

AFRICAN ZOOLOGY:

By DR. SMITH.

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Genus ICHNEUMON. *Lacepede.*

Incisors $\frac{1}{2}$, *canines* $\frac{1}{4}$, *molars* $\frac{2}{3}$,—36. *Muzzle sharp, ears short and semicircular; body elongated; anal pouch large; feet with five toes, semipalmated; tail tapering towards the point; nails curved and sharp pointed.*

Viverra. Linnæus. *Mangusta*. Olivier, Cuvier. *Herpestes*. Illiger, Desmarest.

Ichneumon Pharonis. (Egyptian Ichneumon.) Hair on neck, back, sides, and base of tail, long; on head, lower parts of neck, breast, belly, extremities, and tail near the tip, short. Colour of head, back, neck, breast, belly, tail till near the tip, and extremities towards their roots, grey, freely pencilled with black, each hair being annulated with these colours; sides of body dirty reddish white, or greyish white, with less of the black pencilling; lower parts of extremities nearly an uniform pure black; soles of feet entirely bare; space round eyes and between them and nostrils, nearly bare, and of a black colour; eyes red; outsides of ears blackish brown, insides white pencilled with black. Tail very bushy towards root, tapering towards the point, which is tufted with a brush of long jet black hairs. Length from nose to base of tail twenty-eight inches; length of tail twenty-five inches.

Inhabits Egypt and South Africa—rather rare in the latter.

Viverra Ichneumon, Lin. *Syst. Nat.* p. 84. *Herpestes Pharonis*, Desm. *Mamm.* 213. *Mangouste*, Buff. xiii. *Nems and Pharaoh's Rat*, *Modern Egyptians*. *Commiche Muishond Cape Colonists*.

Var ?

Length from nose to base of tail eighteen inches; length of tail fifteen inches. From nose to tip of tail a narrow moderately distinct golden yellow stripe, and another on each side of the face, which diverges from the first, passes over the eye and terminates on the side of the head. In all other respects its characters precisely correspond with those detailed in the foregoing description.

Obs. The appearances exhibited by the teeth, prove, that the *single specimen*, which has supplied me with the means of furnishing this description had not attained the adult state, and in consequence I have not considered myself yet warranted in publishing it as a distinct species, under the name of *Ichneumon dorsalis*, as it is designated in my notes.

Ichneumon Caffer. (Grey Ichneumon.) Hair of head, throat, breast, and extremities, short; elsewhere rather long. Colour grey, finely and freely pencilled with black, the hairs being every where annulated alternately black and greyish white: whiskers black; eyes red; outsides of ears blackish brown, insides white, freely pencilled with black; extremities towards feet black, finely pencilled with white; soles of feet, behind, covered with hair. Tail rather larger near the root than at the tip; the latter inclined to a dull reddish-brown. Length from nose to base of tail seventeen inches and a half; length of tail sixteen inches.

Inhabits South Africa,—abundant in the Cape Colony.

Viverra Caffra, Gmel. *Syst. Nat.* 85. Le'Mems, *Buff. Sup.* t. iii. *Herpestes Griseus*, Desm. *Ency. Method.* Grey Muis-hond of the Cape Colonists.

Ichneumon Madagascarensis. (Madagascar Ichneumon.) Hair of head, throat, breast, belly, and lower parts of extremities short, that of the other parts longer. The colour of upper and lateral parts of head, and of lower parts of extremities brown-red, freely speckled with black and white; the upper and lateral parts of the neck, body, and the whole of the tail, speckled being black, brown-red, and pale reddish white, each hair annulated with these colours, which are darkest upon the back; throat, and lower parts of neck, pale tawny; breast, belly, and inner side of extremities, dirty pale rufous speckled with white; woolly hair yellowish white. Tail rather thick towards root, very slender at the point; outer surfaces of ears thinly covered with short brownish yellow hair; inner surfaces more thickly, with a dull tawny sort; whiskers black; nails dark horn-coloured. Length from nose to base of tail fifteen inches and a half; length of tail about fourteen inches.

Inhabits Madagascar.

Obs. This species, in point of size and form, has a considerable resemblance to the *Ichneumon Caffer*, but the colours are much lighter, and when the two are compared together, the various differences are very evident.

Ichneumon tenianotus. (Natal Ichneumon.) Hair of head, under parts of neck, and lower parts of extremities, short, elsewhere pretty long. Centre of face, forehead, crown, cheeks, and space between eyes, and ears, black freely pencilled with white; muzzle, upper and lower lips, and space under lower jaw, light chesnut; outer surfaces of ears brownish, inner surfaces dirty reddish white; back and sides of neck, shoulders, anterior parts of back and sides, and outer surfaces of anterior extremities, finely pencilled black and white; the rest of back and upper parts of sides, banded transversely deep black and

yellowish white or light yellow-brown; flanks and outer surfaces of hinder extremities towards body, pencilled dull black and yellowish white; lower parts of neck, breast, belly, and inner surfaces of extremities, yellowish white; lower parts of extremities black. Tail slender, thickest towards the root; for about two-thirds of its length, pencilled black-brown and pale ferruginous; last third, nearly an uniform black. Length from nose to base of tail fifteen inches; length of tail seven inches and a half.

Inhabits South Africa,—about Natal,—rare.

Ichneumon urinator, Smith. (Black Ichneumon.) Figure robust. Woolly hair grey-brown, and abundant; bristly hair black, freely pencilled with reddish white, and completely conceals the other hair; extremities, and last third of the tail, nearly an uniform black; sides of muzzle reddish brown, pencilled with black; whiskers, and bristles on the eyebrows and chin black; lower lip inclined to white, outer surfaces of ears black; inner surfaces brownish; soles of feet bare; claws dark horn-coloured. Tail moderately thick at base and tapering to the point. Length from nose to base of tail twenty-two inches; length of tail sixteen inches: height at shoulder eight inches, at rump nine inches and a half.

Inhabits South Africa,—common.

Mangusta Urinatrix, Smith, *Zoological Journal*, vol. iv. p. 437.
Mangusta paludinosus, Cuv. *Reg. Animal*, Ed. ult. t. 1. p. 158.
 Zwarte Muishond of the Cape Colonists.

Ichneumon albicaudis, Smith. (White-tailed Ichneumon.) General colour white-grey freely variegated with black. Woolly hairs soft and abundant; white grey towards surface, blackish towards body. Bristly hairs long, and coarse, annulated black and white towards roots, all black towards tips, particularly on the middle of the back and anterior and outer surfaces of hinder extremities towards body. Hair of head, of anterior extremities, and lower parts of posterior extremities, short; nose black, sides of muzzle reddish brown, pencilled with black; outer surfaces of ears brownish, pencilled with white; inner surface whitish; anterior extremities black, pencilled towards body with white, on their inner and posterior surfaces; lower portions of hinder extremities, black, with a whitish stripe behind. Tail very bushy towards root, slender towards point. The hairs of the first fourth of its length have the black annuli predominating, in the middle portions the white is most abundant, and the black is only seen through it; towards the tip they are entirely white. The greater part of the soles of the feet, particularly of the hinder ones, covered with hair; nails black: muzzle slightly curved upwards. Length from nose to

base of tail twenty-two inches; length of tail eighteen inches height at shoulder ten inches, at rump nearly twelve inches.

Inhabits South Africa,—rare.

Obs. This animal stands higher on its limbs than the typical species of the genus, its figure is shorter and more robust, and its teeth exhibit a slight difference in form, and are not so closely set as in the true *Ichneumons*. This peculiarity in addition to the state of the soles of the feet, may, when its manners and habits are better known, require it to be separated from the present genus.

Ichneumon Galera. (The Vansire.) Hair short; woolly hair brown; bristly hairs brown at their bases, elsewhere narrowly annulated black and reddish; nose sharp pointed; incisors $\frac{6}{5}$, canines $\frac{11}{11}$, molars $\frac{6}{5}$,—38. Length from nose to base of tail thirteen inches; length of tail nine inches and a half; the trunk only seven inches.

Inhabits Madagascar.—Guinea? Mauritius, *Griffith*.

Mustela Galera, Gm. *Syst. Nat.* i. 95. *Herpestes Galera*, Desm. *Mam.* 212. Vansire, Buff. xiii. Mangouste Vansire, Geoff. *Mem. de l'Institut de l'Egypte.* Madagascar Weasel, Pennant, ii. Vohangshira of Madagascar.

Obs. Mr. Verreaux is in possession of the skin of a small animal of Madagascar, which, when its osteology shall be known, will probably form the type of a genus near to the *Genets*. It is impossible to arrive at a certainty as to the natural form of the head, but the ears and feet are pretty perfect; the former are about an inch long, rather narrow and pointed;—the latter have a little resemblance to those of the *Ichneumons*. The color of the head and neck is a reddish brown, finely and freely pencilled with reddish white, each hair being annulated with that colour. The body, extremities, and tail, deep clear maronne, the latter with four black rings, the last close to the point. Length from nose to base of tail seventeen inches; length of tail eleven inches.

Genus CYNICTIS. *Ogilby.*

Incisors $\frac{6}{5}$, canines $\frac{11}{11}$, molars $\frac{6}{5}$,—38. The three anterior molars of each side of both jaws spurious, the fourth carnivorous, the others tubercular. Ears short and rounded; fore feet with five toes; hinder ones with four; nails curved, pointed, and furrowed beneath; soles of the feet partly covered with hair; tail very hairy, flattened horizontally.

Cynictis typicus. (Steadman's *Cynictis*.) Colour yellowish red, passing to chesnut, darkest along the middle of the back; the hairs every where, but particularly those of the upper parts of the head, cheeks, upper and lateral parts of the neck, and the sides annulated with reddish white, the base of each hair blackish: the under and lateral parts of tail, lighter coloured; tip of tail whitish; margins of lips, and space below lower jaw, inclined to white; whiskers black; eyes brown-red; nails dark

horn-coloured. Length from nose to base of tail eighteen inches; length of tail about twelve inches.

Inhabits South Africa.

Mangusta Levaillantii, Smith, *Zool. Journal*, No. xvi.
Mangusta, penicillata, Cuv. *Reg. Animal*, 2d ed.

Obs. This little animal is very common in the eastern districts of the colony, and in 1826 was labelled in the South African Museum, by me, as *Le Vaillant's Mangouste*. Mr. Ogilby however has the merit of having discovered peculiarities in its structure which required it to be made the type of a new genus, and he will doubtless be pleased to know that its manners and habits are in support of the propriety of the separation. The advantages of effectually commemorating the type of a genus, has induced me in this instance, as well as in many others, to substitute for the specific name applied in the first instance, one, which if continued, will readily effect it.

Cynictis Ogilbyii, Smith. (*Ogilby's Cynictis.*) Colour of upper and lateral parts a sort of pale ochre yellow pencilled finely and freely with black and dull white, particularly on the head, upper parts of neck, shoulders, sides of body, and outer surfaces of hinder extremities towards body; upper lip, lower parts of cheeks, and neck, dull white; breast, belly, and insides of extremities, ochry white; outer surfaces of ears principally black-brown, inner surfaces pale tawny; whiskers and nose black. Tail bushy towards base, tapering towards point; upper surface towards base ochre coloured, middle parts tawny clouded with black, from each hair having a broad ring of that colour towards its tip; point, sides, and under surface, yellowish white: nails dark horn-coloured. Length from nose to base of tail twelve inches; length of tail ten inches.

Inhabits South Africa,—The Bushman flat and northern parts of Graaff-Reynet district.

Obs. It might with justice and advantage be established as a rule, that the second species discovered should bear the name of the individual who indicated the genus.

GENUS RYZAENA. *Illiger.*

Incisors 3, *canines* $\frac{1}{1}$, *molars* $\frac{2}{2}$,—36. *Upper jaw*—first and second molars *spurious*; third *quadricuspidate*, three points on the outer and one on the inner edge; fourth and fifth *tubercular*, two tubercles on the outer and one on the inner side. *Lower jaw*—first and second *spurious*, third and fifth *tricuspid*, fourth *quincuspidate*. *Muzzle* prolonged beyond the jaws; ears short and rounded; feet with four toes; nails formed for digging; anal pouch large.

Ryzaena typicus. (The Meerkat.) Face, upper parts of head and neck, anterior part of back, and shoulders, greyish white freely pencilled with black; rest of back with waved transverse bands alternately black and tawny or tawny white;

sides of body dull tawny white; sides of head and under parts of neck, whitish; breast and belly, pale tawny white; extremities dull white with fulvous tinges; sides of muzzle and upper lip, whitish; whiskers, bristly hairs of cheeks and eyebrows, black; outer surfaces of ears whitish, the margins black; inner surfaces, and spaces round eyes, deep black; lower portion of muzzle dull red-brown. Tail fulvous towards base, pencilled with black; subferruginous pencilled with black towards middle, and brownish black at the tip; nails dark horn-coloured. The woolly hairs on the neck, back, and sides, very abundant, blackish towards bases, fulvous towards tips, which tint in many places shines through the bristly hairs; the latter are annulated with four rings alternately black and white; the last, or tip one, very black. Length from nose to base of tail twelve inches; length of tail eight inches.

Inhabits South Africa.—About Lake Tchad, *Denham*.

Viverra tetradactyla, Lin. *Buff. Nat. Hist.* xiii. *Ryzaena*, Illig. *Prod. Suricata Capensis*, Desm. *Mam.* p. 214—330. Meer Kat of the Cape Colonists.

Genus HYÆNA.

Incisors $\frac{2}{2}$, *canines* $\frac{1}{1}$, *molars* $\frac{4}{4}$,—34. *Upper jaw*,—three conical false molars; one very large, strong carnivorous tooth, with three edges on the outer side, and a small tubercle within; fifth, small and tuberculous. *Lower jaw*,—three false molars; carnivorous tooth bicuspidate and without the tubercle on the inside. *Head* short and very broad; *tongue* aculeated; *ears* moderate; *feet* with four toes; *nails* not retractile; a glandular pouch over the anus.

Hyæna vulgaris. Desm. (The striped Hyæna.) Hair coarse, rough, and pretty long; on the back of the neck and middle of back longest, where it forms a distinct mane, some of the hairs of which, towards the tail, measure from eight to nine inches. General colour yellowish grey with transverse black stripes on the sides and extremities, those of the latter very numerous and darker coloured than the others; the hairs of the mane are grey tipped with black; muzzle and outer surfaces of ears violent brown; some black spots above and below the outer angles of eyes. Throat black; breast, belly, and inner surfaces of extremities, yellowish, spotted with brown. Tail very hairy, of a grey colour with brown tints. Length from nose to base of tail about three feet two inches; length of tail about nine inches.

Inhabits Barbary, Egypt, Abyssinia, Nubia, and Asia.

Canis Hyæna, Lin. *Hyæna vulgaris*, Desm. *Mam.* Foadh. Shaw's *Travels in Barbary*. Abyssinian Hyæna, Bruce's *Travels*. *Hyæna of the Ancients*.

Hyæna maculata, Thunberg. (Spotted Hyæna.) Muzzle and nose black; forehead, crown of head, sides of muzzle, and face before eyes, finely speckled with brownish red or black-brown; out surfaces of ears covered with a short tawny hair; inner surfaces, and lateral parts of head, about and below the ears, yellowish white; upper and lateral parts of neck, back, and sides, pale fulvous or whitish tawny, variegated by black or dull brownish somewhat circular spots; outer and anterior surfaces of extremities have the ground colour rather paler and the spots commonly darker; lower part of head, throat, breast, belly, and inner surfaces of extremities, dull white; the belly with some dusky spots. Tail fulvous towards root, with some black spots on its upper surface; the last two-thirds deep black, and the hair very long, which is not the case on the first third. The hair on the back of the neck and between the shoulder is longer than on the other parts of the body, turned forwards, and forms a sort of reversed mane. Length from nose to base of tail four feet four inches; length of tail sixteen inches: height at shoulder about two feet six inches, at rump about two feet two inches.

Inhabits South Africa,—common every where.

Mem. de l' Acad. de Petersb. iii. 308. *H. maculata*, Tem: in *Ann. General de Phys.* iii. 53. *Hyæna Crocuta*, Zimm. *Geogr. Gesch.* ii. 256, 149. *H. Tachetée*, Cuv. *Ossem. Fossil.* iv. p. 385. *Hyæna Capensis*, Desm. Tiger Wolf of the Cape Colonists.

Obs. The tints of the colours vary with age and season; sometimes the ground colour in young individuals is whitish instead of pale fulvous, the spots are deep black, and the under parts quite black: in still younger ones, the spots are often not distinct; the surface exhibiting rather a brindled appearance; and in very young ones the fur is of a very dark dull slate colour, verging towards black.

Hyæna fusca, Geoffroy. (Fuscous Hyæna.) Hair long and shaggy, particularly on the back of the neck, the body, and tail. Muzzle pale red-brown; forehead, crown, and lateral parts of head, reddish white pencilled with black; chin, upper part of throat, and cheeks, in a great measure black; ears pointed, their outer and inner surfaces with a thin sprinkling of reddish yellow hair; eyes dark brown; neck dirty white-yellow or pale tawny, with a few of the hairs of its upper surface annulated with black. Colour of body variegated tawny or reddish grey, and brown or blackish brown; the latter so disposed as to give the appearance of stripes or spots of that hue on the sides; some of the hairs are entirely tawny, but most of them are only of that colour towards their bases and blackish brown towards and at the points; outer surfaces of extremities towards body, principally black; lower parts of ex-

limbs yellowish white, with numerous deep black transverse bands, which nearly form rings, being only slightly interrupted on the inner surfaces. Feet whitish yellow; tail above, deep black; beneath, except towards tip, reddish yellow; nails dark horn-coloured. Length from nose to base of tail three feet ten inches; length of tail thirteen inches: height at shoulder two feet four inches, at rump about two feet.

Inhabits South Africa—not so abundant as the preceding.

Collect du Mus. H. brunnea, Tem. *Acad. de Stoch.* 1820, 1 part, pl. 2. Hyæna villosa, Smith, *Trans. Lin. Society*, vol. xv p. 462. Strand Jut, or Strand Wolf, of the Cape Colonists.

Genus FELIS. *Linnæus.*

Incisors $\frac{3}{1}$, *canines* $\frac{1}{1}$, *molars* $\frac{4}{4}$, or $\frac{3}{3}$.—30 or 28. *Upper jaw*—two first molars spurious, conical, and strong; third with three lobes and a small tubercle, which is wanting in some species; fourth nearly flat. *Lower jaw*—two first spurious. *Head* round; jaws short; tongue aculeated; ears triangular, and more or less pointed; pupils circular or vertical; anterior extremities with five toes; hinder ones with four.

Felis Leo. (The Lion.) *Male.* The upper parts of the head, the chin, neck, shoulders, and belly, covered with a long shaggy blackish brown and tawny hair; on the other parts of the body, the extremities, and tail, the hair is short, of a tawny yellow colour, darkest on the back, and finely pencilled, particularly on the tail, with dull black; the point of the latter is tufted, and of a brown-black colour. The outer and inner surfaces of the ears tawny; the hairs about the base of the former, long, black, closely applied to ears and projecting beyond their margins. Eyes yellow, pupils circular; under parts of hinder extremities a uniform pale tawny; each claw concealed by a tuft of blackish hair. Length from point of nose to base of tail about six feet; length of tail about thirty-four inches: height at shoulder three feet six inches, at rump about three feet two inches.

The female is smaller and without any appearance of a mane. The young are dull tawny pencilled with black, and more or less striped and spotted with the same colour; no tuft at the point of the tail.

Inhabits Africa.

Obs. The description given is that of the South African Lion. That which inhabits Senegal and Guinea is said to be smaller, and the male to have a mane of a much lighter colour. In Griffith's translation of Cuvier's Animal Kingdom, it is stated, that "Major Smith has lately been informed by Professor Kretschmen of Frankfort, that he was in expectation of receiving from Nubia the skin and jaws of a new species of Cat, larger than the Lion, of a brownish colour, and without mane."

Felis Leopardus. (The Leopard.) Ground colour of upper and lateral parts of head and neck, back, sides, and outer surfaces of extremities, tawny or tawny white, inclined to fulvous, or even in some specimens to clear red-brown on the back; the chin, neck, breast, belly, and insides of extremities, white or whitish. The forehead and sides of the head freely mottled with small blackish spots; the neck, anterior part of back, shoulders, belly, and extremities, similarly variegated: the spots on outer surfaces of thighs and shoulders much the largest, those towards feet small. Middle of back marked with closely set spots of an oblong form, and the sides with small ones disposed in irregular circles, each of which is distinct from the others around it, and has the centre of a darker tint than the prevailing ground colour. Centre of face tawny freely pencilled with black but not spotted; lower part of muzzle reddish white, and behind each nostril a short longitudinal black stripe; edges of upper and lower lips, towards angles of mouth, black, the rest of the upper, tawny white with three narrow continuous or spotted black lines over the whiskers; the latter white intermixed with a few black bristles. Eyes fine yellow; outer surfaces of ears black with a transverse fulvous blotch near tips; some of the spots on the lower part of the neck run more or less into each other, and form something like two transverse stripes, one at commencement of breast and another about half-way between that and the chin. Tail closely set with large irregular black spots, which, on its upper surface, are separated by narrow fulvous lines, and below by white ones; towards tip it is white beneath, and above indistinctly annulated black and white; the tip itself is black. Claws yellowish white. Length from nose to base of tail about four feet ten inches; length of tail two feet eight inches.

Inhabits Africa and India,—not uncommon in South Africa.

Lin. *Syst. Nat.* Gm. i. p. 77. *Felis Leopardus*, Cuv. *Ann. du Mus.* xvi. p. 148. *tab.* 16. *Felis Pardus*, Thunb. *Mem. de l'Acad. de Petersb.* iii. p. 30-3. *Tiger of the Cape Colonists.*

Obs. It is difficult to find any two individuals of this species which exactly resemble each other. The ground colour is subject to considerable variation, not only in the different sexes but even in the same sex at different ages and at different times of the year. The spots are also found to vary in appearance and number, and the tail has seldom the colours arranged in the same way in any two specimens. The female as met with in South Africa is commonly about a third smaller than the male, with the ground colour generally darker, at least upon the back and upper portions of the sides. The occurrence of such discrepancies may probably have given rise to the establishment of more species than actually exist in nature, and when the *Felis Leopardus*, *F. Pardus*, and *F. Pardus Antiquorum*, are compared together with attention, and the variations to which the first is known to be subject, be kept in view, it will probably be admitted that they are not three species,

but one species. In the *Regne Animal*, tom i. p. 161, it is stated, that the *Felis Leopardus* is like the *Felis Pardus*, with the exception that it has ten instead of six ranges of black spots in the form of roses upon each flank, and of a smaller size.

Felis jubata, Liu. (The Hunting Leopard.) Colour ochry yellow studded with small black round spots, varying in size but largest on the back and outsides of thighs; belly and insides of extremities inclined to white. The hair of the back of neck and anterior part of back, rather long, and forms a small mane; between the eye and angle of mouth a black stripe; each ear with a transverse black bar towards the middle of its posterior surface, inner surface whitish. Tail fulvous above, whitish beneath, towards root spotted with black, towards point annulated alternately with black and white; the point itself white. Body slender; legs very long; claws semiretractile. Size about that of a greyhound.

Inhabits Africa and India,—rare in South Africa.

Jagaur, Buff. Hunting Leopard, Penn. *Quod.* 1. 234. Luipaard of the Cape Colonists. 'Nkwi and Nkwane of the *Bachapins*.

Felis serval, Lin. (The Serval.) The upper and lateral parts of head, the neck, back, shoulders, and extremities, fawn coloured; sides pale tawny; chin, anterior part of throat, breast, belly, and insides of extremities, whitish. The hinder parts of head, neck, and more or less of the back, variegated with four narrow longitudinal black stripes; the rest of the body and extremities rather thickly studded with black spots, principally of an oblong shape, those on the latter towards the body form irregular, interrupted rings; towards feet the spots are very small; cheeks and forehead mottled with small black spots, and a continuous or interrupted narrow stripe of the same colour extends from the middle of each eyebrow and joins the outermost stripe of hindhead. Immediately before each eye a black spot, and on each side of muzzle, close to nostrils, a short blackish stripe; centre of muzzle without variegations; upper lip tawny white, with its margin towards angle of mouth black; outer surfaces of ears fawn coloured at base, black in the middle, then white, the tips black; inner surface pale tawny white; eyes yellow; outer edge of posterior surface of hinder extremities towards feet, blackish. Tail fawn coloured above, whitish beneath; towards root irregularly spotted with black, towards tip annulated with that colour, the tip itself black. Length from nose to base of tail three feet; length of tail eleven inches,

Inhabits South Africa.

Felis serval and *Capensis*, Lin. *Felis Capensis*, Thunb. *Mem. de l'Acad. de Petersb.* tom iii, p. 304. 'Tyger-bosch-Kat, Cape Colonists.

Felis nigripes, Burchell. (Latakoo Cat.) Colour tawny or light brown ochre, fainter on the under parts of the body: everywhere mottled with black spots, rather long than round; a few of those on the back of the neck are sometimes elongated into stripes; while those on the fore part of the shoulders join and form very black transverse stripes, of which, several surround both the fore and hind legs. The marks on the lower parts of the body are extremely black, and the under parts of the feet are the same. Tail of the same colour as the back, and confusedly spotted, at least to four inches from its base, no where annulated. The top of the head is of a darker colour than the body; ears ovate, obtuse, and of an uniform grizzled dark brown, covered with very close short hairs; the anterior edge furnished with upright white hairs as long as the ear itself; hair over the eyes whiter; whiskers white. Size of the domestic Cat.

Inhabits Southern Africa,—about Latakoo.

Burchell's *Travels*, vol. ii. p. 592.

Felis Caffra, Desm. (Caffer Cat.) The surface colour of the upper and lateral parts of this species varies a little in different specimens, but is generally a mixture of pale tawny, greyish white and dull black, intimately blended together; on the sides some of the latter colour is so disposed as to give an appearance of many obscure transverse dusky stripes. The under parts of the neck, the breast, belly, and inner surfaces of hinder extremities, pale tawny pencilled with white. Lower parts of muzzle pale rufous; upper lip pale tawny blended with white; eyebrows and cheeks whitish, the latter crossed by two oblique reddish brown stripes; under each eye two short indistinct brownish transverse stripes; eyes yellow, and in front of each a small brownish black spot; beard white, some of the bristles black towards their bases; under lip and chin white; outer surfaces of ears rufous pencilled towards their bases with white and tawny, the tips slightly with black; inner surfaces reddish white. Outer surfaces of extremities towards body with a few deep black transverse stripes; lower portions of the anterior ones spotted with brownish black; the same parts of the posterior ones scarcely spotted; the hinder surfaces of all the feet deep black. Tail for the greater part of its length above, black slightly pencilled with grey, beneath, pencilled grey and black, towards tip grey with two or more complete black rings; the tip itself black. The woolly hairs on the top of the head are dusky black, on the body blackish towards their bases, fawn coloured towards tips; bristly hairs black, most of them annulated with greyish white. A few particularly on the hinder part of back and tail entirely black.

Length from nose to base of tail about two feet; length of tail thirteen inches. Height about ten inches.

Inhabits South Africa.—Abyssinia, Bruce.

Felis caligata, Tem. *Monogr. de Mamm.* p. 123. *Felis undata*, Desm. *Nov. Dict. de l'Hist. Nat.* vi. young? Cuv. *Ossem. Fossil.* iv. 435. adult. Wilde-Kat of the Cape Colonists.

Felis Obscura, F. Cuvier. Fur of a very deep brown black with numerous transverse stripes entirely black.

Inhabits South Africa,—rare.

Chat noir du Cap. *Dict. des Sciences Naturelles*, tom viii.

Felis maniculata, Cretzschmar. (Small-footed Cat.) Woolly hair, a dirty ochre colour, darkest on the back and hinder parts; bristly hair black-brown, annulated with dirty white; skin of lips naked and black like the nose; bristles of beard and eyebrows glittering white, and brown at their roots; extremity of muzzle a dark ochre colour; eyes fiery yellow, and from the inner corner of each a dark stripe extends towards the nose, each of which is margined on its inner side by a white stripe, which extends to the eyebrows; space between the latter as far as forehead, fulvous; outer surfaces of ears grey, inner white; crown marked by eight narrow undulated black lines which extend along the hindhead and are lost on the neck. Cheeks, throat, and fore part of neck, shining white; the former crossed by two ochre-coloured lines which unite below the ears; the neck is surrounded by two similar coloured rings, and is also marked by spots of the same tint; breast and belly white, mottled with yellow spots; along the back a dark stripe which arises at the shoulders and loses itself on the upper surface of the tail; lower surface of tail whitish yellow, and at the point it is surrounded with two black rings. Extremities of the same colour as the body; the fore ones with five transverse black bands, the hinder ones with six distinct transverse stripes which extend round to the inner sides; each of the fore legs with two large black blotches on the inner surface; the soles and back parts of feet, clear black. Length from nose to base of tail twenty inches; length of tail nearly nine inches and a quarter: height at shoulder nine inches and a half, at rump ten inches and three quarters.

Inhabits Nubia, and the western side of the Nile, near Ambukol.

Felis Chaus, Guildenstadt. (Short-tailed Cat.) Woolly hair soft and very abundant; bristly hair thin and rough; the former dirty ochre yellow, darkest on the back; the latter similarly coloured towards body, each hair annulated towards its middle with black-brown, the tips in general grey-yellow

white, or saffron yellow, producing a variegated surface-colour of grey-yellow and white. Many of the bristly hairs have black points, and form on the sides of the belly, where many are connected, very faint perpendicular or undulated stripes and isolated spots. The bristly hairs of the back have light ochre or almost yellow coloured points, and form between shoulders and tail a yellowish stripe, which is most distinct along the course of the back bone. Nose black; above and under each eye a white spot; from inner corner of eye a black stripe extends towards the nose; edges of lips black, the other parts thereof white; bristly hairs of eyebrows, checks, and beard, white; amongst the latter a few black ones. Insides of ears margined on anterior edges with whitish yellow hair; outsides, greyish brown, passing to brown towards tips; the latter surmounted by a tuft of black hairs half an inch in length. Cheeks, under-jaw, throat, neck, and breast, ochre coloured; belly, whitish yellow, mottled with dark patches. The outer surfaces of anterior and posterior extremities, the colour of the body, with four or more dark transverse bands; inner sides of extremities yellow, with a large round black spot on each of the fore ones; feet ochre yellow, black behind. Tail cylindrical and greyish, point obtuse and black, with two black rings near to it, which are separated by whitish rings. Length from nose to base of tail two feet one inch; length of tail eight inches; height at shoulder fourteen inches and a half, at rump nearly fifteen inches and a quarter.

Inhabits Egypt, along the banks of the Nile,—common in Persia.

Felis Caracal, Lin. (The Caracal.) The upper parts of the head, the neck, the back, sides, outer surfaces of extremities, and tail, bright fawn coloured or wine red, pencilled freely with dull white, each hair being tipped with that colour; the chin, the fore parts of neck adjoining it, the breast, and belly, white; the inner surfaces of extremities tawny white; eyebrows reddish white; anterior parts of upper lip close to nose, and angles of mouth, white; middle portions blotched with black: beard, a mixture of black and white bristles. Eyes fine yellow; ears black without, pencilled with white; within, whitish, and each tipped with a slender tuft of black hair about two inches in length. Tail cylindrical, and with a few of the hairs at its point, principally reddish brown. The bases of most of the hairs on all parts of the animal inclined to white; the ground colour commonly darkest on the head, middle of back, and shoulders. Length from nose to base of tail three feet two inches; length of tail twelve inches. Height about nineteen inches.

Inhabits Africa and Asia,—not uncommon near the Cape of Good Hope.

Lugx, Aristot. *Hist. Anim.* 11. c. 7. n. 31. Caracal a long queuc, Buff. *Supp.* Felis Caracal. Cuv. *Ann. du Mus.* xiv. p. 154 Thunb. *Mem. de l'Acad. de Petersb.* 111 305 Roode-Kat of the Cape Colonists.

Genus OTARIA. Peron.

Incisors $\frac{1}{2}$, *canines* $\frac{1}{2}$, *molars* $\frac{2}{3}$.—36. Crowns of molars with one principal conic point and a little conical lobe before and behind it. Head short and broad; external ears distinct.

Otaria Peronii, Desm. (Peron's Sea-Bear.) Above, the surface colour is very obscure red-grey or dull iron-grey, lightest on the head and posterior part of back; the under surface of neck and breast the same colour with an indistinct greenish tint; belly inclined to rufous; extremities rufous; upper lip and space immediately behind angles of mouth, dull white. Through the red-grey a darker tint is visible and the hairs when reversed, or otherwise separated, are found to be whitish towards their bases, blackish in the middle and reddish grey at the points; the woolly hair is a pale smoky brown. The membrane connecting the toes of the fore feet slightly scolloped at its anterior termination; the extremities of the toes with rudimentary nails; the membrane of the hinder feet terminated in five lobes, and all the toes armed with nails, the three middle ones most distinct. Length from nose to base of tail about eight feet; length of tail about five inches.

The young of this species when between two and three feet in length, is nearly quite black.

Inhabits the seas about the Cape of Good Hope.

Phoca pusilla, Lin. ? *P. Peronii*, Bodd. *Elem.* Petite Phoque, Buff. Sea Dog of the Cape Colonists.

Obs Perhaps the *Phoca pusilla* of Linnæus may be the young of this species, and if so, the name ought to stand *Otaria pusilla*, instead of *Otaria Peronii*.

ORDER RODENTIA.

Two large incisors in each jaw, separated from the molars by a vacant space, the canines being wanting; molars with flat crowns or blunt tubercles. Lower jaw articulated by a longitudinal condyle; orbits not separated from the temporal fossæ; zygomatic arches small; toes variable in number, unguiculated; stomach simple; intestines long; cæcum large.

FAM. SCIURIDÆ.

Genus SCIURUS. Linn.

Incisors $\frac{2}{3}$, *canines* $\frac{1}{3}$, *molars* $\frac{1}{3}$.—22. Upper incisors flat in front and wedge-shaped at their points; the lower pointed

and laterally compressed; molars with tubercular crowns. Ears erect; eyes large; anterior feet with four long toes and a tubercle instead of a thumb; posterior with five long toes, all furnished with crooked nails. Tail long, villous, and flattened horizontally, or round; two pectoral and six ventral teats.

Sciurus Madagascarensis, Shaw. (Madagascar Squirrel.) The upper parts of the head and neck, the back, tail, outer surfaces of extremities, and all the feet, deep black; the cheeks, under part of neck, breast, and inner surfaces of anterior extremities, yellowish white; belly, and inner sides of hinder extremities, brown mixed with yellow. Tail distichous. Length from nose to base of tail seventeen inches; length of tail about eighteen inches.

Inhabits Madagascar.

Shaw's *Zoology* ii. part 1. 128. *Ecureuil de Madagascar*. Buff. *Hist. Nat. Supp.* vii.

Sciurus Abyssinicus. (Abyssinian Squirrel.) Rusty black above; belly and fore-feet grey. Length from nose to base of tail about two feet.

Inhabits Abyssinia.

Obs. Authors appear to consider this animal, described by Thevenot, as not a well established species of Squirrel.

Sciurus Getulus, Gmel. (Barbary Squirrel.) The head, the upper parts of the body, the legs, feet, and tail, ash coloured, inclining to red, darkest upon the upper parts of the head and back; on each side are two white or cream-coloured stripes which extend from the shoulders to the hinder legs; belly white; eyes large, and surrounded by a circle of whitish hairs. Tail bushy, each hair annulated with light and dark ash colours, which tints are so disposed as to produce a sort of striped appearance; nails black. Length from nose to base of tail about eight inches; tail nearly the same.

Inhabits Barbary, and Northern Africa.

Barbarian Squirrel, Edward, *pl.* 198. White-striped Squirrel, Penn. *Quad.* ii. 150. *Barcque*, Buff. *t.* x.

Sciurus Cypensis. Thunb. (African Ground-Squirrel) The face, the upper parts of the head, the upper and lateral parts of neck, the back, the upper half of the sides, and the outer surfaces of the extremities subferruginous, slightly pencilled with white which arises from some of the hairs being annulated with that colour; sides of head, under parts of neck, breast, belly, lower parts of sides, and inner surfaces of extremities, dull white; whiskers black; external ears scarcely distinguishable; a brownish red stripe under each eye; the eyebrows and sides of muzzle inclined to white, and a narrow distinct white stripe

extends from each shoulder to within about an inch and a half of the tail, about half an inch above where the subferruginous colour terminates on the sides. Upper surface of tail near its root with short hair of the same colour as the body, elsewhere the hairs are long and directed towards the sides, or distichous, white at their bases, black in the middle, and white at the tips: thus the centre portion of the upper and under surfaces appear black and the edges white. Rudimentary thumb of anterior extremities with a flat nail; the toes with long, strong, slightly curved, dark horn-coloured nails. Hairs of the head and body short, rigid, and of a bristly character. Length from nose to base of tail eleven inches; tail the same length.

Inhabits South Africa.—Senegal. ? Central Africa, *Denham*.

Sciurus Erythopus, Geoff. *Coll. du Mus.* *Sciurus Albovitatus*, Desm. *Nouv. Dict.* and *Hist. Nat.* x. 110. *Agimump of the Hottentots.*

Obs. When we are better acquainted with this species we will doubtless find that it will require to be separated from the true Squirrels. In my notes it stands as the type of a genus designated *Geosciurus*, yet I do not feel myself at present warranted in publishing it under that name. I have never had an opportunity of observing it in its natural haunts, but I have been informed by persons who have, that a great number of individuals live together, and that where such families occur, numerous holes exist in the ground, and in these they reside, unless when in search of food, or enjoying the warmth of the sun. And when occupied in either of these ways they retreat with the utmost rapidity into their subterranean habitations upon the slightest alarm, and do not venture out again until the object of their fears is no longer to be discovered. They feed principally upon roots, which they dig out of the earth by means of the long and strong nails with which their toes are armed.

Sciurus Poensis. (Fernando Po Squirrel.) Surface colour of the upper and lateral parts of the head, neck, and body, and of the outer sides of the extremities, a yellow green freely pencilled with black, particularly on the back; upper and lower lips, chin, throat, breast, belly, and inner sides of extremities, yellow. Tail nearly cylindrical; hairs at the point long, elsewhere considerably shorter, each annulated alternately black and greenish yellow; all the tips black. Ears rounded, and both surfaces thinly covered with a fine short greenish yellow fur; whiskers black; front teeth a pale orange colour. The yellowish green of the upper parts is produced by all the hairs being marked by a ring of that colour near the point; the latter, together with the bases of the hairs are black. When seen at a distance the whole of the upper parts appear olive green, and the lower dull yellow. Length from nose to base of tail six inches; length of tail eight inches.

Inhabits Fernando Po.

(To be continued.)