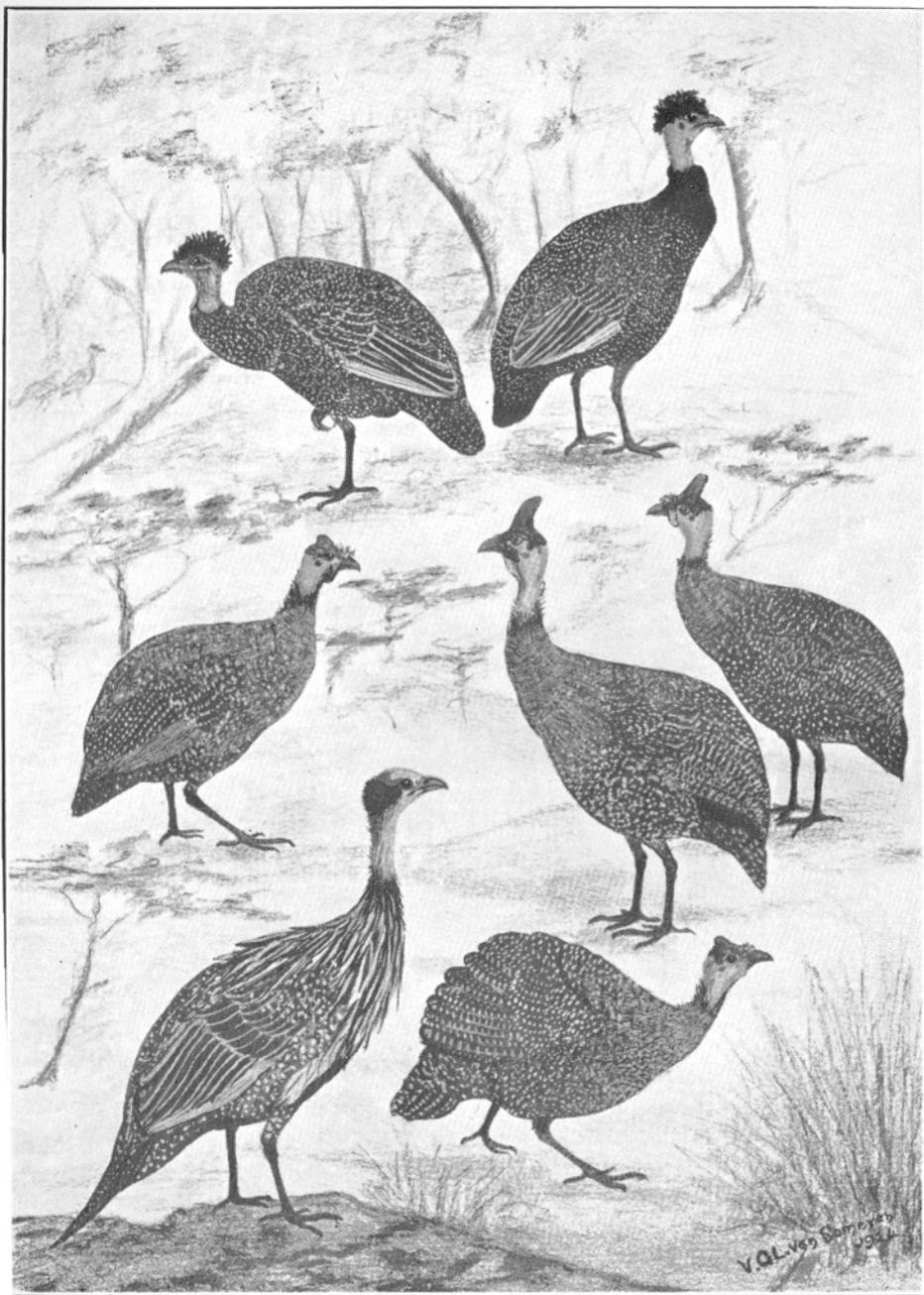


FRONTISPIECE.



- 1, *Guttera pucherani*. 2, *Guttera e. seth-smithi*. 3, *Numida m. rendilis*.  
4, *Numida reichenowi*. 5, *Numida m. somaliensis*. 6, *Numida m. major*.  
7, *Acryllium vulturinum*.

# THE BIRDS OF KENYA AND UGANDA.

## PART I.

by

V. G. L. VAN SOMEREN, M.B.O.U., C.F.A.O.U., C.M.Z.S., ETC., ETC.

### INTRODUCTION.

The lack of a popular Handbook on the Birds of Kenya and Uganda has been a long felt want, and in order to fill, in some slight measure, this gap in the literature pertaining to the Natural History of these Territories, it is proposed to publish in the Journal a series of Papers dealing with this subject.

Our knowledge of the local birds has not reached the same degree of perfection as our insight into British birds, and these notes must, of necessity, be incomplete so far as general habits are concerned.

In order to popularise the Series it has been thought advisable to commence these Papers with notes on the "Game Birds," although this will entail a departure from the recognised order of Classification.

It is a remarkable fact, that, although the "Game Birds" are plentiful and are daily shot for the "pot," there is still a great deal to be ascertained regarding their habits, and a lot of systematic work in connection with geographical races and their distribution, yet to be done.

This first instalment contains notes on the Guinea-Fowl of Kenya and Uganda.

In order that the various terms, referring to the feathering, may be understood, the appended sketch should be consulted.

In dealing with the birds of these Countries it must not be forgotten that within these territories there exist such extremes of altitude and climate as to produce a marked influence on the Avifauna of the regions.

Considering these factors and the position of these countries it is not surprising to find that their Avifauna is of a very varied and complex nature. To emphasise this point I take the liberty of reproducing a chart published in *Novitates Zoologicae* Vol. XXIX./1922, showing the various avifaunal areas, and also of repeating my notes relevant thereto.

The whole of the Western Provinces of Uganda and the central area can be looked upon as West African in character, somewhat modified in type. When we consider the northern territory we find Sudan and South Ethiopian forms represented, and in the eastern districts a mixed avifauna showing South Ethiopian and East African elements.

It should be noted here, however, that birds which may be taken to be typically western in type, find their way into the Elgon area, North Kavirondo, and the Mau Hills, extending more or less southward to what was the old political boundary between Uganda and East Africa.

At this point I should like to draw attention to the extraordinary distribution of certain species which are found on the Elgon-Nandi ranges, and which, although not occurring in Uganda and south of Lake Victoria, yet appear again in the Ruwenzori-Kivu area, in some cases exhibiting no change, in others showing a marked intensification of colour so as to be reckoned as geographical forms. As examples of this we have *Sylvietta leucophrys*, *Trochocercus nigromitratus*, *Chlorophoneus dohertyi*, and *Campothera taeniolaema*.

In the case of East Africa we have to consider Ethiopian, Somali, and South African influences; but in practically all instances the birds exhibit modifications in plumage justifying the recognition of races.

From this point we naturally come to the consideration of the effect of the climatic and topographical influences on the bird-life of the countries.

The zones or areas, as indicated by the chart, carry in them certain species and forms which are more or less confined to these areas, but it must be understood that these areas are still provisional to a certain extent.

That various factors—such as climate, altitude, etc.—had influence on the evolution of races and species has been long recognised, but insufficient regard has been paid to these points in connection with the birds of East Africa and Uganda. Thus, when they are considered, it is not surprising to find that we must recognise more races and species than hitherto.

The various zoogeographical zones or areas are most marked when we study the distribution of the Larks and the Warblers.

What I call the "thorn bush zone" extends throughout the eastern half of Kenya, north into Eastern Uganda, and ends on the east the high plain and Alpine zones. But even in this "thorn-bush zone" races of the same form are found, produced no doubt by local conditions.

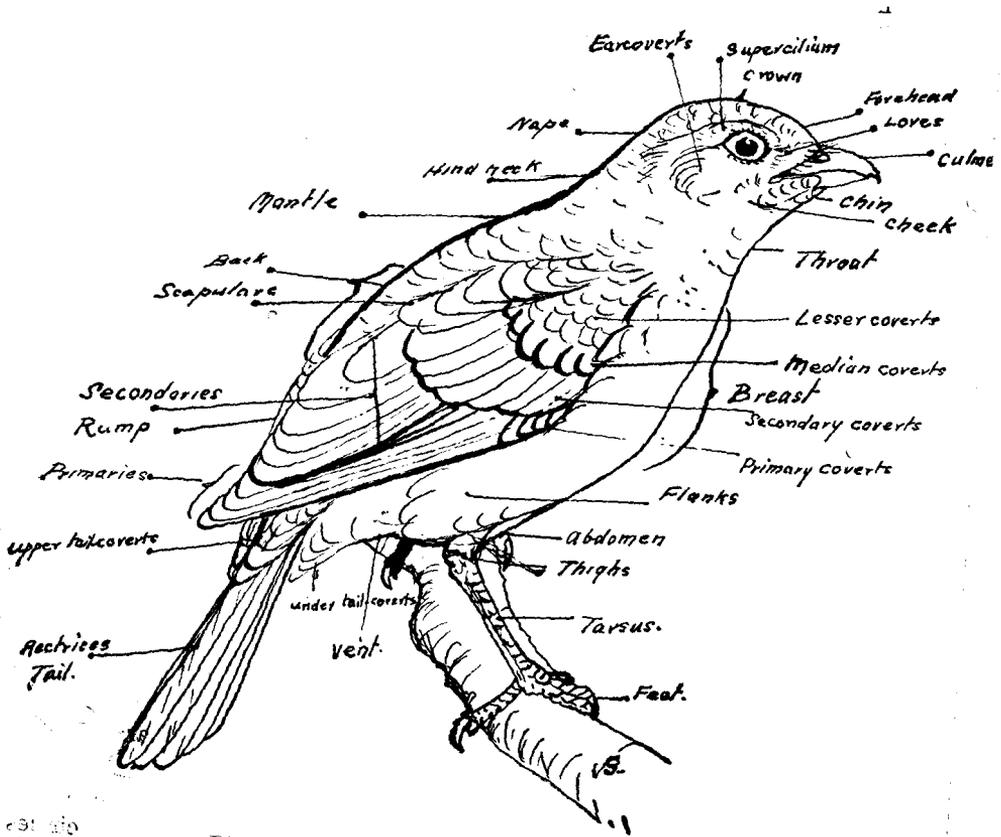


Diagram shewing nomenclature of external parts.

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FAMILY.—PHASIANIDAE.

GENUS.—NUMIDA.

GUINEA-FOWL.

**Numida reichenowi**, Og.-Grant. Ukamba Helmeted Guinea-Fowl.  
Ref. Og.-Grant, Ibis 1894, p. 536.  
Type locality, Kilungu River, Ukamba.

Distribution: Telta, Taveta, Loita and Kedong. Ukambani to north-east Kenia.

GENERAL DESCRIPTION: ADULT.

The adult plumage is black, heavily spotted with white. The feathers on the lower breast, flanks, thighs and under tail-coverts are black with well defined circular or ovoid white spots; each feather of the breast narrowly edged with white.

The abdominal feathers are more barred than spotted, whilst those of the upper breast and lower neck are more finely spotted, the majority of the spots coalescing, thus forming alternating bars of black and white. Each feather is edged and tipped with bluish white, (in newly moulted birds) or white; this edging does not show up distinctly owing to the loose nature of the barbs at the margins of the feathers.

The upper part of the neck is bare, bright blue at the sides, and purply blue to blackish on the throat and hind neck. Two loose folds of skin, pendent from either side of the upper throat, are pale blue along the upper free edge and dark blue at the base.

A few decomposed hackle-like black feathers are present at the junction of the bare skin with the lower neck feathers in front, becoming more numerous in the hind part, and extending up the back of the neck for some little way; most of these feathers in the latter area are directed upwards, thus forming a scanty ruffle.

The feathers of the mantle, scapulars, lesser coverts, inner secondaries, rump upper tail-coverts and tail are black with small white spots, each spot being enclosed in a diamond-shaped network of fine dotted lines. The wing-coverts conform to this type of colouration, but the spots are more irregular and the net-work more broken. The spots on the secondary-coverts are arranged in rows; those on the margin of the outer web are elongate. The inner primaries and the secondaries are black with rows of white spots and numerous oblique lines on the margin of the outer web, giving to this area a banded appearance.

The head which is bare, except for a few hair-like feathers round the ears, on the eyelids, and on the posterior aspect of the nostrils, is

surmounted by a horny helmet, the base of which extends from the base of the bill to the occiput. The casque which is horn-brown in colour, is long and laterally compressed and deeply and irregularly grooved at its base. The base of the horn is red.

The skin in front of the eye, and the wattles dependent from the upper margin of the gape, are bright red.

There is considerable variation in the size and colour of these wattles, some have part of the base, blue in colour.

The size and shape of the helmet is not constant, some are long and tapering, with a straight front edge, others are rounded at the tip and curve backwards. There are *no* bristles between the nostrils. Legs blackish-brown; bill yellowish-horn at tip, darker at base.

#### JUVENILE:

The newly hatched chick is pale buff below and light orange brown above slightly paler on the back. The head and dorsum are striped with blackish-brown, while the flanks and wings are spotted with this colour. Growth is rapid and the feathering of the wings, tail and breast is quickly assumed.

In first plumage, the underside is buff with slight speckling in the region of the breast. The feathers of the mantle and wings are rufous brown freckled with blackish and edged with sandy-brown. The dorsum is pale greyish-buff with a broad central and lateral stripes of brownish-black. The head retains the feathering of the chick stage. The bill is pinkish-brown. The legs and feet are pale pink, to flesh-brown.

In the second plumage, evidence of spotting is present on the lower neck, breast, flanks, and wing-coverts. The wings, tail and lower back become conspicuously barred with buffy white, and the mantle with rufous brown and blackish. In this stage the colour of the head and neck is not altered. With the third plumage, spotting becomes general over the whole body, but the spots are greyish or tinged with buff, whilst the feathers are brown-black, not deep black. The head and neck commence to lose the fur-like feathering and the helmet commences to grow. The head and neck which are now devoid of feathering, become dark brown in colour.

#### HABITS:

Throughout the greater part of the year these birds associate in large flocks, frequenting the thorn-bush and forested ravines. They are also to be met with in native cultivations. Very often a flock contains two hundred or more birds. When associated

thus they are very noisy, especially in the early mornings, and at sunset, just when they go to roost. They spend the night in trees.

During their foraging expeditions, these birds cover an immense area. The whole of this distance is covered on foot for they seldom take wing. They are remarkably good runners and when surprised in thorn-bush or shamba they trust to their running powers rather than to flight.

During a collecting trip in the Tsavo district I witnessed a huge flock partaking of a mid-day drink at a river bank. This particular spot was evidently a regular resort of the Helmeted and Vulturine Guinea-Fowls, and as I had plenty of time, I took up my position under a huge acacia tree on the opposite bank to the one frequented by the birds. I had not long settled down when my head collector whispered to me that a large flock was coming along.

I personally could neither hear nor see anything, but presently a small batch of a dozen birds topped the bank and descending the slope, walked on to a small rocky promontary and drank their fill. When these birds had scrambled up the bank their place was taken by batch after batch until over a hundred birds had satisfied their thirst. Thinking that the birds had disappeared I moved my position and walked up-stream passing behind a screen of shrubs which shut out the view of the water. Beyond these bushes one obtained a good view of a small clearing on the opposite bank where the thorn trees were not very dense, and here, to my intense surprise, I discovered the whole flock about to settle down to rest. I quickly took cover, and taking advantage of the noise made by the running water, I worked my way towards a spot from which a good view of the entire flock could be obtained.

Fortunately, the few birds stationed as sentinels had not observed my movements and one was able to study the birds when quite at their ease. Many indulged in dust baths, while others attempted a little friendly sparring. Others again, attended to their toilet, frequently helping one another in this business. It was a common sight to see a bird go up to another and commence nibbling at the others wattles or running its bill through the short feathers at the back of the neck. The recipient of such attentions would stand still as if enjoying such kindly thought, or, if the recipient happened to be a bird which had started a sand bath it would stop this operation and lying full out on its side would stretch its neck out to receive treatment.

Throughout the two hours during which I watched these birds the only sound made was a low call uttered by different individuals from time to time. As I was suffering badly from cramp I decided

to make my presence known. No sooner had I done so than the familiar warning cry was started by the sentinels, to be taken up immediately by a hundred startled individuals. A general stampede ensued. At first some of the birds ran here and there uncertain from which quarter danger threatened, but presently all went off in one direction. Once out of sight of danger, the calling ceased, but the retreat continued for more than a hundred yards. Not a single bird took wing.

The approach of the nesting season makes these birds rather quarrelsome. The males display and fight vigorously. The feet are used freely, but as these birds have no spurs, little damage is done.

The courtship display consists of a series of spasmodic runs, ending in an abrupt stop in front of the female. These manoeuvres are gone through many times while the female stands preening herself or goes on feeding apparently quite unconcernedly. During the run the wings are raised and expanded, but kept close to the body, giving to the bird a compressed appearance, or occasionally they are held away from the side and slightly drooped. Sometimes when the male has stopped in front of the female, he will pick up a bit of grass, making a low call the while. After pairing, flocking is abandoned, and each pair wanders off to select a nesting site. The nest is usually situated under a low bush, and consists merely of a slight depression in the ground sparsely lined with bits of grass and leaves. The eggs, from six to twelve in number are buff to brownish in colour, freckled with darker brown in the region of the pores. Incubation lasts about twenty-four to twenty-six days. The principal nesting months are May and June, November and December, though eggs are frequently taken in other months. The nesting season varies in different localities according to the rainy periods.

If several pairs of birds happen to nest in the same district, it is common to find that the parents pool their young when about a month old. Thus one occasionally puts up a flock consisting of four or five old birds and several squeakers obviously belonging to more than one brood.

Although frequenting native shambas, these birds do little damage to crops; on the contrary, they do an immense amount of good as they feed largely on moths, locusts, crickets, and other injurious insects. Most of their food is obtained by scratching; roots and seeds being eagerly sought after.

From a sporting point of view, these clumsy birds offer little attraction. Their small wings and heavy bodies preclude long or sustained flight. Occasionally one is able to put these birds up with the help of dogs, but if they rise at all they make for the nearest large

tree. From such a situation they can be dislodged, amid hoarse and discordant protests, and an occasional sporting shot obtained.

These birds make three distinct calls—a low single note uttered occasionally when feeding, or resting; a series of notes, the first long, followed by two short ones of a higher tone uttered particularly by the male birds; and the usual harsh discordant note of alarm.

**Numida ansorgei**, Hartert. Nakuru Helmeted Guinea-Fowl.  
Ref. Hartert, "Under the African Sun," 1899.  
Type locality, Nakuru Lake.

Distribution: A limited area situated between the Aberdares and the Mau extending from Gilgil to south Solai.

Original description of *Numida ansorgei* Hartert ex ANSORGE, W.J.  
"Under the African Sun," &c., p. 331. No. 40.

"An adult male of a guinea-fowl, shot at Lake Nakuru, on March 29, 1898, cannot be united with one of the described forms. It stands probably somewhat between *N. reichenowi* and the form named *N. intermedia* by Oscar Neumann. It differs from *N. reichenowi* in the form of the helmet, the high ridge of the caruncles at the base of the bill, the broad, not narrow and not hair-like feathers on the back of the neck, and the colour of the wattle at the gape and the barred neck-feathers. It differs from *N. intermedia* Neum. in the beak being blackish-green, not red, the larger wattle at the gape, and their colour, and probably also the more spotted chest. The type-specimen has on the hind-neck, just below the head, a bunch of broad pointed feathers, which seem to point upwards; the feathers below this bunch are very finely, but regularly barred with numerous white bars. The red naked skin on the nape is divided by a narrow black line in the middle; the wattle at the gape is broad and largely extended in front and behind, but not very pendent; and there is a red spot in front as well as on the hind-tip. "Iris red-brown." Wing 282 mm. tarsus 75, middle toe with claw 55, helmet in a straight line from the bottom 34, bill 24.

From *N. coronata* which is not yet known to occur North of the Zambesi it presents many points of difference, notably the bunch of feathers on the hind neck, the deep black ground-colour, the form and colour of the wattles."

**Numida mitrata**. Pall. Coast Helmeted Guinea-Fowl.  
Ref. Pallas, Spic. Zool. 1767.  
Type locality, Mosambique?

Distribution: Coast area from Vanga to the Sabaki River, inland to Samburu and the Shimba Hills.

#### GENERAL DESCRIPTION: ADULT.

Plumage black, spotted with white. The helmet is short, conical, and rugose; reddish in colour at the base, and becoming yellowish-horn at the tip. The base of the helmet extends from the root of the maxilla to the occiput. There are no bristles or caruncles between the nares. The sides of the head and the whole of the neck are bright blue. A loose fold of skin extends from the chin and dividing into two, passes to either side of the neck just above the commencement of the neck feathering. The wattles at the gape are long and pointed, the basal two-thirds bright blue in colour, the terminal third red. The bill is horn-yellow at the tip, deepening to reddish-brown at the base.

There are a few hair-like feathers scattered over the front and side of the neck, becoming more plentiful and hackle-like over the posterior surface; these hackle feathers form a ruffle in this area.

The feathers of the lower neck and upper breast are finely barred, black and white, the bars being of equal width, giving to these areas a general greyish appearance.

The rest of the plumage is very like that of Reichenow's Guinea-Fowl but the spotting is finer throughout.

The legs and feet are dark horn-brown.

#### JUVENILE:

The colour of the chick of the Coast Guinea-Fowl is rather more rufescent than that of inland birds, but the pattern is similar. In the first feathered stage this difference is also present. The sequence of plumage change is similar in all the Helmeted Guinea-Fowl.

#### HABITS:

Throughout the whole of its range *N. mitrata* can now be considered scarce. The species has been sorely harried by the coast natives with the result that one seldom sees a large flock. Ten to twelve birds usually form a pack, but in the more secluded districts large flocks may be met with. Without some sort of protection the species will in time become a rarity in Kenya.

The thorn-bush and grass country west of Samburu still forms a favourite haunt of these birds. In habits they hardly differ from other species of the "helmeted" group. They are swift of foot and appear loth to fly; in consequence they offer little sport.

The nesting season would appear to correspond more or less with the latter part of the rainy seasons. Eggs were found in the Shimba district in June, and young in first feather in Giriama in January. The eggs are of the usual type, buff to sandy-brown in colour with the pores of a darker shade. The nest is made in thick grass or under a dense shrub. A few bits of grass placed around a slight hollow, constitute the entire nest. The bird is a close sitter and is usually reluctant to leave its nest.

Ground vermin, such as the little brown Mongoose, take considerable toll of the eggs and chicks, and it is no uncommon sight to see parent birds with one or two young instead of eight to ten. The natives snare the birds as they come to their nests.

**Numida meleagris rendills.** Lönnb. Rendile Tufted Guinea-Fowl.  
" " baringoensis, C. Grant. Syn.  
Ref. Lönnb. K. Sven. Vet.—Ak Hand. 1911.  
Type locality. Between Meru and Rendile.

Distribution: N.E. Kenia to Baringo. S. Rudolf to the Turkwell and Suk and Kamassia.

#### DESCRIPTION: ADULT.

Very like *N. reichenowi* in general plumage but rather darker in appearance. The presence of a tuft of bristles between the nostrils at once distinguishes this species from the southern Helmeted Guinea-Fowl. The helmet is strongly developed, both in male and female, laterally compressed and rounded at the tip. The bare skin of the sides of the head, the neck, and the wattles, are blue in colour.

The outer webs to the secondaries, besides possessing oblique white bars, also have wavy irregular lines passing through the black interspaces, giving to these feathers a freckled appearance.

This race lacks entirely the terminal white bars to the secondary coverts (found in the typical Abyssinian form).

#### JUVENILE:

In general scheme of colouration, the newly hatched chick and the young in first feather conform to the description given under *Numida reichenowi*. It is in the third stage that one finds appreciable differences. Indications of the nasal bristles are present and besides the general paler underside, the upper surface is much lighter in colour due to pale buff spotting and barring of the mantle and wings.

The eggs of this Guinea-Fowl cannot readily be distinguished from those of other "helmeted" species; they are buff to pale brown, with most of the pores indicated by a deepening of the brown pigment. Ten to fourteen eggs are recorded as normal clutches.

**HABITS:**

Throughout the whole of its range, this bird occurs in very large flocks. A pack sometimes consists of two hundred birds or more.

During the dry weather, it is sometimes possible to locate these birds feeding on a plain, by the clouds of dust thrown up as they scratch the ground.

The gathering of a flock, at sunset, preparatory to going to roost, or the flocking at a waterhole, is a wonderful sight. From all directions batches approach on foot. Their agility and jumping powers are remarkable. A sudden disturbance sends the birds off, by leaps and bounds, to the nearest trees or embankment, amid much hoarse cackling. From these elevations they continue to protest, the cries being uttered in concert by dozens of individuals.

Unlike most birds, these Guinea-Fowl appear loath to leave their roosting places until the sun is well up. Once they are on the move they cover an immense distance.

These birds are certainly most plentiful in the Northern Guasso Nyiro districts, in the Suk country and along the Turkwell River.

***Numida meleagris major.*** Hartl. Uganda Tufted Guinea-Fowl.

Ref. Hartl. Able. Bremen. 1883.

Type locality, Kakkala, N.W. Uganda.

Distribution: North Uganda to Ankole, and eastwards through Uganda proper, to east of Victoria Nyanza, including north and south Kavirondo.

The Tufted Guinea-Fowl of these northern districts have been divided up into several geographical races by various Systematists and if all the forms were valid we should have the following races included in this survey:—

N.m. toruensis, Neum. West Uganda from Ankole to Toro and S. Lake Albert, extending into Uganda Proper.

N.m. major. Hartl. Northern Province of Uganda.

N.m. neumanni. Erl. Usoga, east to Kavirondo.

N.m. macroceras. Erl. Rudolf district.

For the purposes of this paper it will be sufficient to place all under the oldest name as above.

#### DESCRIPTION : ADULT.

The Uganda Guinea-Fowl is very like *N.m. rendilis* in general scheme of colour, but differs from that race in the following particulars:—The helmet is much smaller and sometimes rudimentary, reddish in colour, usually pointed and inclined backwards. The wattles at the gape are fairly broad at the base, but otherwise long and tapering, and generally blue in colour; but in some individuals the wattles are red tipped. (Ankole and Usoga). The nasal bristles are short, stout and reddish in colour. The naked parts of the neck, throat, and sides of the head are bright blue with a paler irregular line down each side of the neck. The bill is yellowish horn at the tip, becoming red at the base. There is a well developed patch of black feathers at the commencement of the neck feathering. The feathers of the lower neck and the upper breast are black with narrow white wavy lines, the white bars much narrower than the black inter-spaces, thus giving to this area a dark appearance. The spotting on the mantle, back, rump, and tail is small, while the enclosing white dotted network is rather more conspicuous than is found in the Rendile bird; thus one might describe these feathers as being a mottled greyish, with white spots outlined in black. The wings are marked as in *N.m. rendilis*. The legs are dark horn-brown.

#### JUVENILE :

The scheme of colouration in the chick is similar to that found in the other Tufted Guinea-Fowl. The stripe on the head is slightly different. A central blackish brown stripe commences at the base of the maxilla, and extending back, widens out in the region of the hind crown, and becomes narrower at the occiput. This stripe is flanked on either side by three lines, the outermost commencing just above and in front of the eye. A fourth line starting at the posterior angle of the eye passes back through the ear opening and at this point is met by a fifth streak which starts at the gape. A further narrow line marks the angle of the jaw.

In the first and second feather, the mantle is rufescent brown with wavy cross bars of blackish brown and buffy brown. The upper breast is rufescent, streaked with blackish, with a few white centres to the more elongate feathers of the neck. The lower breast and flanks are sandy; each feather with brownish angular markings in the centre, and buff shaft streaks. The abdomen is greyish buff with grey brown cross bars.

The rest of the plumage agrees with *N.m. rendilis* of a similar age. The spotted plumage develops rapidly, appearing first of all on the breast, flanks and lesser wing-coverts.

## HABITS :

Although widely spread throughout suitable localities, I have never seen these birds in very large flocks, except in N.E. Uganda. Twenty to thirty birds appear to be an average association for the southern area of distribution.

The scrub and " Game country " are the localities favoured by these birds, but native cultivations and edges of forest land are sometimes visited.

In general habits, and nesting operations, these birds do not differ from other members of the group. They are trapped by the natives, in snares placed in position near the nest or captured by hand while actually sitting. The Maragoli adopt the basket method of capture. A toto is detailed to watch the birds, and having located the nest, the spot is marked. A rough basket of twigs is constructed and armed with this, the nest is visited toward evening. The parent bird being a very close sitter, is very easily captured by placing the basket on top of her. The method is one which should be strictly prohibited, as not only are a large number of breeding birds thus destroyed, but numerous eggs are damaged as the bird struggles to free herself.

The only place where I have obtained really good sport with these birds has been along the Maragoli and Suk Escarpments. Here, owing to the rugged formation of the hillsides, one can drive the birds and, with good dogs, cause them to fly out over the dongas to reach the opposite side. In other situations the birds are difficult to put up. They run in some cases as fast as a Hare and if one appreciates ground shooting, such can be obtained in fairly open country.

**Numida meleagris somaliensis.** Neum. Somali Tufted Guinea-Fowl.

Ref. Neum. Orn. Monatsb. 1899.

Type locality, Somaliland, N.W.

Distribution : Throughout Jubaland to Waghier and the Lorian.

## DESCRIPTION : ADULT.

Conforms in general type of plumage with other members of this group but rather more greyish throughout, due to the pronounced white speckled network surrounding the white spots of the feathers. The feathers of the lower neck and upper breast are extremely finely barred with alternating wavy lines of black and white; the white lines predominating.

The secondary coverts are markedly black with clearly defined white spots so that this area stands out conspicuously from the rest of the more greyish upper plumage. The feathers of the breast are pale, widely margined with white, rendering this area pale, compared

to the rest of the plumage. These white edges do not show up as definite lines owing to the loose nature of the tips of the feathers. The white spots on the outer webs of the inner secondaries are irregular in shape, and most have a black mark towards the lower edge. The outer webs of the outer secondaries have a general finely speckled appearance, due to the irregular and obsolete nature of the oblique bars being obscured by a fine white spotting. The spotting along the outer webs of the inner secondary coverts is modified in a similar way to those of the secondary feathers.

There is a very small patch of black hackle-like feathers at the base of the hind neck.

The most conspicuous characters which distinguish this race are: the very small helmet (in some specimens quite rudimentary) and the exceptionally large tuft of long fine white bristles at the base of the maxilla. The helmet, which is reddish in colour, commences at the base of the bill, but does not extend as far back as the occiput, but stops just short of it, and is not continued right down behind the eye. The bare parts of the rest of the head, and neck, are blue. The wattles are well developed, elongate, and project back; the basal two-thirds blue, the remainder red in colour.

This is the smallest race of Tufted Guinea-Fowl found within the boundaries reviewed in these notes; the greatest difference being found in the size of the bill, head and legs.

#### JUVENILE:

The young in down is similar in pattern to that of other races, but is paler, and less striped on the head. In the first and second feathered dress the plumage is noticeably paler than in *N.m. rendilis*, or *N.m. major*. The head is pale buff with a broad central blackish stripe flanked on either side with two narrow blackish lines, extending from the nares to the occiput. The feathers of the lower neck are pointed, white in colour, with blackish edges.

The breast feathers are greyish buff with darker bars of blackish and white. The mantle, rump, and wing coverts are brownish speckled with blackish and barred with buffy brown and buff. The legs are light brown and the bill dark brown.

#### HABITS:

These birds frequent the thornbush and acacia country, wandering out into the rocky and grass country when feeding.

They occur in flocks of forty or so and offer easy shooting. Their call is typical of the "helmeted" Guinea-Fowl, but compared with *N. rendilis*, the pitch is higher.

The eggs of this race conform to the general type. They are almost oval, slightly pointed at one end, sandy buff in colour and with darker pores.

GENUS.—GUTTERA.

CRESTED GUINEA-FOWL.

**Guttera edouardi seth-smithi.** Neum. Uganda Black-necked  
Crested Forest Guinea-Fowl.

Ref. Neum. B.B.O.C. XXiii. 1908.

Type locality, Unyoro, Uganda.

Distribution: Forests of Uganda, Kavirondo, Nandi south to Mau.

DESCRIPTION: ADULT.

General plumage black, spotted with pale blue.

A full crest of long curly feathers extends from the base of the bill to the centre of the cranium. The feathers of the forehead are directed forwards whilst those of the hind crown are long and lie well over the occiput.

The rest of the head and neck are bare, cobalt blue on the back and sides and dull red at the chin and throat.

Rudimentary wattles are present at the gape. There is a slight fold of skin on either side of the neck just before the commencement of the feathering.

A wide collar of black feathers surrounds the lower neck, extending on to the upper breast in front.

The feathers of the mantle, back, rump, upper and under tail-coverts, breast, flanks, thighs, abdomen and lesser wing-coverts are black, spotted with light blue, each spot outlined with darker blue. Each feather is narrowly edged with pale blue.

The secondary-coverts are black with lines of semi-confluent pale blue spots. The outer primaries are dark brownish black with two rows of small white spots on the outer web. The inner primaries have wavy lines of pale blue on the outer webs and oblique narrow wavy lines on the inner webs. The outer five secondaries are black with wavy pale blue longitudinal lines and broad white edges to the outer webs; the inner webs have interrupted wavy blue lines. The rest of the secondaries are black with longitudinal rows of pale blue spots, the spots on the outer webs are confluent, thus forming irregular lines. The tail is black, finely spotted with blue on the basal two-thirds of each feather.

The bill is greenish horn colour; the legs and feet leaden grey-brown.

#### JUVENILE :

The young in first feather is as follow :—The head is ochraceous buff, lined with black ; a central line commences at the base of the bill, passes back over the crown and at the top of the head widens out to form a large black patch on the hinder part of the crown and neck ; a narrow black line commences at the nostril and in the region of the lores divides into two—the upper line passing over the eye breaks up into a mottled superciliary stripe, the lower, skirting the upper border of the gape passes below the eye, to end in a mottled area in the region of the ear. The throat is pale buff, while the breast feathers and those of the flanks are blackish, widely edged with rusty and buff.

The feathers of the mantle and those of the wing coverts are rusty brown, lined on the outer web with black and margined with ochraceous. The secondaries are greyish, finely speckled with black, and tipped with pale buff. The primaries are greyish black, tipped with buff. The abdomen is greyish. Bill horn-brown. Legs and feet pinkish brown.

#### HABITS :

The breeding season of this species would appear to be little affected by the rainy seasons, as I have found young in the first dress in January, March, June, August and December, and eggs in January. Eight to ten eggs form a normal clutch. They are large and white, with a semi-matt surface with well marked pores.

The nest is a slight depression in the ground, sparsely lined with leaves and bits of grass, usually constructed under a bush or at the base of a large tree or below an overhanging rock or bank.

These birds are found in small flocks of a dozen or so individuals within the dense forests; they however frequently come out into the old deserted native forest clearings, especially towards the afternoon.

The food consists largely of insects, seeds and young shoots. They are also fond of small land molluscs, which they turn up when scratching among the leaves.

White-ants are eagerly sought after and it is when feeding on these that one comes across these birds on the edges of forests.

The Crested Guinea-Fowl is one of the shyest of the game birds, and in consequence, extremely difficult to procure.

Traces of these birds are frequently found; places where they have been scratching—or perhaps an odd feather or two lying about, but one can hunt a forest for weeks without ever seeing or coming across them. Occasionally if one is walking through a forest patch towards evening, one may be fortunate enough to catch a glimpse of these birds as they scurry across the path. Two calls are uttered

by these birds, one a low whistling trill, made while they are feeding, and the other, a loud, oft-repeated churring. They call mostly in the morning and again of a late afternoon.

Owing to the nature of the forests in which these Guinea-Fowl live, one can obtain but little sport with these birds. Hunting them with dogs is a method adopted by the natives and some such measure usually produces one or two birds, but even when treed, they give one little chance of good shooting. The only method of securing any sport with these birds, other than by using dogs, is to organise a drive in a limited area of forest, through which one or two rides have been cut. If a gun is stationed at these paths and the birds are driven and made to cross these clearings, it is possible to obtain a rapid right and left, but no more.

If a bird is winged and makes off into the dense undergrowth, pursuit is hopeless, unless one has a good dog. Even then, owing to the speed at which it runs, capture is not always a certainty.

There is another race of Forest Guinea-Fowl belonging to this group, which extends within the Kenya boundaries, this is *Guttera edouardi suahelica*, Neumann. B.B.O.C. XXIII., 1908, which, according to Chapin (Ref. Zool. Afr. Vol. XI., 1923) is doubtfully distinct from *G.e. granti*. It differs from *G.e. seth-smithi* in having less red on the bare throat and neck. The form extends into the forests of Nguruman, South Masai Reserve.

**Guttera pucherani.** Hartl. Curly Crested Blue-necked Forest Guinea-Fowl.  
Ref. Hartl. J.F.O., 1860.  
Type locality, Zanzibar (probably mainland).

Distribution: The forests along the Coast from the Juba to Vanga, inland to Taveta and Kilimanjaro, north to Kikuyu, Escarpment, and Ngong, and east to Mt. Kenia and N. Jubaland.

**DESCRIPTION: ADULT:**

Very like *G.e. seth-smithi*, Neum. in general colour, i.e., black with blue spots, but with the sides of the head, the chin, throat, and wattles at the gape, red in colour; the rest of the bare area, blue. There is no black collar on the lower neck, the blue spotted feathers continuing right up to the area of bare skin.

The black crest is closer and more curly than in the "black-collared" species.

A very pronounced deep fold of skin surrounds the back and the sides of the neck, passing forward and upwards to the commencement of the red area in front of the neck.

Long black hair-like feathers are present on the chin, cheeks and round the ear openings; while short hairs are scattered over the back of the neck.

The rest of the plumage resembles the Uganda Crested Guinea-Fowl.

#### JUVENILE:

The young in first feather resembles the young of a *G.e. seth-smithi* of a similar age, differing only in the colour and freckling on the wings.

#### HABITS:

These birds go to nest toward the latter part of the rainy seasons, December, and May to June. The eggs are large, white or creamy, with a dull surface and well marked pores.

During the nesting season, these birds are remarkably silent and even more retiring than at other times. Flocks are small and although the species is widely distributed, one seldom comes across them. They frequent the forests and areas along the coast where thick bush gives sufficient cover.

They are not as partial to the dense forest undergrowth as is the "Black-collared" species, and quite frequently one finds evidence of these birds along the more open margins of the forests; and in forests where there are wide breaks, one may on occasion catch a glimpse of a small flock, busy scratching amongst the fallen leaves, or having a sand bath.

In the coastal districts I have sometimes surprised these birds in long grass quite a distance from the nearest thicket, and my experience of the coast bird is, that they are not quite so retiring as these found in the heavy inland forests.

While feeding they utter a soft double note, repeated several times in succession, but the call usually heard is a loud rattling cry somewhat like the noise made by a "devils rattle." I have noticed that this is frequently uttered before a rain storm, and invariably when the birds are excited.

My experience has been that this species takes more readily to trees when flushed by a good dog than does the "Black-collared" species, but in spite of this they offer little chance of good sport.

NOTE: The birds from Jubaland are rather smaller than those from central and south Kenya, and the formation of the crest is different. They may possibly represent a distinct race.

## GENUS ACRYLLIUM.

### VULTURE-LIKE GUINEA-FOWL.

**Acryllium vulturinum.** Hardw. Vulturine Guinea-Fowl.

Ref. Hardw. P.Z.S. 1834. p. 52.

Type locality, probably East Africa.

**Distribution:** The thorn-bush country from Kilimanjaro to Ukambani north to the Northern Guasso Nyiro, westwards to north Karamajo and eastwards through the Northern Frontier to Jubaland.

#### DESCRIPTION: ADULT.

Head and neck devoid of feathers, except for a patch of short, velvety brown feathers in the region of the nape and extending on either side to the angle of the mandible. A few hair-like feathers are scattered over the lower and back part of the neck. The lower neck and upper breast are covered with long, black, hackle feathers, each with a wide white shaft stripe and broadly margined with blue. A line of glossy black feathers runs down the centre of the breast, gradually widening out to cover the whole of the abdomen. On either side of this black breast-streak, there is a large patch of blue supported on the flanks by white-spotted purple feathers, each white spot broadly outlined with jet black. The thighs are covered with white-spotted black feathers. The feathers of the mantle are elongate and slightly pointed, black in colour, very finely vermiculated with white, and with a conspicuous white shaft streak outlined in black. The scapulars and the majority of the wing coverts are black, finely vermiculated and spotted with white dots, irregularly outlined in black. Some of the scapulars have subterminal white shaft spots. The secondary and outer wing coverts are jet black with three lines on the outer webs and two rows of white spots on the inner webs. The primaries are brownish, with a few spots on the margin of the outer webs and bars of white spots towards the tips on the inner webs. The outer secondaries are black, edged with purplish on the outer web, followed by a slight freckling of white, and with lines of pure white parallel to the shaft. The mid-secondaries are conspicuously lined with white on the outer webs while the inner ones possess in addition, extremely fine white vermiculations.

The inner webs of most of the secondaries have three rows of dotted lines; in the outer secondaries, the white marks in this region assume the appearance of broken transverse bars. The rump feathers

are similar to those of the scapular region. The upper tail-coverts are black with small white spots surrounded with a white network. The tail is long and wedge-shaped, the central pair of feathers being markedly elongate and projecting far beyond the rest. In colour, the three central pairs resemble the upper tail-coverts, while the rest of the rectrices are black with small white spots. The under tail-coverts resemble the outer tail feathers in colour. The bill is greenish grey and the legs and feet brown-black. The naked parts of the head and neck are cobalt-blue.

The sexes are alike in colour. The female is smaller and does not possess the four or five tarsal knobs found in the male.

#### JUVENILE:

The newly hatched chick is covered in down of a sandy colour, immaculate on the chin, throat and undersurface of the body, but striped and spotted with black and dark brown on the dorsum. The crown is more rufescent, and is ornamented with black stripes, the three central ones coalesce in the hinder part of the crown, forming a black patch in this area.

In first feather the young retains the head colouration found in the chick. The feathers of the mantle, scapulars, the inner wing coverts are alternately barred with black, buff, and rufous, and tipped with buff. The secondaries and inner rectrices are black with bars of buff freckled with blackish and tinged with rufous towards the tips. The primaries are brown-black with bars of buff on the outer webs and tips. The outer rectrices are black with cross bars of buff.

The breast feathers are blackish, barred and fringed with pale buff. The flanks and abdomen are greyish, barred and tipped with pale buff. The feathers of the lower breast are washed with bluish. The bill is flesh-brown, and the legs and feet pinkish-brown.

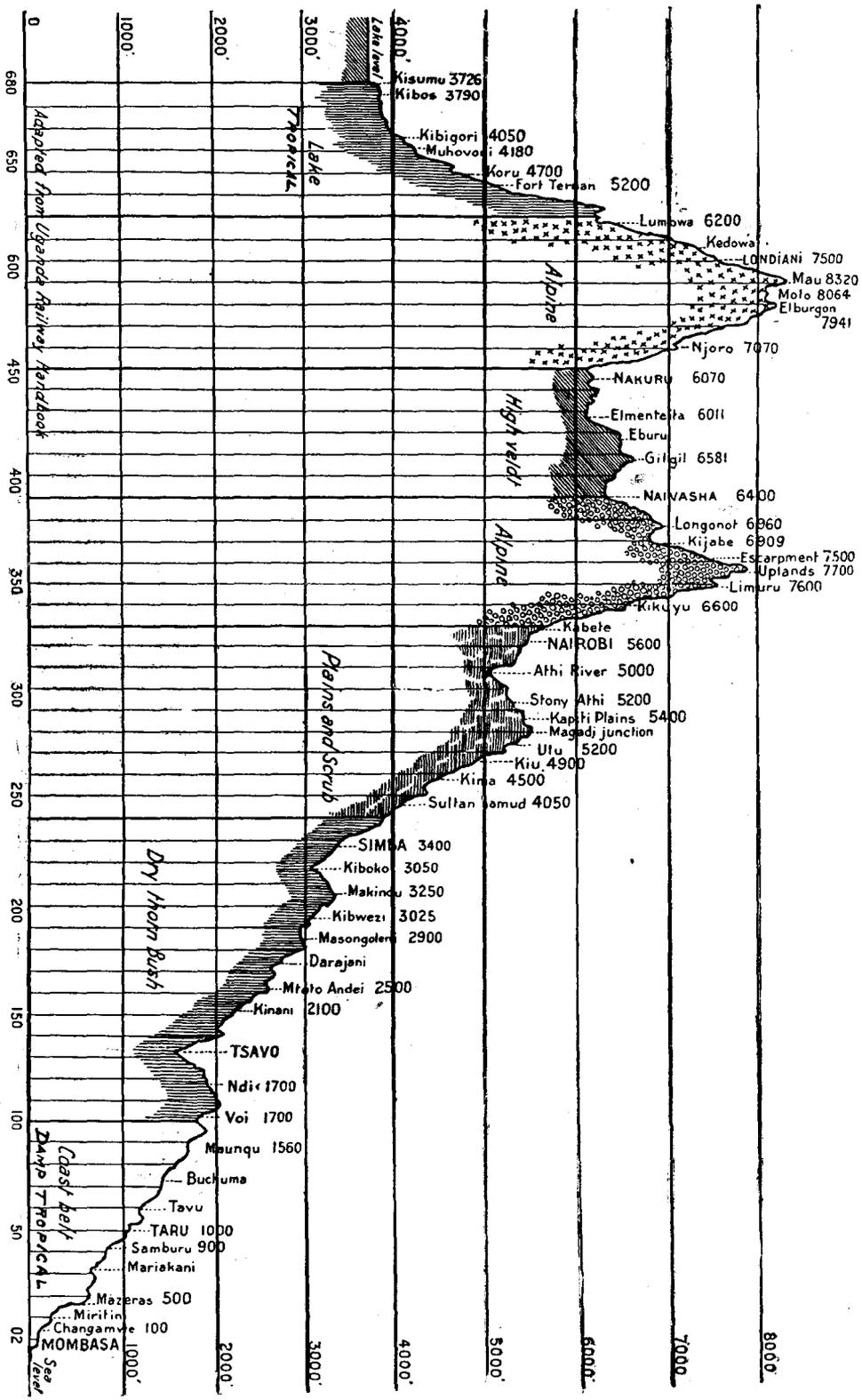
The second feathered stage represents a transition between the first dress and the adult plumage. The feathers of the lower neck are replaced with black and white hackles and the flanks become spotted with white.

#### HABITS:

The Vulturine Guinea-Fowl is associated throughout the whole of its range with wilderness and dry thorn-bush country; the Serengeti and Yatta plains, the Northern Guasso Nyiro and desert land of Jubaland. It is a strange coincidence that the most beautiful starling, *C. regius*, and the handsomest Guinea-Fowl should be inhabitants of the same desert country!

The species is exceptionally plentiful in certain parts of Jubaland and even in other parts of its distribution the flocks consist of scores of birds. The largest flock observed by me contained well over a hundred birds. In habits these birds do not differ from the ordinary "helmeted" species.

They are perhaps a little less inclined to wander far afield when out foraging, and as a result one has on occasion been able to keep more or less in touch with a particular flock throughout the whole day. During my wanderings in the Tsavo area I located a spot used by these birds as a "collecting" ground before going to roost for the night. The situation was ideally placed, for nearby there was a rocky hill, and from this eminence I could watch the birds congregating and observe them at their evening parade. The birds turned up long before sunset, and although belonging to one large flock they appeared in small batches of twenty or so. The nesting season was just about starting, and the time thus extremely favourable for observing the display of the males. Here and there one would see a fine male in brilliant plumage detach himself from the rest of the batch, and standing on a slight eminence, he would raise the upper part of his wings, keeping the tips close pressed into the body, the back and rump feathers being raised in between, and fully expand the tail. The legs would be brought close together, and drawing himself to his full height, he would take one or two short steps, first in one direction then another, and finally spreading the wings out he would launch himself into the middle of the nearest batch of birds. These birds, which had perhaps been peacefully preening themselves, would dart away in all directions, and taking a few hurried strides, would stop short, and wheeling round, return to the original place from which they were disturbed. Another male, dispensing with the advantage of a "setting" to his performance, having displayed his plumage, would rush at the nearest bird, and ducking under her, cause a wild leap into the air. These performances always ended with a general stampede of the rest of the birds. Each would scurry off for a few yards in one direction, and drawing up sharp, dart off another way, and finally, after a series of these spasmodic runs, quietly settle down, only to be rudely disturbed by some other excitable male. Right up to the last moment before flying up into the roost trees, these birds could be seen scratching in the ground in search of food. Seeds, roots, bulbs, green shoots and insects enter largely into their dietary and land molluscs are eaten with avidity. When the nesting time arrives, the breeding birds separate from the rest of the flock and wander off. At such times it is no uncommon thing to come across a pair or a single bird in the thorn-bush. The nest is of the usual guinea-fowl type, usually placed in thick grass protected by rocks or shrubs.



The eggs are large and oval, white or cream coloured, with a semi-glossy surface.

From a sporting point of view, Guinea-Fowl offer little excitement, and the Vulturine is no exception. / They take quite readily to trees when flushed, and owing to the nature of the thorn-bush they inhabit, one can occasionally obtain a few good flying shots as the birds break cover. The birds are not good flyers, and owing to the weight of their bodies they soon take to ground and trust to their remarkable running powers. A winged Vulturine is a lost bird unless a good dog is put on to trail it.