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FAUNAL NOTES FROM THE CHIMANIMANI MOUNTAINS, BASED ON A COLLECTION OF BIRDS AND MAMMALS FROM THE MUCRERA RIVER, MOÇAMBIQUE

by

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INTRODUCTION

The Chimanimani Mountains lie along the central part of the frontier between Moçambique and Rhodesia. The montane fauna of these mountains has been studied by expeditions from the University of Cape Town (see Masterson & Child, 1959; also Mitchell *et al.*, 1958) and the Prince Edward School, Salisbury, Rhodesia (see Siemers, 1967). Hodgson (1971) has collated the avifaunal data and Jackson (1973) has provided some additional records of the birds and mammals in the central area. Nevertheless, much remains to be learned of the Chimanimani fauna, especially on the Moçambique side of the mountains and particularly in relation to seasonal altitudinal movement.

The author visited the Chimanimani Mountains on an Umtali Museum expedition in 1972 for the purpose of studying the Freckled Nightjar *Caprimulgus tristigma* in the vicinity of the Mucrera River, Moçambique (19°53'S, 33°03'E, 1 450m), from 9 August to 7 September. Special efforts were made to collect the Cape Eagle Owl *Bubo capensis* and the Bokmakiri *Telophorus zeylonus*; both were

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secured, details being published in Jackson (1973a) and Jackson (1972) respectively. Notes were kept of all birds and mammals seen and mist nets were set in forest, grassland and rockland to sample the birds and bats present; however, these activities were incidental to the main objectives mentioned above.

This paper provides an annotated list of the 51 bird and nine mammal species seen or collected and includes the first record of the Rednecked Francolin *Francolinus afer* from the Chimanimanis. The Muçrera deme of the Wailing Cisticola *Cisticola lais* is found to be shorter-winged than *C.l.mashona*. Some new breeding records are given and notes on habitat preference, movement or behaviour are provided for many of the species. Colours of soft parts are often found to differ from those given in the standard reference work (McLachlan & Liversidge, 1970).

All records fall within the quarter degree square 1933C3.

SYSTEMATIC LIST

The data are presented in systematic order in the list that follows. Nomenclature and sequence follow Clancey (1971) on birds and Smithers & Tello (1972) on mammals. For localities see the gazetteer at the end of the paper.

BIRDS

Tachybaptus ruficollis

Dabchick

Found breeding on the Muçrera River in August: on the 22nd the nest was only half built; on the 30th it contained at least one egg; the clutch of four eggs appeared to be completed by 2nd September but this was not confirmed until the 6th. Hodgson (1971) gives no breeding record for the Chimanimanis. The breeding season in Rhodesia varies according to locality: in the drier south-west it is mainly January to March; in the rest of the country it is mainly June to August (Benson *et al.*, 1964). The statement in McLachlan & Liversidge (1970) that the season is "January to March and June to August in Rhodesia" obscures the fact that the two peaks are for different parts of the country. Winterbottom's (1971) statement of "February in Rhodesia" is thoroughly misleading.

According to McLachlan & Liversidge (*op. cit.*) the eggs of grebes "are invariably covered up with nest-material while the parent is

absent" and Winterbottom (*op. cit.*) states that "the parent covers them with damp weeds *whenever* leaving the nest"; however, Witherby *et al.* (1948) provide a qualified statement "eggs . . . are covered before leaving by incubating bird *when disturbed*"; italics mine in all cases. During ten hours of observation at the nest on the Muçrera it became obvious that during the normal nest relief ceremony (both birds incubate) the sitting bird leaves without first covering up the eggs. However, it usually waits until its mate is very close to the nest before leaving so the eggs remain exposed for a short while only. I arranged several incidents to test the reaction of the bird to the approach of a human along the bank; this usually led to a hasty attempt to cover up the eggs before slipping quietly into the water, the extent to which the eggs were covered depending on the speed with which the human approached. A very rapid approach from the bird's "blind" side left it with too little time to cover the eggs properly and it would slip into the water leaving the eggs only partially covered. On one occasion it left without any attempt at covering up the eggs when it was frightened by a sudden movement and loud noise from a photographic hide near the nest; it simply ran straight off the nest into the water and dived. My observations suggest that the sitting bird only covers up the eggs when a disturbance occurs and then only to the extent to which it has time to do so before hiding itself.

Anas sparsa

Black Duck

Seen on the Muçrera River and also at Southern Lakes; usually in pairs. Early one morning Black Ducks were heard calling repeatedly in flight up and down the Muçrera close to camp. Inspection of the 1¼-in. mesh mist net set across the river revealed two large holes so it would appear that both ducks flew straight through it, giving rise to the unusual amount of calling.

Aquila verreauxii

Black Eagle

Not once did I see this species during my month in the Chimanimanis, despite watching for it at all times; it seemed to be absent during the previous winter as well (Jackson, 1973).

Buteo rufofuscus augur

Augur Buzzard

The most conspicuous raptor in the area, pairs often seen soaring in thermals, both birds calling. When calling in flight the legs are dropped to the vertical, something I have noticed in the Bateleur *Terathopius ecaudatus* also; perhaps this applies to all raptors. The

Augur Buzzards were frequently buzzed in flight by Whitenecked Ravens *Corvus albicollis*, or Rock Kestrels *Falco tinnunculus*; in parrying such attacks the Augurs did not present talons by rolling over the way so many raptors do, but by pitching over backwards, the legs being thrown forward and up to strike at the descending attacker.

Falco tinnunculus

Rock Kestrel

Seen regularly over the Muçrera area, and also to the west of the lower Bundi on the Merewe peaks.

Fracolinus shelleyi

Shelley's Francolin

Often heard calling near my camp on the Muçrera; also seen near St. George's Cave and on the open grassland of the Bundi Plain, particularly near Merewe.

Fracolinus afer

Rednecked Francolin

A small covey seen clearly in grassland just north of Binga by R. Chenaux-Repond and me during a more recent visit (December, 1972); not previously reported from the Chimanimanis (Hodgson, 1971), but Clancey (1971) notes that it is "common in the mountainous frontier zone".

Vanellus senegallus

Wattled Plover

Seen regularly in open grassland along the Muçrera; very active at night as well as by day and readily mobbed me when I approached them on moonlight nights.

Columba arquatrix arquatrix

Rameron Pigeon

♀: 406,5g.

More common than the few records in Hodgson (1971) and Jackson (1973) suggest, but easily overlooked unless watched for during twilight when they are flying to the roost or dispersing from it. Up to 15 roosted regularly in the canopy of a small patch of forest close to my camp and I noticed another smaller roost in a forest a few km south. The birds arrived in ones or twos, occasionally threes, about half an hour after sunset and left again well before sunrise. Only once did I flush one from the forest during daylight, so the roost area was not normally used for feeding. Departing birds appeared to disperse a long way, mostly disappearing over the western edge of the Chimanimanis, so could well be visiting the

farming areas lower down during the day. A similar pattern was observed on the Nyika and in the Mafinga Mountains by Clay (1953), and by Skead (1964) in the Amatole Forests.

On 5th September I noticed a display flight over the roost forest for the first time; this was at 0830h. The bird would emerge from the forest canopy, flying strongly, do a circuit of 50 to 100m while calling and then fly into the forest again; this was repeated several times. A female collected on 24th August had enlarged oocytes (max. 3mm), so breeding in the Chimanimanis in September seems certain; there do not appear to be any breeding records for Rhodesia (Benson *et al.*, 1964) or Moçambique (Clancey, 1971).

The irides of the specimen were yellow, as given by Clancey (1964), not light brown as given by McLachlan & Liversidge (1970).

Tauraco corythaix livingstonii

Livingstone's Turaco

Common in the Muçrera area, my observations agreeing with Hodgson's (1971) assessment of its status in the Chimanimanis.

Bubo capensis mackinderi

Cape Eagle Owl

My earlier sight record of this species in the Chimanimanis (see Jackson, 1973) was confirmed by collecting a female near the Muçrera River; details of this specimen, the first for Moçambique, have been published elsewhere (Jackson, 1973a). The calls of this species near the Muçrera were the same as those heard near the Mevumosi in May.

Caprimulgus tristigma granosus

Freckled Nightjar

♀: 91,0g

The main object of the expedition to the Muçrera River was to study the Freckled Nightjar in an area selected during a previous visit in May, when it was noticed that the species was more common along the rugged quartzite ranges of the international border than in the softer country to either side (Jackson, 1973). The study area, some 4,4 sq. km in extent, stretches from the Rhodesian border to the Muçrera River (west to east) and from the 1 893m peak to the 1 911m peak (north to south). The area consists almost entirely of rockland, particularly at the higher levels; lower down there are patches of grassland studded with finger rocks (monoliths). The vegetation is sparse and mainly confined to the ravines, where the small mountain streams support growths of bracken and *Philippia* heath and, in some places, riparian forest of modest height.

Despite regular searching and playing of decoy sound tapes, not a single nightjar was seen or heard in the study area during the month that we spent there. This negative result helped to establish an important point regarding the ecology of this species: although it is essentially a rock nightjar, breeding and roosting on rocks and rarely found away from rocky country, rocks alone are not enough; there must also be sufficient vegetation to maintain an adequate supply of insect food. This explains the abundance of this species in the Matopos hills of Rhodesia and the frequent occurrence of a single pair on a small isolated granite knoll in a sea of miombo woodland, *pers. obs.*

A devastating fire swept through the study area a week or so prior to our arrival: the grassland patches were reduced to ash; the bracken-filled gullies were mostly burned out: even small riparian forests were severely scorched around the edges. This no doubt accounted for the paucity of the more obvious insect life noted in the study area during our nocturnal activities there; hardly any insects were attracted to our lights. The absence of nightjars from the study area was certainly due to the virtual absence of suitably sized insects there, for we located Freckled Nightjars outside the study area in places which had not been burned or which had recovered from a burn earlier in the year. One bird roosted regularly on top of the rock pile forming St. George's Cave, northeast of the study area; the vegetation around this cave is particularly lush and had not been burned. Two birds were located regularly on the small hill (*ca* 1 600m) just southeast of the study area; this area had been burned several weeks prior to my arrival so the vegetation had recovered to a large extent; a few pockets escaped the fire altogether and it is worth noting that one of the two birds on this hill was usually seen on a rock in the middle of one of these pockets. A pair occupying a territory along the headwaters of the Mucrera River, south of the study area, was also associated with good vegetation which had escaped burning. No other nightjars were found anywhere near the study area, but we did note regular song in the vicinity of Southern Lakes and on the slopes opposite Dead Cow Camp during our many trips up and down the mountain; neither of these areas had been burned. It seems quite clear from the foregoing that vegetation is important in the ecology of the Freckled Nightjar, being a link in the food chain upon which it depends. In my experience Freckled Nightjars make no direct use of vegetation; they roost and nest on bare rock surfaces and usually perch on rocks when hunting; I have yet to see one perching in a tree.

There was little evidence of breeding during August. Song intensity appeared to increase towards the end of the month and the pair south of the study area showed distinct territorial behaviour, but no nests were found and it seems unlikely that any egg laying took place before September. A female collected on 4th September had an active ovary, two of the oocytes being well developed at 3-3½mm diameter; another five measured 2-2½mm and the remaining ten or so measured less than 2mm. Apparently the breeding season in the Chimanimanis starts in late August to early September, as it does in Rhodesia (Benson *et al.*, 1964) and elsewhere in southern Africa (McLachlan & Liversidge, 1970; Winterbottom, 1971).

McLachlan & Liversidge (*op. cit.*) give the voice as 'a weird 'whow-whow' repeated over and over again, sometimes with three syllables, sometimes with four'. This is in fact the song of the species and it is better written as 'hew-cue', the two syllables being different; it is unusual for the song phrase to consist of more than two syllables. The species also has several different calls, two of which were uttered in response to a playback of the song; these may be called 'wocks' and 'whooting'. The 'wock' call consists of a single note of fairly low frequency repeated two or three times: 'wock-wock' or 'wock-wock-wock'; this was done in the immediate vicinity of the tape-recorder during playback of song and was uttered in flight, mainly by the pair which appeared to have an established territory. My impression is that it is an alarm or agitation call. The 'whooting' call on the other hand seems to be an invitation call; it was frequently given by a solitary male in response to playback of song and consisted of a long series of 'whoot' notes: 'whoot-whoot-whoot-whoot' . . . etc., at a higher frequency than the 'wock' note. When attracted to the tape-recorder, the male would fly over it, then settle on a rock some ten or more metres away and respond either with the song of the species or by 'whooting', more often than not the latter. More field work is required to establish just what the significance of these calls is.

There were frequent showers during our stay and often very heavy ground mists were experienced. On several occasions *tristigma* song was heard during light drizzle. The female collected was found on the ground in short grassland not far from rocks during a fog (visibility about 5m max.); it appeared to have been grounded by the fog, for it was saturated and was in an unusual posture with one wing half spread. It may have been attracted by my light.

The eyeshine of this species at night varies according to the distance from the light source. The eye is visible as a very pale yellowish-white reflection at a distance of 100m with a 6V torch; as the distance is reduced the yellow intensifies until it is a rich golden colour at about 50m; at 15 to 20m it is bright orange and at 3m the eyeshine is quite reddish, but not as bright as in *C. pectoralis*.

Apus barbatus

Black Swift

A flock of *ca* 40 seen feeding over a patch of montane forest on a hill slope near the Mucrera, the flight calls producing a continuous chittering sound (*cf.* the 'screaming' and 'shrill calls' of McLachlan & Liversidge, 1970). Another flock seen at the head of Banana Grove was whirling around at great speed close to the ground; two individuals were seen to lock talons in midflight and to drop several metres before separating; these activities also accompanied by much twittering.

Alcedo cristata cristata

Malachite Kingfisher

3 ♀♀: 14,4; 16,5; 18,9g

The three specimens were all taken in a net set across the Mucrera River. There is only one previous record for the Chimanimanis, of two seen at Southern Lakes (Hodgson, 1971); Clancey (1971) does not record it from the Portuguese side of the mountains.

Hirundo albigularis albigularis

Whitethroated Swallow

10 ♂♂: $22,8 \pm 2,5$ (20,1–28,6)g

This species was found to be common in the vicinity of the upland rivers and streams during my August–September visit but I did not record it in May–June (Jackson, 1973), so I question whether Hodgson (1971) is correct in considering it to be resident in the Chimanimanis. It seems more likely that here, as elsewhere in southern Africa (McLachlan & Liversidge, 1970), it is a summer visitor. Snell (1963) notes that it is a summer visitor to the montane areas of Inyanga. It was present when I arrived at the Mucrera on 10th August, but it is remarkable that all the specimens taken in a net set across the river were males; this suggests that the females arrive later than the males. Females were certainly present in late August and early September, for I noticed aerial displays and prospecting behaviour by pairs at that time. Nine of the males were collected during the period 13–24 August; none of these was

in breeding condition, the largest testis measuring $3\frac{1}{2} \times 2\frac{1}{2}$ mm. The other specimen was taken on 1st September with testes measuring 8×7 (L) and 8×6 (R) mm.

Hirundo fuligula

Rock Martin

Sparse; seen feeding over montane forest on a hillside near the Muçrera River.

Oriolus larvatus

Blackheaded Oriole

Noted regularly at Dead Cow Camp. Scarce in the Chimanimanis (Hodgson, 1971; Jackson, 1973).

Corvus albicollis

Whitenecked Raven

Regularly over the Muçrera River. Boldly visited our camp to scavenge within a fortnight of us setting it up. Frequently seen in pairs mobbing Augur Buzzards *Buteo rufofuscus*; fond of soaring in thermals.

Parus griseiventris

Smallbilled Grey Tit

Seen in *Uapaca* woodland on the ridge between the Bundi Plain and Banana Grove; also in a patch of riparian forest at about 1 550m, 1km south of the Saddle.

Pycnonotus barbatus naumanni

Blackeyed Bulbul

6 ♂♂: $39,3 \pm 2,5$ (35,8–42,4)g 2 ♀♀: 39,3; 39,4g

Some of the males had enlarged testes, but generally there was no sign of breeding. Seems to prefer forest edge and similar thickets; therefore frequent in the narrow montane riparian forests.

Andropadus milanjensis disjunctus

Stripecheeked Bulbul

4 ♂♂: 35,2; 36,3; 40,4; 41,8g ♀: 40,3g

Common in montane and riparian forest along the Muçrera and its tributaries. No evidence of breeding at this time.

Turdus libonyana tropicalis

Kurrichane Thrush

♀: 55,7g

Taken in montane forest edge at ca 1 450m. Clancey (1971) does not mention its presence in the Portuguese Chimanimanis but Hodgson (1971) gives a sight record from there.

Turdus olivaceus swynnertoni

Olive Thrush

2 ♂♂: 59,5; 70,1g ♀: 68,3g

The colour of the bill as given by McLachlan & Liversidge (1970) and illustrated in their plate 35 is misleading. The bill is orange, not yellow, and has a very dark brown culmen, as described by Clancey (1964).

Cercomela familiaris

Familiar Chat

Fairly common on rocky hillside with tumbled boulders, scattered monoliths and sparse vegetation.

Thamnolaea cinnamomeiventris

Mocking Chat

Found to be decidedly more common than suggested by Hodgson (1971); however, it tends to be shy and may be overlooked. In similar habitat to the last species, but with rather more vegetation present.

Saxicola torquata promiscua

Stonechat

3 ♂♂: 13,4; 15,6; 16,2g ♀: 17,3g

All the birds taken were in breeding condition, males with testes of 8 x 4½ (L) and 6 x 4 (R), 8 x 5 (L) and 7 x 4 (R) and 9 x 5 (L) and 7 x 5 (R), and the female having a yolking oocyte of 6mm. The iris colour is not black, as given by McLachlan & Liversidge (1970) but brown to dark brown thus agreeing with Clancey (1964).

Cossypha caffra vespera

Cape Robin

3 ♂♂: 25,8; 26,3; 32,9g

The heavy bird is an adult, but the other two are immature (skulls not fully ossified), which probably explains why they are so much lighter. The tarsus is brown, as given by Clancey (1964), not black as given by McLachlan & Liversidge (1970). Clancey (1971) suggests that the montane populations move to lower levels in winter: I did not notice any difference in population density in the Chimanimanis between my August–September visit and the May–June visit (see Jackson, 1973); however, a visit in mid-summer may have revealed a population increase and this should be looked for.

Chloropeta natalensis natalensis

Luteous Warbler

3 ♂♂: 12,1; 12,2; 12,5g

None of the specimens was in breeding condition: max. testes measured 3 x 2 (L) and 2 x 2 (R) mm. Hodgson (1971) records it

from the Lower Bundi Valley only; I found it to be rather sparsely distributed along the Muçrera, usually in patches of burnt bracken but occasionally inside small montane forests and in the canopy of riparian forest.

Apalis thoracica

Barthroated Apalis

It is surprising that I did not net this species, for it is fairly common along the Muçrera in riparian forest and in thickets among the rocks.

Eremomela scotops

Greencap Eremomela

Seen in *Brachystegia-Uapaca* association at ca 1 550m on the ridge between Banana Grove and the Bundi Plain.

Sphenocacus afer excisus Clancey (1973)

Grassbird

♀: 27,7g

Ovary not active. The colour of the bill was horn with a dark brown culmen, thus agreeing more with Clancey's (1964) description than with McLachlan & Liversidge (1970) who give the bill colour as black. Seen at several points along the Muçrera, usually in thickets or bracken and *Philippia* along the stream edge; occasionally in dry gullies.

Cisticola ayresii

Ayres' Cisticola

Again common in the Bundi Valley, but very few seen in the vicinity of the Muçrera.

Cisticola lais subsp. ?

Wailing Cisticola

15 ♂♂: $14,6 \pm 0,8$ (13,1–15,8)g 10 ♀♀: $10,7 \pm 1,0$ (9,1–12,0)g

According to Clancey (1971) the subspecies occurring in the montane border area of Moçambique is *C.l.mashona*. The Muçrera series certainly resembles *mashona* in appearance, but the wing-length is consistently shorter. Lynes (1930) gives the wing of ♂ *mashona* as 60 ± 2 mm, and McLachlan & Liversidge (1970) give it as 58–60 and that of the ♀ as 50–53. In the Muçrera series wing-lengths are $56,5 \pm 1,2$ ($54\frac{1}{2}$ –58) mm for ♂♂ and $49,8 \pm 0,7$ (49–51) mm for ♀♀. The marked sexual dimorphism in size is clearly demonstrated by both wing-length and weight.

Prinia robertsi

Roberts' Prinia

2 ♂♂: 8,7; 9,0g ♀: 9,7g

Small parties just inside some of the montane forests near the Mucrera. The bills were not black as given by McLachlan & Liversidge (1970), but greyish brown shading to brown on the culmen. There may therefore be a seasonal or age variation in bill colour; study of longer series would resolve this point.

Batis capensis erythrophthalma

Cape Batis

♂: 13,0g ♀: 13,7g

Fairly common in the montane and riparian forest patches in the Mucrera area up to 1 600m, which is slightly higher than the upper limit given by Hodgson (1971). According to McLachlan & Liversidge (1970) the iris is "yellow, red in ♂ in breeding condition", but *both* my specimens had red irides and *neither* was in breeding condition (no oocyte of more than 1mm and testes both 2 x 1½mm).

Trochocercus albonotatus swynnertoni

Whitetailed Crested

♂: 7,3g ♀: 8,7g

Flycatcher

In most of the montane and riparian forest patches along the Mucrera. No evidence of breeding at this time.

Anthus novaeseelandiae rufuloides

Richard's Pipit

♀: 24,6g

McLachlan & Liversidge (1970) give the bill colour as brown, but this applies to the culmen and tip of mandible only; the base of the lower mandible is a pale yellowish brown. Clancey's (1964) description is accurate.

The area west of the Mucrera River had been burned out shortly before our arrival, so there were no pipits on that side of the river for the first week or so. As the new grass shoots came out and provided food for insects, so the Richard's Pipits appeared there, but only to feed; each evening at about 1730h they left the area, flying across the river to the upland grassland area which had not been burned, presumably to roost. Numbers increased steadily and display flights became more frequent towards the end of August. On the 22nd I watched the following incident: four pipits were feeding close together in short grass in the rockland to the west of the Mucrera; at my approach two flew up to perch on a rock; shortly afterwards a third bird joined them and as soon as it landed one of the others approached it to within half a metre

where it displayed with tail cocked almost to the vertical, wings half open and quivering violently as the bird called; the respondent appeared to take no notice but then flew down behind the rock, followed by the solicitor. The action resembled greatly the begging posture of a young bird, except for the cocked tail; I presume it was a form of courtship solicitation.

Display flights in moonlight were noticed on the Saddle at about 0500h one morning well before sunrise; the moon was full at the time, setting at about sunrise.

Lanius collaris predator

Fiscal Shrike

4 ♂♂: 38,6; 40,2; 41,6; 42,5g

All in breeding condition. Clancey (1971) regards this species as marginal in southern Moçambique and does not record it specifically from the Chimanimani Mountains. Hodgson (1971) and I (Jackson, 1973) have commented on the apparent increase of this species in the Chimanimanis, so I shall merely add that in the Muçrera area, too, it was found to be quite common, frequently using monoliths to perch on for hunting or singing.

Laniarius ferrugineus

Boubou

Sparse in the Muçrera area, where most of the suitable cover had been burned out.

Dryoscopus cubla

Puffback

Recorded at Dead Cow Camp but neither seen nor heard anywhere in the Muçrera area; my previous assessment of "ubiquitous" (Jackson, 1973) should be modified accordingly; in particular I should clarify that I have not recorded it in open grassland or bare rockland at any time.

Telophorus zeylonus restrictus

Bokmakiri

A useful series of eight specimens of this form was collected and written up (see Jackson, 1972).

Malaconotus olivaceus interfluvius

Olive Bush Shrike

♀: 33,6g

The specimen is of the ruddy phase. The iris colour was red, whereas McLachlan & Liversidge (1970) give it as brown in the ♀. The bill is not plain black, it pales to grey basally. In the Chimanimanis this species appears to be confined to evergreen forest (Hodgson, 1971; Jackson, 1973 and this study).

Onychognathus morio

Redwinged Starling

Common in the Mucrera area, as it is all along the rugged border range.

Promerops gurneyi

Gurney's Sugarbird

Seen once only during my stay in the Mucrera valley. This species is remarkably scarce in the Chimanimanis as a whole and merits a detailed population study.

Nectarinia famosa famosa

Malachite Sunbird

♂: 15,7g 2 ♀♀: 13,5; 14,0g

The male was in breeding condition (testes 6 x 5 (L) and 5 x 4 (R)), but the females were not. Males were singing regularly from favoured song posts, usually on top of a *Cussonia* or *Strelitzia*, and much courtship chasing was in evidence. Not seen inside evergreen forest, preferring the more open gullies and ravines, particularly those with proteaceous bushes.

Nectarinia kilimensis arturi

Bronze Sunbird

♂: 16,4g

Skead's (1967) assessment of the habitat requirements of this species is not entirely correct. It *will* on occasion enter montane forest patches, particularly at canopy level, as already noted by Hodgson (1971). On the Mucrera the species was usually associated with the small montane forests, where it was seen mainly along the edge but frequently in the canopy, particularly during courtship chases, and occasionally even inside the forest for a distance of up to five metres.

Skead (*op. cit.*) could give no details of the courtship behaviour of this species. Both at Dunblane in the northern Chimanimanis (see Jackson, 1970) and in the Mucrera area I noted that pairs indulge in hectic courtship flights, the male pursuing the female relentlessly in low level flights of several hundred metres at times, skimming low over the vegetation, be it scrub or forest; the male keeps up a continuous chittering call during the flight. One such flight around, over and into a forest patch ended with both birds perching close to me on the edge of the forest, the pair being about 10cm apart on a horizontal branch some five metres above ground: the male immediately displayed by rapidly winnowing half spread wings while bowing violently several times, the long tail jerking

up and down through an angle from about 45° below to 45° above the horizontal; the female showed no reaction and after a short while the male flew off into the forest, followed closely by the female.

Nectarinia chalybea manoensis Lesser Doublecollared Sunbird

♀: 7,5g

Several seen in the Mucrera Valley, mainly in thickets among the rocks, but also in montane and riparian forest patches.

Nectarinia venusta Yellowbellied Sunbird

Common in the Mucrera area in the habitats given by Hodgson (1971).

Ploceus xanthops Larger Golden Weaver

Clancey (1971) does not record this species in the Portuguese Chimanimanis and Hodgson (1971) gives only one record for the mountains as a whole, in reed beds in the lower Bundi. It breeds in the Mucrera valley, several old nests being found along the edge of the stream. The birds were not present when I arrived on 10th August, being noticed for the first time on 3rd September when four were seen in bracken and protea in a small gully some 200m from a patch of montane forest; they made their way to the forest and could subsequently be heard calling from the depths of it. I doubt whether I could have overlooked the species there earlier, for the call is quite distinctive and obtrusive; it seems clear that they arrived in the Mucrera valley in late August or early September. There is no suggestion in McLachlan & Liversidge (1970) that this species indulges in any form of movement, but perhaps it will be found to be an altitudinal migrant in the Moçambique-Rhodesia border area. The species was seen regularly up to the time I left the area, by which time a male had been noticed singing a swizzling song from a treetop on the edge of the forest; this particular forest is only about 200m from the point on the Mucrera River where the old nests of this species were found.

Estrilda astrild Common Waxbill

Only two seen along the Mucrera; Hodgson (1971) implies that they are scarce at higher altitudes, but I found them reasonably common in May–June (Jackson, 1973).

Serinus canicollis

Cape Canary

A few small parties were seen flying over open grassland and settling on the edge of the forest or in thicket. This species has yet to be collected in Moçambique, but has previously been seen there (Jackson, 1973).

Emberiza capensis smithersii

Cape Bunting

Very common everywhere in rockland; at times very confiding.

MAMMALS

Tadarida aegyptiaca

Egyptian Freetailed Bat

This appeared to be the only species of bat present in the Muçrera area; at any rate, it is the only one that was caught in any of the mist nets. The 27 specimens taken were all caught in a mist net spanning the Muçrera River at a point where it opens out into a large pool. The habitat in the immediate vicinity consisted of open grassland to one side of the river and fairly open rockland with grass in between the rocks on the other side of the river; however, it could be that the bats were visiting the river from some distant feeding ground, for insect life in the vicinity of the Muçrera was decidedly scarce (see discussion under Freckled Nightjar).

Measurements, in mm and g, of the specimens were as follows, giving Mean \pm Standard Deviation (Observed Range):

	11 ♂♂	16 ♀♀
<i>Overall</i>	111,5 \pm 2,8 (106-115)	111,1 \pm 3,7 (105-118)
<i>Head-Body</i>	73,9 \pm 1,0 (72-75)	72,3 \pm 2,7 (68-78)
<i>Tail</i>	37,6 \pm 2,2 (33-40)	38,9 \pm 2,4 (35-44)
<i>Hind Foot</i>	10,0 \pm 1,4 (8-11)	9,5 \pm 1,3 (7-12)
<i>Ear</i>	20,5 \pm 0,8 (19-22)	20,3 \pm 1,4 (18-22)
<i>Forearm</i>	48,1 \pm 2,1 (46-54)	48,1 \pm 1,6 (46-52)
<i>Weight</i>	14,9 \pm 1,0 (13,8-17,3)	15,6 \pm 1,4 (13,7-18,1)

There is evidently no sexual dimorphism in size. There was no sign of breeding; all the ♀♀ had dry mammae.

Cercopithecus albogularis

Samango Monkey

On 2nd September at 1130h we had the unusual experience of seeing a solitary Samango Monkey on the peak of a bare quartzite ridge, the nearest forest being 1 to 2km away on the slopes of Nhauti.

Papio ursinus Chacma Baboon
Common in the rockland west of the Mucrera River.

Herpestes sanguineus Slender Mongoose
One seen in the rockland west of the Mucrera.

Sylvicapra grimmia Common Duiker
Solitary individuals seen in rockland at St. George's Cave, in grassland at Southern Lakes and in *Uapaca* woodland west of the Bundi Plain. A family party of two adults and one young was encountered on 20th August near the Mucrera River in a small thicket; the young was collected.

Oreotragus oreotragus Klipspringer
Very common throughout the Mucrera area south to Dragon's Tooth, especially in rocky ravines; frequently in pairs but occasional solitary individuals seen.

Taurotragus oryx Eland
Two seen in grassland east of the Mucra and a herd of 15 seen crossing the Saddle on several occasions; this is a natural point at which to cross the mountains and the eland apparently use it regularly, for this is probably the same herd reported in my previous paper (Jackson, 1973). We found the remains of an eland on the plateau just south of St. George's Cave; it had been slaughtered on a makeshift carpet of cut branches hidden in a small clearing among large rocks; all that remained were the front legs below the knee, a few pieces of hide and the stomach contents. A party of 11 African hunters seen carrying bundles of meat in this vicinity a few days earlier (Dr. F. W. Huchzermeyer, *pers. comm.*) no doubt accounted for the rest; they appeared to be armed with spears, knobkerries and bows and arrows only.

Pronolagus crassicaudatus Red Rock Hare
Despite moving about the Mucrera area a great deal at night we did not see this species. Its presence was nevertheless confirmed when we collected a specimen of the Cape Eagle Owl *Bubo capensis* and found an entire leg of this hare in its oesophagus. For full details and discussion see Jackson (1973a).

Rhabdomys pumilio Fourstriped Mouse
♂: 28,7g
One collected inside tent in open grassland near the Mucrera River.

SUMMARY

The paper reports on a collection of 125 specimens taken in August–September, 1972, in the vicinity of the Muçrera River, Moçambique; this is in the Chimanimani Mountains close to the Rhodesian border. The collection includes the first specimen of Cape Eagle Owl *Bubo capensis* from Moçambique (see Jackson, 1973a) and useful series of Whitethroated Swallow *Hirundo albigularis* (ten specimens), Wailing Cisticola *Cisticola lais* (25 specimens), Bokmakiri *Telophorus zeylonus* (eight specimens; see Jackson, 1972) and Egyptian Freetailed Bat *Tadarida aegyptiaca* (27 specimens). The specimens represent 24 bird and four mammal species; also recorded are another 27 bird and five mammal species seen but not collected, including the first record of the Rednecked Francolin *Francolinus afer* from the Chimanimanis.

Habitat notes are provided for most of the species. The Dabchick *Tachybaptus ruficollis* was found breeding in the Chimanimanis for the first time and ovarian activity was noted in Rameron Pigeon *Columba arquatrix* (apparently no breeding records from Moçambique or Rhodesia), Freckled Nightjar *Caprimulgus tristigma* and Stonechat *Saxicola torquata*; for most species the breeding season was only just beginning. Notes on courtship and other behaviour are included for several species.

The Muçrera deme of the Wailing Cisticola is shorter-winged than *C.l.mashona*, the taxon to which the Chimanimani populations are usually referred.

The Whitethroated Swallow is not resident in the Chimanimanis as claimed by Hodgson (1971); it arrives in August, the males apparently preceding the females by a few weeks.

The weights of all specimens are given and for several bird species the colours of soft parts given in McLachlan & Liversidge (1970) are shown to be unreliable.

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GAZETTEER

The only suitable and readily available map of the area is the 1-50 000 CHIMANIMANI map (ref. 1933 C1 & C3) in the topocadastral Series of the Department of the Surveyor General. This map gives good topographical detail, particularly on the Rhodesian side of the border, and shows most of the localities mentioned in this paper and in my earlier paper (Jackson, 1973). The grid reference for each locality is listed below; those enclosed in parentheses lie beyond the limits of the map:

Banana Grove	002105	Mevumosi River	(162063)
Binga Peak	065136	Mountain Hut	021128
Bundi Plain	025070	Mucrera River	059020
Bundi River	026130	Nhauti Peak	059973
Camp Portage	(110163)	Poacher's Cave	(101035)
Dead Cow Camp	(982108)	Skeleton Pass	037149
Dombi Peak	040142	Southern Lakes	033055
Dragon's Tooth	030957	St. George's Cave	063033
Elephant Lake	(180098)	The Plateau	(092170)
Gossamer Falls	(178005)	The Saddle	047045
Gossamer Range	(176048)	Tucker's Falls	(152150)
Kurasika Cave	(135166)	Turret Towers	048113
Lower Bundi River	030070	Umtali Museum Camp	060012
Macuire Range	(120028)	1 600m Peak	063007
Martin's Falls	(133143)	1 893m Peak	043031
Merewe Peak	007083	1 911m Peak	039005