

PODICIPES FLUVIATILIS.

Little Grebes were not abundant on the lagoons of fresh water which occur near Shi Tao and the North-East Promontory. These birds breed rather late, as one fresh egg was obtained on July 20th, and on August 28th a young bird not very long hatched.

XXVIII.—*On the Birds collected by Mr. Claude H. B. Grant at various Localities in South Africa.*—Part III. By W. L. SCLATER, M.A., F.Z.S., M.B.O.U. *With Field-Notes by the Collector.*

[Continued from above, p. 437.]

THE numbers in front of the names of the Birds are those of the 'Check-list of South-African Birds,' published by me in 1905 (Ann. S. Afr. Mus. iii. pp. 303–387), which is founded upon the four volumes of the 'Birds of South Africa' by myself and the late Dr. Stark.

In order to save space the following contractions are used :—

CC. = Cape Colony.

Tv. = Transvaal.

N. = Natal.

P. = Portuguese East Africa.

Z. = Zululand.

382. UPUPA AFRICANA.

Tv. Woodbush, May, June (2); Legogot, May (1);
P. Coguno, Aug. (2); Beira, Dec. (1).

[The African Hoopoe has been noted from the Cape Peninsula (March 1903), the Eastern and North-Eastern Transvaal, and the Inhambane and Beira districts of Portuguese East Africa. It appears to be a local migrant to a certain extent—as, for instance, at the Woodbush it was only observed in the winter, none being met with in the summer season; and at the Cape I have only seen it in the month mentioned, although I was there in both February and March and again in October. It is usually seen in pairs or

threes, and inhabits more or less bushy country; it feeds largely on insects, for which it is observed searching in the trees and shrubs as well as on the ground. The cry is clear, somewhat loud, and generally of two notes; the flight is slow and jerky, the white on the wings and tail shewing conspicuously. It is rather a wary bird, and cannot always be approached within shot.

The soft parts of the adult are:—Irides hazel; bill, legs and toes blackish.]

383. *IRRISOR VIRIDIS*.

CC. Knysna, Dec., Jan. (8).

[“Kakelaar” of the Colonists.

I have notes of this species from the Knysna only. It is always seen in small parties of about half a dozen individuals, and spends its time searching the trunks and larger limbs of the trees for insects and grubs. It can often be seen hanging head downwards on the under side of the branches examining the interstices of the bark. It has a loud clattering cry of many syllables rapidly repeated, accompanied by a see-saw movement of the body, the head being well thrown back each time, and likewise the tail. I have on several occasions seen the birds when calling face one another on a horizontal branch, their continual bowing to each other being very comical. The flight is undulating and never long sustained, the tail being widely spread, shewing clearly the white spots on it and on the wings. The species will often pitch on the side of the trunk of a tree after the manner of a Woodpecker.

The soft parts of the adult are:—Irides dark brown; bill, legs and toes coral-red.

In the young:—Irides much darker brown; bill black; legs and toes pink-brown.]

383 *a.* *IRRISOR ERYTHORHYNCHUS*.

Tv. Klein Letaba, July, Aug., Sept. (5); Legogot, May (1); Coguno, July, Aug. (5); Tambarara, April (1); Tete, Sept. (4).

This Kakelaar has been noted in the Eastern and

North-Eastern Transvaal and the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa. In cry, flight, and habits it cannot be distinguished from *I. viridis*, and, like that species, inhabits only forest or well-timbered country. I have never succeeded in finding the nest, although I have chopped out holes in trees where I have seen birds enter or emerge. The soft parts are similar to those of *I. viridis*.

384. RHINOPOMASTES CYANOMELAS.

Tv. Woodbush, May (1).

RHINOPOMASTES CYANOMELAS SCHALOWI.

Reichenow, Vög. Afr. ii. p. 347.

P. Coguno, Aug. (3) ; Beira, Dec. (1) ; Tete, Aug. (1).

The birds from Portuguese East Africa should be referred to Schalow's Scimitar-bill *, distinguished by its longer tail with much larger white spots. This subspecies was first detected in South Africa by Swynnerton ('Ibis,' 1908, p. 392). There are several other examples in the British Museum, viz., from the Makalaka country (*Bradshaw*), Hunyani River (*Clark*), and Fort Chiquaqua (*Sowerby*), all in Rhodesia, referable to this form. It is not mentioned in Gunning and Haagner's recently published 'Check-list of South-African Birds.'

[Only in the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa have I noted this species. It was not common anywhere except in the Inhambane district, where a good many were noticed. It is always in pairs, and can often be seen examining the topmost branches of tall trees, never remaining long, and continually moving on from tree to tree.

It has a single clear loud cry, like a sharp whistle, which is apparently the call-note. It is very wary, and is not easily obtained. I could discover nothing of its breeding-habits.

The soft parts are :—Irides deep brown ; bill, legs and toes black.]

* *Rhinopomastus schalowi* Neumann, J. f. Orn. 1900, p. 221 [Muanza, German E. Afr.].

387. *CYPSELUS BARBATUS*.

CC. Plettenberg Bay, Feb. 20 (1) ; **Tv.** Wakkerstroom, Apl. 7 (1) ; Woodbush Hills, Nov. 20 (1).

These are undoubtedly individuals of the resident South-African race.

[I have only noted this Swift in the summer season, and I have always observed it in flocks, generally hawking so high that it was impossible to obtain specimens. Curiously enough, I have never seen this species breeding, and could learn nothing from the natives respecting it.

The soft parts are :—Irides almost black ; bill and toes black.]

388. *CYPSELUS CAFFER*.

CC. Plettenberg Bay, Feb. 20 (1) ; **Tv.** Wakkerstroom, Mch. 21 (2) ; Pietersburg, Feb. 25 (1).

[This Swift is migratory, and I have noted it at most localities visited in the summer season from about September to April. It is often seen in small parties of about half a dozen, and when the birds chase each other the flight is marvellously rapid. They build generally under the verandas of private dwellings, and most people will not have them disturbed. The cry is a "screech," continually uttered when chasing each other.

The soft parts are :—Irides dark brown ; bill and toes black.]

CHÆTURA BOEHMI.

Chætura anchietæ C. Grant, Bull. B. O. C. xxi. 1908, p. 66.

P. Tete, Aug. 20 (1).

This little Spine-tail agrees in every respect with a series of specimens collected by Dr. Ansorge at Cassualalla and N'dalla Tando, in North Angola, and all should doubtless be referred to *C. anchietæ* (Sousa, J. Lisboa, xvi. 1887, pp. 93, 105). Reichenow (Vög. Afr. ii. p. 388) makes *C. anchietæ* a synonym of *C. böhmi* (Schalow, Orn. Centralb. 1882, p. 183) from Kakoma, in German East Africa. I have seen no examples from East Africa, but so far as the description goes there is no reason to doubt Reichenow's identification.

The Angola birds have a spot of white on the lores, which, however, is often partially or wholly concealed by the stiff black tips of the feathers around ; this is not noticed in the descriptions of *C. anchietæ*, but is probably present, as it is in the Tete bird.

Sheppard (Journ. S. A. O. U. v. 1909, p. 37) obtained three examples of a Spine-tail, which he identified as *C. böhmi*, near Beira, and Wilde (Gunning and Haagner, 'Check-list of South-African Birds,' p. 78) got others at Sesheke on the Upper Zambesi ; the bird is therefore probably not uncommon along the Zambesi Valley, and makes an addition to the avifauna of South Africa.

[I have only seen this Swift at one locality, and that was at the junction of the Mazoe and Luenya Rivers, some twenty or twenty-five miles south of Tete ; it was probably passing there on migration, as about a dozen were seen for a few days only, which were hawking over the water in company with *Cypselus caffer* and *Hirundo smithi*. The flight is peculiar owing to the short tail, which compels the bird to be continually using the wings, especially when turning. It is apparently unable to turn with the graceful movement of the other Swifts and Swallows. The cry was not unlike that of *H. smithi*, and not the screech of the Swifts. Unfortunately, after I shot the specimen that I brought home, the others became wary and I could not secure any more.

The soft parts are :—Irides almost black ; bill, legs and toes black.]

392. CAPRIMULGUS EUROPÆUS.

CC. Plettenberg Bay, Mch. 9 (1) ; **Z.** Jususie Valley, Dec. 2 (1) ; **P.** Beira, Dec. 12 (1).

The Jususie Valley example, though sexed a female, appears to be a young male, while the Beira one, which is sexed a male, is obviously a female.

[“ Wozavolo ” of the Zulus.

In its winter-quarters the European Nightjar has similar habits to those I have noted in Europe except that it is solitary, and I have never heard it call.]

394. *CAPRIMULGUS FERVIDUS*.

Tv. Legogot, May (1) ; Woodbush, May (2) ; **P.** Coguno, June, Aug., Sept. (7) ; Beira, Dec., Jan. (3).

This is a somewhat rare species in South Africa. The two sexes seem to be almost identical. The females have the white on the tail-feathers and on the primaries, generally characteristic marks of the males, but the spots are, perhaps, slightly smaller.

[“Dowe” of the Ntebis.

Not until I reached the Transvaal did I come across this species, and there I found it both in the Eastern and the North-Eastern localities visited, and again in the Inhambane, Beira, and Gorongosa districts of Portuguese East Africa, but it was not heard or seen near Tete. It was not common in any locality except at Coguno, where it was exceedingly plentiful. It appears about sundown, and sits both on the ground and in trees ; it catches its prey from a fixed perch, and does not, I believe, hawk after the manner of *C. fossei*. It has a clear, loud, liquid call of several notes rapidly repeated, but different from that of *C. natalensis*, and not easily described, and another single peculiar note which, I believe, is the call to another bird, as I always heard it when two came together. The alarm-note is a single harsh cry, sometimes with a sharp snapping noise, probably made with the beak. This species, like most Nightjars, only utters its regular call or “song” when sitting. It was very common all round my camp at Coguno, and sat regularly on the trees near by. I noticed that it called much more often on moonlight nights ; on dark nights it was seldom or never heard. The Ntebi name is derived from its single call-note.

The irides are dark brown.]

395. *CAPRIMULGUS PECTORALIS*.

CC. Durban Rd., Sept. (2) ; Port Nolloth, Aug. (2).

One egg taken at Port Nolloth, Aug. 13.

[“Nacht-uil” of the Cape Colonists.

The Cape Peninsula and Namaqualand are the only localities where I have seen this Nightjar, and it appears to

be confined more or less to the coast-belt. Only the pair secured were seen at Port Nolloth, and none were heard calling; but at the Cape it was plentiful, and could be heard and seen every night, being very partial to orchards and cultivated lands. It was found sitting on the posts of the fencing, whence it took short flights round the fields, often returning again to its perch. It has a charming note, I think higher in tone than either that of *C. fossei* or that of *C. europæus*, and another, somewhat guttural, which is probably the sexual call. It apparently breeds fairly early, as the pair shot at Port Nolloth were flushed from the nest, which was a mere hollow in the sand on an open stony hillside, and contained one egg just laid. On skinning the female I found another in the oviduct not quite hardened.

The irides are dark brown.]

396. *CAPRIMULGUS TRIMACULATUS*.

Tv. Swali's Nek, July (1); Woodbush, June (1); Legogot, Apl., May (5).

This is a rare species in South Africa. There are only three South-African examples in the British Museum—the type of *C. lentiginosus* A. Smith, from Namaqualand, one skin from the Cunene River, and one from Rustenberg. The present series is therefore a welcome addition. The female has the white spots on the *three* outer primaries as in the male, but no white on the tail.

[Only in the Eastern and the North-Eastern Transvaal have I noted this distinct Nightjar. It was fairly plentiful at Legogot, but two specimens were seen at Woodbush and one was secured in the low veld. It appears about sundown, and always sits in roads or tracks, never, I believe, on a stump or tree, and I have not flushed it in the daytime.

Whether this bird is silent or not I do not know, but I have been unable to recognise its call.

The irides are dark brown.]

397. *CAPRIMULGUS FOSSII*.

Z. Umfolosi Station, July (2); Hluhlwe Stream, Aug. (1); **Tv.** Woodbush, Jan. (2); Pietersburg, Mch. (1);

Legogot, Apl. (1) ; **P.** Beira, Dec., Jan., Feb. (3) ; Tete, Aug. (2).

The bird killed Jan. 4th at Beira is in full moult; the outer tail-feathers are only about half an inch long and quite hidden. The Beira birds, as remarked by Grant, are slightly smaller than those from the Transvaal, the wings averaging 150 against 160 mm.

[The three males from Beira are somewhat smaller than the rest of the series, the wing being only 6·0 inches as compared with 6·3 and 6·5 of males from other localities.

I have noted this Nightjar in Zululand, the Eastern and North-Eastern Transvaal, and in the Beira, Gorongosa, and Tete districts of Portuguese East Africa. It was neither heard nor seen in the Inhambane district.

This Nightjar usually sits on the outside branches of trees, whence it darts out on its prey, returning again to the same spot; occasionally, also, it sits on the ground. It indulges in long flights, often in wide circles, generally returning to the place which it has left, and in this respect resembling *C. europæus*. It was commonly seen in numbers every evening on the Zambesi River on my trip from Tambarara to Tete, skimming over the surface of the water, catching insects and sitting on the sandbanks. The call is a "churr" exactly resembling that of the European Nightjar, the alarm-note being a sharp snap, probably caused by the beak. In the daytime it is sometimes flushed in rough scrub and vegetation on the outskirts of woods and forests.

The irides are dark brown.]

398. *CAPRIMULGUS NATALENSIS*.

Z. Umfolosi Station, July, Aug. (1) ; Hluhluwe Stream, Aug. (1) ; Jususie Valley, Dec. (2).

One egg taken from a female shot at Umfolosi Aug. 30th. Only known in South Africa from Natal and Zululand.

["Foyia" of the Zulus.

Only in Zululand and Natal have I noted this Nightjar. In Zululand it was particularly plentiful, especially in the Umfolosi country, where it was found lying up in the long

grass in the dry vleis and on the hillsides. It appears just after sundown, and has a low skimming flight; it was very fond of sitting on the open railway-track or sometimes on the posts of the fencing. It has a cry of several clear liquid notes, distinct from those of other Nightjars which I have met with. It is apparently a somewhat early breeder, for I took a developed egg from the oviduct of a female shot in August, and I shot a fully-fledged young bird in December.

The irides are dark brown.]

400. *CORACIAS GARRULUS*.

P. Beira, Dec. 2, 12, 16, 17 (6).

[It was only in the Beira district of Portuguese East Africa, in the summer of 1906-7, that I came across this bird, and I find the following references to it in my diary:—

“2 Dec., 1906.—Large flock of European Rollers passed over here (6½ mile camp) this afternoon, coming from the N. and going S., travelling very high. After wasting several cartridges I succeeded in securing three specimens.”

“16 Dec., 1906.—Several small lots of *C. garrulus* passed over going south to-day.” And again, under date the 5th Feb., 1907, I find:—

“The European Roller which was so common here a few weeks back has gone from round my camp (6½ mile), and I only saw two or three as I was walking up from Beira.”]

401. *CORACIAS CAUDATUS*.

Tv. Klein Letaba, July, Aug., Sept. (7); **P.** Coguno, Aug., Sept. (4); Beira, Nov., Dec. (2); Tete, Sept. (4).

A young male, marked “Beira, Dec. 16,” has the crown more faintly tinged with green than the adult and the breast is cinnamon instead of lilac, while the elongated tail-feathers are, of course, absent.

[The Lilac-breasted Roller has been observed in Zululand north of the Hluhluwe Stream, in the Eastern and Northern Transvaal, and in the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa. This species is more or less confined to the lower “bush-veld,” and I have only seen an occasional individual in the high country.

It is usually observed in pairs perched on the tops of bare trees, and when approached flies round in large circles high up out of shot, keeping up a continuous discordant cry. On the wing it often indulges in sudden tumbles, rising again abruptly when within a few feet of the ground. It often mobs hawks and crows that happen to pass near it. I have always observed that the bird so mobbed makes off as fast as it can, and never attempts to retaliate. It feeds entirely on insects, and will congregate in numbers in company with the Drongos around grass-fires to catch grasshoppers, beetles, and other insects driven out by the flames.

The soft parts of an adult are :—Irides hazel ; bill black ; legs and toes dark greenish yellow.]

402. *CORACIAS SPATULATUS*.

P. Coguno, Aug., Sept. (2).

So far as I am aware the Racquet-tailed Roller has not hitherto been obtained in Portuguese East Africa, but within South African limits only in Rhodesia.

[I have not seen this Roller elsewhere than in the Inhambane district of Portuguese East Africa, and even there, although several individuals were seen, it could not be said to be plentiful. It was observed singly, and I remarked that it was not so noisy as *C. caudatus*. It generally sat on the tops of small bushes and trees or on the lower branches of the larger ones. I found it rather wary, and when disturbed it merely moved off to some distant position, never circling round high up as does *C. caudatus*.

The soft parts of an adult are :—Irides brown ; bill black ; legs and toes greenish or greenish yellow.]

403. *CORACIAS MOSAMBICUS*.

Tv. Klein Letaba, Sept. (1) ; **P.** Tete, Aug. (1).

[I only noted the Purple Roller at Klein Letaba, where it was fairly plentiful, and in the Tete district, where it was scarce. It is always observed singly, and generally frequents well-timbered country, and is seen either perched on the middle branches of the trees or on the ground

devouring some prey. When disturbed it flies slowly off to some other position, and is generally very quiet in habits, but is wary and not easily shot. It feeds principally on insects such as grasshoppers and beetles. Its cry is loud and discordant, but is not often uttered.

The soft parts of an adult are:—Irides dark hazel; bill black; legs and toes brown washed with green.]

404. EURYSTOMUS AFER.

P. Beira, Nov., Jan. (2); Masambeti, Oct. (1).

[“Sauri” of natives in the Beira country.

It was only between Beira and Tete that I saw this species, and even there it was local, being commonest near Beira. It inhabits forest country, and is generally seen sitting on the topmost branches of the large dead trees; it indulges in long circling flights when disturbed—and often when not—calling continuously and loudly all the while, after the manner of *Coracias caudatus*, but I have never noted it tumbling to the same extent. It feeds principally on insects, and I have seen it dart out and catch locusts on the wing after the manner of a Flycatcher. I have observed it both singly and in small parties of eight or more; these latter may have been old and young or birds migrating.

The soft parts of an adult are:—Irides brown; bill yellow; legs and toes greenish-yellow.]

MEROPS SUPERCILIOSUS.

Reichenow, Vög. Afr. ii. p. 325.

P. Masambeti, Oct., Nov. (5); Beira, Jan. (1).

Six eggs taken at Masambeti, Oct. 24.

This Bee-eater has not hitherto been taken south of the Zambesi, so far as I know. It is a common East African species, ranging, according to Reichenow, from Shoa to Mozambique. The most southern locality mentioned by Reichenow is Kissango, north of Mozambique and at least 700 miles north of Beira.

The eggs are like those of other Bee-eaters; they average $1.1 \times .9$ inch (*i. e.* 28×23).

[Only near Beira, where it was plentiful, and up towards

the Zambesi, where it was scarcer, have I seen this Bee-eater. I met with it both in pairs and large flocks at the same time ; it was one of the common birds of Beira, and could be seen any day sitting on the acacias and other trees in the streets and the gardens of the private houses. It does not appear to hawk for food like the other Bee-eaters, but darts out on its prey from a fixed perch after the manner of *Melittophagus meridionalis*. In Beira enormous flocks were seen towards evening circling and twisting over the mangrove-swamps where they roosted, presenting at a distance the appearance of Swallows. At Masambeti, near Beira, I found two pairs breeding in the banks of some drainage-ditches cut through cultivated land, but only one hole contained eggs. These holes ran in for about three feet, with hardly any upward incline, and in the cavity at the end of one I captured a female sitting on six eggs, which I should imagine is rather a larger clutch than usual. When dug out the cavity was within six inches of the surface of the ground, and there was no deposit of débris or other matter. The cry of this bird is a single clear note, and its food consists principally of winged insects of various kinds.

The soft parts of the adult are:—Irides crimson ; bill, legs and toes black.]

408. *MEROPS NUBICOIDES*.

Merops natalensis C. Grant, Bull. B. O. C. xxi. 1908, p. 66.

Tv. Woodbush, Jan. (3) ; **P.** Masambeti, Nov. (1) ; Beira, Nov., Dec. (4).

[Woodbush in North-East Transvaal, the Beira district, and the Zambesi, where I saw several hawking over the water on my trip from Tambarara to Tete, are the only localities where this beautiful Bee-eater was noted. It was usually seen in threes, fours or half dozens, comprising old and young, sitting on the tops of the trees or hawking high up for food well out of shot. This Bee-eater is perpetually on migration or is a great wanderer, as all I have seen have never remained for more than a few

hours in any one locality. The cry is a single clear note, rather louder than that of *M. superciliosus*; the food consists of insects of various kinds, which are taken on the wing as described above.

I find the following note in my diary with reference to the young male shot at Beira on Dec. 11th, 1906:—"The immature male of *M. nubicus* shot to-day is interesting, as it is assuming the adult colouring without a moult" (see Bull. B. O. C. xxi. p. 66).

The soft parts of the adult are:—Irides brown; bill, legs and toes black. Young similar.]

409. DICROCERCUS HIRUNDINEUS.

P. Coguno, Aug. (2).

[On only two occasions have I seen this pretty Bee-eater; at Coguno, where the pair shot were observed, and again on the 9th May, 1907, when another pair were seen at Tambarara, Gorongosa district. It was noticed sitting on the tops of the trees hawking for insects after the manner of the larger Bee-eaters. It has a single clear call, somewhat different from that of the other Bee-eaters.

The soft parts of the adult are:—Irides bright red; bill, legs and toes black.]

410. MELITTOPHAGUS MERIDIONALIS.

N. Illovo, Nov. (2); **Z.** Jususie Valley, Dec. (2); Umfolosi Station, June, July, Aug. (6); **Tv.** Klein Letaba, July, Sept. (3); **P.** Coguno, Aug. (3); Masambeti, Oct., Nov. (2); Beira, Dec. (3); Tete, Aug., Sept. (2).

Four eggs taken at Masambeti, Oct. 30.

Three young birds taken at Beira on Dec. 9th are apparently just out of the nest, and are in an interesting state of plumage. They are green above, much as in the adult, while below, the breast is green, becoming yellow on the throat and cinnamon on the abdomen. The bill is very short.

[This is a very common Bee-eater in all the lower bushveld country in Eastern and East-Central South Africa. I have noted it from Natal and Zululand, the Eastern and

North-Eastern Transvaal, and the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa. In habits this little Bee-eater is somewhat different to the other species; it is usually observed along the banks of rivers and streams or low-lying swampy ground, where it sits on the tops of the bushes and reeds, from which it darts out on to its prey, coming back to its perch in a graceful circle. In the Inhambane district I have seen it some considerable distance from water, and I have found it sitting in the bushes and stumps in native clearings and lands. The call is a sharp single note, not loud, and is often uttered when disturbed, especially by pairs. It apparently breeds from October onwards, and I took the eggs and young in the Beira district in October and December respectively. The nesting-hole is placed in a bank, often on the railway, and runs in only about two feet in length, with a slight upward tendency and a cavity at the end. The hole is usually run in straight. I have seen it turned at right angles at a few inches from the entrance, but this is generally due to the birds meeting with hard soil or roots. The clutch is apparently four, although three is often taken, and both birds assist in incubation and feeding the young. The food consists of insects, which are usually caught on the wing.

The soft parts of the adult are :—Irides crimson; bill, legs and toes black. In the young the irides are brown.]

411. MELITTOPHAGUS BULLOCKOIDES.

Tv. Legogot, Apl., May (5); **P.** Tete, Sept. (1).

[This is distinctly a scarce Bee-eater. At Legogot it was fairly common, going about in flocks of twenty or more and generally hawking high up out of shot; towards evening these would congregate together, and with much calling and circling at a great height go away towards the Legogot Mountains, where they roosted on the ledges of the rocks or in the deep dongas. In the Tete district only a pair or so were seen. The cry is somewhat sharper and shriller than that of the other Bee-eaters.

The soft parts are:—Irides hazel; bill, legs and toes black.]

412. CERYLE RUDIS.

CC. Plettenberg Bay, Mch. (6); **Z.** Umfolosi Station, July, Aug., Sept. (6); **Tv.** Klein Letaba, Aug., Sept. (8); **P.** Beira, Feb. (1); Tete, Aug., Sept. (2).

[“Isicuya” of the Zulus.

This Kingfisher is quite the commonest in South Africa, and was noted or taken in every locality visited from the Cape to the Zambesi, excepting Namaqualand. It is usually seen in pairs or threes and occasionally fours or halfdozens, the latter probably old and young. It systematically works the water, hovering with the bill pointed vertically downwards; on seeing a shoal of fish it shuts its wings, and drops like a stone head first on to its victim, which it devours on the wing if it is small, or, if large, takes to the bank to swallow.

This Kingfisher perches on reeds, low bushes, and dead branches, and is often seen sitting on the ground, yet it never fishes from such positions, but always on the wing. The cry is a sharp “kwik,” and is, I believe, merely a call-note. It is very tame, passing very near when on the wing and fishing within a few yards of people; when settled, it will allow itself to be approached quite close before taking wing. I have never succeeded in finding the nest of this species.

The soft parts are:—Irides dark brown; bill, legs and toes black.]

413. CERYLE MAXIMA.

CC. Plettenberg Bay, Mch. (1); **Z.** Ngoye Hills, Oct. (2); **Tv.** Klein Letaba, Sept. (2).

Three eggs taken at Klein Letaba, Sept. 9, measure about 46 × 36 mm.

[I have observed the Giant Kingfisher in the Knysna district of Cape Colony, Zululand, Klein Letaba, and in the Beira, Gorongoza, and Tete districts of Portuguese East Africa. It is everywhere very wild, and nowhere can it be said to be plentiful. Always observed in pairs and frequenting both large and small rivers or streams and occasionally lagoons and lakes, it is perhaps more partial to well-

wooded and shady streams, but is never actually found in forest. The flight is fast and straight, and the bird flies close to the surface of the water, except when passing from one water to another, when it keeps well up over the tops of the trees. This species, like most Kingfishers, fishes from some projecting stump or branch, and is often seen resting in the middle of large trees. The cry is very loud and somewhat harsh, and is generally uttered when the bird is on the wing. I took a nest on Sept. 9th, 1905, at the Klein Letaba; it was in the sandy bank of a large dry donga cut into the bank of the Klein Letaba River. The hole ran in about five feet, with a slight upward tendency, having a large cavity at the end in which I found three eggs deposited on the earth without any débris. Both the old birds were secured, the female being shot on a tree close by, while the male was caught sitting on the eggs.

The soft parts of an adult are :—Irides dark brown ; bill black ; legs and toes brown.]

414. *ALCEDO SEMITORQUATA*.

CC. Knysna, June (1) ; **Z.** Ngoye Hills, Oct. (1) ; **P.** Masambeti, Nov. (2).

[Only in the Knysna, the Ngoye Hills in Zululand, and at Masambeti near Beira have I observed this species ; it was never plentiful. It frequents well-wooded and shady rivers and streams, and I have never seen it on open lagoons or lakes. It is very shy and retiring in habits, making off at the first alarm, and has usually to be shot on the wing. It fishes from an overhanging bough or thick reed, and the cry is a single shrill note, generally uttered on the wing. It breeds in the banks of the rivers and streams, but I have never succeeded in securing the eggs.

The soft parts of an adult are :—Irides hazel ; bill black ; legs and toes tomato-red.]

415. *CORYTHORNIS CYANOSTIGMA*.

CC. Plettenberg Bay, Mch. (1) ; **Z.** Umfolosi Station, Sept. (2) ; Ngoye Hills, Oct. (1) ; **Tv.** Woodbush, June (1) ; **P.** Masambeti, Nov. (4) ; Beira, Feb. (2).

[“Iguyamtwama” of the Zulus; “Dederu” of the Ntebis.

This was one of the commonest Kingfishers in S. Africa, and I have seen it in every locality from the Cape through East and East-Central South Africa to the Zambesi. It is equally common on rivers and streams in wooded and forest country and on lagoons and open reedy swamps, where it is seen either perched on some overhanging branch or reed waiting for its prey, or flying with incredible swiftness and appearing like a blue streak. It feeds principally on small fishes, besides crustacea and beetles. I have generally observed it singly. It breeds in the banks of the rivers and streams, but I have never succeeded in finding an occupied nesting-hole.

The soft parts of an adult are :—Irides dark brown; bill and legs rich tomato-red. In the young the bill is blackish, with part of the lower mandible and the extreme tip of the upper very pale tomato-red; legs and toes very dark.]

416. *ISPIDINA NATALENSIS*.

N. Illovo, Nov. (3); **Z.** Ngoye Hills, Oct. (2); **Tv.** Woodbush, May (1); **P.** Masambeti, Nov., Oct. (2).

Two clutches of two and three eggs each, taken at Masambeti, Oct. 25 and Nov. 11.

[This little Kingfisher was observed in Natal, the Ngoye Hills, Zululand, Legogot, Woodbush, and the Inhambane, Beira, and Tete districts of Portuguese East Africa. I did not myself see this species in the Northern Transvaal, but the dried specimen sent flew against the window of a farmhouse in the village of Woodbush and was picked up dead by the farmer, from whom I got it. It is usually observed on the outskirts of woods and forests, not necessarily near water, perched on some projecting branch or bough, whence it darts on its prey, which consists largely of spiders and coleopterous insects. I have never seen it take fishes. The flight is straight and marvellously quick, and the call is sharp and not easily distinguished from that of *Corythornis cyanostigma*. It was found breeding at Masambeti, near Beira, and two sets of eggs were taken, on Oct. 25th

and Nov. 11th, 1906. The nesting-holes were situated in the cut-away bank of the railway and ran in about two or three feet with a slight upward tendency, the eggs being deposited in a cavity at the end on the bare earth without any lining or débris.

The soft parts of an adult are :—Irides dark brown ; bill, legs and toes pale tomato-red.]

417. *HALCYON SWAINSONI*.

P. Masambeti, Oct. (1).

Four eggs taken at Masambeti, on Oct. 25th, closely resemble those of other species of the genus, being white and very round.

[Only at Masambeti, where a single pair were found breeding, was this species observed. The flight and cry are similar to those of *H. orientalis*, and its general habits are probably much the same. The nesting-hole was situated in a cut-away bank of the railway and ran in about three or four feet; four eggs, which is the full clutch, were found in a cavity at the end and were deposited on the bare soil without lining or débris.

The soft parts of an adult are :—Irides hazel ; bill, legs and toes red.]

418. *HALCYON ALBIVENTRIS*.

N. Illovo, Nov. (2) ; **Z.** Jususie Valley, Nov., Dec. (2) ; Ngoye Hills, Oct. (1) ; **Tv.** Klein Letaba, July, Sept. (2) ; Woodbush, June (1) ; Legogot, Apl., May (4) ; **P.** Coguno, June, July (3).

Some individuals of this species are much more strongly washed with ochreous on the breast and flanks than others. In the above series the birds from Legogot, killed in April and May, shew this most clearly, and I imagine that these are freshly moulted individuals and that the buff gradually wears off in the course of the year.

The birds from Coguno ought to be referable to *H. orientalis*, the type of which is said by Peters to have come from Inhambane, but they have all the characters of *H. albiventris*.

[This species has been observed in Natal, Zululand, and the Eastern and Northern Transvaal. In the Portuguese country to the east and north its place is taken by *H. orientalis*, though specimens from Inhambane and Legogot (E. Transvaal) intergraduate between the two. Therefore, where these species meet they interbreed, and specimens from such localities would shew characters of both.

This bird is fond of well-wooded country, and is usually observed perched on the lowest branches of trees, often along shaded rivers and dry dongas. It feeds principally on insects and probably on freshwater crustacea, but I have never seen it take fishes. It has a loud harsh cry, the alarm-note being different from the call; the flight is fast and straight, the alarm-note being uttered as it leaves its perch.

The soft parts of an adult are :—Irides brown; bill, legs and toes red. In the young the bill is reddish-brown, more brown than red, and the legs and toes dark brown tinged with pale red.]

419. HALCYON ALBIVENTRIS ORIENTALIS.

P. Masambeti, Oct., Nov. (2–4 nestlings); Beira, Jan. (1).

[Only in the Beira district of Portuguese East Africa have I observed this species. In cry and general habits it exactly resembles *H. albiventris*. It breeds during the wet season, and I found the nest at Masambeti, near Beira, at the end of October. The nesting-hole was situated in the bank of the Masambeti stream under an overhanging bough, and ran in about four feet with a slight upward tendency; from a cavity at the end I took four young birds: both the adults were caught with a grass noose at the entrance.

The soft parts of the adult are similar to those of *H. albiventris*.]

420. HALCYON CHELICUTI.

Z. Ntambana Hills, Aug. (1); **Tv.** Legogot, Apl. (1); **P.** Coguno, Aug., Sept. (4); Masambeti, Nov. (1); Beira, Dec. (1); Tambarara, June (1); Tete, Sept. (1).

[“Nongwosoya” of the Zulus.

Only in the Ntambana Hills, north of the Hluhluwe Stream in Zululand, Legogot, and the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa have I observed this little Kingfisher. It seems very partial to clearings and native gardens, where it is seen perched on the lower branch of a dead tree, keeping a sharp look-out for its prey, which consists mainly of coleopterous insects. I have observed it also in parts quite remote from any water, and it is usually solitary, although at Beira it was in pairs; as this was, however, in the wet summer season it was probably breeding, but I was quite unable to locate any nests. In the early morning and late afternoon, seldom during the middle of the day, it can be seen perched on the topmost branch of a tree and giving forth a loud continuous "trill," while sitting bolt upright and regularly opening and shutting the wings to their fullest extent, so as to make it appear as though the movement of the wings had greatly to do with the "song"; and from this peculiar habit I have always called it the "concertina bird." I believe that it is only the male which "sings," but I have not been able to conclusively prove the fact. This is one of the earliest birds to rise in the morning, and I have heard it trilling before the first streaks of dawn. The flight is fast and straight, but never long sustained.

The soft parts of an adult are:—Irides brown; bill, upper mandible dark purple, lower red; legs and toes red, darkest on the upper surface.]

423. *COLIUS STRIATUS*.

CC. Durban Rd., Mch. (1); Knysna, Feb. (1); Plettenberg Bay, Feb., Mch. (2).

423 *a.* *COLIUS STRIATUS MINOR*.

Reichenow, Vög. Afr. ii. p. 203.

Z. Jususie, Jan. (1); Umfolosi Station, July (2); Hluhluwe Stream, Aug. (4); **Tv.** Woodbush, June, Dec. (3); Legogot, Apl., May (2); **P.** Coguno, June, Aug., Sept. (3).

Reichenow distinguishes a subspecies from East and South-East Africa, extending south to Natal, by its smaller

size and by the blacker chin and throat. The series collected by Grant shew some variation in size, though a by no means constant one, but the character of the black chin is fairly noticeable and may suffice.

["Muis-vogel" or "Mouse-bird" of the Colonists; "Nhlazi" of the Zulus.

This is the common Coly of most localities that I visited. I have met with it in the Cape Peninsula, the Knysna district, Zululand and Natal, the South-Eastern, Eastern, and North-Eastern Transvaal, and the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa. It was found to be more plentiful farther north, and was especially common in the Inhambane district. It is gregarious in habit, and was often found in flocks of twenty or more individuals feeding on fruit and berries. It does considerable damage in orchards and gardens.

It gets its name of "Mouse-bird" from the quaint way in which it clambers among the branches and its habit of getting into thick bushes and remaining quiet, much as mice will do. The cry is a whistle, uttered generally when on the wing or on being disturbed, and is apparently both call- and alarm-note. The flight is low, straight, and rapid, often with a few rapid beats of the wing and a long glide, the birds, as a rule, diving into the middle of the bushes before settling.

The soft parts are :—Irides brown ; bill, upper mandible dark slate, lower light slate ; legs and toes dark crimson.]

424. COLIUS CAPENSIS.

CC. Table Mt. slopes, Feb. (1) ; Durban Rd., Mch., Sept. (2) ; Port Nolloth, Aug. (2) ; Klipfontein, May (1).

I can see no difference in colour between the Cape Peninsula and Namaqualand birds, so that the latter shew no approach to *C. c. damarensis* Reichw.

["Muis-vogel" or "Mouse-bird" of the Colonists.

I have only observed this Mouse-bird in the Cape Peninsula and Namaqualand, and it was common in both localities. In habits it resembles *C. striatus*, being, like that species, gregarious and generally seen in flocks of perhaps a dozen

individuals, but I have never observed it in such large flocks as that species. It is also one of the fruit-growers' worst enemies, damaging far more than it eats. The cry is somewhat different from that of *C. striatus*, being more of a double note.

The soft parts are :—Irides dark brown ; bill pale slate-coloured, dark at tip of upper mandible, yellow at tip of lower ; legs and toes coral-red.]

426. *BUCORAX CAFER*.

Z. Sibudeni, Oct. (3) ; **Tv.** Klein Letaba, July (head of ♂ only) ; **P.** Beira, Dec. (head of ♀ only), and wing not ticketed.

Of three males killed on the same day, Oct. 28th, at Sibudeni, two appear to be somewhat younger than the third. The culmen of the youngest of these, measured in a straight line with dividers, is only 18 in. against 22 in the older specimen. In the young bird the greater part of the base of the lower mandible is white, not black (in the dried skin). The plumage of the younger bird, too, is much browner than in the adult, while some of the darker adult feathers are already appearing on the back.

["Brom-vogel" of the Colonists ; "Insingisi" of the Zulus ; "Marandane" of the Machangaans.

This great Hornbill was commonly noticed in small parties of from three to six individuals in Zululand, the Transvaal, and the Beira and Gorongosa districts of Portuguese East Africa. It is usually seen on the ground hunting for food, which consists of almost any thing from insects to reptiles and young birds. In many parts protection had been given to this bird, but when it was discovered that it destroyed quantities of young game-birds, this was removed. It roosts at night in tall trees in the woods and forests, where also I have been shown the nest, composed of sticks placed in the topmost forks or strong branches, but I have never seen one occupied. The flight is slow but powerful, the white primaries being then very conspicuous, and the call is a penetrating low "boom" of about five syllables, the last three being lowest in tone ; it is somewhat ventriloquial and

can be heard to a considerable distance. It is possible that more than one bird contributes to the call, but as the syllables run concurrently it is difficult to prove this conclusively. When taken young it is a remarkably tame and amusing pet, but has usually to be kept away from the poultry yard. Wounded birds when attacked by a dog stand with the wings outstretched and make vicious digs at the animal with their beaks, but never attempt to use the wings; they continually inflate and deflate the pouch, producing a loud snake-like hiss.

The soft parts of the adult are:—♂. Irides pale grey, with dark brown lines and vermiculations; all bare skin on head and neck red; bill, legs and toes black.

♀. The bare skin round the eyes is duller and the chin is metallic blue, which extends more or less on to the throat.

I have seen many young birds in captivity; they are similar to adults in plumage, but the black is duller, and all the bare skin of the head and neck is dull sooty-black without red.]

427. BYCANISTES BUCCINATOR.

Z. Sibudeni, Oct., Nov., Dec., Jan. (5); Ngoye Hills, Sept., Oct. (4); **P.** Beira, Feb. (1); Tambarara, June (1); Tete, Sept. (1).

The size of the bill and casque in the male varies very considerably; in the male from Beira the casque measures 160 mm. in a straight line, in one from Sibudeni only 115. I find, however, as great variation among examples from Nyasaland in the British Museum, and suspect that it is purely a question of age.

[“Nkanat” of the Zulus; “Kegemide” of the Ntebis, Gorongozas, and Njungwis.

The Trumpeter Hornbill was found in Natal, Zululand, and the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa. It was common in all these localities except the Inhambane district, where only two or three pairs were seen and no specimens were secured, it being very wild. Curiously enough, it is not known in any of the

forested country in the Eastern and North-Eastern Transvaal, although one would imagine that these parts are as well suited to its habits as many others. It is generally seen in flocks of from half a dozen to twenty or more, and is entirely frugivorous, being very partial to wild figs, the berries of the Ntuma, and the seeds of certain leguminous trees. The flight is noisy, swift, and strong, consisting of several flaps of the wings, then a glide, and the flaps again. The cry is loud and harsh, and not easily described, but cannot be mistaken for that of any other bird; it is uttered both on the wing and when sitting. In feeding the birds are very noisy, continually calling and flapping about in a clumsy manner in the trees.

The soft parts of the adult are:—♂. Irides brown; orbits pinky flesh-coloured; bill horny black or blackish, pinky flesh-coloured at the basal end of the casque; legs and toes black. The female is similar to the male, except that the orbits are dusky.]

427 *a.* BYCANISTES CRISTATUS.

P. Tambarara, June (1).

[“Kegemide” of the Ntebis and Gorongozas.

This Hornbill has only been observed in the woods and forests of the Beira and Gorongosa districts of Portuguese East Africa, where it was as plentiful as *B. buccinator* and consorted to a great extent with that species. In its food, flight, and general habits it resembles it, but its cry is very different; it is not harsh and loud, but more approaching a growl, and is not easy to describe exactly.

The soft parts are:—Irides dark brown; orbits pinky flesh-coloured; bill dirty white; legs and toes black.]

428. LOPHOCEROS MELANOLEUCUS.

CC. Knysna, Jan. (3); **Z.** Sibudeni, Nov., Dec., Jan. (6); Jususie Valley, Dec. (1); Ngoye Hills, Oct. (2); **P.** Coguno, June (4); Masambeti, Nov. (1); Beira, Jan. (1); Tambarara, June (1); Tete, Sept. (1).

[“Slap-gat” of the Colonists; “Nkolwane” of the Zulus; “Nyumdero” of the Gorongozas.

This Hornbill is much more a bird of the woods and

forests than other members of the genus, and is not usually found in ordinary bush-veld. It is somewhat locally distributed, and was found in the Knysna, at Sibudeni and Ngoye in Zululand, and in the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa, but does not exist at Zuurbron, Legogot, or the Woodbush Hills, although these localities are well forested and, one would think, well suited to its habits. It is generally observed in flocks of about a dozen individuals, and in pairs or family-parties in the summer season. The flight is graceful and floating, without a great deal of flapping, and it usually perches on the topmost boughs of the trees. It feeds on insects of various kinds, wild fruit and berries, and often visits orchards and lands for the fruit and grain, especially kaffir corn. I have seen it catch locusts and grasshoppers on the wing with a pretty easy grace. The call is almost a whistle, rather shrill and of several syllables, the middle ones uttered rapidly.

The soft parts of the adult are :—♂. Irides pale yellow ; bare skin round eyes and at base of cheeks adjoining the lower mandible sooty black ; bill dull red, pale yellow at base of both mandibles ; legs and toes dull black.

♀. Soft parts as in male, except the bare skin round eyes and at base of cheeks adjoining the lower mandible, which is pale green. In a young female the irides are greyish yellow ; bare skin round eyes and base of cheeks paler green ; bill duller and lighter, without the pale yellow at base.]

430. LOPHOCEROS EPIRHINUS.

Tv. Klein Letaba, Aug. (4).

[“Nkolu” of the Machangaans.

Only in the low bush-veld of the North-Eastern Transvaal have I seen this Hornbill and it was there fairly plentiful. It is usually in pairs, and has an easy graceful flight as it moves from tree to tree. In company with *L. leucomelas* it came in numbers to the grass-fires, and would perch on the lowest branches of the Mopani trees or bushes in front of the fire and dart down on the numerous grasshoppers and other insects that were driven out. Insects of various kinds

appear to be its principal food, and it is often observed on the ground hunting for its prey, especially on burnt-off patches. Its cry is a single, low, melancholy note, not greatly dissimilar to that of *L. leucomelas*.

The soft parts of the adult are:—

♂. Irides reddish brown; bare skin round eyes and base of cheeks adjoining the lower mandible sooty black; bill black, with a long yellow patch on the upper mandible, extending from the base under the nostril to over half the length of the mandible, and three or four yellow transverse lines on the lower. Legs and toes black.

♀. Irides as in male; bare skin round eyes and base of cheeks browner; bill, upper mandible at base pale yellow, along cutting-edge and apical portion dull dark red; lower mandible, basal two-thirds black crossed with four pale yellow lines, apical portion dull dark red. Legs and toes as in male.

In neither sex does the colour of the bill alter after death.]

431. *LOPHOCEROS ERYTHORHYNCHUS*.

P. Tete, Aug., Sept. (4 and one head).

[“Nyumdero” of the Njungwis.

Around Tete and south of Makumbi's country to about the 18° south latitude, on my return trip to the coast, this species was found. It was generally in small flocks of half a dozen individuals and was somewhat wary. Every morning flocks would pass over, coming out of the back country and making towards the rivers, where they spent the day, presumably to feed on the wild fruit and berries and to rest in the shade of the leafy trees that line the banks—for, as it was the dry season, the only leafy vegetation was near the river; they passed back again towards sundown, each flock regularly taking the same course, so that it was then by a little waiting that specimens could be secured. The flight is easy and graceful, with a few flaps of the wings, accompanied by the long glide so characteristic of the Hornbills. The cry is a single note, low and clear, and almost a whistle.

The soft parts of an adult are:—Irides pale yellow; bare skin above eye bluish white, behind and below eye and at base of cheeks adjoining the lower mandible pinkish flesh-coloured; the throat and neck pale white; bill, upper mandible very dark tomato-red, whitish horn-coloured at the base, lower mandible whitish horn-coloured at base, next part blackish, apical two-thirds and cutting-edges very dark tomato-red; legs and toes sooty black.]

433. *LOPHOCEROS LEUCOMELAS*.

Z. Hluhluwe Stream, Aug. (1); **Tv.** Klein Letaba, July, Aug., Sept. (6); **P.** Tete, Sept. (1).

[“Umxeu” of the Zulus; “Nkolu” of the Machangaans.

The Yellow-billed Hornbill has been noted at the Hluhluwe Stream, Zululand, the Klein Letaba, and in the Tete district of Portuguese East Africa. It was not seen in the other localities visited; and as it is a striking species it cannot easily be overlooked. It was by no means common in Zululand, or in the Tete district, but was very plentiful at the Klein Letaba. It inhabits bush country, usually singly or in pairs, and was seen sitting on the top of thorn-trees or halfway up a Mopani: it feeds on fruit and berries and insects of all kinds, for which it visits grass-fires. The flight is quite Hornbill-like, and the cry is a single loud and clear note, a sort of cross between a mew and a whistle.

The soft parts of an adult are:—Irides bright yellow; bare skin round eyes, base of cheeks, and throat pale flesh-coloured; bill yellow-chrome, tips and cutting-edge of both mandibles blackish.]

434. *HAPALODERMA NARINA*.

CC. Knysna, Jan. (2); **N.** Illovo, Nov. (1); **Z.** Sibundeni, Oct., Nov., Dec., Jan., Feb. (6); Ngoye, Sept., Oct. (4); **Tv.** Woodbush, Dec., Jan., Feb. (5).

A young bird just fledged, but with the tail still ungrown, was obtained at Woodbush on January 29. It is green above, much as is the adult, but has a number of conspicuous white spots on the coverts and inner secondaries;

below, the breast is buffy, mottled and irregularly barred with green and dusky.

[“Bosch-lourie” at Knysna; “Trogon” of the Transvaal; “Sansobi” of the Zulus.

I have taken this Trogon in the Knysna, in Zululand and the North-Eastern Transvaal; it was said to occur at Legogot, though I did not myself come across it; but I both saw and heard it in the Beira and Gorongosa districts of Portuguese East Africa. Where found it is fairly plentiful, and is seen either singly or in pairs; it is essentially a bird of the woods and forests, never being seen in ordinary “bush-veld,” but occasionally in tree-fringed streams and rivers in forested districts. It is often seen flitting through the trees with a rapid twisting flight, the green back shining in the sunlight; but when perched it is extremely difficult to detect unless the watcher catches sight of the belly, the rest of the colouring harmonizing so well with the foliage of the trees. The cry is only uttered in the summer season, the bird being apparently silent during the rest of the year; it is, I believe, only uttered by the male and sounds like a “goo” several times repeated. It can be easily mistaken for the cooing of *Haplopelia larvata*, except that with the Trogon it never varies in tone. It can be heard at a good distance and is distinctly ventriloquial, the performer often being quite close when it sounds a distance away. The food of this bird consists of insects, which I have seen it catch on the wing, darting out from a fixed perch. I have never succeeded in finding the nest, but it apparently has two broods, as I have shot the young in changing plumage in February and again in April, the latter probably representing the broods hatched in January and February and the former those about October.

The soft parts of the adult are:—

♂. Irides rich brown; bare skin round eyes blue, bare skin at back of eye, base of beak, and throat green and yellow; bill lemon-yellow at base, greenish yellow at tip; legs and toes whitish flesh-coloured.

♀. As in the male, except the bare patch on throat yellow, and legs and toes browner.

♀ *imm.* Irides paler brown ; bill horn-coloured, all the bare skin dusky ; legs and toes much browner.

♂ *juv.* Irides as in *imm.* ♀ ; bill horny white ; legs and toes brownish flesh-coloured.]

435. *GEOCOLAPTES OLIVACEUS.*

Tv. Zuurbron, Apl. (1).

[Since the close of the Central Cape Colony trip I have only observed this fine Woodpecker in the mountains of Namaqualand and in the mountainous country to the east of Wakkerstroom, South-Eastern Transvaal. Its loud resounding cry, not unlike the alarm "whistle" of the Klipspringer (*Oreotragus saltator*), at once betrays its presence. It spends most of its time searching the crevices of the rocks and boulders for insects, which it captures with its long flexible tongue. It can often be seen clinging to the flat surfaces of the great rocks, being easily able to hold on to any slight inequality. Its flight is very swift and straight, the cry being uttered both on the wing and when settled. Since the trip referred to above, I have been able to supplement the notes on the breeding-habits of this bird. I find that it invariably nests in sandy banks, generally those of dongas and spruits at the base of kopjes and mountains ; the nesting-hole does not go in to any very great depth—usually some three to four feet, with a slight upward tendency, ending in a cavity in which the eggs are deposited on the bare earth. Often the hole, after going in for some few inches, is turned abruptly to the right or left, and where a pair have decided to nest, a number of smaller or greater excavations can be seen where the birds have tested the bank.

The soft parts of the adult are :—Irides yellowish white ; bill black ; legs and toes ashy grey.]

436. *CAMPOTHERA NOTATA.*

CC. Plettenberg Bay, Mch. (1).

["Hout-Kopper" of the Cape Dutch. The Knysna Woodpecker was only observed in the Knysna district of Cape Colony, and I did not commonly see it there. In cry and habits it much resembles *C. abingdoni*.

The soft parts are:—Irides hazel; bill blackish horn coloured, somewhat paler at base of lower mandible; legs and toes slate-coloured.]

437. *CAMPOTHERA ABINGDONI*.

N. Illovo, Nov. (2); **Z.** Ngoye Hills, Oct. (1); **P.** Coguno, Aug. (3); Masambeti, Nov. (1); Beira, Nov., Dec., Feb. (3).

[The Golden-tailed Woodpecker was procured in Nata and Zululand, and in the Inhambane, Beira, and Gorongosa districts of Portuguese East Africa. It was found especially plentiful in the Inhambane and Beira districts. It is always in pairs and frequents well-timbered country, being particularly partial to the dead trees left standing in native clearings, where its continued tapping betrays its presence. It has a loud sharp cry, which can be heard at a considerable distance. The flight is straight and swift, though usually only from tree to tree, the bird pitching generally on the trunk and working up to the topmost branches, searching every crevice on the way.

The soft parts of the adult are:—♂. Irides reddish brown or purple; bill dark slate-coloured; legs and toes grey-slate-coloured.

♀. Irides brown; the rest of the soft parts as in the male.]

438. *CAMPOTHERA SMITHI*.

Tv. Klein Letaba, Sept. (1).

[Only on the occasion when I secured the specimen brought home have I seen this Woodpecker; a pair were then observed. In cry and habits it resembles *C. abingdoni*.

The soft parts are:—Irides reddish brown; bill blackish slate-coloured; legs and toes slate-coloured.]

439. *CAMPOTHERA MALHERBII FÜLLEBORNI*.

Neumann, Journ. f. Orn. 1900, p. 204; O.-Grant, Bull. B. O. C. xxi. 1908, p. 66.

P. Masambeti, Nov. (2).

This subspecies, recently described by Neumann from Langenburg on Lake Nyasa, seems to be hardly separable

from the typical form, *C. malherbii*, originally described from Zanzibar.

However that may be, it is a new species for South Africa, though it was included by Swynnerton ('Ibis,' 1908, p. 410) in his list of the birds of Gazaland, having been taken at Chirinda on the Mashonaland-Portuguese frontier.

Curiously enough, Gunning and Haagner in their recently published Check-list of South-African birds include it on the strength of its being recorded from Zomba (!) by Reichenow. I need hardly add that Zomba (in Nyasaland) is far to the north of the Zambesi, the boundary for South Africa recognised by these authors.

[The occasion on which I secured my pair was the only time that I saw this Woodpecker. In cry and habits it exactly resembles the common *C. abingdoni*, and except for its smaller size can easily be passed over for that species. Although the two specimens were shot on different days, I have little doubt but that they were a pair, as the male was found in the same tree in which the two birds had been originally observed.]

440. DENDROPICUS CARDINALIS.

Tv. Woodbush, Jan. (1).

440 a. DENDROPICUS CARDINALIS HARTLAUBI.

Z. Jususie Valley, Dec. (1); **P.** Coguno, Aug. (3); Masambeti, Nov. (4); Tambarara, Apl., June (2); Tete, Aug., Sept. (2).

As one would naturally expect, the Zululand and Coguno examples are more or less intermediate between the typical form from South Africa and *D. c. hartlaubi* originally described from Zanzibar.

["Squopamiti" of the Zulus.

This little Woodpecker was noted in most of the localities visited in Eastern and East-Central South Africa from Zululand northwards to the Zambesi. It was scarce in Zululand, but became more plentiful the further north I went, being especially so in Portuguese East Africa. It was

observed in pairs, or, during the latter end of the breeding-season, in family-parties, and frequented both ordinary bushveld and denser woods or patches of forest, being more especially noticed searching for food on the dead trees in the native clearings. In cry and habits it is exactly a smaller replica of *C. abingdoni*.

The soft parts are:—

♂. Irides crimson; bill, legs and toes slate-coloured.

♀. Irides reddish brown; bill, legs and toes slate-coloured.

Juv. Irides brown; bill horn-coloured, paler at base of lower mandible; legs and toes pale slate-coloured.]

441. *THRIPIAS NAMAQUUS*.

Tv. Klein Letaba, Sept. (1); **P.** Coguno, Aug. (1); Beira, Nov., Dec. (2); Tete, Aug., Sept. (3).

[I have found this striking Woodpecker in the North-Eastern Transvaal and in the Inhambane, Beira, Gorongosa, and Tete districts of Portuguese East Africa. Only one pair was observed in the low veld of the North-Eastern Transvaal, where the male was shot, but it was more plentiful in the Portuguese country, especially from Beira to the Zambesi, although nowhere can it be said to be common. It is always found in pairs and has all the habits of the other Woodpeckers, but its larger size compared with the other bushveld haunting species and its louder and harsher note at once betray its presence; and when once seen and heard, it cannot be mistaken for any other species or be easily overlooked. Like *C. abingdoni* and *D. hartlaubi*, this species has a great partiality for dead trees, especially those left standing in clearings and native gardens.

The soft parts are:—♂ & ♀. Irides crimson; bill, legs and toes dark slate-coloured.]

442. *MESOPICUS GRISEOCEPHALUS*.

CC. Knysna, Dec., Jan. (7); **Z.** Sibudeni, Nov. (4); **Tv.** Zuurbron, Apl., May (2); Woodbush, Nov. (6).

[“Squopamiti” of the Zulus.

This species is strictly a bird of the forest, and does not inhabit ordinary well-timbered country (“bushveld”) as

do most of the other Woodpeckers. I noted it as common in the forests of the Knysna, Zululand and Natal, the South-Eastern and North-Eastern Transvaal, but no sign of it appeared in the great virgin forests of Portuguese East Africa, although those of the Gorongosa district seem as well suited to its habits as those further south. It was observed both singly and in pairs, the cry being somewhat loud, but perhaps not so harsh as that of the other Woodpeckers. Although I have seen this bird right through the summer season, I have never succeeded in observing a pair nesting.

The soft parts of both sexes are:—Irides dark crimson; bill, legs and toes slate-coloured. In many specimens the greater part of the lower mandible is pearly white.]

443. *LYNX RUFICOLLIS*.

Tv. Woodbush, May 23, 25 (4).

Mr. Grant's notes strengthen my conclusion (B. S. Afr. iii. p. 143) that this bird is only a winter visitor to South Africa.

[I have not observed this Wryneck elsewhere than in the Woodbush, North-Eastern Transvaal, where I spent some months from April onwards; it was not until the latter end of May that this species put in an appearance, when I secured the only four specimens seen, after which I did not see or hear another. In the early morning these birds could be heard calling from the tops of the trees, but were silent throughout the rest of the day. Whether they were passing through on migration it is impossible to say positively, but the fact that none was seen or heard before or after tends to that conclusion.

The soft parts are:—Irides russet-brown; bill, legs and toes pale whitish green.]

445. *INDICATOR MAJOR*.

Tv. Legogot, Apl. (1).

[Only at Sibudeni in Zululand, and at Legogot, Eastern Transvaal, where the specimen secured was shot, have I noted this Honey-Guide. The specimen secured was sitting on a

thorn-bush, calling quietly to itself; this may have been a sort of song, as the usual note is loud and clear. I have seen so few examples of this species that I have been unable to make any exact observations on its habits.

The soft parts are :—Irides hazel; bill, legs and toes blue-slate-coloured.]

446. *INDICATOR VARIEGATUS*.

Z. Ngoye Hills, Oct. (1); **Tv.** Legogot, Apl. (1); **P.** Tambarara, July (1).

[I have observed this Honey-Guide in the Knysna, Zululand, and Legogot, Eastern Transvaal, and from the forests of the Gorongosa district. As with the others, I have been extraordinarily unlucky in coming across this species, and it was only in the Eastern Transvaal that I was able in any way to study its habits. What has been said by Sparrmann about the guiding-habits of *I. indicator* is equally true of this bird, and I have myself on several occasions found the nests of bees by its aid. At the Cape the natives say that it is useless to follow a pair, as they are only calling to each other, but that it is the single birds which endeavour to attract attention. I have not been able to prove this conclusively, although it is true that all those which I have followed have been solitary. It does not, however, always happen that the bird takes its follower to honey, as it often brings him to snakes, leopards, and sometimes to game.

The soft parts are :—Irides brown; bill blackish, pale at base of lower mandible; legs and toes pale slate-coloured.]

447. *INDICATOR MINOR*.

Z. Hluhluwe Stream, Aug. (1); Ngoye Hills, Oct. (1).

[Only on the two occasions when I shot specimens did I find this little Honey-Guide. It appears to be very retiring in habits, and like *I. variegatus* is partial to well-wooded and forest country. I have not recorded its call or other habits, having seen so little of the species.

The soft parts are :—Irides hazel; bill blackish brown, much paler at base of lower mandible; legs and toes slate-coloured.]

449. *LYBIUS TORQUATUS*.

N. Illovo, Nov. (2); **Z.** Jususie Valley, Jan. (1); Ngoye Forest and Hills, Sept. (2); **Tv.** Woodbush, May, June (4); Legogot, Apl., May (2); **P.** Masambeti, Nov. (1); Beira, Dec., Feb. (2).

The examples from Beira and Masambeti are distinctly smaller than those from the Transvaal—wing 84–88 against 93–95; and in this respect they approach the East African *L. irroratus*, but they retain the characteristic plumage of *L. torquatus*.

[This Common Barbet was found in Natal and Zululand, northwards and eastwards to the North-Eastern Transvaal and the Beira and Gorongosa Districts. It is usually observed in pairs, and frequents well-timbered country, where its loud resounding cry can be often heard. In the early mornings it is frequently seen sitting on the topmost boughs of the trees, probably enjoying the first warm rays of the sun, uttering at intervals its cry, and bobbing up and down in a funny fashion, opening and shutting the wings each time. Both male and female call. The flight is swift and straight, and generally only from tree to tree unless the bird is greatly alarmed. Its food consists mainly of fruit and berries, for which it visits orchards and gardens, but it also devours a goodly number of insects. I have seen it examining and going in and out of holes of trees, apparently with the idea of nesting, but I have never succeeded in finding the eggs.

The soft parts of the adult are:—Irides red-brown; bill, legs and toes black.

In the young bird the irides are hazel; bill brownish black; legs and toes as in the adult.]

450. *TRICHOLEMA LEUCOMELAS*.

CC. Klipfontein, Apl., July (4).

[Since the Central Cape Colony trip I have only seen this Barbet in Namaqualand, where it was quite common and resident. It is usually found in pairs and feeds principally on berries and fruit, for which it visits gardens and orchards. It does considerable damage to green and ripe fruit, especially figs. It has a loud cry of two or three syllables and

is active in habits, often hanging upside down like a Tit when feeding or endeavouring to reach some special food.

The soft parts are:—Irides hazel; bill, legs and toes black.]

452. *SMILORHIS LEUCOTIS*.

P. Beira, Jan, Feb. (5); Tambarara, June (2).

[Only in the Beira and Gorongoza districts of Portuguese East Africa have I seen this striking Barbet. It cannot be said to be common even there, although several individuals were observed, most of which were secured. I noticed it both in pairs and family-parties, and until I shot them they could be seen every morning sitting on the topmost branches of dead trees after the manner of *Lybius torquatus*. This is a local resident species, keeping to the same ground and frequenting the same trees. The call is loud and different from that of the other Barbets, and the flight is swift and straight, but seldom long sustained. When I reached Beira it had apparently already bred, as young birds assuming the adult feathering were secured in company with the parent birds in February.

The soft parts are:—Irides dark brown; bill, legs and toes black.]

456. *BARBATULA EXTONI*.

Tv. Woodbush, June (1).

[The specimen sent is the only one that I have ever seen: it was shot pottering about in a Euphorbia. It was both solitary and silent.

The soft parts are:—Irides dark brown; bill, legs and toes black.]

457. *BARBATULA BILINEATA*.

Z. Ngoye Forest, Sept. (1).

[As in the case of the preceding species, I have only once seen this Barbet. The specimen was noticed creeping about in a thick bush intertwined with brambles. It was solitary and silent.

The soft parts are:—Irides dark brown; bill, legs and toes black.]

458. *TRACHYPHONUS CAFER*.

Tv. Klein Letaba, Aug., Sept. (4).

[I have only noticed this species in the North-Eastern Transvaal, where it was common in the bush-veld below the Berg, and again in the Gorongosa and Tete districts of Portuguese East Africa, where it was decidedly scarce. In habits it is retiring and, as a rule, frequents thick bush along the dongas and rivers. It has a peculiar loud call and is more often heard than seen.

The soft parts are :—Irides red-brown ; orbits dusky ; bill yellowish green, apical portion pale slate-coloured ; legs and toes dark slate-coloured.]

459. *CUCULUS GULARIS*.

P. Beira, Jan. 29 (1).

[Several individuals of this species arrived around Beira in company with *C. canorus* in January, but were so wild that they could seldom be approached within shot. They were observed sitting in the larger trees or on the bare topmost branches of dead ones, and had no call.

The soft parts are :—Irides pale dirty yellow ; eyelid yellow ; bill greenish yellow at base, black at tip and ridge of culmen ; gape orange.]

460. *CUCULUS CANORUS*.

P. Beira, Feb. 13, 16 (2).

One of the birds is immature and shews traces of rufous barring on the back.

[This Cuckoo arrived in company with *C. gularis* in January and remained up to the time I left the Beira district, which was in March. It was indistinguishable from *C. gularis* on the wing and when sitting, and had no call.

The soft parts are :—*Adult*. Irides darkish yellow ; eyelid yellow ; bill at base greenish yellow, black at tip and ridge of culmen ; legs and toes lemon-yellow.

Imm. Irides pale dirty yellow ; eyelid yellow ; bill at base greenish yellow, black at tip and ridge of culmen ; legs and toes lemon-yellow.]

462. *CUCULUS SOLITARIUS*.**Z.** Sibudeni, Nov. 1 (1).

[“Piet-myn-vrow” of the Colonists and Dutch; “Pagom-kono” of the Zulus.

This Cuckoo frequents well-wooded and forested localities, where it is more often heard than seen. It is very shy and retiring, and as it generally keeps within the forest, where it flits backwards and forwards calling all the time, it is a most difficult bird to secure; in fact, only on the occasion when I shot the specimen brought home did I ever see it, although I spent many hours searching for the bird. It is migratory, and I only heard it calling in the first months of the summer season. I have noted it in Zululand (Nov.), the Woodbush Hills (Oct. & Nov. 1905), and at Masambeti (Nov. & Dec. 1906). The call is of three whistles, the last being much lower in tone than the other two, and is audible at a considerable distance; it is on its call that both the Colonial and native names are founded. Owing to its being so shy and retiring I was unable to learn anything about its breeding-habits.

The soft parts are:—Irides brown; orbits bright lemon-yellow; bill, upper mandible dark slate-coloured, lower greenish yellow; legs and toes bright lemon-yellow.]

464. *CHRYSOCCYX SMARAGDINEUS*.**Z.** Sibudeni, Dec. 19 ♀, Jan. 21, 23, ♂'s (3); **Tv.** Woodbush, Nov. 23, Dec. 5, 8, ♂'s (3).

[“Emerald Cuckoo” of the Colonists; “Libentonyane” of the Zulus.

The Emerald Cuckoo is essentially a bird of the forests, where in the summer season its unmistakable call can be heard. It was heard in the forests of the Nkandhla Range in Zululand and in those of the Woodbush Hills in the North-Eastern Transvaal, while I heard one calling at Storms River, between the Knysna and Port Elizabeth, in Dec. 1904, although when I reached the Knysna none was heard. Its call is a whistle of four distinct notes, the last two being lower than the other two, and can be heard at a considerable distance, the bird sitting among the leafy boughs of some tall tree.

Only the male calls, the female being very retiring in habits and difficult to secure. The colours of this Cuckoo so perfectly match the green of the trees that I have found not a little difficulty in distinguishing it when sitting still, although I have actually located the tree in which the bird is by its call. Each male appears to frequent the same spot day after day and keeps to the part of the forest it has reserved for itself, and never have I heard two calling from the same spot. The female from Zululand was shot at the nest of a Sunbird which was still in course of construction and which she was evidently watching.

The soft parts are :—♂. Irides brown ; eyelid greenish blue ; bill greenish yellow, bluish at gape ; legs and toes blue-slate-coloured, nails black.

♀. Irides brown ; eyelid blue ; base of bill blue, tip black ; legs and toes slate-coloured.]

465. *CHRYSOCOCCYX KLAASI*.

CC. Durban Rd., Sept. 16 (1) ; **Z.** Umfolosi Station, July 15 (1) ; **P.** Coguno, Aug. 24 (1).

When I prepared the ' Birds of South Africa ' I believed that this Cuckoo did not winter in South Africa, but it has since been taken by Taylor at Barberton in June (Bull. B. O. C. xvi. p. 7) and by Ivy in Albany and Davies in Pondoland in the same month, so that it is evidently a resident or partial resident in South Africa throughout the year.

[I have seen Klaas's Cuckoo in the Cape Peninsula, near Umfolosi, and at Coguno. Except at the Cape, where a pair were seen, I have only noted it singly. It frequents the outskirts of patches of bush, and I have found it very shy and retiring in habits. The cry is a single note, generally uttered on the wing.

The soft parts are :—Irides dark brown ; bill pale green ; legs and toes very pale green.]

466. *CHRYSOCOCCYX CUPREUS*.

Tv. Woodbush, Jan. 3 (1) ; Pietersburg, Mch. 2 & 4 (2).

[" Didric " of the Colonists.

I have observed the Golden Cuckoo in the Northern

Transvaal near Pietersburg, and a pair were seen at Masambeti, near Beira, on the 10th Oct., 1906. This species is generally met with in the thorns and bushes along the streams and rivers, and often in the orchards and trees of cultivated gardens. It has a loud cry, which is especially uttered when the birds first arrive and when they chase each other. The flight is swift, but never long sustained.

The soft parts are:—Irides red; eyelid red; bill, upper mandible black, lower fleshy; legs and toes blackish.]

468. *COCCYSTES JACOBINUS*.

P. Beira, Feb. 9 (1).

[Only near Beira have I seen this Cuckoo, where several pairs were noticed creeping about in the rough growths and bamboos on the ant-heaps. It was wild and not easy of approach, and I did not hear it utter any call.

The soft parts are:—Irides dusky black; bill, legs and toes blackish.]

469. *COCCYSTES HYPOPINARIUS*.

Tv. Woodbush, Dec. 28, 30, Jan. 9, 15 (6).

[Whilst on the North-Eastern Transvaal trip, from April 1905 to March 1906, this Cuckoo made an appearance in October, proclaiming itself by its loud call. It was in pairs, and frequented the thorns and bushes, generally along the spruits and streams. After a few weeks it became silent and retiring in habits, but I could not discover whether it was breeding or not.

The soft parts are:—Irides dusky; bill, legs and toes blackish.]

472. *CENTROPUS BURCHELLI*.

N. Illovo, Nov. (1); **Z.** Jususie Valley, Dec. (1); Umfolosi Station, July, Aug. (5); **Tv.** Klein Letaba, Aug. (1); **P.** Beira, Nov., Dec. (2).

[This species is common in most localities throughout Eastern and East-Central South Africa. It is perhaps more plentiful to the south than nearer the Zambesi. It frequents thick vegetation and undergrowth, generally

along streams and rivers or marshy places. Although almost exclusively a ground bird, it will sometimes perch on branches and in bushes and trees, especially when disturbed. The flight is slow and floppy and seldom long sustained. The call, which is more often heard in wet weather than in dry, and is more frequently uttered in the early morning, is a series of liquid notes running up and down the scale, not easily described, but which cannot be mistaken for that of any other bird. I have never succeeded in locating a nest.

The soft parts are :—Irides red ; bill, legs and toes black.]

476. *CENTROPUS SUPERCILIOSUS*.

P. Coguno, Aug. (1).

This bird is a female not quite adult, which agrees in every respect with *C. superciliosus*, except that it has a single blue-black feather on the nape which looks as if more were coming and that eventually it would develop into *C. burchelli*; but *C. superciliosus* undoubtedly does occur in South Africa, though it is by no means so common as *C. burchelli*.

478. *CEUTHMOCHARES AUSTRALIS*.

P. Beira, Feb. (1).

[I have only on one occasion come across this species and that was in a dense patch of forest within five miles of Beira. It was seen skulking and creeping about in some parasitic plants growing on one of the trees. I do not know its call, and it is a species that might easily be overlooked owing to the dense nature of the country in which it lives.

The soft parts are :—Irides dark crimson ; bill yellow, base of culmen black ; legs and toes black.]

479. *TURACUS CORYTHAIX*.

CC. Knysna, Dec., Jan., Feb. (26); Plettenberg Bay, Mch. (1).

[“Lourie” of the Colonists; “Gwalagwala” of the Zulus.

Curiously enough, I have only taken this Turaco in the Knysna district, and have heard it only in one other locality and that was in the Nkandhla Forest in Zululand, where it

was once common but is now distinctly scarce, owing, it is said, to its having been shot out by Cetywayo's hunters ; the red feathers of the wings were that king's special perquisite. In the forest of the Knysna district it is very plentiful and is usually seen in flocks of from half a dozen to a dozen, occasionally in pairs. It is a sociable species, and if one is shot from a flock the others, although alarmed at the report of the gun, will soon return and look for their mate, when another can be secured, and so, if one stays long enough, the whole party can be taken. When in the trees it has a creeping action, running along the branches and peering round on the intruder, continually raising and lowering the crest, and gradually working up to the topmost boughs, from which it finally takes flight to another tree ; the red primaries are very brilliant when the sun catches them. They are also most inquisitive birds, and I have had them, when I have been quietly lying up for bluebuck or small birds, come jumping and running through the trees within a few feet of me, examining me first from one point and then from another, uttering occasionally their harsh alarm-note and taking flight in a great hurry when I waved my arm. This species feeds almost exclusively on fruit and berries, and the cry is a harsh croaking noise which can be heard at a great distance. It calls generally in the early morning and late afternoon, often all day long when the weather is wet ; sometimes not a bird is heard for days together, but this is generally when the weather is fine and warm.

The soft parts of the adult are :—Irides brown ; orbits red ; bill orange-red ; legs and toes black.

In the young the irides are raw sienna, the orbits dusky ; bill brown or brownish red ; legs and toes black.]

TURACUS CORYTHAIX PHÆBUS.

Neumann, Ornith. Monatsb. 1907, p. 193.

Tv. Woodbush, Nov., Dec. (5).

Neumann has recently shown that the "Louries" of the Eastern Transvaal are separable from those of Cape Colony by the colour of the back and tail, which is of a rich metallic

blue without any trace of green. This distinction is quite obvious when the Woodbush Louries are compared with those from Knysna. Neumann's type is an adult male from the Kaap near Barberton in the Transvaal, now in the Liverpool Museum, and he also mentions two examples in the British Museum from the Lydenburg District. Others from Knysna, Elands Post, and King Williamstown in Cape Colony, and from Durban, all specimens in the British Museum, are typical *T. corythaix*.

[“Lourie” of the Transvaal Colonists.

Only in the forest of the Woodbush Hills in the North-Eastern Transvaal have I seen this form of the Knysna Lorie. There it is decidedly plentiful, and in every habit and action it resembles the southern *T. corythaix* and cannot, until handled, be distinguished from that species. The soft parts are also similar.]

480. *TURACUS LIVINGSTONII*.

P. Tambarara, Mch. (1).

[“Nkurukuru” of the Gorongozas.

Livingstone's Turaco much resembles in general habits the common *T. corythaix*. I have found it only in forest country and either singly or in pairs, never in flocks. It was by no means plentiful in the Gorongosa forests, where it frequented the denser parts and was more often heard than seen. The cry is similar to that of *T. corythaix*, but rather harsher. The native name is derived from its alarm-note.

The soft parts are:—Irides brown; orbits red; bill red-orange; legs and toes black.]

TURACUS REICHENOWI.

Reichenow, Vög. Afr. ii. p. 53; C. Grant, Bull. B. O. C. xxi. 1908, p. 66.

P. Masambeti, Nov. (1).

This bird, taken for the first time within South African limits, differs from *T. livingstonii* very much in the same way in which *T. c. phæbus* differs from *T. corythaix*, by the pure blue metallic coloration of the lower back, wings, and tail, without any traces of green.

I have not been able to find any examples which exactly match this bird in the British Museum. All the Nyasaland examples, of which there is a long series, seem to be true *T. livingstonii*.

[“Nkurukuru” of the Ntebis.

This species was by no means common, only two or three being observed in the thicker patches of forest near Beira; but whether they were of this form or the ordinary *T. livingstonii* it is quite impossible to say, as in general habits and call it exactly resembles that species. The soft parts are also similar.]

481. *GALLIREX PORPHYREOLOPHUS*.

N. Illovo, Nov. (2); **Tv.** Legogot, Apl., May (2); **P.** Coguno, Aug. (2); Beira, Feb. (1).

482. *GALLIREX PORPHYREOLOPHUS CHLOROCHLAMYS*.

P. Tete, Aug. (2).

The Zambesi Purple-crested Lourie apparently replaces the southern typical form only in the Zambesi Valley proper; specimens from Beira are identical with those of Natal.

[“Gwalagwala” of the Natal natives; “Ngulegule” of the Machangaans and Machopees; “Nkurukuru” of the Ntebis.

This species appears to be confined to the low veld of the eastern side of South Africa. I have noted it in Natal, the Eastern Transvaal, and in the Inhambane and Beira districts of Portuguese East Africa. Except in Natal it is not partial to forest, and is usually found in the thicker and denser parts of ordinary “bush-veld” country, where it occurs singly or in pairs, creeping about the trees and brushwood in search of fruit and berries after the manner of the other Louries. The flight is swift and gliding, with little movement of the wings, and the cry is harsh and resonant, deeper than that of *Turacus* and different in tone.

The soft parts are:—Irides very dark brown; eyelid red; bill, legs and toes black.]

483. SCHIZORHIS CONCOLOR.

Tv. Klein Letaba, July, Aug., Sept. (8); **P.** Tete, Aug. (1).

[“Go-away” bird of the Colonists; “Nkwenyane” of the Machangaans and Machopees.

I first saw this Lourie in Zululand, north of the Hluhluwe Stream, where I noted it in threes and fours in the thorn-trees, but it was so wary that I was unable to secure specimens. I subsequently met with it in the Eastern and the North-Eastern Transvaal, and in the Inhambane and Tete districts of Portuguese East Africa. It frequents “bush-veld,” and I have only once observed it on the high veld proper, and that was on the Pietersburg–Klein Letaba road, where a few were seen in the thorn-trees along the edge of the Berg. It appears to be somewhat local; for instance, it is not found south of the Hluhluwe Stream in Zululand, and in the Inhambane District it is confined to the valleys of the Inyasuni and Yamatemda Rivers, where the country is more or less open, and is not met with either in the Beira or Gorongosa districts of the Portuguese country, although common around Tete. It is usually found in companies of about half a dozen flopping about in the trees, feeding on the berries and fruit or lazily flying from tree to tree. It has a loud drawn-out cry of “kway,” sometimes singly, sometimes doubly repeated. Although wary and keeping out of shot as a rule, it is most inquisitive, and will accompany a man for long distances, either on one side or more often in front, perching on the tops of trees and giving vent to its aggravating cry, jerking up the tail and continually raising and depressing its crest. From this habit it has earned a bad reputation among hunters, as it warns the game of the approach of danger, the cry sounding as though the bird was calling to the game to “go away.” The natives also attribute this to the bird, and I have seen them strike off in another direction because of its persistence in keeping in touch with them; I have myself blown the bird to pieces with a rifle-ball in pure exasperation.

The soft parts are :—Irides hazel; bill, legs and toes black.]

484. *PŒOCEPHALUS ROBUSTUS.*

Tv. Zuurbron, Apl., May (2).

[“Papegaai” of Colonists.

Only in the Wakkerstroom district of the Transvaal and the Beira and Gorongosa districts of Portuguese East Africa have I noted this Parrot. It is generally observed in pairs or threes and frequents forest country, feeding on the wild fruits and berries. It is wary and not easily approached within shot. The cry is a single loud note often repeated, especially when the birds are passing high overhead from one part of the forest to another.

The soft parts of an adult are :—Irides brown ; bill pearly ; legs and toes slightly slate-coloured.]

486. *PŒOCEPHALUS FUSCICAPILLUS.*

Tv. Klein Letaba, July, Aug., Sept. (6) ; **P.** Coguno, June (2) ; Beira, Dec. (3).

Mr. Claude Grant remarks (below) that in one of the Klein Letaba examples and in all three from Beira the axillaries as well as the under wing-coverts are yellow, while in the other examples they are green. As there are signs of green on some of the yellow axillaries, it seems probable that the birds with the yellow axillaries are immature. The male from Klein Letaba (dated Sept. 6) with yellow axillaries is also slightly smaller both in the wing and bill and has the notch of the upper mandible but slightly indicated, all signs of immaturity.

[In the three examples from Beira and one from the Klein Letaba the axillaries are yellow. In the other five specimens from the Klein Letaba and the two from Coguno the axillaries are green. This is probably due to age, as one with yellow axillaries shews distinct traces of the green colouring, and one or two with green axillaries have them tinged with yellow.

It was not till I reached the Klein Letaba country that I came across this species ; afterwards I found it in the Inhambane, Beira, and Tete districts of Portuguese East Africa. This little Parrot is generally seen in pairs, often also in

small parties of half a dozen. Its flight is very rapid and straight, and the cry is clear and sharp and often repeated, especially when on the wing. It feeds principally on berries and wild fruit, and I have noticed that it drinks regularly, usually about noon.

The soft parts are :—Irides pale yellow ; bill, upper mandible blackish, lower pearly ; legs and toes slaty.]

[To be continued.]

XXIX.—*On the Birds noticed during a Voyage to Alexandria.*

By CLAUD B. TICEHURST, M.A., M.R.C.S., M.B.O.U.

IN the spring of 1909 I went by a slow passenger-steamer to Alexandria. As there are not a great number of papers dealing with bird-life seen at sea and in the neighbourhood of the ports of call, I think that it may be worth while to put on record the names of such species as I came across, especially as I was on the look out the whole time, and kept careful notes of those that I met with. Short calls of a few hours were made at Gibraltar, Algiers, and Malta, and nearly all the time available at these places was devoted to studying the bird-life of the neighbourhood.

I left Liverpool on April the 13th, 1909, in the s.s. 'Menes.' In the Mersey were noted Lesser Black-backed Gulls and Herring-Gulls, both adult and immature, and some Common Gulls. The next day, as we went down the Welsh coast, Herring-Gulls, Lesser Black-backed Gulls, and Kittiwakes followed the ship the whole day, and these were almost all adult birds ; two adult Gannets were also seen. At dusk about a dozen Manx Shearwaters appeared from the *west* flying in towards land. Had these birds come from the Irish coast, or had they been resting on the sea during the day ? On the 15th, we were out of sight of land after leaving the Scilly Islands at 3 A.M., and birds were scarce ; a few adult and immature Great Black-backed Gulls (*Larus marinus*) and Puffins were all that were seen, except a large Skua in the



Slater, William Lutley. 1911. "On the Birds collected by My. Claude H. B. Grant at varioe Localities in South Africa With Field Notes by the Collector." *Ibis* 5(4), 695–741. <https://doi.org/10.1111/j.1474-919x.1911.tb03330.x>.

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