1}{2}$ mm, weight 20.8 g. Iris dark sepia-brown, maxilla grey-brown, mandible dirty pinkish white with a greyish brown tip, legs beige. Crop contents round black seeds. Wing 72, tail 38, tarsus $18\frac{1}{2}$, culmen $13\frac{3}{4}$ mm. Light moult of body-feathers, moderately fat.

This bird was taken out of a large flock, all in non-breeding plumage.

Euplectes capensis crassirostris (Ogilvie-Grant)

Pyromelana crassirostris Ogilvie-Grant, 1907, Bull. Brit. Orn. Cl. 21: 14 — North end of Ruwenzori, 3500 feet.

♂, 16 October, Rhodes Inyanga Orchards, 1800 m, testes $2 \times 1\frac{1}{2}$, $2 \times 1\frac{1}{2}$ mm, weight 22.0 g. Iris very dark brown, maxilla black, mandible white, legs dirty brownish grey. Crop contents grains of a cereal. Wing 72, tail 49, tarsus 22, culmen 14 mm. Light moult of body feathers.

♂, 20 October, about $1\frac{1}{2}$ miles north of the Orchards, 1800 m, testes $2 \times 1\frac{1}{2}$, $1\frac{1}{2} \times 1$ mm, weight 20.8 g. Iris dark brown, bill entirely black, inside of mouth flesh colour, legs brown-grey. Wing 74, tail 47, tarsus 22, culmen $14\frac{1}{4}$ mm. No moult, plumage fairly fresh.

♂, 2 November, near Rhodes Inyanga Orchards, 1800 m, testes $3\frac{1}{2} \times 2$, 3×2 mm, weight 21.5 g. Iris dark brown, maxilla black, mandible white, legs dirty grey-brown. Wing 73, tail 50, tarsus $22\frac{1}{2}$, culmen $13\frac{1}{2}$ mm, moult of body feathers, skull fully ossified.

This was a common, and by the black and yellow of its plumage conspicuous, species of the Highlands. The birds were usually seen in pairs, and showed a preference for shrubbery and rank grasses along water-courses.

In applying the name *crassirostris* to these specimens, I have followed Moreau (1960), whose conclusions, based on a large material, appear to be well-founded.

Euplectes ardens ardens (Boddaert)

Fringilla ardens Boddaert, 1783, Table Pl. Enl.: 39 — no locality = Cap de Bonne Esperance (ex d'Aubenton, pl. 647).

♂, 23 October, Rhodes Inyanga Orchards, 1800 m, testes $2\frac{1}{2} \times 1$, 2×1 mm, weight 20.2 g. Iris very dark brown, maxilla black, mandible pale pinkish grey, legs brown-grey. Crop contents grass-seeds. Wing 78, tail 53, tarsus 22, culmen 15 mm.

♂, 10 November, between the Orchards and Inyanga village, 1750 m, gonads not found, weight 19.9 g. Iris dark brown, bill: upper and tip lower dark brown-grey, remainder of mandible dirty white, legs dark brown-grey. Wing 72, tail 47, tarsus $20\frac{1}{2}$, culmen 15 mm.

The first specimen shows the beginning of a breeding-plumage, with deep-black remiges and rectrices; it was taken out of a small flock of four of its species with a few *E. capensis*, from the ground in a vegetation of weeds. The second bird in off-season plumage, with dull blackish brown remiges and rectrices, was taken from a large flock of birds, singing in scrub along open country.

Corvus capensis Lichtenstein

Not a common bird in the Highlands, I have only one certain record, of a single individual flying over the Orchards.

Corvus albus Statius Müller

The status of this crow is apparently much the same as that of the preceding species; I have but few observations, at 1700 to 1800 m.

APPENDIX

Notes on type-localities and nomenclature of some African bird-species, based on material in the Rijksmuseum van Natuurlijke Historie.

Botaurus stellaris capensis (Schlegel)

In all lists available to me from Vincent (1952) onwards, the type-locality of this subspecies is given as Wijnberg, Cape Town. Consultation of the original description (Schlegel, 1863) shows that the subspecies, described as *Ardea stellaris capensis*, was based on only two specimens: "1. Femelle, Afrique australe, voyage du Dr. van Horstock. — 2. Mâle, tué en Octobre 1834, Latakou, voyage de Mr. J. Verreaux, acquis en 1858".

Both specimens, mounted birds, are still in our collection and the male especially is in a good condition. Under its socle the locality, published as Latakou by Schlegel, is spelled Littakoe. This is Old Lattakoe about 50 km north-east of Kuruman (formerly also known as New Lattakoe). As the female syntype bears no exact locality, Old Lattakoe may be fixed as the type-locality. There is no material from Wijnberg in our collection, and that locality is not mentioned in Schlegel's publication. I am not aware that the species has ever been authentically recorded from Wijnberg, from where it was not mentioned by Winterbottom (1960).

Trachyphonus purpuratus goffinii (Goffin)

The authorship of *Capito goffinii* has been universally ascribed to Schlegel, but mistakenly as consultation of the original publication shows that Goffin (1863) was responsible for the description; Schlegel would have done no more than suggest the name.

Malaconotus blanchoti Stephens

In view of remarks by Clancey (1957b) and the definite opinion expressed by Grant & Mackworth-Praed (1958) that: "*Malaconotus blanchoti* should be considered indeterminate", it is perhaps well to state that the type-specimen is in our museum. It proves that the currently accepted nomenclature is correct.

A few particulars concerning the history of this specimen may be in place here. Stephens (1826) based the species on a plate and description published by Levaillant (1808: 87, pl. 285: La Pie-Grièche Blanchot). In the description, Levaillant further provided the following information: "Cette espèce a été envoyée du Sénégal par M. Blanchot, gouverneur de cette colonie, et fait partie du riche cabinet de M. Raye de Breukelerwaert, à Amsterdam".

Raye retained his collections until his death, after which they were auctioned (on 3 July 1827). In the auction-catalogue (Anon., 1827: 6), the type under discussion is listed as: "No. 48 Lanius olivaceus. la Piegrièche Blanchot". The bulk of the collection was purchased by Temminck on behalf of the Rijksmuseum van Natuurlijke Historie, a special grant of f. 10.000.—having been made by the Minister of Public Education (cf. Gijzen, 1938: 161). As a matter of interest I would like to mention that in the copy of Levaillant's work in our museum, that once belonged to Raye's library (cf. Mees, 1967b), an original water colour drawing of the type, natural size, is bound; it bears a caption, written in ink: "La Piegriesche Blanchot/Du Senegal/De Grandeur Naturelle/De mon Cabinet".

It may cause wonder that none of the authors who have speculated about the identity of *Malaconotus blanchoti*, has attempted to obtain information regarding the type.

Turdus pelios Bonaparte

In the original description (Bonaparte, 1850), the type-locality of this bird, variously regarded as a separate species (White, 1962a; Mackworth-Praed & Grant, 1963), or as a subspecies of *Turdus olivaceus* (Ripley, 1964, etc.), is merely given as "ex Asia centrali". Rensch (1923), however, stated: "Typus von Fazoglu im Brüsseler Museum", and from then onwards Fazoglu in the Sudan has been generally accepted as the type-locality.

It is curious that Rensch could regard a specimen in Brussels as the type, as in the description Bonaparte clearly stated that it was in "Mus. Lugd.", and the type, a holotype, is still present in our museum. It was originally, and in agreement with the erroneous type-locality published by Bonaparte, labelled as from "Inde", and there is no better information regarding its

provenance. According to information received from Dr. R. F. Verheyen (in litt., 13-III-1969), there is no specimen of *Turdus pelios* from Fazoglu in the Brussels museum. It will be evident therefore, that Fazoglu can at most be a designated type-locality.

***Ploceus tricolor* Hartlaub**

The combination *Ploceus tricolor* (Hartlaub) as at present in use (Moreau, 1962, etc.) is based on *Hyphantornis tricolor* as published by Hartlaub in 1854. The binomen *Ploceus tricolor*, however, was first published in 1850, and again two years later (Hartlaub, 1850, 1852). The type of *Ploceus tricolor* Hartlaub, 1850, is in our collection. It is a specimen of considerable antiquity, as it is the same bird described by Temminck (1807: 102, 234) under the name "le Republicain à ventre et gorge jaune d'Afrique Côte d'Angôle". Later the locality has been changed to Senegal, but the specimen in question has been re-identified as a female of *Ploceus nigricollis* (Vieillot) by Finsch, an identification that is quite correct, and therefore the provenance originally given, Angola, is doubtless correct. *Ploceus tricolor* Hartlaub, 1850, is therefore a synonym of *Ploceus nigricollis nigricollis* (Vieillot), 1805.

One could assume that *Ploceus tricolor* Hartlaub, 1850, is merely an older homonym of *Ploceus tricolor* (Hartlaub), 1854, and that therefore the later name could be saved (to avoid changes in currently used nomenclature) by suppression of the earlier one. The situation is, however, not quite as simple as that. Consulting the later description (Hartlaub, 1854: 110), one finds the following: "304. ? *tricolor* Hartl." (etc.). From this it is at least reasonable to assume that here Hartlaub never intended to describe a new species, but had a specimen that he referred with a query to the species *P. tricolor* as described by him in 1850. I do not believe that it is useful to attempt a validation of a name apparently applied in error. The bird named *Ploceus tricolor* in current literature, should be known as *Ploceus fuscocastaneus* (Bocage), 1880.

It is difficult to understand why the name *Ploceus tricolor*, ascribed to Hartlaub (1854) has continued to be used, as Reichenow (1904-1905: 44, 53), in a work one would expect to be thoroughly familiar to any ornithologist working on African birds, indicated the synonymy correctly.

With the knowledge that it is the valid name of the species, the question of the subspecific status of the type of *Ploceus fuscocastaneus* assumes new importance. It is well known that this species can be divided into two in the female sex well differentiated races: a northern and western race in which the female resembles the male in plumage, a southern and eastern race in

which the female has the underparts almost entirely black. Unfortunately *Hyphantornis fusco-castanea* Bocage was based on an immature male from the Portuguese Congo, not subspecifically identifiable, and no other specimens from that area are known. It has hitherto been associated with the northern race, though with doubt (for example Traylor, 1963: 196), but since the other race has been discovered in northern Angola (Traylor, 1962: 123) and on the lower Congo (Schouteden, 1958: 299-301) it becomes increasingly likely that it belongs to the south-eastern race, in which case the north-western race would have to be renamed.

Oriolus intermedius Hartlaub

When Amadon (1953) described *Oriolus nigripennis alleni* from Bangah, Liberia, he was unaware of the existence of an older name for the West-African populations of this species: *Oriolus intermedius* Hartlaub (1850: 46). The holotype, a mounted bird, is still present in our collection; it is a male from Rio Boutry, Gold Coast, collected by H. S. Pel (for biographical particulars on Pel, and a map of his collecting-localities, I refer to Holt-huis, 1968). Later, Hartlaub (1854: 24) placed this name mistakenly as a synonym of *O. baruffii* Bonaparte = *O. brachyrhynchus* Swainson, but in his subsequent final work he quite rightly resurrected it (Hartlaub, 1857: 81).

NOTE

After this report was closed a publication was received from Clancey (1969a), in which six of the species treated by me are assigned to newly-described subspecies. I have been unable to consider these, but I wish to observe that the inclusion of *Estrilda melanotis* from Inyanga in a new race under the name *Estrilda quartinia stuartirwini*, conflicts with my own conclusions.

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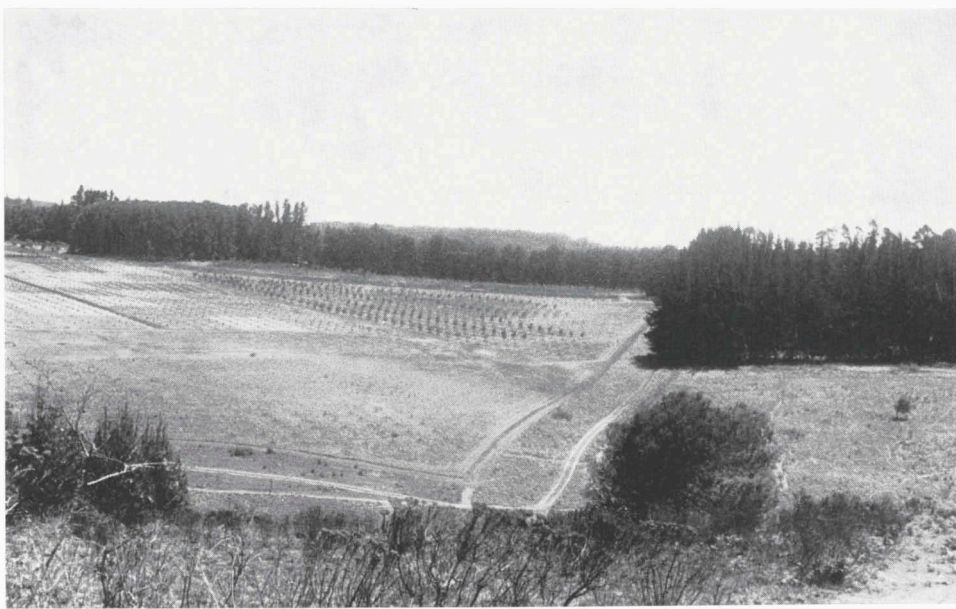
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1) For the sake of clarity it must be mentioned that *Malaconotus blanchoti* was not described in Gen. Zool. 7, but in vol. 13, part II.

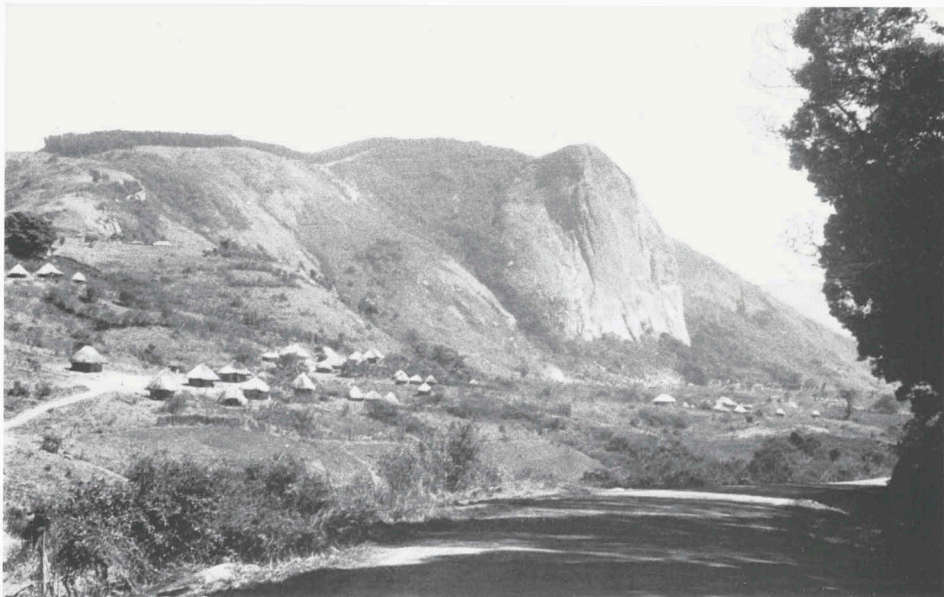
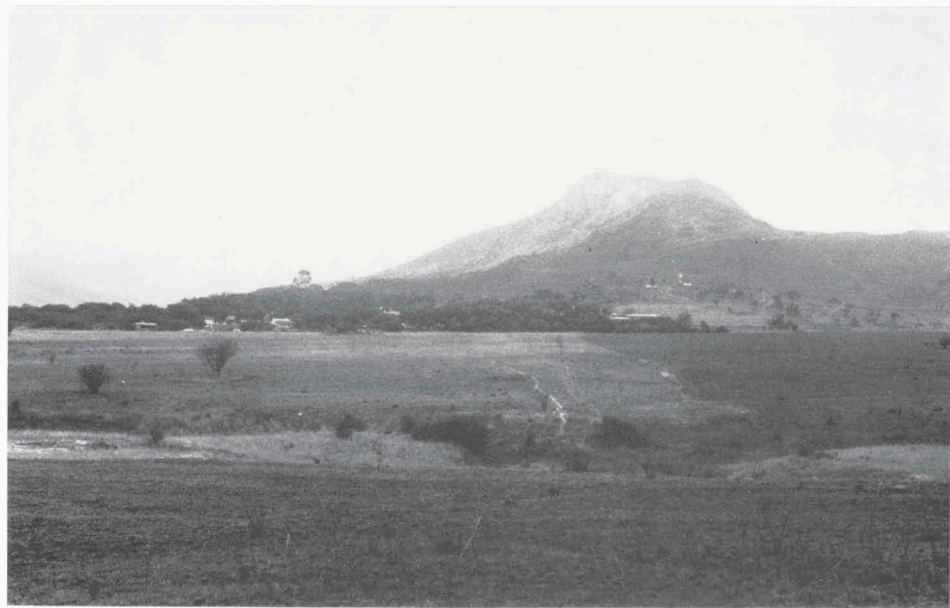
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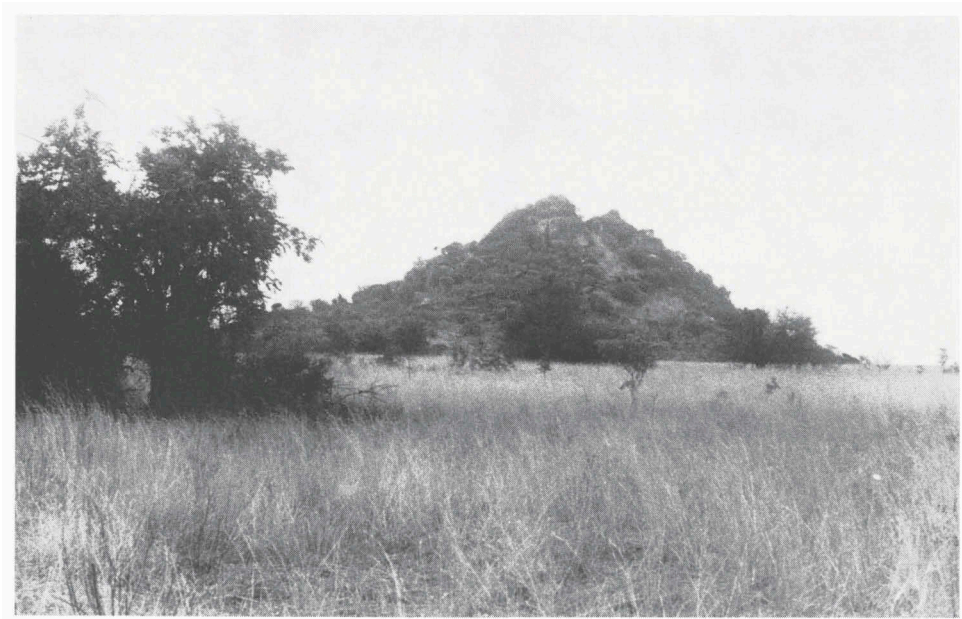
Top figure. Rhodes Inyanga Orchards, 1800 m, seen from the north; the tall trees to the right enclose the older part of the Orchards, habitat of *Streptopelia capicola*, *Turdus libonyanus*, *Apalis thoracica*, etc. On the open ground, *Grus carunculata* was a daily visitor. Bottom figure. Burnt land north of the Orchards, 1800-1900 m, habitat of *Anthus novaezeelandiae*, *Macronyx capensis*, and in the bushes *Chloropeta natalensis* and *Lybius torquatus*.



Top figure. Inyanga village, 1700 m, in the background. In the foreground a slightly sloping burnt plain, habitat of *Lobivanellus senegallus*, *Mirafra africana*, *Oenanthe pileata*, *Cisticola lais*, etc. Bottom figure. The escarpment of the Inyanga Highlands, seen from the south-east (Honde valley).



Top figure. Fig-tree of the subgenus *Sycomorus*, favourite haunt of *Pycnonotus barbatus*. Bottom figure. Rocky outcrop; on its slopes numerous flowers, which attracted a rich variety of insects.



Top figure. Savanna near Aberdeen, 1300 m. Bottom figure. Creek and riparian woodland at Aberdeen, 1300 m, habitat of a great diversity of bird-species.



Some interesting features of the Inyangang Highlands. Left, termite mound in the woodland at Aberdeen. Right, entrance to one of the forts, built of loose stones, such as adorn a number of mountain tops in the Highlands. Much about origin and use of these structures remains unexplained.