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NATURAL HISTORY
A SYNOPSIS OF THE ACCIPITRES (Diurnal Birds of Prey)

Comprising Species and Subspecies described up to 1919, with their Characters and Distribution

BY

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In concluding my work on the *Accipitres*, a work which I fear has grown far beyond my original intention of publishing a mere list, I have to acknowledge my indebtedness to the sources from which I have received inspiration and help. In the first place I must acknowledge that a good deal of the systematic part and the generic characters have been borrowed from the late Richard Bowdler Sharpe’s "Catalogue of the Accipitres in the Collection of the British Museum" (1874) of which his annotated copy, laid down on sheets and extended, came into my possession after his death, as also his interleaved copy of the *Accipitres* portion in Gray’s "Genera of Birds," upon which he based his 1874 monograph. For permission to make use of the former work I have to thank the Trustees of the British Museum. I have also derived assistance from Mr. W. L. Sclater’s work at the British Museum (Natural History) in so far as his had preceded mine, and his MS. Catalogue of the skins, which he kindly gave me permission to use. I have also to thank Mr. Bannerman, Mr. Chubb and other assistants at the Museum for help rendered during my studies there. To Lord Rothschild and Dr. Hartert for the use of the superb collections at Tring I am grateful, and to Dr. Hartert especially for much personal assistance. The Rev. F. C. R. Jourdain and a number of other friends have also given me help and encouragement in various ways in what, although an arduous and unprofitable undertaking, will I hope be of some permanent help in systematizing this interesting group of birds.
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An Asterisk (*) affixed indicates a change of name. *Italics* indicate a discarded name.

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† Mr. Sclater (Ibis, 1919, p. 777, Auk, 1920, p. 154) points out that, if the rules are strictly adhered to, *Vultur* Linn. must replace *Sarcorhamphus*, while the logical result is that *Vulturidae* must replace *Cathartidae* and the Old World (or true) Vultures be called *Æzyptidae*. 

vi.
A SYNOPTICAL LIST
OF THE
ACCIPITRES
(DIURNAL BIRDS OF PREY)

PART I.

Order Cathartidiformes.
Fam. I. CATHARIDÆ (New World Vultures).
Nostrils perforated; head, neck, and forepart of breast bare; hind toe short and weak.

Gen. I. SARCORHAMPHUS Dum. (1806).
Size large, length 38 in.; head with an erect fleshy caruncle; outer toe about equal to inner.

Plumage black, with a whitish wing patch.
   Nat., i., p. 86 (1758).
   Great Condor.

Plumage brown [doubtfully distinct].
1a. Sarcorhamphus gryphus equatorialis Sharpe, Ecuador.
    Cat. Birds B.M., i., p. 21 (1874).
    Brown Condor.

Gen. II. GYPAGUS Vieill. (1816).
Head with fleshy caruncle; outer toe longer than inner.

Plumage black and cream colour; size moderate, length 27 in.
2. Gypagus papa (Linn.). S.N., i., p. 86 (1758). S. America,
    King Vulture.
    N. to Mexico.
Gen. III. CATHARISTA Vieill. (1816).

Head without caruncle; tail square.

Plumage black; larger: wing 17.50; tail 8.50; tarsus 3.35 in.

3 Catharista urubu urubu* (Vieill.), Ois. d'Am., Sept., pl. xi. (1807).
Black Vulture.

Smaller: wing 16.30; tail 8; tarsus 3.10 in.

Bras., iii., p. 58 (1830).
S. American Black Vulture.

Gen. IV. CATHARTES Illiger (1811).

Tail rounded.

Plumage black; larger: length 30; wing 21.70; tail 11.50 in.; tarsus 2.90 in.

4. Cathartes aura aura (Linn.), S.N., i., p. 86 (1758).
S. American Turkey Vulture.

Smaller: length 27; wing 21; tail 10; tarsus 2.35 in.

N. American Turkey Vulture.

Median wing coverts and secondaries very distinctly shaded with whitish ash.

Falkland Island Turkey Vulture.

Head yellow; "shafts of quills and tail-feathers brown above, white below" [doubtful form].

4c. Cathartes aura perniger (Sharpe), Cat. Bds., B.M., i., p. 25 (1874).
Venezuelan Turkey Vulture.

N. & Central America, Cuba, Jamaica.

S. American Black Vulture.

Tropical S. America from Colombia to Chile & Brazil.

N. America (United States) S. to Honduras.

Falkland Is., Patagonia, Chile.

Venezuela, Guiana, N. Brazil, Peru.

* Cathartes atratus (Bartr.) of most authors.
Head orange; shafts to primaries above and below white*.

Yellow-necked Turkey Vulture. Brazil N, to Surinam,
Brit. Guiana, Venezuela & E. Mexico (?)

Gen. V. PSEUDOGRYPHUS Ridgw. (1874).
Head without caruncle; tail square.

Size of Sarcorhamphus; length 40 in.; wing 30.

5. Pseudogryphus californicus (Shaw & Nodder), Nat. Misc., ix., p. 1, pl. 301 (1797).
Californian Condor.

ORDER ACCIPITRIFORMES.
Sub-Order I. SERPENTARIII.
Fam. I. SERPENTARIIDÆ.
Both inner and outer toes connected with middle one by well-
developed basal web.

Gen. VI. SERPENTARIUS Cuvier (1798).
Head crested.

Darker.

Secretary Bird.

S. & E. Africa
N. to Ben-
guela on W. and Zambesi on E.

Paler.

Northern Secretary Bird.

Sudan to
Shoa.

ORDER ACCIPITRIFORMES.
Sub-Order II. ACCIPITRES.
Fam. I. VULTURIDÆ (Old World Vultures).
Head and neck bare, or with short down only, no feathers; nostrils
not perforated.

* Cory ("Bdls. of Bahama," p. 134, 1890) says shafts of C. aura septen-
trionalis are "yellowish externally" in winter plumage. I believe C. a
perniger and C. a. urubitinga to be identical; both have the head yellow
and ranges intermingle.
Gen. VII. ÆGYPIUS Savigny (1809).

Nostrils rounded.

Size large, length 42 in.; plumage blackish brown; ruff of feathers round hind neck.

7. Ægyptius monachus (Linn.), S.N., i., p. 122 (1766).

Cinereous Vulture

Gen. VIII. GYPS Savigny (1809).

Nostrils perpendicular, rather oval; tail with 14 feathers

Size large, length 40 in.; plumage stone-buff; neck ruff of white down; head with white down.

8. Gyps fulvus fulvus (Gmel.), S.N., i., p. 249 (1788).

Griffon Vulture.

Plumage paler and more isabelline reddish.


Indian Griffon.

Paler than G. fulvus fulvus, especially below, and shaft stripes nearly obsolete.

8b. Gyps fulvus kolbi (Daud.), Traité, ii., p. 15 (1800).

Kolbe's Griffon.

Plumage above isabelline whitish; below light buff with broader whitish shaft stripes.


Himalayan Griffon.

Down on head yellow; plumage above blackish brown with whitish edgings; below creamy buff; crop-patch dark brown.

10. Gyps rueppelli rueppelli (Brehm), Naum. 1852, heft 3, p. 44.

Rueppell's Vulture.
Plumage above browner; below whitish.


Erlanger’s Vulture.

Head bare; ruff and upper parts dark brown with fulvous central streaks; rump white; below light brown with white streaks; crop-patch brown.


Indian Long-billed Vulture.

Above pale earthy brown; below whitish brown; crop-patch dark brown; ruff white (Hume).

11a. *Gyps indicus pallescens* Hume, Stray Feathers, i., p. 150 (1873).

Pallid Vulture

Gen. IX. GYMNOGYPS Less. (1831).

Tail of 12 feathers.

Size large, length 30 in.; above and crop-patch black; ruff white, rather scanty; rump white; below chocolate brown.


Indian White-backed Vulture.

Above and crop-patch dark brown; below pale brown, with yellowish-white shaft lines.


African White-backed Vulture.

Plumage more greyish.


Paler.

13b. *Gymnogyps africanus fuelleborni* Erlanger (t.c.)

* Reichenow’s *Gyps cinnamomeous* from Alatau (Orn. Mb., 1907, pp 30-31) appears to be another subspecies [doubtful] of *G. fulvus.*
Still paler.

13c. *Gymnogyps africanus zechi* Erlanger (t.c.)

Gen. X. JORGOS Kaup (1828).

Head with fleshy folds and a neck-lappet; tarsus longer than middle toe.

Above and crop-patch brown; ruff of brown feathers on hind neck; below clothed with white down, with brown lanceolate feathers on breast and abdomen.


Sociable Vulture.

Above and crop-patch black; across breast a circle of white down; below black; ruff small, black.


Pondicherry Vulture.


Head covered with down; no neck-lappet.

Plumage blackish brown, rump paler; ruff dark brown; crop-patch and under parts white.


White-headed Vulture.

Gen. XII. NEOPHRON Savigny (1808).

Forepart of chest bare.

Plumage white; primaries black; length 25 in.; wing 19.2.

17. *Neophron percnopterus percnopterus* (Linn.), S.N., i., p. 87 (1758).

Egyptian Vulture.
[Doubtfully distinct.]


Smaller than typical form; length 21 in.; wing 15.5.

17b. *Neophron percnopterus ginginianus* (Lath.), Ind. Orn. i., p. 7 (1790).

Indian White Vulture.

Gen. XIII. NECROSYRTES Gloger (1842).

With a fur-like chest-patch.

Plumage chocolate brown; hind neck covered with whitish down; crop-patch creamy brown, encircled with white down. Length 24 in.; wing 18.50.


Northern Hooded Vulture.

Larger; length 26 in.; wing 20 in.; with shorter and stouter bill.


Hooded Vulture.

Fam. II. *FALCONID.É.*

Crown of head always clothed with feathers, its sides either feathered or bare; outer toe not reversible.

Sub-Fam. I. *POLYBORIN.É.*

Toes connected near base by interdigital membrane; sides of face mostly bare.

Gen. XIV. POLYBORUS Vieill. (1816).

Nostrils oval. Size large (22-26 in.).

Above and below blackish brown with narrow whitish bars; tail whitish with a terminal blackish band; face, neck and breast white with blackish bars.


Common Caracara.
Above black, mantle only with creamy buff wavy bars; upper tail-coverts white; tail buff with 13 or 14 black bars and a broad terminal band.


Audubon's Caracara.

Paler insular race.


Tres Marias Caracara.

General plumage marked with transverse bars of brownish black and brownish white; crown, wing-coverts, terminal portion of primaries and terminal band on tail blackish brown.


Guadeloupe Caracara.

Gen. XV. IBYCTER Vicill. (1816).

Head generally with recurved crest.

Nostrils round. Size variable (16-25 in.).

Plumage black with greenish reflections; a white band across base of tail.

22. *Ibycter ater* (Vieill.), Analyse, p. 22 (1816).

Yellow-throated Caracara.

Plumage black with greenish reflections, but abdomen white; face and throat deep red.

23. *Ibycter americanus* (Bodd.), Table Pl. Enl., p. 25 (1783).

Red-throated Caracara.

Plumage black with greenish reflections, but upper tail coverts, base and tip of tail and abdomen white.


Mountain Caracara.

S. United States, Central America, Northern S. America.

Tres Marias Is., W. Mexico.

Gen. XV. IBYCTER Vicill. (1816).

Head generally with recurved crest.

Nostrils round. Size variable (16-25 in.).

Plumage black with greenish reflections; a white band across base of tail.

22. *Ibycter ater* (Vieill.), Analyse, p. 22 (1816).

Yellow-throated Caracara.

Plumage black with greenish reflections, but abdomen white; face and throat deep red.

23. *Ibycter americanus* (Bodd.), Table Pl. Enl., p. 25 (1783).

Red-throated Caracara.

Plumage black with greenish reflections, but upper tail coverts, base and tip of tail and abdomen white.


Mountain Caracara.

S. America, Pacific side of Andes.
Above brownish black; upper tail-coverts, base and tip of tail and entire under parts white; sides irregularly marked with black.

White-throated Caracara.

Skin of face and throat wrinkled and orange colour; Plumage black; rump, upper tail-coverts, tips of quills, a broad terminal band on tail, and vent white; breast with drop-shaped white marks.

Carunculated Caracara.

Black; rump, upper tail-coverts and base and terminal band on tail white; below white with band of black across lower throat.

27. *Ibycter circumcinctus* Scott, Auk, xxvii., 1910, p. 152.
Scott's Caracara

Above and below black; nape, outer upper tail-coverts, throat and breast with lanceolate white stripes; tail broadly tipped with white.

28. *Ibycter australis* (Gmel.), S.N., i., p. 259 (1788).
Foster's Caracara.

Gen. XVI. MILVAGO Spix. (1824).

Feathers on back of head erectile, forming 2 tufts; size small (about 16 in.).

Above brown, with pale ashy margins; head, neck, basal two-thirds of tail, and under parts white.

Yellow-headed Caracara.

Above rufous brown; head and neck with black central streaks; upper tail-coverts white; tail with broad subterminal dark band; below brownish ochre with dark shaft stripes.

Chimango Caracara.

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Patagonia.

Highlands of Ecuador and Colombia.

Patagonia, E. of Andes.

Falkland Is.

Brazil and Amazonia to Guiana, Colombia & Panama.

S. America from S.E. Brazil to Tierra del Fuego.
Sub-Fam. II. ACCIPITRIN.E.

Outer toe connected to middle one by an interdigital membrane; tibia and tarsus about equal in length.

Gen. XVII. POLYBOROIDES Smith (1830).

Lores and sides of face bare.

Plumage silvery grey, lower back and rump and abdomen white, narrowly barred with black; quills and tail chiefly black, latter with a broad median band of white. Length 23.50-27 in.

Madagascar Gymnogene.

General plumage dark grey; breast and abdomen broadly barred with black and white; tail black, tipped with white, with a broad band of dull white and an indistinct one nearer base.

Banded Gymnogene.

Gen. XVIII. CIRCUS Lacep. (1806).

Sides of face feathered; with distinct facial ruff; lores furnished with bristles; nostrils oval with no bony excrescence; tarsus reticulated behind; size moderate; length (males) 17-22.50 in.; females 19-24.50 in.

Key to Natural Groups and Species (Males).

A. Above bluish ashy, or greyish.
   a. Thighs uniform white.
      Throat and chest bluish ashy; upper tail-coverts white.

33. Circus cyaneus cyaneus (Linn.), S.N., i., p. 126 (1766).
     Hen Harrier.
More brownish ashy above and below.

33a. *Circus cyaneus hudsonius* (Linn.), S.N., i., p. 128 (1766).
Marsh Hawk.

N. America, Central America & W. Indies (winter).

Adult plumage unknown.

Madagascar Harrier.

Throat and chest white; upper tail-coverts white, banded with ashy grey.

Pallid Harrier.

Europe; Africa, India, Burma, China in winter.

b. Thighs white, with rufous streaks or spots.

Throat and chest pale bluish grey; upper tail-coverts white, tipped with deep ash colour.

36. *Circus pygargus pygargus* (Linn.), S.N., i., p. 89 (1758).
Montagu’s Harrier.

Europe; Palestine, Africa, India, China in winter.

[Doubtfully distinct.]


Caucasus.

c. Thighs white, barred across with orange rufous.

Throat and chest white, barred with orange tawny; upper tail-coverts white.

Cinereous Harrier.

Tropical and temperate S. America, migrating to Straits of Magellan & Falkland Is.

d. Thighs rufous, either uniform or spotted and margined with white.
Throat and chest rufous with white spots; upper tail-coverts ashy brown, tipped and spotted with white.

Spotted Harrier.

[Doubtful form.] Said to be smaller and darker.

Lesser Spotted Harrier.

B. Above brown.

a. Thighs white, with rufous streaks or spots.

Throat and chest white streaked with pale rufous brown; upper tail-coverts white, slightly spotted with pale rufous.

Fijian Harrier.

Larger.

Allied Harrier.

Smaller.

Little Allied Harrier.

Smaller and darker than *C. a. gouldi*.

New Zealand Harrier.

b. Thighs rufous, the feathers margined with white.

Throat and chest brown, the feathers margined with white; abdomen rufous; upper tail-coverts orange rufous, tipped with white.

40. *Circus ranivorus* (Daud.), Traité, ii., p. 170 (1800).
S. African Marsh Harrier.

E. Australia, Tasmania, Celebes.

N.W. Australia.

Australia.

S. & E. Australia, Tasmania.

N.W. & N. Australia.

New Zealand.

S. Africa below 10° S. lat.
Throat and chest creamy buff, the latter streaked with brown; upper tail-coverts white.

41. *Circus aeruginosus aeruginosus* (Linn.), S.N., i., p. 91 (1758).
Marsh Harrier.

Europe, rare in Siberia, but in winter to India, China, Japan and Philippines, also Africa.

Much brighter coloration, more black and white: (± lighter).

Hartert’s Harrier.

N. Africa.

C. Above black or blackish.

a. Thighs white.

Throat and chest white, streaked with black; upper and under tail-coverts white.

42. *Circus maillardi* Verr. in Maill., l’Ile de la Réun., ii., p. 12 (1863).
Maillard’s Harrier.

Markings on throat and chest browner and broader; under tail-coverts also streaked.

Wolf’s Harrier.

New Cali-

Eastern Marsh Harrier.

New Guinea Harrier.

E. Siberia, in winter to E. China, Indo-Burman countries, Malay Archipelago.

The same, but with distinct transverse spots of dusky cinereous on upper tail-coverts.

New Guinea Harrier.

S.E. New Guinea.
Throat and chest black; upper tail-coverts barred with black.

   Pied Harrier.

Throat and chest black; upper tail-coverts white with remains of rufous bars.

47. *Circus buffoni* (Gmel.), *S. N.* i., p. 277 (1788).
   Long-winged Harrier.

b. Thighs black.

Throat and chest brownish black; upper tail-coverts white, the lower ones spotted with black.

   Black Harrier.

Females (usually much different from males).

A. Above brown.

a. Thighs white.

   Below white, striped with dark brown; upper tail-coverts white, barred with dark brown.

b. Thighs white, with streaks or spots of rufous or brown.

   Below tawny buff, streaked with brown; upper tail-coverts white.
   Below nearly white, streaked with brown.
   Below creamy buff, with pointed spots of rufous brown; upper tail-coverts white.
   Below buffy white, with rufous centres to the feathers; upper tail-coverts white.
   Below creamy white, with streaks of brown; upper tail-coverts white, barred with dark brown.

   C. *melano-leucus*.

   C. *cyaneus*.

   C. *hudsonius*.

   C. *spilonotus*.

   C. *pygargus*.

   C. *macrurus*.
c. Thighs white, barred with orange tawny.

Breast brown with white spots, rest of under parts barred with orange tawny and white; upper tail-coverts white, barred with reddish.

C. cinereus.

d. Thighs rufous.

Below dark brown, with a white band, marked with brown, across breast; upper tail-coverts white, tinged with grey and rufous.

Below brown, streaked with white; upper tail-coverts rufous, tipped with white.

C. arugi-nosus.

C. ranivorus.

Gen. XIX. MICRASTUR Gray (1841).

Nostrils round, with a bony excrescence; tarsus reticulated behind.

Size large, length 20 in., wing 10.4; above blackish; tail with 3 white bands; below pale ochraceous fawn, as well as sides of face and nuchal collar.

49. Micrastur brachypterus (Temm.). Pl. Col., pls. 116 (juv.), 141 (ad.), (1822).

Collared Harrier-Hawk

From S. Mexico through Central Amer. and Colombia to Brazil and Paraguay.

50. Micrastur mirandollei (Schl.) Nederl. Tijdschr., i., p. 131 (1863).

Mirandolle’s Harrier-Hawk.

Size medium, length (♀) 17.5; wing 9.8; above slate; tail with 3 bands of ashy brown; below whitish; no nuchal collar.

Upper E. Peru, Guiana Panama.

51. Micrastur ruficollis ruficollis (Vieill.), N Diet., x., p. 322 (1817).

Red-necked Harrier-Hawk.

E. South America, Venezuela, Guiana, Central Brazil, Paraguay.
Above chocolate brown; tail blackish, with 3 narrow white bands; below thickly barred with black and white; throat brown.

Barred Harrier-Hawk.

Above (male) ashy brown (female blackish); tail blackish with 4 irregular white bands; below whitish, breast finely barred with wavy blackish lines; lower abdomen white.

White-throated Harrier-Hawk.

Above blackish; tail with 3 irregular white bands; throat and cheeks pale grey; below dull white, closely barred on breast and less so on abdomen with blackish.

Grey-throated Harrier-Hawk.

Above greyer; chest suffused with rufescent buff.

Rufous-chested Harrier-Hawk.

Slightly larger than *M. g. querilla*; less pure white below, and dusky bars broader and heavier, especially on belly, thighs and under tail-coverts.

Bangs's Harrier-Hawk.

Gen. XX GERANOSPIZIAS Sundev. (1873).

Tarsus scaled benna; thighs without overhanging tuft of feathers; ridge of bill greater than half length of middle toe (without claw); commissure slightly festooned.

Size moderate (length 16.5-24.5 in.).
Plumage slaty blue, with little trace of white cross bars except on thighs and under wing-coverts; tail ochraceous, with 2 broad black bands.

54. *Geranospizias caeruleus caeruleus* (Vieill.).
X. Dict., x., p. 318 (1817).
Grey Crane-Hawk.

Under parts barred with whitish.

Wood Hawk.

Like *G. c. caeruleus*, except that general plumage is slaty black.

Black Hawk.

Gen. XXI. **UROTRIORCHIS** Sharpe (1874).

Tail (13 in.) longer than wing (12 in.), very strongly graduated; size large (length 24 in.).

Above blue grey, lighter on head and nape; upper tail-coverts pure white; tail very long, black above, greyish below, irregularly banded and tipped with white; below leaden grey.

55. *Urotriorchis macrurus* (Hartl.). J.f.O., 1855, p. 353.
W. African Grey Hawk.

Gen. XXII. **PARABUTEO** Ridgw. (1874).

Nostrils with bony tubercle near upper margin; thighs with overhanging tuft of feathers; tarsus scaled almost right across and feathered further down than length of middle toe.

Size large (length about 23 in.; wing about 12-14 in.).

General colour blackish brown, variegated by lighter spotting; lesser wing-coverts and thighs rufous; tip and base of tail and also tail-coverts white.

One-banded Buzzard-Hawk

Venezuela, Guiana, W. Brazil, Peru, Bolivia Argentina.

Brazil, Paraguay.

Central America from S. Mexico to Panama.

W. Africa, Gold Coast to Gaboon.

S. America, northward from Chile on W. and Buenos Ayres on E.
General colour sooty black, tinged with chestnut on rump. (Female more brownish.)


Central and N. America from Panama to Southern U.S.

Gen. XXIII. MELIERAX Gray (1840).

Tarsus scaled in front, reticulated on outer aspect, not feathered so far down as length of middle toe.

Size large (length 21 in.; wing 14.8); general plumage bluish ash; quills black; wing-coverts, secondaries, upper tail-coverts and base of tail whitish freckled with grey; outer tail-feathers white, barred with black; belly white, narrowly barred with blackish.


Size similar; tail-coverts white, with numerous bars of slaty grey; tail blackish, with 4 white bands, the middle feathers unbarred; below white, minutely barred with ashy grey.

57a. *Melierax canorus metabates*, Heugl., Ibis, 1861, p. 72. Many-banded Hawk. [= *M. polyzonus* of authors.]

Much lighter form.


N.E. Africa, Sudan to Mogador, W. Arabia.

Rather smaller; above darker slate; throat, chest and wings, light grey; below white, with narrow blackish bars; below white, with narrow blackish bars; tail black, tip and upper tail-coverts white.


Nubia to Sudan & Hausaland.

E. Africa, Somaliland to Kilimanjaro.
Much darker below than *M. c. metabates*, which has white bars rather broader than dark bars, reverse being case in this species.


Size small (length 11.5-13.6: wing 7.1-8.3); above and throat ashy grey; rump blackish, upper tail-coverts white; quills and tail brown banded with black; below white barred with ashy grey.


Size similar; plumage black; quills and tail banded as in *M. gabar*. Feet cinnabar red (orange in last-named). [Disputed species.]


Gen. XXIV. ASTUR Laeep. (1801).

Bill short, cutting edge of upper mandible with a festoon; nostrils oval, with no bony tubercle; toes moderate, middle one somewhat longest, outer and inner nearly equal.

**Key to Natural Groups and Species (Adults).**

**A.** With conspicuous line of white on each side of crown, from above hinder ear-coverts; crown blackish; above ashy brown; below white barred with greyish brown; tail with 4 dark bands; length, ♂, 19-20.5; ♀, 23-24 in.


Smaller and darker race.

Less brownish, purer grey

   Siberian Goshawk.

"White" race.

60c. *Astur gentilis candidissimus* Dyb., Bull. Soc. Kamtschatka
   Kamtschatka Goshawk.

Above bluish ash, with blackish shaft stripes; crown deeper black; below closely freckled or vermiculated, instead of barred; tail bands indistinct.*

61. *Astur atricapillus* (Wils.), Am. Orn., vi., pl. 52, fig. 3 (1812).
   American Goshawk

Markings of lower parts fine and delicate and so dense as to present a nearly uniform appearance; tail bands obsolete.

61a. *Astur atricapillus striatus* Ridgw., Hist. N. W. North
   Am. Birds, iii., p. 240 (1874).
   America, Sitka to Sierra Nevada.

Above sepia brown; head, neck and upper mantle blackish slate; nape varied with white; tail with 6 irregular darker bands; below white, thickly and broadly barred with blackish.

   Madagascar.
   Henst’s Goshawk.

B. Sides of crown uniform with crown itself; no distinct red nape band; maximum length 20 in. (♀)

* The young of most species of the genus *Astur*, both in the typical group and many succeeding ones, are brown above, the feathers more or less margined with ochraceous or rufous, and ochraceous or creamy white below with *longitudinal* markings, usually in the form of streaks on throat and large oval spots on breast and flanks, although in some species the flanks may be barred. The characters given, as in other genera, are those of adult birds.
a. Above brownish or slate; tail with about 3 darker bands; below white, barred with rufous; length, ♂, 13.5-14; ♀, 16-17 in.

63. *Astur tachiro tachiro* (Daud.), Traité, ii., p. 90 (1800).
African Goshawk.

Below lighter; cross bands more distinct; no bars on under wing-coverts.

Zanzibar Goshawk.

Flanks and transverse bars more richly rufescent.

63b. *Astur tachiro unduliventer* (Rüpp.), Neue Wirb., p. 40, t.-f. 18, fig. i. (1835).
Abyssinian Goshawk.

Thighs rufous, without bars; under wing-coverts white.

West African Goshawk.

b. Above slaty grey; below with breast rufous, or partly so, and rest of under parts white, barred with rufous.

64. *Astur trivirgatus trivirgatus* (Temm.), Pl. Col., i., pl. 303 (1824).
Indian Crested Goshawk.

Larger.

Larger Crested Goshawk.

c. Above brown; head bluish grey; tail with about 4 dark bars; below white, with broad streaks of brown; thighs barred with blackish brown.


d. Smaller (length, \(\frac{5}{2}\), 10.7 in.); above brownish ash; sides of head and of neck rufous; tail with 6 dark bars; below white, barred with rufous.


Paler below, with more white on abdomen.


* Doubtfully distinct from *A. t. castanilius* if it has the rufous thighs of the latter. The amount of white barring most certainly varies with age.
f. Above deep slate grey; tail with 8 or 9 dark bars; below wholly chestnut with a few whitish cross bars.


Moluccas (Halmahéra, Morotai).

g. Above slate grey; bars on tail nearly obsolete; below cinnamon rufous, without white bars; length ♀ 15.8; ♂ 12.5 in.


Moluccas (Ceram and Amboina).

Slightly smaller; below more vinous red.


Whole under side deep rufous cinnamon.


Smaller and darker.


Lighter above.


Smaller (length of ad. 12.2 in.) and more delicate grey above.


N. Solomon Is. (Shortland Group & Bougainville Is.).

Is. of Misori, N.W. New Guinea, Jobi Is. (?).
Under wing and tail-coverts whitish; thighs reddish white.

Ramsay's Goshawk.

h. Above paler ashy grey; crown bluish; tail uniform; below paler salmon colour, with remains of white bars on breast, more numerous on abdomen.

Flores Goshawk.

i. Above bluish grey; tail with 5 or 6 blackish bars; below salmon rufous, with white cross bars.

73. *Astur badius badius* (Gmel.), S.N., i., p. 280 (1788).
Ceylonese Shikra.

Larger and lighter grey.

73a. *Astur badius dussumieri* Temm., Pl. Col., livr. 52, pl. 308 (1824)
Shikra

Above paler bluish; below with broader and brighter vinous bands.

73b. *Astur badius poliopsis* (Hume), Stray Feathers. ii., 1874, p. 325.
Hume's Shikra.

Tail slightly longer and more barred.

Severtzow's Shikra.
Mantle blackish slate; below paler salmon colour, under wing-coverts distinctly barred.


Above clear bluish ashy, under wing-coverts buffy white, with faint dusky cross bars.

73e Astur badius sphenurus (Rüpp.), Neue Wirb., p. 42 (1835). Rüppell’s Goshawk.

Below with numerous distinct narrow bars of pale rufous; under wing-coverts barred like breast.


Tail with only one indistinct subterminal bar; under wing-coverts white.


Tail with 5 bars; body below, pale buffy vinous without bars.


Tail bars obsolete above.


k. Head, neck and upper part of mantle light greyish white; rest of upper parts slate grey; tail uniform; below vinous rusty red.

76. Astur pallidiceps (Salvad.), Orn. d. Papuasia, etc., i., p. 64 (1879). White-headed Goshawk.
1. Above as last, but tail with blackish bars; below entirely white.

77. *Astur poliocephalus* (Gray), P.Z.S. 1858, pp. 170, 189.
   Grey-headed Goshawk.

m. Above uniform slate colour; tail with 7 darker bars; below entirely white.

78. *Astur franciscii franciscii* (Smith), Afr. Q. Jul., ii., p. 280 (1834).
   Frances's Goshawk.

Smaller and darker above.

78a. *Astur franciscii pusillus* Gurney, Ibis, 1875, p. 258.
   Joanna Island Goshawk.

n. Above brownish ash colour; below white barred with dull ashy.

   Grey Goshawk.

   Northern Grey Goshawk.

o. Above and below pure white.

80. *Astur novahollandiae* (Gmel.), S.N., i., p. 264 (1788).
   White Goshawk.

Smaller; wing ± 7.8 against 10.4 in.

   Lesser White Goshawk.

p. Above slate black; below white streaked and barred with black.

   Black-and-White Goshawk.

q. Above blackish slate; below white.

82. *Astur haplochrous* (Selat.), Ibis, 1859, p. 275, pl. viii.
   Black-throated Goshawk.
r. Above black, or blackish slate; tail unbanded; below white, with or without slight greyish shading or vermiculations on sides of chest. Length, ♀, about 18 in., ♂, about 14 in.


White-throated Goshawk.

Larger; cheeks white; below with some black shaft streaks and cross bars [doubtful form].


Meyer's Goshawk.

Tail with 4 whitish bands above; cheeks and ear-coverts black.

84. *Astur jardinei** Gurney, Ibis, 1887, p. 96, pl. iii.

Jardine's Goshawk.

Above dark lead grey; below pale grey.


Grey-bellied Goshawk.

C. With a well defined rufous neck band.

a. Above brown; crown black, crested; tail with 4 black bands; below, chest rufous, rest of under parts white barred with black.


Red-collared Goshawk.

b. Above brownish slate; inner webs of tail-feathers obscurely barred; below, breast rufous brown barred with slate, rest paler barred with white.


* If the later ascertained locality of this form, British Guiana, is correct it must be a perfectly valid species, and can have little direct relationship with *A. a. albignlaris*.

Dr. Hartert, who examined the description of Oustalet's *Astur sharpei* (Bull. Soc. Philom. (6), xi., p. 25, 1875) with me, thinks it is merely an example of *A. albignlaris albignlaris*, and I have therefore omitted it.
c. Above light bluish grey; tail not visibly barred; throat white; below pale vinous red, length, ♂, 13.5; ♀, 16.5 in.

Fijian Goshawk.

Larger; above darker, except head; below with some white bars; throat bluish grey.

Grey-throated Goshawk.


Smaller; above as A. rufitorques; below pale vinous red; belly white.

White-bellied Goshawk.

Above lighter.

Tenimber Is. Goshawk.

d. Above black; tail barred on inner webs only; below vinous chestnut; throat black.

Black-backed Goshawk.

Above more slaty black; below paler.

Mt. Goliath Goshawk.

e. Above greyish brown; tail with numerous darker bars; below white, barred with pale rufous; thighs and under wing and tail-coverts white.

93. Astur torquatus torquatus (Temm.), Pl. Col., i., pl. 43 (1823).
Collared Goshawk.

Sumba Goshawk.
f. Above similar to last; below dull rufous, narrowly barred with white and ashy; under wing-coverts dull rufous barred with fulvous. Size larger, ♀, 20 in.

94. Astur fasciatus fasciatus Vig. & Horsf., Tr. Linn. Soc., xv., p. 181 (1827).
Australian Goshawk.

Smaller: "wing 236 mm."

Northern Goshawk.

Below paler; under wing-coverts barred with vinous grey.

West Australian Goshawk.


Below rich vinous salmon colour, with remains of white cross-bars.

95. Astur wallacii Sharpe, Cat. Bds. B.M., i., p. 128, pl. 5 (1874).
Wallace's Goshawk.

Gen. XXV. NISOIDES Pollen (1866).
Hinder aspect of tarsus scaled; commissure of bill perfectly straight.

Above slaty black; nape and base of scapulars mottled with white and upper tail-coverts tipped with same; tail with about 8 darker
bands; below white barred with rufous brown; throat streaked with black; length, $\phi$, 11.5, wing 6 in.


Gen. XXVI. ACCIPITER Briss. (1760).

Bill with distinct festoon to cutting margin of upper mandible; nostrils oval; tarsus long, slender and smooth; toes long and slender, particularly the middle one, which is more than twice ridge of bill (without cere). Maximum size $\phi$, 15.8; $\varphi$, 18 in. Minimum $\phi$, 8.8; $\varphi$, 10.5 in.

**Key to the Natural Groups and Species (Adults).**

A. Thighs banded; no collar round neck.

a. Above bluish slate; nape more or less mottled with white; tail with about 4 darker bands; below white, breast barred with rufous or brown; flanks rufous.


Smaller, darker above, more closely and thickly barred below.


Above bluer.


Europe and N. Asia, in winter to Algeria, N.E. Africa, India, China.
Above lighter and greyer, with dark shaft stripes; dark tail bands nearly obsolete; below barred with greyish.


Kamtschatkan Sparrow-Hawk.

Insular race [with light and dark phases.]


Teneriffe Sparrow Hawk.

Blackish slaty above, darkest on head and nape; bars on tail broad and pronounced; below with bars broad and decided.


Himalayan Sparrow-Hawk.


Above blackish brown; below white, barred with greyish black.


Madeiran Sparrow-Hawk.

Above slaty blue; below white, barred with pale rufous; the flanks barred like breast.

99. Accipiter fuscus fuscus (Gmel.), S.N., i., p. 280 (1788).

Sharp-shinned Hawk.

Paler and more cinnamomeous below; thighs with cinnamon rufous predominating.


Western Sharp-shinned Hawk.

Smaller and more slender; checks rufous; below nearly white, especially the thighs.

99b. Accipiter fuscus fringilloides† (Vig.), Zool. Jul., iii., p. 434 (1828) [ex Cuba].

Cuban Sparrow-Hawk.

* Judging from description this form and Hume's melanoschistus are very near one another, if not the same.
† If the Cuban and Haitian forms are the same, they should be called A. fuscus striatus (Vieill.) as being the older name.
Below rufous, the feathers spotted on both webs or barred with white; upper breast more or less uniform rufous.

Cooper's Hawk.

Female with markings of lower parts denser and rather deeper in colour; more rufous on thighs. Male scarcely differs from typical form.

Mexican Sparrow-Hawk.

Sides of neck, a band running to hind neck, and upper part of breast greyish ash.

Gundlach’s Sparrow-Hawk.

Above slaty grey; below white, throat unspotted, rest minutely banded or vermiculated with greyish brown.

[=*A. tinus*, cu. plur.]
Eyebrowed Sparrow-Hawk.

b. Above slaty black; upper tail-coverts tipped with white; tail with 2 faint paler bands, and 2 large spots of white on inner webs; below white, sides bright chestnut, below narrowly barred with rufous.

102. *Accipiter minullus minullus* (Daud.), Traité, ii., p. 88 (1800).
Little Sparrow-Hawk.

Sides paler; bars darker and broader.


N. America (Middle and Southern U.S.).
W. United States to C. America.
Cuba.
Tropical S. America, N. to Panama.
S. Africa, to Mozambique on E. and Angola on W.
Abyssinia (S. Shoa).
Arusi, Galla Land, N.E. Africa.
102c. *Accipiter minullus tropicalis* (Reich.), Jr. f. O., p. 139, 1898.

Upper tail-coverts conspicuously white; barrings below blackish brown with very little rufous.


Red-legged Sparrow-Hawk.

c. Above dark ashy grey; tail, with 4 darker bars, alternated with paler bands, in centre of each of which is a white spot; below white with narrow grey bands.

103. *Accipiter ovampensis* Gurney, Ibis, 1875, p. 367, pl. vi.

Gurney’s Sparrow-Hawk.

d. Above blackish brown; tail uniform above, with paler bands beneath; below white, thickly barred with greyish black.


Madagascar Sparrow-Hawk.

B. Thighs nearly uniform brown, with slight remains of white cross bars; an ill-defined white collar on hind neck.

a. Above sooty brown; tail with 5 darker bands; below white, broadly barred with rufous brown.


Semi-collared Sparrow-Hawk.

C. Thighs barred; red collar on hind neck.

a. Above bluish ash; tail almost uniform above, but with numerous darker bars below on inner webs; below broadly barred with vinous red and greyish white.


Collared Sparrow-Hawk.
Darker above.

Broome’s Sparrow-Hawk.

Above clearer bluish slate; below brighter Rufescent with less distinct whitish bars; thighs with bare indications of bars.

Papuan Sparrow-Hawk.

D. Thighs uniform ashy grey; red collar on hind neck.

a. Above blackish slate; red collar extending to upper interscapulary region; tail with 10 or 11 darker bands, obsolete on outermost feathers; below pale ashy grey, sides of neck chestnut.

Red-collared Sparrow-Hawk.

Above "dark blue slaty grey"; rufous collar round hind neck.

108. Accipiter brachyurus (Ramsay), Pr. Linn. Soc. N.S.W., iv., p. 465 (1879)
b. Bars on tail nearly obsolete; below uniform clear vinous, paler on thighs; lower abdomen white.

Grey-throated Sparrow-Hawk.


E. Thighs greyish white; no nuchal collar.

a. Above bluish grey; sides of face and neck very pale; below clear vinous red; tail blackish slate above, with 4 or 5 dark bars beneath.

110. Accipiter rhodogaster (Schl.), Mus. P.B. Celebes Astures, p. 32 (1862).
Red-bellied Sparrow-Hawk.
Above darker slate grey; sides of face and neck vinous like under parts.


F. Thighs rufous or ochraceous; no nuchal collar.
   a. Above slaty grey; tail brown with about 5 ashy brown bars; cheeks and under surface white, with a few dusky shaft lines and bars on breast and flanks; thighs chestnut.

     Grey-backed Sparrow-Hawk.
     Above darker and browner; head blackish; thighs pale ochre.

112. *Accipiter chionogaster* (Kaup), P.Z.S., 1851, p. 41.
     White-bellied Sparrow-Hawk.
     Above plumbeous; thighs cinnamon rufous.*

     Salvin’s Sparrow-Hawk.
     Above deep slaty grey, including sides of face; below chestnut.

     Chestnut-bellied Sparrow-Hawk.
     Above and below plumbeous; abdomen mixed with ferruginous rufous.

     Plumbeous Sparrow-Hawk.
     Above deep slate; nape mottled with white; side of face and under surface tawny rufous.

     African Sparrow-Hawk.

     Abyssinian Sparrow-Hawk.

* I have an ad. ♂ from Escorial, Venez., snowy-white below, with reddish-white thighs lightly barred with dusky, which seems to constitute a new form.
d. Above slaty black, lower upper tail-coverts white; tail with 2 bars of white on inner webs; below chestnut.

Sharpe’s Sparrow-Hawk.

G. Thighs greyish, with traces of bars; no nuchal collar.

a. Like *A. sharpei* above, but no white spots on centre tail feathers; below, rufous colour paler on sides.

Hartlaub’s Sparrow-Hawk.

b. With 2 white spots on centre tail feathers; breast faintly barred with grey; sides pale vinous.

Bates’s Sparrow-Hawk.

H. Thighs very pale rufous or ashy to chestnut; no nuchal collar.

a. Above blackish slate; nape mottled with white; sides of neck washed with rufous; tail with 3 blackish bars; below chestnut, paler on thighs and more or less barred below breast. Wing, \( \varphi \), 6.6; \( \sigma \), 7.4.

Java Sparrow-Hawk.

Besra Sparrow-Hawk.

Larger; wing, \( \varphi \), 6.5-7.1; \( \sigma \), 8.35; below with markings much browner.

Larger Besra Sparrow-Hawk.

W. Africa, Cameroon to Benguela.

W. Africa (Senegambia to Togoland).

Cameroons.

Greater Sunda Is., Java, N. Borneo, Sarawak, S. India, Ceylon.

Himalayas, Andamans, Siam, Formosa, Hainan.
Below nearly uniform light red in ad. ♀; the ad. ♂ like typical race. Wing, ♀, 6.9-7.3; ♂, 6-6.9 in.

[= *Accipiter manillensis* (Meyen)].
Philippine Sparrow-Hawk.

Thighs and under tail-coverts uniform chestnut; wing 5.95 in.

Whitehead's Sparrow-Hawk.

b. Female barred below, up to throat, with rufous or brown like *A. nisus nisus*. Wing av., ♂, 6.45; ♀, 7.45.

Japanese Sparrow-Hawk.

c. Tail with 4 darker bars; below pale fawn rufous, the breast mottled with white spots and half bars. Wing av., ♂, 8.5; ♀, 10.5.

White-throated Sparrow-Hawk.

d. Tail with 5 black bands; head black; sides of face and under surface slaty blue, with blackish shaft stripes; thighs and under wing-coverts rufous.

Black-capped Sparrow-Hawk.

e. Under wing-coverts white, rufous along carpal bend; thighs rufous; tail with 4 dark bars.

123. *Accipiter bicolor* (Vieill.), N. Dict., x., p. 325 (1817).
Four-banded Sparrow-Hawk.

Philippine Islands.

N.W. Borneo (Mt. Kina Balu), Sarawak (Mt. Dulit).

Japan, N. China, Formosa, Malay Archipelago, Philippine Is.

S. America (Paraguay and Bolivia).

S. America (Brazil, Paraguay).

S. Mexico to Colombia, Ecuador and Guiana.
f. Below ashy grey, with large white spots and bars, margined with brownish; breast shaded with rufous; thighs rufous; under wing-coverts rufous mottled with brown.

Chilian Sparrow-Hawk.

I. Thighs black; no nuchal collar.

a. Above black; tail brown with 5 blackish bands; below black, most of feathers with concealed white bases or spots.

Black-and-White Sparrow-Hawk.

Chile to Str. of Magellan, Patagonia.

A SYNOPTICAL LIST
OF THE
ACCIPITRES
(DIURNAL BIRDS OF PREY)
PART II.

Sub-Fam. III. BUTEONINE.

Bill moderate, bending from base, with a slight projection on cutting edge of upper mandible. Outer toe connected to middle toe by an interdigital membrane; tibia much longer than tarsus, exceeding it by more than the length of hind claw.

Gen. XXVII. ERYTHROTRIORCHIS Sharpe (1875).

Wing about equal to tail, the latter moderately graduated; ridge of bill (without cere) less than half length of middle toe (without claw).

Size of Buteo. Length 20, wing 14.5; ♀ wing 16 in.; plumage above and below bright rufous, with black centres; tail ash, tipped with pale rufous, and irregularly barred with dark brown; under surface of tail and tips of primaries whitish.

126. Erythrotriorchis radiatus (Lath.). Ind. Orn. Suppl., ii., p. xii. (1801) [N.S. Wales.]
Red Buzzard.

Gen. XXVIII. MEGATRIORCHIS Salvad. & D’Alb. (1875).

Wings short, slightly longer than tail; tail long, rounded; inner toe shorter than outer.
Larger; length ♀ 26.75, wing 14 in.; plumage above brownish black, with rufescent margins; below white, spotted longitudinally with brown; wings and tail above banded alternately with brownish-black and greyish-brown.

Doria's Buzzard-Hawk.

Gen. XXIX. HETEROSPIZIAS Sharpe (1874).
Nostrils round, with large tuberular process; wings reaching up to or beyond tail; tail about equal to twice tarsus.

Size of *Buteo*: length ♀ 24, wing 18.3, ♂ 20, wing 16.5 in.; head and shoulders rufous; mantle and scapulars pale slate grey with rufous margins; rump and tail purplish black, tail with a median white bar and white tips; below rufous with narrow obsolete black bars on breast.

Red-winged Hawk.

Gen. XXX. GERANOAETUS Kaup (1844).
Size much larger than *Buteo*; tail proportionately shorter, and wings proportionately longer.

Length ♂ 28, ♀ 31, wing 23.7, tail 11.5 in.; slaty-black, with the shoulder grey, finely barred with blackish; abdomen and under wing and tail-coverts greyish-white, finely barred with blackish.

Chilian Eagle.

Gen. XXXI. BUTEO Lacep. (1799).
Cere large; nostrils oval with no tubercle; wings moderately long, the 3rd to 5th quills longest, the first 3 to 5 emarginate or notched on inner webs; tarsus short, strong, usually scaled, and feathered in front for a varying distance. Size usually under 24 in.
Key to the Natural Groups and Species (Adults).

A. Tail usually brown, sometimes washed with rufous, with a varying number of transverse bars; generally from 6 to 12, often indistinct.

General plumage sooty-black, shaded with brown; tail greyish-brown with 12 or 13 blackish bars.


Galapagos Buzzard.

Aberrant species; size small; wing 10.75 in., very short and rounded; inner webs of first 4 primaries emarginate; tips of primaries reaching to about middle of tail; tail with 8* or 9 darker bars; plumage blackish-brown (dark phase) or brown above and buff below and on head (light phase).


Solitary Buzzard.

Size small; length 18.50, wing 11.8 in.; above pale brown; tail with 6 or 7 bands of darker brown; below white, throat narrowly and breast broadly streaked with pale brown; belly and thighs uniform pale brown.


Short-winged Buzzard.

Size large, length 24.5; wing 19 in.; head and neck white, with broad streaks of pale brown; above dull brown; tail with indistinct darker cross-bars, the base and inner webs white; below white, barred on throat and streaked on breast with dark brown; flanks dark brown.


[Archibuteo strophiatns(Hodgs.)is a synonym.]

Upland Buzzard.

E. Siberia. Mongolia to Tibet, Nepal and L. Baikal; Cas. Japan; winters China, Turkestan, N. India.
Length $\varphi$, 19. wing 15 in.; first 3 primaries notched; above dark-brown to slate-brown with paler edgings; tail with 10 or 12 darker cross-bars, the sub-terminal broad; throat white, upper breast rufous ($\varphi$) to deep chestnut or brownish-black ($\varphi$); other lower parts buffy-white, generally with rufous arrow heads or flank bars; a uniform sooty-brown phase is met with.


Tail brown with 8 or 9 darker bars; below whitish, heavily blotched lengthwise with dark brown; thighs buffish, barred with dark brown.


First 4 primaries notched; length $\varphi$ about 20 in.; wing 14.75-15; tail 8.75-9; tarsus 3.10; $\varphi$ wing 15-16 in.; plumage variable; adult in breeding plumage (*Brit. Isles*) brown to dark brown above, sometimes with rusty edges to scapulars; lower parts whitish, heavily blotched on breast and barred on belly with dark brown (occasionally rufous brown), the upper breast, flanks and thighs nearly uniform; tail with 12 or 13 darker bars, the sub-terminal one broad*; a sooty-brown phase also a "white" variety are met with.


* Adults among the Buzzards usually have the tail much less numerousy barred than is the case with young birds; and often have a broad sub-terminal band, lacking in young birds; the latter also have the under-parts of the body as a rule lighter, often with the arrow-head, circular or elongated dark markings characteristic of the young birds of other groups of the *Accipitres*. Individuals of all the species of *Buteo* vary greatly in plumage.
Smaller insular race; darker and more rufous; more heavily marked below, tail tinged rufous.

Sardinian Buzzard.

Wing ♂ 16.50, ♂ 15.50 in.: large and dark insular race; more similar to simmermanni than typical form; darker than latter generally is and nearly uniform below, blackish-brown to rufous-brown, the abdomen barred: tail with 10 or 12 darker bars and with or without rufous tinge.

Madeira Buzzard.

Wing ♂ 13.40-14.10; ♂ 14.70-15.25 in.; rufous form, but tail generally light ashy, with 7-9 bars, the sub-terminal broad, more or less tinged with rufous; below with belly either uniform deep rufous or barred and mottled with buffish-white.

Azores Buzzard.

Wing ♂ 15.40-15.70, ♂ (juv.) 13.80 in.; rufous form; chest and abdomen rufous brown; tail brown, slightly tinged with rufous and with the darker bars nearly obsolete in very old bird, about 5 being apparent; younger birds have about 10 distinct bars.

Canaria.]
Canary Isles Buzzard.

Paler and less rufous than three preceding forms; wing ♂ 14.60; above ashy-brown, with paler margins to the feathers; tail with 9 darker bars; below throat white, streaked with dusky-brown; chest brown, mottled with buffy-white; centre of breast whiter; belly

* The fine series in Brit. Mus. does not appear to me to confirm the view that the Azores race is the same as the Canary Is. race.
barred with brown; thighs dark brown, slightly barred with rufous; feet smaller and slighter.


Size of but more rufous than *B. buteo buteo*; more heavily marked below; abdomen and under tail-coverts white barred transversely with rufous brown; tail distinctly barred and with a rufous tinge; wing 14.32, tail 8.25 in.


Tarsus feathered about half-way down in front; plumage above purplish brown, with rufescent margins; tail with 4 or 5 indistinct darker bars; below rufous, abdomen buffy-white, barred with rufous (younger birds buffy-white below, streaked on breast and blotched on abdomen with dark brown.)


B. Tail more definitely red in old birds, with most of the bars obsolete.

Smaller: wing♀ 13.40-14.50, tail 7-8, tarsus 3 in., ♀ wing about 15 in.; above brown

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* There are eight rufous Brit. birds in the Brit. Mus. collection, two of which seem referable to *B. rufiventris* and the rest to this form, while there is another example in Brighton Mus. from the Monk coll., labelled "England." Devonshire birds are, however, often almost as rufous as those from E. Europe.
with conspicuous rufous margins and blackish shafts; tail more or less rufous, with sub-terminal band and remains of other bars (in younger birds ashy-brown barred with dark brown); head, neck and under parts tawny rufous, breast varied with creamy buff and throat streaked with brown; belly not barred in adult.


Desert Buzzard.

Much larger: Wing 16.25-17.75, tail 10.5, tarsus 3.75. ♀ wing 18-19 in.; breast buffish to pale rufous with dark shaft streaks; abdomen, flanks and thighs rufous to chocolate brown, unbarred; tail pale rufous, whitish at base and shafts white, with 2 or 3 definite bars towards tip and remains of others; uniform dark under parts of some birds probably a dark phase or erythrus rather than age; also subject to melanism; immature buffish white below blotched and streaked with dark rufous brown; tail ashy with darker bars.


[Astrakan.]

Long-legged Buzzard.

W. Asia and S.E. Europe* (S. Russia to Caucasus); S. to India, Arabia and Africa below the Sahara in winter; cas. in Brit. Islands.

S.E. Europe (cas. S. & W. Europe), Egypt, Arabia, Asia Minor; W. & C. Asia; N.W. India and Africa in winter.

* The form *B. menetriæsi*, Bogd., is not separable. It appears to rest upon birds with a fully rufous tail and the bands obsolete, except the sub-terminal one, but there is no doubt these are only very old birds and there is no means of distinguishing European from Asiatic examples in the various other stages of tail marking, while the red stage seems common to both. Both forms migrate to Africa.
Much smaller; wing 14.50, tail 8.2, tarsus 2.7 in.


Algerian Buzzard.

Length ♂ 21, wing 17, tail 8, tarsus 3.30 in.; ♀ length 23, wing 18 in.; general plumage sooty or brownish-black; lower breast chestnut; abdomen more or less barred with white and chestnut; primaries externally ashy, secondaries whitish, both barred with black; tail chestnut red, with black sub-terminal band; younger birds have under parts rufous, excepting throat.

139. *Buteo jakal* (Daud.), Traité, ii., p. 161 (1800).

[S. Africa.


S. Africa.

Size similar; tail less chestnut, more tawny; lower parts black in old birds; in younger chiefly white, excepting the throat which is more or less black.


Somaliland.

Angur Buzzard.

General plumage of ♂ dusky blackish, the feathers of back and wings margined with brown; sides of head and cervical collar varied with rufous; forehead, nape spot and throat white; breast as upper parts; abdomen and flanks white spotted and streaked with black; tail rufous with sub-terminal black band.


W. Africa to N.E. Africa.

Salvadori’s Buzzard.

Size variable; average length ♂ 21, wing 15.50 in.; ♀ 24, wing 17.50 in.; above blackish-brown with more or less of lighter variegation; tail chestnut with one sub-terminal darker band and often remains of others; below buffy-white, flanks barred or mottled and abdomen heavily streaked with blackish-brown.
142. *Buteo borealis borealis* (Gmel.), S.N., 1, p. 266 (1788). [Carolina.]
Red-tailed Buzzard.

Light form, pure white below with few or no markings; sub-terminal tail-bar reduced or obliterated.

Krider’s Hawk.

Strongly developed form of *B. borealis borealis*, more strongly marked below, especially on thighs, and with more bars than the sub-terminal one on tail; melanisms are frequent, but they usually retain the rufous tail.

Western Red-tail.

Perhaps a melanism of *B. borealis borealis*; size similar, but more robust; nearly uniform sooty-brownish-black, with much less of concealed white; tail mottled with greyish, dusky-white and rufous, with subterminal black band.

Harlan’s Buzzard.

E. North America, N. to Canada and Newfoundland W. to Gt. Plains.

Gt. Plains, from Missouri and Minnesota, W. to Rocky Mountains, N. to S. Manitoba.

W. North America, beyond W. edge of Gt. Plains E. to Middle Yukon, S. to Guatemala; Guadaloupe Is.

Lower Mississippi Valley & Gulf States, from Louisiana to Georgia and Florida.
Resembling *B. borealis calurus*, but smaller throughout; wing \(\delta\) ad. 344 mm.; \(\varphi\) 365 mm.; dark areas blacker and more extended.


Alaska Red-tail.

Tail uniform rufous, with one very narrow sub-terminal band; flanks and thighs light rufous; juv., tail barred, and flanks and thighs sparsely barred with rufous.


Central American Red-tail.

Size of *B. borealis borealis*, but darker above; throat and middle of belly with broad conspicuous striping and banding of deep chocolate brown; tail feathers with dark brown markings (remains of bands) near shaft.


Florida Red-tail.

Small form: wing \(\delta\) 14.94–15.70, \(\varphi\) 16.76 in.

Insular race, undescribed? *

142g. *Buteo borealis socorroensis* Ridgw., Pr. U.S.N. Mus., iii., 1880, p. 220 (1881) [Socorro Is.]

[Socorro Island Red-tail.]

More rufous on sides of breast and belly; thighs heavily barred with brown.

142h. *Buteo borealis fusinosus* Nelson, Pr. Biol. Soc. Wash. xii. p. 7 (1898) [Tres Marias Is.]

Tres Marias Red-tail.

Length 21, wing 14.50 in.; above sooty-brownish with purplish gloss and ferruginous edgings; tail rusty-ferruginous, base and tips white with sub-terminal dusky-black band and 7-9 dusky bars; wing quills rich brown, barred with black; below white tinged

* The example in Tring Mus. is black with rufous tail, having broad sub-terminal band, and 8 or 9 narrow obsolete bars, presumably a melanism.
buff; throat streaked with dusky, chest more thickly with ferruginous; a dusky zone across abdomen; thighs barred ferruginous.


Tropical Buzzard.

Doubtful species: "Possibly the light phase of *B. b. harlani." A.O.U. Check List; only type example known.*


C. Tail black.

Smaller than *B. borealis borealis*; average length ♀ 19, wing 12.50 in.; plumage above reddish brown with darker centres; lesser wing-coverts bright chestnut; below pale brownish rufous, barred with white; thighs paler and more buffy; quills and tail black, barred with white, the tail with about 6 bars.

145. *Buteo lineatus lineatus* (Gmel.). S.N. l., p. 268 (1788) [Long Is., N.Y.]

Red-shouldered Buzzard.

Much darker: "An erythrisn of last form" (Copes); below generally much darker reddish, with much less white barring; thighs rufous.


Western Red-shouldered Buzzard

Smaller: wing 11-12 in.


Florida Red-shouldered Buzzard.

* A.O.U. Check List, ed. 3, 1910, but Gurney (Ibis, 1876, p. 242) refers to another from Colorado.
Wing (type) 12.98; tail 8.62 in.; darker, approaching B. l. elegans: breast usually more spotted with buffy; dark shaft of chest more conspicuous; head and back more rufous.


Considerably smaller; length ♂ 15, wing 10.75 in.; ♀ 16, wing 11.40 in.; only 3 outer primaries emarginate; plumage above dark brown with lighter edges; nape much mottled with white; tail brownish-black with 2 bands of greyish-white; below rufous brown cross-barred with white in the form of transverse oblong spots.


Insular race: smaller and lighter than *antillarum* and bars below narrower and less sharply defined.


[Description not seen.]

146c. *Buteo platypterus rivieri* Verrill, Add. to Avif. of Dom. ca. 1905, p. ---

Smaller; wing ♂ (Surinam) 15.25 in.*; general plumage black; tail black with broad median band of grey (showing white below) and remains of a second band.

* Examples from Mexico (Tring Mus.) are larger; wing ♂ 16.75 in. A ♀ (?) Bolivia has the wing 18 in., and if this is a migrant from Mexico, there may be a large northern race, and if so it could be called *mexicanus*. Gray's *albonotatus* (Mexico) is a *nominum nudem* and cannot stand, while Kaup's *albonotatus* (Ibis, 1847, p. 954) is neither a name nor a description. His *albonotatus* in *Contr. Orn. 1850, p. 75*, is from "S. America" and is based on the "concealed white spots," which can be seen on the Surinam bird at Tring, and not on the Mexican; they appear only to mark a stage of plumage. The only certain distinction seems to lie in the relative sizes.
147. *Butco abbreviatus abbreviatus* Cab., in Schomb. Reis. Guiana. iii, p. 739 (1848) [British Guiana.]
Zone-tailed Buzzard.

Much smaller; wing "♀" 12.50; tail 6 in.;
uniform sooty black; tail with 4 grey bars above, showing white below.

147a. *Butco abbreviatus minimus* subsp. nov. ["♀"]
*Miritiba*, Braz., 18.8.09, coll. H.K.S.

D. Tail white.

Length ♂ 22; wing 15.25 in.; general colour of ♂ bluish-slate; tail white with about 9 narrow bars of slate grey and broad sub-terminal blackish band; ♀ head, neck and upper breast slate; mantle, scapulars and belly rufous.

Falkland Island Buzzard.

Size similar; adult ♂, general plumage slate, tail with 8 darker bars and broad black sub-terminal band; abdomen and thighs slate, more or less barred with white; ♀ wings, rump and belly more or less suffused with rufous; thighs rufous barred with white.

149. *Buteo hypospodius* Gurney, Ibis, 1876, p. 73, pl. 3. [Medellin.]
Grey-bellied Buzzard.

Larger; wing (♀?) 19 in.; above and tail much as in ♀ of *B. e. erythronotus*; below barred with white and slate, the breast mixed with rufous.

Gurney’s Red-backed Buzzard.

Brit. Guiana, Surinam, Brazil, Venezuela, Mexico, Arizona, New Mexico, Texas, S. to Bolivia.
S. Brazil.

Chile, Patagonia, Falkland Is., Tierra del Fuego.

Colombia, Venezuela, Amazonia, Brazil.

Ecuador, Peru, Bolivia, Chile, Argentina.
Length ♂ 21; wing 15 in.; ♀ wing 16.5 in.; ♂ above slaty-blue, below white; tail white with 10 or 11 narrow grey bars and sub-terminal blackish band; ♀ back and scapulars brick red.


Red-backed Buzzard.

Insular form; ♂ darker slate grey above; ♀ back uniform like ♂ instead of red.


Masafuera Buzzard.

Length ♂ 21, wing 17 in.; above and throat slaty-grey, darker on head and wings; shoulder ferruginous; rump and upper tail-coverts white; tail silvery grey, centre feathers white, with 8 or 9 silvery bars and sub-terminal black band; below white, axillaries and flanks barred with blackish.


White-tailed Hawk.

Cross bars on tail and lower parts finer and more broken.


Sennett's White-tailed Hawk.

"Notably smaller: with the upper parts, particularly the head and sides of the neck, darker and more slaty."


Columbian White-tailed Hawk.

* The following additional forms of *Buteo* have been described from Chile by Philippi (Arch. für Naturg., 1899, pp. 167-70) viz.: *Buteo melanostethos, B. pecilogaster, B. macronyctes, B. ater, B. pictus, B. albignula, B. [Asturina?] ethiops et elegans*, but what the respective value of these forms is I have been unable to judge.
Ad. plumage not seen; imm. black, abdomen somewhat barred with buff; tail with indistinct darker bars. [Tring Mus.]

152c. *Buteo albicandatus colonus* Berl., J.f.O. 1892, p. 91. [Curacao.] Curacao White-tailed Hawk

Gen. XXXII. ARCHIBUTEO Brthm (1828)

With characters and appearance of *Buteo*, but tarsi feathered to the toes.

Length 26, wing 18.7 in.; ♀ length 22.5, wing 17 in.; above deep brown with paler margins; head, neck, throat and chest white, streaked with dark brown; scapulars and least wing-coverts with white bases; upper tail-coverts banded with white; tail white, terminal portion ashy, with sub-terminal blackish band; centre of belly and flanks deep brown mottled with white; thighs and tarsi buffish-white, barred with brown; much variation occurs, some birds being much darker, almost uniform below.


Rough-legged Buzzard.

Much paler; plumage above with broad white margins; streaks on throat and breast and thighs much narrower and paler; upper tail-coverts white with a central streak of brown.


Siberian Rough-legged Buzzard.

Much darker and more ochraceous below normally than *A. l. lagopus* and varying in melanistic examples to nearly uniform black.

153b. *Archibuteo lagopus sancti-johannis* (Gmel.), S.N., i., p. 273 (1788). [Hudson Strait and Newfoundland.]

American Rough-legged Buzzard.

N. Europe and N. Asia; in winter S. to Mediterranean, Black Sea and Caspian.

Siberia, Turkestan, Kamtschatka, Ussuri.

N. America, N. of Mexico, breeding N. of U.S
Plumage above blackish with chestnut margins; head streaked with black and white; tail silvery ashy, tinged with rufous, the base and tip white; below white, with black shaft lines on breast and arrow heads on flanks; legs bright chestnut barred with black.

   Ferruginous Rough-leg.

Gen. XXXIII. BUTEOLA Bp. (1855).

Nostrils round, with distinct central tubercle; wing with 3 outer primaries emarginate on inner webs, the 4th sinuate.

Size moderate; length ♂ (? 15.5, wing 11.3 in.; ♀ (? 16, wing 13 in. Above slaty-black; tail ashy-brown, tipped with whitish and with 4 bars of blackish-brown; sides of face and under surface of body white; melanistic variety [*B. fuliginosa*, Scl.] immature ?, general plumage sooty-black; tail brown with 8 blackish bands.

   Short-tailed Buzzard.

Gen. XXXIV ASTURINA Vieill. (1816).

Tibiae long; feet large and powerful; nostrils round, with indistinct and concealed tubercle at base of upper margin. Size medium (length 16-18 in.).

♂ ♀ above ashy-grey, barred with silvery white, most narrowly on the head and nape, bars becoming duller and broader on wings; upper tail-coverts blackish, tipped with white; tail blackish with a broad white band about ⅓rd of distance from tip and a second incomplete band on outer feathers; body below regularly banded with silvery white and slaty grey.

W. North America, S. to California; in winter to Lower California and N. Mexico.
Shining Buzzard-Hawk.

[Not seen.]

Above ash-grey without white bars; head and nape lighter; tail with whitish band across middle with remains of another nearer base, below banded as A. n. nitida, except on breast, which is ash-grey with black shaft stripes.

Mexican Goshawk.

Gen. XXXV. RUPORNIS Kaup (1844).

Feet and claws much smaller and weaker.
Size rather smaller than Asturina.

Length 14, wing 8.70 in.; above pale ash-grey; tail light ash with 3 broad bands of black; inner webs of wing quills rufous, barred with black, outer webs and tips ash brown; below white, barred with pale rufous or rufous ashy, the chest and throat nearly uniform.

158. Rupornis magnirostris magnirostris (Gmel.), S.N., i., p. 282 (1788). [Cayenne].
Large-billed Hawk.

[Not seen.]

Bangs's Hawk.

Above browner; tail with interspaces ashy.

Mexico to Guatemala and N. Nicaragua.

S.E. Brazil, Amazonia, Guiana, Colombia to Panama.
Bolivia.
Guiana, Venezuela, Colombia, Peru, Lesser Antilles.

Peru.
Smaller; much paler (smoke grey) above; slightly paler below.


Tail with the interspaces rufous instead of ashy; below buff banded with rufous, throat and chest ashy.

158d. *Rupornis magnirostris ruficauda* (Scl. & Salv.), P.Z.S., 1869, p. 133 [Type loc. sugg. David, W. Panama, Chapm.].

Red-tailed Hawk.

Insular race.


Length ♀ 14.50, wing 10 in.; tail dark brown imperfectly banded with white and shaded with dull rufous; below dark rufous narrowly banded with white.


Larger; above brown, darker on head; quills paler rufous than in *R. m. ruficauda*, and with bases pale rufous externally; tail pale rufous banded with dark brown; below buffy-white, very narrowly and indistinctly barred with pale rufous.


Above ashy brown, head much clearer; tail with the interspaces ashy-brown; throat ashy-grey; chest pale rufous, rest of under parts fulvous barred with pale rufous.

158h. *Rupornis magnirostris nattereri* (Scl. & Salv.) P.Z.S. 1869, p. 132. [Sao Paulo et Matto Grosso.]

Natterer's Hawk.

Uniform black, lower upper tail-coverts and base of tail white; tail black, with a single band of ashy-brown; tibial plumes rufous; under tail-coverts buffy-white.
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Brazil to Peru, Colombia, Venezuela.

Gen. XXXVI. BUSARELLUS Lafr. (1842.)

Size of Buteo; sole of foot covered with rugose and thorny spicules (like that of Pandion) tip of upper mandible much curved.

Above bright chestnut, with narrow black shaft stripes; outermost wing-coverts and quills black; basal half of tail chestnut banded with black, apical half black with narrow white tip; head and neck creamy buff; lower throat black; below chestnut.

Black-collared Hawk.

Brazil, Guiana, Paraguay.

Gen. XXXVII. BUTEOGALLUS Less. (1831.)

Size nearly the same; outer toe hardly longer than inner; soles of feet smooth, wings short of tail by less than length of hind toe.

Plumage above black, with rufous margins on mantle and wing-coverts; quills bright chestnut, the outer webs black; tail black with white tip and indistinct median band of white; throat blackish; below rufous, narrowly barred with black.

161. Buteogallus equinoctialis (Gmel.), S.N. i. p. 265 (1788). [Cayenne.]
Equinoctial Buzzard.

Guiana, Colombia, Paraguay.

Gen. XXXVIII. URUBITINGA Lafr. (1837)

Rather larger; tarsus scutellate before and behind, reticulated laterally; distance between tips of wing and tail greater than length of hind toe; secondaries nearly as long as primaries; general plumage black.

Above and below black; upper tail-coverts mostly white; basal half of tail white with a broad black band; apical half black with white tip.

Brazilian Eagle.

Under wing-coverts and tibiae with more white; tail with less white and an extra black bar.


[Guatemala.]

Ridgway's Black Hawk.


[Guatemala.]

Gorgona Black Hawk.

Black above and below; upper and under tail-coverts narrowly tipped with white; tail with a broad white median band and white tip.

163. *Urubitinga anthracina anthracina* (Licht.), Preis. Verz.; Vogel, Mexico, etc., p. 3 (1830).

[Mexico.]

Mexican Black Hawk.

Doubtful form; said to be dark chocolate brown with 2 more or less distinct extra white bands at base of tail.

163a *Urubitinga anthracina gundlachii* Cab., J. f.O. (1854).

[Cuba.]

Cuban Black Hawk.

Gen. XXXIX. LEUOPTERNIS Kaup (1847).

Similar in structure to *Urubitinga*; nostril nearly circular; tarsus not more than twice as long as middle toe; plumage usually more white than black.

Plumage uniform bluish slate colour; tail black, with a white median band and white tip.
164. *Leucopternis schistacea schistacea* (Sundev.)


[Brazil.]

Slate-coloured Hawk.

Smaller: Uniform leaden grey; wings and tail black, latter with a median bar of ashy-white; under wing-coverts white and tibial plumes barred with same.

164a. *Leucopternis schistacea plumbea* Salv., Ibis, 1872, p. 240, pl. viii. [Ecuador.]

Plumbeous Hawk.

General plumage white; head streaked with black, neck all round white; mantle and wing-coverts black varied with white; quills black; tail white with broad sub-terminal black band.

165. *Leucopternis albicollis albicollis* (Lath.), Ind. Orn. 1, p. 36 (1790). [Cayenne.]

White-collared Hawk.

Similar, but rather smaller and with head plumbeous; upper parts plumbeous instead of black; black sub-terminal band on tail narrower.

165a. *Leucopternis albicollis occidentalis* Salv. Ibis. 1876, p. 496. [Puna I.]

Puna White-collared Hawk.

Larger; above and below white; tail with broad sub-terminal black band; greater wing-coverts and secondaries black tipped with white; primaries black.


Ghiesbrecht’s Hawk.

Above blackish-slate, most of feathers tipped or barred with white; head, neck and underparts white; basal half of tail black, terminal white.


Mantled Hawk.
Above more slate coloured, with less white variegation: neck shaded with greyish: tail with narrow sub-terminal black band on white apical half.

168. *Leucopternis lacernulata* (Temm.), Pl. Col. S.E. Brazil 1, pl. 437 (1827) [Brazil.]
White-headed Hawk.

Smaller: above slate-black; above eye a white stripe, and nape streaked and margined with same; tail black, tipped with ashy-brown, with a median band of white; below white narrowly streaked with black on sides of chest.

White-browed Hawk.

Above black; head, neck and lower parts white; lores and stripe behind eye black; crown and nape streaked with black; tail black with broad band of white about 1/3rd from end.

Black-faced Hawk.

Above uniform plumbeous: wings and tail black; latter with a narrow band of white near middle; below white with a few black shaft stripes on sides of breast.

Semi-plumbeous Hawk.

Above, also throat and foreneck, slaty-black, below white narrowly barred with black; tail black with a median band of white, and a few anterior incomplete bars of same.

Barred Hawk.

Gen. XL. HARPYHALIAETUS Lafr. (1842.)

Much larger than *Buteo*: Head with a long occipital crest; tail short, not three times as long as tarsus.
Length ad. 33, wing 22 in.; tail 13.5 in.; above and below ashy-brown, shaded with chocolate; quills blackish; secondaries ashy-grey mottled with black and with a broad sub-terminal band of same; tail black, tipped with white, with broad white median band, and a second indistinct one nearer base.

173. *Harpyphaliaetus coronatus coronatus* (Vieill.)
Crowned Harpy.

Much darker; general colour bluish-black, shaded with chocolate; crest much shorter.

Arch. f. Naturg. 1844. p. 264. [Peru.]
Solitary Harpy.

Gen. XL1. MORPHNUS Cuv. (1817)

Size similar; head crested; tail long, more than four times as long as tarsus; toes very short; claws large.

Length ♀ 36, wing 19.3, tail 17 in.; above brownish-black; head and neck greyish-brown; wings barred with lighter ashy-brown; tail black, tipped with whitish and with from 3 to 5 bands of ashy-brown; chest ashy-brown; below white barred with rufous or brown.

Guiana Crested Eagle.

Crown and sides of head dark slate; above blackish-brown; wing-coverts more conspicuously barred with white; tail with 4 bands of white, mottled and tinged with brownish-grey; throat and upper breast blackish; below closely barred with black and white.

174a. *Morphnus guianensis tæniatus* Gurney, Ibis, 1879, p. 176, pl. iii. [Sarayacu.]
Ecuadorian Crested Eagle.
Gen. XLII. THRASAÆTUS Gray (1837)

Larger; bill robust, culmen much curved; feet very powerful; tarsus almost entirely bare, the scutallæ rough and irregular; claws very large and strong; head with broad depressed crest, erectile.

Length 38 in.; wing 22.30; above, also crest and chest-patch, ashy grey; tail irregularly barred with black; head, neck and under-parts white.*

175. *Thrassaætus harpyia* (Linn.) S.N., i., p. 86 (1758) [Mexico].
Great Harpy Eagle.

Gen. XLIII. HARPYOPSIS Salvad. (1875).

Size large; head crested; tail long and rounded.

Length about 34 in.; wing 19 in.; above dusky brown; below dirty white; chest greyish; tail with 6 indistinct transverse bands.

New Guinea Hawk-Eagle.

SUB. FAM. IV. GYPAETINÆ.

Gen. XLIV. GYPAETUS Storr (1784).

Nostrils hidden by stiff bristles; chin with a long tuft of black bristles; tarsus more or less feathered.

Size large: length 41 in.; wing 29.50; head white, a line each side of crown and another below ear black; general plumage above black with white shafts; wings and tail brown and scapulars washed with ochraceous brown; below tawny; tarsus feathered to the toes.

177. *Gyæetus barbatæs grandis* Storr, Alpen-reise vom Jahr 1781, p. 69 (1784) [Switzerland].
Bearded Vulture.

* Immature birds are black above and on chest; head and neck ashy-grey; below white.
Below warmer tawny reddish.

177a. Gypaetus barbatus barbatus (Linn.) S.N. 1, p. 87. (1758.) [Africa.]
Atlas Bearded Vulture.

Length 38 in.; wing 29 in.; cheeks white without the black markings: tarsus bare towards lower part.

Southern Bearded Vulture.

SUB. FAM. V. AQUILINÆ.

Outer toe connected to middle toe by membrane; tibia much longer than tarsus, which is reticulated on hinder aspect and generally more or less clothed with feathers; bill large, long and powerful; cutting edge of upper mandible festooned, but not toothed; wings long; tail moderate; sexes generally alike.

Gen. XLV. UROAETUS Kaup (1844).
Tail strongly graduated, wedge-shaped; tarsi clothed with feathers all round to base of toes.

Size large; length 38, wing 24.2 in.; general colour above and below black, browner on wings; nape tawny chestnut; upper tail-coverts brown mottled with white; tail feathers white at base of inner web.

Wedge-tailed Eagle.

E. & W. Australia, Tasmania.

Gen. XLVI. AQUILA Briss. (1760).
Tail nearly square or moderately rounded; tarsi feathered all round; toes reticulated above, except last phalanx which is scaled; head without crest; claws powerful and curved.

Length (♀) 37, wing 26 in.; plumage black, with back, rump and some of scapulars white; immature fawn colour, tail uniform.


S. Africa, N.E. Africa (Abyssinia) Palestine (occ.)
Length ♀ 32, wing 23-24.5 in.; ♂ average length 35.5, wing 26-27.50 in.; general plumage above blackish-brown, with paler margins; crown brown; nape and hind neck tawny rufous (W. Europe; much paler in E. European birds.); tail blackish at apical fourth, browner towards base; middle irregularly banded with grey; below blackish with brown bases to the feathers; in younger birds basal half of tail white, centre mottled brown, apical third black.


Averaging smaller; plumage darker and duller.


Larger; length ♀ 40, wing 27.9 in.; colour generally brighter.


Large and more rufous; max. length ♀ 40 in.; wing 27 in. [Doubtfully distinct.]


Smaller; wing ♀ 23.5 in.; head and neck above dull yellowish isabelline; forehead marked with dark brown, and nape tinged with rufous; general plumage blackish-brown; some of the scapulars pure white; tail dark grey with broad terminal blackish band; immature brown; tail uniform.

Size similar; forehead and crown blackish brown; edge of wing and some of scapulars white, forming a conspicuous shoulder patch; immature fawn colour, tail uniform.


White-shouldered Eagle.

Rather smaller; length ♂ 30, wing 23 in.; plumage brown, paler below; head brown, nape patch fulvous; quills, larger scapulars and tail blackish-brown. latter with fulvous tip and obsolete ashly bars; edge of wing white, forming conspicuous white shoulder; immature ashly-brown, tail darker, with terminal band of fawn.


Eastern Steppe Eagle.

Smaller; wing ♂ 21.50, ♀ 22.50.


Western Steppe Eagle.

Length ♂ 31. wing 22 in.; ♀ length 28, wing 20 in.; general colour above and below tawny to rufous brown; head and neck somewhat marked with darker brown; scapulars and wing-coverts darker brown, blotched with pale brown; quills and tail blackish-brown, with indications of greyish bars; under parts streaked with darker brown; immature tawny, tail brown tipped with fulvous.


Tawny Eagle.

S.E. Europe to C. Asia, N. India, China, Burma. Spain; N.W. Africa.

Central Asia N.W. India, and E. Siberia; in winter to Africa.

Steppes of S.E. Europe and W. Asia.

Africa, from Cape Colony N. to C. and E. Africa; C. Asia and N.W. India.
General colour pale clay or ochraceous colour.


Size similar: length ♂ 28, wing 20.5 in.; general colour fulvous brown, paler on head and neck and below, above with lighter margins to the feathers, especially on wing-coverts; tail dark brown with fulvous tip and 8 or 9 indistinct greyish bars on centre feathers.


Smaller; head, neck all round and inter- scapulary region chocolate brown.


Nostrils round; length, ♀, about 29, wing 21.50-23 in.; ♂, wing 20 in.; plumage above and below blackish brown; tail unbarred; younger birds purplish brown, much spotted with brownish-buff above and striped below; tail blackish, barred dark brown.


Smaller; wing ♀ 19–20 in.; ♂ 17.70–19 in.; plumage browner; crown and nape creamy brown; tail feathers with obsolete lighter
bars; younger birds less spotted than those of A. clanga and tail unbarred; nape patch ochraceous rufous.

Lesser Spotted Eagle.

Sexes nearly similar in size; wing ♀ 19.50, ♂ 19.15 in; bill more feeble, tarsi more slender; wings generally exceeding tail in length; least wing-coverts with small spots of white in immature birds.

Long-legged Eagle.

Gen. XLVII. HIERRAAETUS Komp (1844)

General characters of Aquila, but bill more slender; tarsi feathered to the toes.

Length ♀ 26, wing 21 in.; wing ♂ 19.6 in.; above deep brown, feathers mostly with paler margins and white bases; tail ashy, with broad sub-terminal dark brown band, and 5 or 6 indistinct bars; below white, with blackish-brown shaft stripes, the flanks and legs buffish, barred with black.

Bonelli's Eagle.

[Smoiler but doubtful form.]


C. Europe from N. Germany to Bessarabia; cas. W. Europe; in winter to N.E. Africa.

Indian Peninsula; Burmese countries.

S. Europe (S. France and Spain to S. Russia), Asia Minor, Turkestan, Palestine, India, China, N. Africa.

S. Arabia; E. Africa (Somaliland, Mozambique).
Wing ♀ 18.3 in.: above blackish-brown, mottled with white; below purer white streaked with black on breast, and with large spots on under tail-coverts; under wing-coverts black.

African Hawk-Eagle.

Smaller; wing ♀ 16.5, ♂ 14.0; above brown, head and neck isabelline; tail with obsolete bars on outer feathers; below white, throat and breast washed with fawn and streaked with reddish brown or blackish; species subject to variation: younger birds dull brown below with black shaft-stripes, and a white shoulder patch.

187. *Hieraaëtus pennatus* (Gmel.), S.X., i., p. 272 (1788) [*ex Brisson, l. c.*].
Booted Eagle.

Smaller, and with a short occipital crest; length ad. 21.5 in., wing 15 in.; above brown, crown darker; crest, neck and under-surface rufous, with black shaft-streaks; tail mottled greyish-brown, with 7 or 8 dark brown bars.

188. *Hieraaëtus morphnoides morphnoides* (Gould), P.Z.S., 1840, p. 161 (1841). [*Upper Hunter, N.S.W.*]
Little Eagle.

Below heavily striped with dark brown.

New Guinea Little Eagle.

Below pale isabelline; tail with 7 dark bands.

190. *Hieraaëtus ayresi* Gurney, Ibis 1862, p. 149.
Ayres' Little Eagle [*=Lophotriorchis lucani* Sharpe.]
Length 26, wing 18 in.; head with distinct occipital crest; plumage above brown, with paler margins; tail dark brown, tipped with whitish, with obsolete lighter bars on inner webs of feathers; below whity brown, varied with dark brown on throat and breast.


Gen. XLVIII. **LOPHOTRIORCHIS** Sharpe (1874).

Head with a long wedge-shaped crest.

Length 21, wing 14.1 in.; above black; cheeks, throat and breast white; below tawny rufous, with black shaft-stripes.


Kiener's Crested Eagle.

Larger; length 26.5, wing 20.2, crest 3.3 in.; above glossy-black; tail ashy-grey, basal third black; throat black; below tawny rufous with black shaft-streaks; flanks black.


Gen. XLIX. **ICTINAETUS** Jerd. (1844).

Head crested; claws nearly straight, the circumference of inner claw exceeding the length of outer toe (which is very short).

Wing 20-20.50 in.; black; the quills mottled with white near base; tail feathers barred with ashy above, mottled with white below.

194. *Ictinaetus malayensis malayensis* (Temm.). Pl. Col. i., pl. 117 (1824). [ex Reinm. MS.] Malay Archipelago (Sumatra, Borneo, etc.)

Malayan Crested Eagle.
Larger: wing 21.50.

Indian Crested Eagle.

Gen. L. SPIZIASTUR Gray (1841).

Head crested; claws curved and powerful; the circumference of inner claw about equal to length of outer toe and claw.

Length ♂ 24 in., ♀ 21 in.; wing ♂ 16.4, ♀ 15 in.; above blackish, quills and tail ash brown, slightly tipped with fulvous and banded with black; head, neck and under surface white.

Black and White Crested Eagle.

Gen. LI. SPIZAETUS Vieill. (1816).

Tarsi feathered as before; crest sometimes fully developed, sometimes absent; wings short, falling short of tail by more than length of crest.

Length ♂ 28.5 in. wing 16.2 in.; ♀ 24, wing 13.4 in.; occipital crest 3 in. long; sides and back of neck bright rufous; above black, feathers brown at base; wings brown, barred with blackish; tail brown with 4 or 5 blackish bands; below white, chest slightly streaked and abdomen broadly banded with black; on each side of face below eye a black moustachial band. Young much browner and with 6 bands on tail.

196. *Spizaetus ornatus* (Daud.), Traité, ii., p 77 (1800). [Cayenne.]
Manduit’s Hawk-Eagle.

Size about the same; above and below black, browner on wings; under surface of wing with 3 irregular bands of white; upper and under tail coverts slightly spotted with white; tail
black with 4 bands of ashy brown. Young browner above and more spotted with white below; tail with 6 bands.

Tyrant Hawk-Eagle.

Larger; length 38 in., wing 27.5. Above dark sepia brown; feathers of head and neck with whitish brown margins and white bases; wings barred with blackish; tail with 6 bands of ashy grey; fore neck and chest dark brown; throat and under parts white, sparingly spotted with dark brown, especially on flanks. Young paler above, more buffy white below, the spots nearly absent and with about 11 bands on tail.

Martial Hawk-Eagle.

Rather smaller; above black; wings brown; quills externally shaded with pale ashy grey and with a broad subterminal band of black; tail with 2 broad bands of ashy grey and remains of a third; throat black; below yellowish buff, whiter towards vent, broadly banded with black, the chest almost uniform; under wing coverts chestnut. Young above brown with indistinct darker bands and whitish margins; tail with 3 lighter bands; below white.

Crowned Hawk-Eagle.

Smaller; length 32 in., wing 20; ♀ length 28 in., wing 18.50; crest 2.8 in.; above blackish brown, with paler margins, especially to feathers of head and hind neck; wings paler, banded with dark brown; tail ashy brown with 4 blackish brown bands; throat white, with black central stripe; chest fawn

Central and S. America, from Guatemala to S.E. Brazil.

S. Africa, E. Africa, N. to Shoa, Abyssinia, and Bogosland; Nigeria.

S. and W. Africa.
with black shaft streaks; below brown spotted and barred with white. Young have head and neck white with dark centres to the feathers; tail with 6 darker bands; below white, slightly streaked with dark brown; flanks brown.


With the white bands below broader and more regular.


Larger; ♂ about equal to ♀ of typical race.

200b. **Spizaetus nipalensis orientalis** Temm. & Schleg. in Siebold’s Faun. Jap. Aves, p. 7, pl. 3 (text 1844, pl. 1845) [Japan].

Japanese Hawk-Eagle.

[Not separable unless a breeding bird in China.]


Length ♀ 32 in.; ♂ wing 17.8; ♀ wing 16 in. Above brown; feathers of hind neck and mantle with pale bases and black shaft streaks; crest black, 3.8 in. long; wing quills rich brown, barred with blackish; tail with broad blackish subterminal band and 3 narrower bands; throat white with central black stripe and bordered by 2 black moustachial stripes; below brown, more rufous and mottled with white on chest.

201. **Spizaetus cirrhatus cirrhatus** (Gmel.), S.N., i., p 274 (1788) [India]. Indian Hawk-Eagle.

Smaller: wing 15.20—14 in.

201a. **Spizaetus cirrhatus ceylonensis** (Gmel.), S.N., Ceylon. i., p. 275 [Ceylon]. Ceylonese Hawk-Eagle.
Small insular race.


Andaman Hawk-Eagle.

Size of *S. c. cirrhatus*, but with crest very slight; with dusky phase [*S. limnactus* Horsf.] nearly uniform chocolate brown, and pale phase [*S. caligatus* (Raffles)] dark brown above, below white with large longitudinal brown markings, the thighs barred.

201c. *Spizaetus cirrhatus limnactus* (Horsf.), Tr. Linn. Soc., xiii., p. 138 (1821) [Java.]

Javan Hawk-Eagle.

Larger; below white, without the dark markings.


Smaller; length ad. 22.50, wing 13 in.; above black with occipital crest, tipped with white, 2.75 in. long; wing quills brown, tipped white, barred with black and with broad black subterminal band; tail ashy brown, with broad basal and subterminal bands of black; below white, breast with large black spots and belly banded with black.


Rather larger, length 25 in., wing 14.75, crest 2.50 in.; above dark umber brown; crest with base of feathers white; tail paler brown with 7 darker bands; throat as in *S. c. cirrhatus*; below yellowish rufous; chest heavily marked with dark brown lanceolate spots; thighs and under tail-coverts barred with brown and white.


Philippine Hawk-Eagle.
Larger; length ♀ 30 in., wing 21 in.; ♂ length 24 in., wing 19.7 in.; blackish brown, blacker on head; lighter and greyer on wings and tail; tail with 6 or 7 obsolete bars.

204. *Spizaetus gurneyi* (Gray), P.Z.S., 1860, p. 342, pl. 169. [Batchian.]
Gurney's Hawk-Eagle.

**Gen. LII. LOPHOAETUS Kaup (1847).**

Crest feathers very long and pendant; tarsi feathered as in preceding genera.

Size small; length ♂ 21, wing 15.50, crest 4.75; ♀ plumage glossy black, with a brown shade on wings; quills white at base, forming a conspicuous patch, and banded with white on inner webs below; tail with 3 greyish bands on middle feathers, becoming broader and whitish on outer ones; ♀ larger and much browner; juveniles **deeri** chocolate brown.

Black-Crested Eagle.
ADDENDA ET CORRIGENDA (PART 1.)

Page 4 No. 7. In distribution for S.E. and N.E. read: S. and N.
... 4, 8. To distrib. add: Himalayas, Afghanistan.
... 9. For distrib. read: Plains of N. India.
... 10. In distrib. delete: Abyssinia.
... 6. For Jorgos read: Torgos.
... No. 14. For Jorgos read: Torgos.
... 15. For Otoypgs read: Torgos.
... 17. To distrib. add: Canarý Is., Cape Verd Is.
... 36. In distrib. after Europe add: N.W. Africa (Morocco).
... 59a. This is merely a common melanism of M. gular.
... 60. For Siberia read: W. Asia (Asia Minor, Palestine, etc.).
... 60b. To distrib. add: Japan.
... 60c. For Astur gentilis candidissimus, etc. read:
    Astur gentilis albus; Menz. t.c.p. 438 (1882).
... 70. After this article add:
   70a. Astur togaster rooki, Roths. & Hart.,
   (Admiralty Is.)
... 79a. After this article add:
       Melville Is.,
       1, pt. 1, p. 13 (1914).
... 95. After this article [I cannot place from description, as it seems
    immature] add:
   95a. Astur buergersi, Reichenow, Orn. M.B.
       German New
       Guinea
       (Mäomobohberg).
... 97. For N. Asia read: W. Asia.
... 97c. For distrib. read:
    X. and Central Asia from Turkestan to
    Japan; in
    winter to India, Kashmir, Assam, Burma.
... 98. For Accipiter granti read: A. avisus granti.
... 99b. After this article insert:
... 102a. For pp. 171-6, read: p. 173.
... 102b. Delete the word: Minullus.
   [Does not appear to be a tenable species, however,
   and is most probably a melanism of No. 63a,
   Astur tachiro sparsijasciatus.]
... 119b. Delete the word: virgatus. [Not a subspecies of A. virgatus.]
... 119d. Not separable from No. 119. (Hartenr).
... To be cancelled and following leaf substituted:
c. Thighs white, barred with orange tawny.
   Breast brown with white spots, rest of under parts barred with orange tawny and white;
   upper tail-coverts white, barred with reddish.

\[C. cincticeps.\]

d. Thighs rufous.
   Below dark brown, with a white band, marked with brown, across breast; upper tail-coverts white, tinged with grey and rufous.
   Below brown, streaked with white; upper tail coverts rufous, tipped with white.

\[C. arugineosus.\]

Gen. XIX. **MICRASTUR** Gray (1841).

Nostrils round, with a bony excrescence; tarsi and feet large and robust; tarsus reticulated behind; in front covered with small scutellae.

Size large, length, ♂ 20 in., wing 10.4; ♀, about 24 in.; above blackish with white nuchal collar; tail with 3 white bands; below white with black shaft lines; juv. below barred; intermediate plumage below pale ochraceous fawn, as well as sides of face and nuchal collar.

49. **Micrastur melanoleucus melanoleucus** (Vieill.)
   N.D. x., p. 327 (1817). [Paraguay.]
   Collared Harrier-Hawk

   Much smaller; wing ♂ 8.60 in.; tarsi and feet much smaller and weaker; white tail bands above partly obscured by brown patches in centre and below less extensive; those on outer feathers only 4 in number in place of 6 in typical form.

49a. **Micrastur melanoleucus buckleyi**, subsp. nov.
   [ad., ♂ ?, Sarayacu, Ec. Feb. 1880, Buckley, B. Mus. coll. No. 87, 5. 1. 122.]

   Ecuador.

   Size medium, length (♀) 17.5; wing 9.8; above slate; tail with 3 bands of ashy-brown showing white below; below white with black shaft lines; no muchal collar.

50. **Micrastur mirandollei** (Schl.), Nederl. Tijdschr., i., p. 131 (1863). [Dutch Guiana.]
   Mirandolle's Harrier-Hawk

   Upper E. Peru, Guiana, Panama.
Gen. XIXA. CLIMACOCERCUS CAB. (1845.)

Feet very much smaller; tarsi more slender, with broad and regular scales in front.

Size small, length (5) 13 in.; wing 6.9. Above slate or rufous (rufous phase); tail with 3 greyish white bands; below greyish white, barred with greyish black; throat white, fore-neck rufous.

Red-necked Harrier-Hawk.

Above chocolate brown; tail blackish, with 3 narrow white bands; below thickly barred with black and white; throat brown.

Barred Harrier-Hawk.

Above (male) ashy brown (female blackish); tail blackish with 3 irregular white bands (4 in immature); below whitish, breast finely barred with wavy blackish lines; lower abdomen white.

White-throated Harrier-Hawk.

Above blackish; tail with 3 irregular white bands; throat and cheeks pale grey; below dull white, closely barred down to thighs with blackish.

53. Climacocercus anguilla* (Cass.). Pr. Phil. Acad., 1848 p. 87. [Talapa. Mex.]
Grey-throated Harrier-Hawk.

Gen. XX. GERANOSPIZIAS Sundev. (1873).

Tarsus scaled behind; thighs without overhanging tuft of feathers; ridge of bill greater than half length of middle toe (without claw); commissure slightly festooned.

Size moderate (length 16.5-24.5 in.).

* In revising this group the forms irregularis and interstes appear to be untenable and are therefore omitted.
ASYNOPTICAL LIST
OF THE
ACCIPITRES
(DIURNAL BIRDS OF PREY)

PART III.

Gen. LIII. HERPETOTHERES Vieill. (1817).

Tarsus bare on lower portion, reticulated in front; bill with upper mandible slightly festooned; nostrils circular with osseous margins; wings short.

Length ♂ (Ecuador) 16 in.; wing 10.25; tail 8 in.; ♀ wing 11–11.20 in.; above brown; head crested, crown buffish white with brown shaft streaks; hind part of face and broad nuchal band black; fore cheek, side of neck, collar round hind neck and entire under parts buffish white; upper tail-coverts creamy buff; tail dark brown, with 4 creamy buff bands in the form of pairs of oval spots not extending quite across webs.

206. Herpetotheres cachinnans cachinnans (Linn.), S.N., i., p. 90 (1758). ["America meridionalis" = type loc. subst. Surinam Berlepsch.]
Laughing Hawk.

Smaller and more richly coloured; below nearly uniform deeper buff; head deeper buff; wing ♂ 10 in.


[Not seen.]


From Bolivia and Paraguay N. to South Mexico.

W. Colombia, (Pacific side of Andes),

Mexico.
Gen. LIV. DRYOTRIORCHIS Shelley (1874)

Tarsus bare on lower portion; nostrils perpendicular ovals; head with a short crest of lanceolate feathers; wings short.

Length ad. 22.5; wing 11.9 in.; above dark brown; nape and scapulars with white bases to the feathers; quills brown, barred with darker brown, the inner webs white; tail with 6 blackish bands; below white; fawn colour on throat and chest, the former with a black central stripe; chest and breast with black spot on tip of each feather, becoming bars on flanks and thighs; vent and under tail-coverts with spots of rufous.


Wing ♂ 11.5 in.; chest uniform creamy white, without the large black spots (except in immature birds).


Gen. LV. EUTRIORCHIS Sharpe (1875).

Wings remarkably short, not extending much beyond base of tail; tail elongated; head with a short crest.

Above brown, tail with about 8 blackish bars; below white narrowly banded with black; throat and chest ashy.

208. Eutriorchis astur Sharpe, P.Z.S., 1875, p. 73, Madagascar. pl. xiii. [S. Madagascar, type in Brit. Mus.]

Madagascar Serpent-Eagle.

Gen. LVI. CIRCAÆTUS Vieill. (1816).

Tarsus reticulated; head with a short crest as in Dryotriorchis; wings long.
Size large; length ♀ 31 in.; wing 21.3; ♂ 26 in.; wing 19.65; above dark brown, with a purplish gloss, head and wing-coverts paler; forehead and face whitish, with lines of black; secondaries barred with darker brown and with a broad subterminal band; quills black; tail tipped with white and with 3 blackish bands; below white, throat and chest heavily striped and flanks and abdomen barred with brown; juv. below pale earthy brown, abdomen white, spotted and barred with brown; tail with 4 darker bands.

Short-toed Eagle.

Size similar; wing ♀ 22.25–22.50 in.; above brownish black; secondaries and wing-coverts barred with ashy grey; upper tail-coverts tipped and barred with white; tail ashy brown with 4 blackish bands; chest blackish; throat white, streaked with blackish; below white; juv. tawny below.

Black-breasted Snake-Eagle.

Size nearly the same; wing ♀ 22 in.; bill much deeper, upper mandible from ridge to gonys, measured through anterior edge of nostril, 23 mm. as against 19 mm. in *C. pectoralis*; tarsi also much stouter; whole under parts uniform blackish brown; immature brown below with white markings, not white with brown markings as in *C. pectoralis*.

Black-bellied Snake-Eagle.

*S. Europe
N. to France, Germany, C. Russia; N.E. Africa, C. Asia to N. China; India.*

E. & W. Tropical Africa to S. Africa.

* C. hypoleucus (Pall.) must be regarded as a synonym. Apart from the fact that it was described from S. Russia, the white-bellied birds do not constitute a form. Examples from India and Africa with the white under parts are counterbalanced by examples from the same regions as dark below as typical birds. The white-bellied birds are evidently younger examples.
Size similar; length ♀ 32 in.; wing 20.5 in.; above paler; throat and chest ashy brown, the throat varied with white bases to the feathers; below white broadly banded with ashy brown.

Beaudouin's Snake-Eagle.

Smaller; length ad. 25 in.; wing 14.6 in.; above blackish, browner on head, with pale whitish margins to all the feathers, including the wing quills, which are barred with blackish, the secondaries also with a broad subterminal band; tail ashy brown, tipped with white, and with 4 black bands; throat and chest fulvous brown; below white, barred with dark brown.

Banded Snake-Eagle.

Size similar, wing ♀ 16.1, ♂ 15 in.; above grey; tail whitish, shaded and tipped with pale brown, and with broad blackish subterminal band and 2 narrower bands near base; below ashy brown, shaded with grey, the abdomen and thighs barred with white.

214. *Circaetus cinerascens* Mull., Naum. 1851, heft iv., p. 27. [Sennar, Egypt. Sudan.]
Cinereous Snake-Eagle.

Length 25.60; wing 16.20; tail 9.90; throat and chest with black shaft stripes. [Not seen.]

“German” E. Africa.

Gen. LVII. PITHECOPHAGA Ogilvie Grant (1896).

Bill very deep and much compressed, ridge of culmen much curved; nostrils a vertical slit; lores and cheeks covered with bristles only; head with a crest of long lanceolate feathers; feet very powerful; tarsi mostly naked, with a row of large scutes down front; wings short and rounded; tail very long.
Length 33 in.; wing 20.5; tail 15 in.; above rich brown, with paler margins to the feathers, especially on head, where they are whitish buff; tail dark brown with about 4 darker bands; below creamy white, the thighs and flank feathers with reddish brown shaft stripes.


Gen. LVIII. SPILORXIS Gray (1840).
Crest feathers of head rounded, not lanceolate; face bare with only a few short bristles.

Length ♀ (Himalayas) 30; wing 19.50–21 in.; ♂ (Simla, N.W. Himalayas) length 27.50, wing 20.1 in.; wings reaching beyond median pale band on tail; above purplish brown; head and crest black with white bases; wing-coverts with small spots of white; secondaries broadly and upper tail-coverts narrowly tipped with white; tail black with a very broad median band of brownish white; throat, hind cheeks and ear-coverts blackish brown; below pale ochraceous brown; chest with transverse vermiculations of dark brown; breast and belly with spots of white (bordered with dark brown), becoming bars on thighs and under tail-coverts; under wing-coverts pale rufous; outer primaries white below with terminal black band about 4 in. wide and one median blackish band, also slight remains of a second band near base.

Crested Serpent-Eagle.

Smaller, tarsi more slender and feet smaller; wing ♀ (S. India) 16 in.; (Centr. Prov.) 17.25 in.; (Assam) 17–17.50 in.; wing ♂ (Assam) 17 in., (Centr. Prov.) 18.25–18.75 in.; above darker; throat less blackish, much browner, but with blackish shaft stripes; much darker Himalayas (Kashmir to Nepal); in winter to N. India.
below; chest darker and warmer brown, uniform in oldest birds*; white spots below similar; tail more often with median pale band nearer apical end and narrower, with remains of a second basal one, the terminal black band about 2 in. wide; primaries below usually showing 2 distinct black median bands; the terminal one narrower and often broken; under wing-coverts rufous brown spotted with white, the greater ones ashy.

Lesser Serpent-Eagle.

Slightly smaller, and wings shorter; wing ♂ 14.60–14.75 in.; throat and cheeks and ear-coverts ashy brown; tail as in S. c. albidus; chest and upper breast always uniform darker brown in adults; primaries below with only one blackish median band.

Ceylon Serpent-Eagle.

Wing ♂ 17–18 in.; ♀ 17.25–18.25 in.† larger and much paler above and below; with the hind cheeks and ear-coverts ashy; throat as pale as chest, but tinged with ashy and, like chest, finely vermiculated; white

* Vermiculated in less old birds, which are much lighter below; in considering this difficult group it should always be remembered that these birds certainly darken with age. Temminck described albidus from a quite juvenile bird, buffish white below with streaks and spots of dark brown. The dark uniform chest is a sign of age like the single pale tail band, but the typical S. c. cheela is a pale race and does not usually acquire the uniform chest; although it always gets the single tail band. As we get away from the typical race these characters vary, albidus generally getting the uniform chest, but not often being found with the purely black tail and single band. The northern forms are the largest and the southern smallest and more variable in the characters mentioned; also often, but not always, the darkest. The moult is from the pale juvenile plumage straight into the brown underparts with vermiculated chest and white spotted under parts, although the brown comes out in the form of bars towards the vent gradually dividing the white interspaces first into partial bars and then rounding them off into spots. The vermiculations in some forms are lost later as the chest darkens and becomes uniform.

† Measurement of a skin from Shan States in coll. Brit. Mus. Burmese birds vary considerably in size, but it is impossible to place these large birds with S. c. rutherfordi from Hainan, especially as the throat is different.
spots below rounded and less distinct, the darker margins much paler; primaries below as in S. c. cheela, but black terminal band not more than 3 in. wide; under wing-coverts rufous with white spots, the outer edge white.


Smaller; wing (ex. from Hainan, Tring Mus.) ♀ 16-17 in., ♂ 15.50-16.25 in.; throat slaty brown to dusky.


Wing (ad. unsexed) 16.25-16.75; much paler above and below; wings strongly shaded with grey; sides of head slate grey; throat uniform with chest, which is pale ashy brown, slightly vermiculated; chest also sparingly spotted with white like the lower parts; tail brownish black, with brownish white median band and remains of a basal one; primaries with one black median band below, besides terminal one; under wing-coverts rufous, with white spots, outer edges white.


"Resembling S. c. cheela, but with upper parts somewhat paler ashy brown, with a purplish gloss, below dusty ashy; transverse banding on breast indistinct, often not noticeable; throat never black, but like the breast, cheeks and ear-coverts grey, not black; slightly smaller wings" [18-19.25 in.].


Burma, N. to Upper Burma and Shan States, S. to Tavoy, at least, in Tenasserim.

Hainan I.; Indo China?

Siam.

S. China to Upper Burma (Chindwin dist.)
Nearly as large as *S. cheela cheela*; length ♂ 27 in.; wing 18.5–19 in., tail 13 in.; darker above and below; tail with the central pale band narrower; throat and ear-coverts blackish brown; chest nearly uniform brown, but showing vermiculations in some (less old) birds; below darker and more cinnamon brown; wing-coverts darker and browner; primaries below with black areas much increased and little white.


Smaller; wings reaching to middle of pale tail band; wing (Brit. Mus. ex.) ♂ 13.75–15 in. (northern largest) ♀ 14.50–15 in.; ♀ (type Pahang) 14.60 in.; above dark brown; wing-coverts sparingly marked with minute spots of white; secondaries not visibly tipped with white; tail with median brownish white band about 2 in. wide and irregular narrow basal one [in oldest birds base only brownish], the 2 black bands about 1.50 in. wide; throat and cheeks and ear-coverts slate brown*; below darker, browner and duller than *S. c. rutherfordi*; fore neck and chest nearly uniform with only slight traces of vermiculations; white spots on breast and abdomen broader, larger and more regular, in the form of remains of transverse bars; under wing-covert rufous brown, with very large spots of white, edge of wing white; primaries below with the median black markings concentric on inner webs instead of forming bands, the terminal black and subterminal white bands about 2.25 in. wide.

* Malacca birds usually have the subterminal tail band whiter, throat and hind cheeks greyer, and are lighter below; chest fulvous to brown, either uniform or slightly vermiculated (less old birds). Although examples from various parts of the Malayan peninsula vary I think it best to make one race for the whole peninsula, and I have united with it the Sumatran birds which occur not only in the lighter plumage described, but in a much darker plumage, approaching the Javan form (*S. c. bidus*), although a trifle smaller and with the throat paler and greyer; the tail, under wing-coverts and under surface of primaries are similar to those of *S. c. bidus* however. Had it not been for the occurrence of this dark race in Perak and of the lighter Malay race in Sumatra it would be necessary to separate the Sumatran form.
217h. *Spilornis cheela malayensis* *subsp.* nov. Malay
Raub, Pahang. “alt. 400’’; June 28, 1903; Peninsula;
W. H. Graddock, in coll. H. K. Swann
[= S. bacha; auct. plur.]
Malayan Serpent-Eagle.

Slightly larger; wing ♀ 15.50; darker generally (clove brown); wing-coverts heavily spotted with white; secondaries scarcely tipped; tail black with one broad pale median band, the base dark brown; throat, cheeks and ear-coverts blackish; chest uniform clove brown, without vermiculations; under wing-coverts usually blackish slate with white spots; white spots below irregular and only forming bars on under tail-coverts; primaries below with 2 black bands besides terminal one, coalescing on inner primaries, the white areas much reduced.


Javan Serpent-Eagle.

“Resembling *S. c. bido* of Java, but with more white on underside of wing quills and the black not so well defined; a rich umber brown nape band formed by tips of black crest feathers on lower edge of crest, having conspicuous tips of that colour; tail band broader and purer white, not merely pale brown as in *S. c. bido*; throat quite black.”


Borneo (Mts. Kinabalu & Dulit).

Smaller; length ♀ 21 in.; wing 14 in.; much paler brown above, especially on wing-coverts, but bastard wing conspicuously black; head and crest jet black; tail black, with median band brownish white; upper wing-coverts with spots of white; under wing-coverts rufous spotted with white; cheeks, ear-coverts, chin and throat grey; chest uniform

*The name *bacha* cannot stand for Malayan birds. It was described from Le Vaillant who claimed it as a S. African bird erroneously and it is now impossible to say to what race it properly applies. Gurney thought Le Vaillant’s plate more like the Malaccan bird, but considered the name would be best discarded (*Ibis*, 1878, p. 100). In any case it is predated by *bassus* Forster (1798), an equally doubtful name.
brown; primaries below with the white subterminal band about 3 in. wide; below tawny with white spots.


Smaller and much paler (especially on wing-coverts) than *S. c. pallidus*; tail shorter and light band narrower; wing (Nias I.) ad. 11.6–12 in.; tail 7.5 in.; (Bunguran I.) wing ♀ 12 in.; chest uniform (pale ash brown in Bunguran I. birds and throat grey); head and bands on wings and tail black not brownish as in *S. c. minimus*.


Larger; wing ♀ 14.25 in.; similar to last form, but very pale below; much paler than *S. c. pallidus* of Borneo.

**217n. Spilornis cheela subsp.?** [♀♀ Triomate, Yaye-yema, S. Loo Choo Is., June 16 and 19, in coll. Tring Mus.] [=S. pallidus Ogawa, Annot. Zool. Japon., v. 4, p. 213, 1905.] Very small and pale form compared with *S. cheela cheela*, wing ♀ 11.50; ♀ 11.75; head and crest (shorter) blackish brown instead of black; tail with the terminal and median bands dusky brown instead of black, the subterminal and basal bands light brown; throat and chest pale fulvous brown without vermiculations; bands on primaries below as well as tips dusky brown instead of black.


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* I have united the Bunguran I. birds (Tring Mus.) with *salvadorii* as they agree so well in size, although a little paler, and are certainly not *pallidus*. There is no connecting link between these and the Nias I. birds, however.
Larger; wing ♂ 15.25–16.25 in.; throat ashy; chest pale ashy brown finely vermiculated; below tawny, the white spots rounded, becoming bars on thighs; tail with the pale band, but a distinct basal one brown.


Andaman Serpent-Eagle.

"Perhaps closest to the Andaman race (*S. c. davisoni*) but distinguished by the richness of its colouring and its breast being marked with narrow transverse bands of dusky and rufous brown—these bands often extending on to the throat"; wing av. 15.40 in.


Smaller; length ♂ 19.75–21.50; wing 13–14.25 in.; ♀ length 19.50–22.10 in.; wing 12.50–14.20 in.; bend of wing mottled instead of uniform white or yellowish white; tibial plumes spotted instead of barred. [Doubtful form; not seen, and characters given quite insufficient; probably identical with Sumatran bird.]


Length ad. 22.5; wing 15.6 in.; very dark form; above and below dark clove brown; wing-coverts and wings with minute white spots; tail with subterminal band brown and narrow; the basal one brown but indistinct; the terminal and median bands black; below with white spots distinct, rounded, and continued up to throat.


* The occurrence of this bird along with a form of *S. cheela cheela* proves it to be a good species, apart from its very distinctive coloration and markings.
Length ♂ 17.6, wing 13.3 in.; head black; above purplish brown, upper tail-coverts tipped with white; wing quills with broad subterminal band of purplish brown and banded with dark brown below; tail tipped with white and with broad blackish subterminal band and 2 less distinct ones nearer base; face and throat bluish ash; chest uniform dull rufous; below rufous brown with large spots and bars of white.


Length, nearly ad., 18.5; wing 12.2 in.; more closely banded and spotted below.


Length ♂ 18, wing 12.1 in.; ♂ length 17 in.; wing 12.2 in.; rufous of chest paler.


Larger; wing ♂ 13.50–14.5 in.; above pale brown, with a purplish gloss, the feathers irregularly spotted with white at tips; interscapulary region with pale rufous tips and large rounded white spots; head and crest ashy black, spotted with white, and with rufous margins; tail with broad median and subterminal blackish bands; face and throat ashy grey; rest of under parts pale tawny rufous, ocellated with spots and half bars of white.


Wing ♂ 12.50; very much paler, especially below, without the rufous shade on breast and belly.
Steere’s Serpent-Eagle.

Length ♂ 17.10 in.; wing 10.15 in.; tail 6.50 in.; above drab colour, with a slight coppery sheen; ear-coverts and cheeks grey; some of wing-feathers with narrow white tips and top of head and occipital feathers black; tail with 2 light bars; throat white with grey median stripe; breast buffy wood brown, becoming much paler on abdomen; unsplotted. [Not seen.]*

Kloss’s Serpent-Eagle.

Gen. LIX. KAUPIFALCO Bp. (1854).

[= *Asturinula*, auct. plur.]

Size small; head not crested; nostrils circular; tarsi unfeathered, transversely platted in front.

Length ♂ 13.5; wing 9.5 in.; ♀ length 12, wing 8.9 in.; above slate grey, lighter on head; primaries blackish, tipped with white; rump black; lower upper tail-coverts white; tail black, tipped with white and with a median band of white; throat white with central stripe of blackish; chest ashy grey; below white, finely barred with ashy brown.

One-lined Hawk.

Smaller; wing ♂ 8.50; bands below much broader and darker, especially on the thigh feathers; white band on tail much narrower; white of throat more extensive and dark throat stripe narrower.

* From the measurements, pale coloration, and locality this might be assumed to be an immature example of s. c. *minimus*. One other form of *Spilornis, S. asturinus* Meyer (S. B. Ges., Isis, Dresden, p. 13, 1884, *Patr. ign.*) I do not know the relations or distribution of, and so cannot place.
Gen. IX. BUTASTUR Hodgs. (1843).

[Head not crested], nostrils oval, with a superior membrane.

Length ♀ 18.5; wing 12.2 in.; ♂ length 16; wing 11.7 in.; above pale rufous brown (with darker shaft-stripes), darker on head; nape mostly white; wing-coverts paler and variied with white; tail tipped with buffy white, and with 6 or 7 nearly obsolete blackish bars, the subterminal broadest; throat yellowish white, with a line of black each side and down centre; breast pale rufous brown with yellowish white bars; abdomen nearly uniform buffy white.

223. BUTASTUR LEESA (Frankl.), P.Z.S., 1831, pt. 1, p. 115 (1832). [India, between Ganges and Nerbudda.]
White-cyded Buzzard-Hawk.

Size almost similar; above brownish ashy; clearer on head, hind neck and wing-coverts; quills rufous, externally ashy grey, barred with dark brown; tail rufous with 6 blackish bars; below ashy, with blackish shaft-stripes and a few whitish bars on flanks.

Ashy Buzzard-Hawk.

Larger; wing ♀ 13.6; ♂ 13.1 in.; above rufous brown, more ashy on head and mantle, and rufous on wings, rump and upper tail-coverts, which latter are barred and tipped with white; tail with 4 bands of blackish brown; forehead and throat white, latter with mesial brown stripe; feathers of hind neck

S. Africa, Damaraland to Angola on W. and to Nyasaland.

Buluchistan, Kashmir, Indian Peninsula, Burmese Provinces.

Indo-Chinese Provinces, Greater Sunda Is., Celebes.
with white bases. below barred with white and rufous brown.


Eastern Buzzard-Hawk.

Length ad. 16.5; wing 12.3 in.; above cinereous brown with black shaft-stripes, and rufous margins to the feathers; head and neck darker; least wing-coverts and quills rufous; tail with 3 or 4 blackish bands, except on centre feathers; throat creamy buff; below pale rufous, with narrow shaft streaks.


African Buzzard-Hawk.


[= *Helotarsus*, auct. plur.]

Head with a crest of rounded feathers; tail extremely short; wings exceeding tip of tail by more than length of tarsus.

Length ♂ 25, wing 21.5, tail 5 in., ♀ length 21, wing 21.2, tail 4.5 in.; head and under parts glossy black; hind neck, mantle and tail rich maroon chestnut, lower back paler; scapulars and quills black; wing-coverts pale bronze brown, whitish on shoulder; under wing-coverts white; axillaries black; bill black, feet coral red.


Bataleur Eagle.

[T. *leuconotus* (Rüpp.) is a synonym.]

Ussuri-land, Japan and E. China; in winter to S. China, Malay Peninsula, Philippine Is., Celebes, Borneo, etc.


Africa (Cape Colony to Egyptian Sudan and E. Africa; Senegal).
Gen. LXII. HALIÆTUS Savigny (1809).

Size of, and with general characters of Aquila, but tarsus not feathered more than half way down; the front scutellated, sides and back reticulated; no membrane between the toes; head not crested, but feathers of neck long and lanceolate.

Length ♀ 36–38; wing 26 in., ♂ length 33, wing 24 in.; general plumage brown, with paler greyish margins to many of the feathers above; head and neck much paler, nearly white in very old birds, with ashy brown streaks; quills black, shaded with grey externally; longer upper tail-coverts and tail pure white; bill and feet yellow. Immature: head and neck blackish brown; general plumage fulvous brown, mottled with dark brown; tail brown.


White-tailed Eagle.

Size similar; wing 23–25 in.; head and neck all round, rump, upper tail-coverts and tail pure white. Immature: head and neck black and tail mingled white and black at first.


Bald Eagle.

Europe, S. to Mediterranean on E. side; Iceland, Greenland;* Asia Minor, N. and E. Asia†; in winter S. to India.

United States, S. to Lower California & N. Mexico.

Rather larger; wing ♂ 25.50; ♀ 25 in.

Alaskan Bald Eagle.

Length ad. 41, wing 24.4 in.; tail with 14 feathers; general plumage brown, with ashy streaks to head, neck and under parts, and whitish tips to feathers of upper parts; wing-coverts, rump, upper and under tail-coverts, tail and thighs white; immature has these latter parts only mottled with white.

Steller's Sea-Eagle.

Wing ♂ 21.62; differs from H. pelagicus in the great height of its bill and also in having only the tail and upper and under tail-coverts pure white; rest of plumage blackish brown, the feathers on crown and neck with a fine central greyish line: bill and feet orange-yellow.


Wing ♂ 24.4 in.; tail much longer (14.4 in.) and regularly graduated; 5 primaries sharply emarginated, but distance between tips of innermost secondaries and primaries large, 5.5 in. as against 2.5 in. in H. p. niger.

Long-tailed Sea-Eagle.

Smaller; length ♂ 28; wing 23.2 in., ♀ wing 22.3 in.; entire under parts, as well as head and neck, white; above ashy grey, shaded with brownish; primaries blackish; tail black for basal two-thirds, terminal third white. Immature: whole plumage brown


N.E. Siberia, Kamtschatka, Sakhalin; in winter S. to Japan.

Korea, Ussuri.

Siberia.
with whitish shaft-streaks; quills and tail barred with darker brown.


Larger; length ♀ 33, wing 24.4 in.; ♂ length 30, wing 22.2 in.; above dark brown, more tawny on hind neck and sandy on head; rump purplish brown; tail white, with base and broad terminal band black; face and throat buffish white; below fulvous brown, with pale centres to chest feathers.


Smaller; length ♀ 25; wing 20.5 in.; ♂ length 22; wing 19.2 in.; head, neck, breast, interscapulary region and tail pure white; least wing-coverts rufous; primaries black; rest of upper surface blackish brown, and of lower surface deep chestnut.


Size similar; general plumage blackish brown; tail buffy white; feathers of head, hind neck and throat with buffy margins; cheeks and sides of neck white; chest and under parts like upper parts, but with rufous stripes on chest.


* No locality given by Latham, but stated to have been brought in "one of the last circumnavigating ships."
Gen. LXIII. GYPHIERAX Rüpp. (1855).

Space above and around eye bare, as well as a line on either side of throat; front of tarsus reticulated; claws with a groove below as in *Haliaetus*; head slightly crested.

Length ♂ 23 in.; wing 17.2 in.; general plumage white; scapulars and secondaries black; primaries white with the tips black and outer webs mottled with black; tail black with broad terminal band of white; bare skin of face and feet flesh colour; cere bluish grey.

Angola Vulture.

Tropical W. Africa, Angola to Senegambia; E. Africa.

Gen. LXIV. HALIASTUR Selby (1840).

Nostrils circular, with bony margin all round; presents affinities both with *Aquilina* and *Milvinae*.

Length ad. 20, wing 15–15.50 in. reaching beyond end of tail*; tail 7.50–8 in.; head, neck, throat and breast white with distinct blackish brown shaft-stripes, narrowest and blackest in old birds; rest of plumage maroon chestnut, paler on tail, which is whitish at tip; primaries brownish black; bill yellowish, the base blackish; feet light greenish yellow.

Brahminy Kite.

Indian Peninsula, Ceylon, Burmese Provinces; S. China.

Wing ♀ 16 in.; reaching nearly 2 in. beyond end of tail; tail 8.50 in.; the black shaft-streaks on head, hind neck and breast reduced to hair-lines and much less distinct.

* Ceylon birds seem to have as a rule slightly shorter wings and longer tail than Indian birds, and to have the wings as a rule falling well short of end of tail.
Malay Brahminy Kite.

Size similar; wing♀ 14.2; ♂ 15.3 in.; head, neck, interscapular region and throat and breast snowy white without any sign of black streaks; rest of plumage bright maroon; tail with a broad terminal bar of white; cere and bill pale yellow, latter darker at tip and bluish at base; feet whitish yellow.

White-headed "Sea-Eagle."
[≡ *H. i. girrenera* (Vieill. et Oud.)]

Rather larger, length ad. 22; wing 16.6 in.; above ashy brown, more rufous on head and darker and more chocolate on scapulars and wing-coverts; primaries brownish black; tail greyish-brown, paler at tip, and at base of outer feathers; throat fulvous; breast dull ochraceous, the feathers bordered with brown and streaked with white; flanks with black shaft-streaks; cere and bill greyish; feet bluish white.

Whistling Eagle.

"Lighter and smaller" (Math.); "of a much lighter colour, especially on the upper portion of the head, neck and scapulars" (North).

New Caledonian Whistling Eagle.

Sub-Fam. VI. *MILVINÆ.*

Head usually closely feathered; loral bristles scanty or wanting; cere contracted; nostrils oval,
oblique, generally closed in with a superior membrane; bill usually rather weak, straight at base, curved from cere to point, the cutting edge at most slightly festooned, but in two or three genera either toothed or serrated; wings usually long, more or less pointed; tail variable; feet small and weak; tarsi feathered for a variable distance.

Gen. LXV. ELANOIDES Vicill. (1818).

Tail very long and deeply forked, outer feather much the longest; wings very long and pointed, but not reaching beyond next outermost pair of tail-feathers.

Head, neck all round, rump and entire under parts snowy white; back, wings and tail glossy black with purplish and green reflections, the former especially on the scapulars and wings; secondaries white on inner webs, except at tips.

238. Elanoides forficatus forficatus (Linn.), S.N., i., p. 89 (1758). ["America," ex Catesby = Carolina.]
Swallow-tailed Kite

Wing $\delta$ (Venez.) 16.60; outer tail-feathers 12.75 in. "Differs from N. American specimens in having [reflections on] the scapulars and to a lesser extent interseapulars rich bottle green instead of dark purplish maroon" (Chapman). [Doubtfully distinct.]

Southern Swallow-tailed Kite.

Gen. LXVI. NAUCLERUS Vig. (1825).

Tail much shorter; wings long, but not greatly exceeding length of tail.
Length 14.5; wing 9.95; tail 7.8 in.; above cinereous, darker on interseapulary region; wing and tail quills ashy grey, the secondaries white at tips; forehead and indistinct eyebrow whitish; cheeks and under parts pure white.

239. *Naulerus rioconi* (Vieill. et Oud.), Gal. Ois., i., p. 43, pl. 16 (1823). [Senegal, type in Br. Mus.]

Cinereous Kite.

**Gen. LXVII. MILVUS Lacep. (1799).**

Tail forked, but difference between longest and shortest feather less than difference between tips of primaries and tips of secondaries.

Length ad. about 24 in., wing 19-20.75; tail 14-15 in.; plumage above brown with rufous margins, the wing-coverts paler; primaries black; rump dark brown; upper tail-coverts rufous; tail rufous, tipped with fulvous; the outer feathers partly barred with dark brown on inner webs; head, face and throat whitish streaked with dark brown; chest pale rufous, with dark central streaks and paler edges; below bright rufous, with dark central streaks; bill horn colour; cere and feet yellow.


Common Kite.

Wing ad. 18.20-19.30; tail less forked, depth of fork only about half as great; all the feathers, including central pair, barred.


Cape Verd Kite.

N.E. Africa; W. Africa (Senegambia to Hausaland).

Europe, breeding from S. Sweden S. to Spain, also Morocco, Asia Minor, Canary Is.; in Brit. Is. confined to Wales.

Cape Verd Is. (resident).
Length ♀ (Caucasus) 24, wing 18.5; tail 10.5 in.; above dark brown, much paler and greyer on head and hind neck and throat, which are much streaked with dark brown; tail with very indistinct darker bars; below dull rufous brown, brighter on abdomen, with blackish shaft-lines; cere orange, bill black, feet yellow.


Size nearly the same; tail more rufous brown, with 7 or 8 more distinct blackish bands; head and hind neck browner; car-coverts darker; below rather more rufous, especially on abdomen, thighs and under wing- and tail-coverts; bill, as well as cere and feet, bright yellow.


Slightly smaller; wing 17 in.; less rufous, more cinnamon-brown below; bill yellow.


Length ♂ 20; wing 19 in.; head and hind neck slightly rufescent, with distinct central stripes of black; scapulars and wing-coverts

* Gmelin's name *korschwin* (1771) should never have been used for this bird; it does not seem to have been a form of *Milvus* he described at all.
edged with buff; tail distinctly barred with blackish; below dull rufous brown; the breast feathers with pale fulvous stripes next the dark shaft-streaks; vent and under tail-coverts more buffish; cere and feet yellow, bill blackish.

Indian Kite.

Rather smaller; wing 16.5 in.; above blackish brown, paler on wing-coverts, with blackish shaft-stripes; tail dark brown, with remains of dark bars on centre feathers; head and hind neck pale brown, washed with rufous and with blackish shaft-streaks; below dull rufous brown, more dusky on chest and flanks, with distinct black shaft-streaks; cere and feet yellow, bill blackish.

apud Math.]
Allied Kite.

Larger, length 25.5; wing 21; tail 13.2 in.; above dark chocolate brown; head, hind neck and wing-coverts more rufous and with black shaft-streaks; tail paler brown, more rufous on central feathers and distinctly barred with darker brown; lores, forehead and cheeks white with black shaft-lines; car-coverts brownish black; below deep rufous brown, clearer on abdomen, with broad black central stripes, especially on chest; cere and feet greenish yellow; bill black.

Black-eared Kite.
Gen. LXVIII. LOPHOICTIONIA Kaup (1847).

Head crested; bill moderate, the tip not prolonged; tail even.

Length 19; wing 18 in.; above blackish brown, wing-coverts paler and slightly rufous with dark centres; wing quills and tail dark brown, externally greyish, banded with black, the subterminal band very broad; head dull rufous, and forehead, cheeks and throat whitish, with black centre streaks; car-coverts grey; below rufous; chest with broad black centres to all the feathers, becoming narrow shaft-streaks below; cere and feet greyish white; tip of bill blackish.


Gen. LXIX. ROSTRHAMUS Less. (1830).

Head not crested; bill very long and slender, the upper mandible hooked almost into a sickle-shape, the cutting edges not festooned; nostrils narrow ovals, horizontal; tail about half as long as wing, nearly even.

Length ad. 13.5; wing 11.7 in.; general colour lead grey, the wings blackish; tail grey with a broad terminal band of black; cere, lores, gape and feet orange yellow; bill black; iris red.

244. Rostrhamus sociabilis (Vieill.), N.D., xviii., p. 318 (1817). [S. America: Corrientes et Río de la Plata.] S. America from Argentina and Peru to Colombia; Central America, E. Mexico; Cuba and Florida. Everglade Kite.

Larger and blacker; length ad. 18; wing 14.1 in.; entirely slaty black, with a brownish shade on wings; base of tail and upper and under coverts white; tail black, tipped with white, with a subterminal bar of ashy brown; bill black; cere and feet yellow.

Slender-billed Kite.

Gen. LXX. **REGERHINUS** Kaup (1845).

[= *Leptodon*, Sundev. of Sharpe.]

Tail rounded, outer feather shorter than middle one; loreal space bare; upper mandible without a tooth.

Length ad. ♀ 17; wing 11.7; tail 7.5 in.; above and below bluish slate, with narrow irregular bars of white below; primaries blackish shaded with slate grey; secondaries whitish below, barred and tipped with black; tail ashy grey with 2 bands of black; under tail-coverts buff; bill black. First mature plumage generally browner, with a rufous collar round hind neck; below banded with tawny rufous and ochraceous buff.


Larger (wing ♀ 12.6) and with a larger bill (culmen 2–2.5 in. against 1.55–1.65 in. in typical form).

246a. **Regerhinus uncinatus megarhynchus** (Des Murs), in Casteln., Voy., Ois., p. 9, pl. 1. (1855). [Sarayacu, type in Paris Mus.]

Large-billed Kite.

Wing ad. 9.70–10.50 in.; tail black with 4 light bands, the 2 anterior ones white, others light ash grey; below white, barred with pale grey anteriorly and umber posteriorly (Ridgway).


Gen. LXXI. **LEPTODON** Sundev. (1835).

The upper mandible with a single more or less pronounced tooth.
Length ♀ 20-22 in.; wing 12.25-13.25 in.; above glossy black; head slaty grey; wing quills black, banded with slate grey; tail black with 3 bands of ashy grey and tipped with same; below white; bill blackish; feet yellow.


Gen. LXXII. GYPOICTINIA Kaup (1847).

Bill not toothed; head crested; loval space feathered; wings reaching to end of tail; greater part of tarsus bare in front.

Length 24; wing 19; tail 8.5 in.; general plumage above and below blackish, browner on scapulars and more rufous on rump; crest and nape tawny rufous with black centres to the feathers; thighs and under tail-coverts rufous, with black shaft-lines; tail ash grey above, whitish near base and below; lesser wing-coverts and secondaries margined with ashy grey; primaries ashy white at base.


"Differs from *G. m. melanosterna* in lacking the black on head and breast."


Gen. LXXIII. ELANUS Savigny (1809).

Tarsus feathered for nearly two-thirds of its length in front; claws without groove on under surface.

Sexes nearly similar in size; length ad. about 13; wing 10.15-11.20; tail 5.16 in.; above ashy grey, lighter on head; forehead, eyebrow, and face white; feathers round eye black;
lesser and median wing-coverts and a patch on outer edge of wing black; tail whitish, the 2 centre feathers ashy grey; below silky white; sides of breast pale silvery grey, wing quills dark or blackish slate below; cere and feet yellow; bill blackish; iris carmine. Immature browner above and streaked with rufous on chest and flanks.


[near Algiers.]

Black-winged Kite.

Slightly larger; wing♀ 11.60–12; tail 6 in.; ♀ wing 11.75 in.; above ashy grey; primaries slate; wing-coverts black, the shoulder white on edge; black patch on outer edge of wing nearly absent; 2 centre tail-feathers paler grey, rest white; fore-part of head and entire under parts silky white, including under wing-coverts; wing quills white on basal half below. Immature: head and nape white, streaked with brown; above browner, with white margins to all the feathers, including wing-coverts and quills.


White-breasted Kite.

Size similar; wing ad. 11.50–12.30 in.; tail 5.75–6.30 in.; above paler, more silvery grey; tail whitish; primaries darker below, nearly blackish; outer under wing-coverts black, forming a conspicuous patch below; axillaries white.


Black-shouldered Kite.

* Ceylon birds have the smallest wing measurement and the primaries are darkest below, right to the base of the feathers.
"Differs from E. a. axillaris in being lighter above."


Rather larger, with longer tail: wing 12-13.30; tail 6.4-7.4 in.; above darker bluish ash, inner webs of secondaries paler, nearly white; black shoulder patch above variable, but not generally so large; black patch below smaller usually and confined to the outer greater under wing-coverts.


Size similar; wing 11.5 in.; above paler, ashy white, with the black patches on wing-coverts and edge of wing; axillaries as well as under wing-coverts black, except bend of wing which is white.


Gen. LXXIV. GAMPSONYX Vigors (1825).

Wings falling nearly an inch short of end of tail; tail feathers rounded, nearly even; tarsus short, feathered about half way down in front.

Size small, length♂ 8; wing 5.8; tail 3.9 in.; ♀ wing 6.15 in.; above leaden black with a brownish shade on back; secondaries broadly tipped with white; tail below much paler; forehead and sides of face orange buff; sides of neck and a collar encircling latter white, below which is an interscapular patch of vinous red; below white, with small patch of black on each side of upper breast; the thighs pale buffish rufous, as also inner under wing-coverts, but not breast or flanks.

Size nearly similar; wing♂ (Merida) 6; tail 3.75 in.; ♀ wing 6.20; tail 4 in.; wing♂ (Guiana) 5.90–6; ♀ wing 6.20–6.40 in.; below with the sides of breast and flanks chestnut rufous [pure white in Bahia birds]; thighs darker rufous in Venezuelan birds [but hardly more so in Guianan birds]; forehead and sides of face slightly yellower and paler.

252a. *Gampsonyx swainsoni meridensis* subsp. nov. [♂ Nevada, Merida, Nov. 15, 1903, alt. 3,000 metres, in coll. H. K. Swann and Merida and Guiana examples in Tring Mus. and Brit. Mus.]

Northern Pearl Kite.

“Upper surface darker and more strongly shaded with slaty grey; forehead and sides of face straw colour instead of orange buff”; total length 9.10 in.; wing 6.20; tail 3.75 in.; [sides of breast and flanks rufous.]


Nicaraguan Pearl Kite.

Largest; “differing from *G. s. swainsoni* only in the larger wing and tail measurements”; ♀ total length 9.65; wing 6.95; tail 4 in.; ♀ wing 6.9 in. [Differs from *G. s. swainsoni* also in having sides of breast and flanks rufous.]


Western Pearl Kite.

Gen. LXXV. ICTINIA Vicill. (1816).

Upper mandible with the cutting edge lobed, but without a true tooth; bill short and deep, and

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* Examples from the Orinoco are more or less intermediate. Of those in Tring Mus. two have the sides strongly rufous, others only slightly.

† An example in Tring Museum from Prov. of Sara, Bolivia, ♀ has wing measurement of 6.65 in. and presumably belongs to this form; another, ♀, from Calama River, Rio Madeira, has the wing 6.50 and is intermediate.
strongly arched, resembling that of *Falco*; cere short; tail square; wings reaching about 1.25 in. beyond end of tail.

Size small; wing ad. 11.5–12.5; tail 6 in.; above leaden black; wings and tail blacker; head lighter grey, nape a little darker; primaries pale chestnut on inner webs, conspicuous below; under parts slate grey; tail with 3 bars of white on inner webs below, the basal one concealed and sometimes wanting.

253 *Ictinia plumbea* (Gmel.), S.N., i., p. 283 (1788).

[ex Lath.—Cayenne.]

Plumbeous Kite.

Size similar; wing ♂ 10.5–11.5; ♀ 11–12.5 in.; above leaden black, paler on secondaries and blacker on primaries and tail, but latter without white bars below; head, neck and under parts clear grey; base of primaries chestnut on inner webs; bill black, feet orange red.

254. *Ictinia mississippiensis* (Wils.) Amer. Orn., iii., p. 80, pl. 25, fig. 1 (1811). [Natchez, Mississippi.]

Mississippi Kite.

Gen. LXXVI. HARPAGUS Vigors (1824).

Head not crested; nostrils oval with central tubercle; bill with 2 distinct teeth; tarsus slender with broad transverse scales; feet small and weak; wings very short, hardly reaching to middle of tail; size small.

Wing ad. 8.1; tail 6 in.; above slaty grey, head darker and wings browner; tail dark brown, with narrow bands of greyish white; below pale grey, the throat and under tail-coverts white; thighs bright ferruginous.


Red-thighed Hawk.
Size similar; above [oldest dress] much darker, slaty black; tail with 2 brownish white bands; throat white, with median black streak; upper chest greyish, below banded with grey and white; less old birds have tail browner, with 3 narrow whitish bands and another across upper tail-coverts; below chestnut rufous, irregularly barred, except on chest, with whitish and indistinct darker bars.

256. Harpagus bidentatus bidentatus (Lath.), Ind. Orn., i., p. 38, 1790. [Cayenne.]
Double-toothed Hawk.

Size slightly larger, wing ad. 8.8 in.; above browner; below banded as in less old stage of last form.


Gen. LXXVII. BAZA Hodgs. (1836).

Size moderate, length under 20 in.; head with occipital crest; bill with 2 teeth (sometimes appearing as serrations); nostrils linear ovals, without tubercles; wings reaching to or beyond end of tail.

Wing ad. 9.50–9.85; tail 5.7 in.; crest long; above glossy greenish black, browner on sides of head and throat; secondaries white, except at edges and tips, chestnut subterminally [except in very old birds]; chest white, followed by a band of black across upper breast, more or less mixed with chestnut; lower breast and flanks creamy white, banded with chestnut; vent, thighs and under wing- and tail-coverts greenish black. Immature: much more chestnut in secondaries and less barred below.

257. Baza lophotes (Temm.), Pl. Col., i., pl. 10 (1824). [Pondicherry.]
Crested Cuckoo-Falcon.

Peru, Guiana, Venezuela, Colombia.

Central America (Guatemala to Panama).

India (sub-Himalayan dist. to Ceylon); Tenasserim; Indo-China; Malay Pen.
Larger; wing 12.5, tail 8 in.; ♀ wing 13, tail 9 in.; general colour brown, darker on mantle, most of the feathers with paler margins, those of head with rufous margins and white bases; crest dark brown; primaries ashy brown, banded with darker brown; tail ashy grey with 3 bands of dark brown; throat with median and moustachial blackish stripes; below white, upper breast and sides longitudinally marked with rufous brown, lower flanks almost uniform.


Smaller; wing ad. 11.6 in.; above ashy brown; head, crest and intercalfary region darker, inclining to slaty black; quills brown above and ashy white below, barred with dark brown on inner webs, the subterminal band broad; upper tail-coverts tipped and barred with white; tail ashy grey, tipped with white, with broad subterminal and 3 other bands of black; throat and chest clear grey; below buffy white, barred with tawny rufous; under wing-coverts uniform tawny rufous.


Much darker above, uniform slaty black; throat and chest pale grey, the barrings below confined to upper breast and of a much darker brown colour; belly, flanks, thighs and under tail-coverts pure white, with little trace of buff; under wing-coverts uniform rusty rufous.


[Not seen.]

Slightly larger; wing ♂ 12.7 in.; above rather dark ashy grey, shaded with brown; crown and crest blacker; upper tail-coverts ashy grey with brown tips; under wing-coverts barred with pale rufous and fulvous; ♀ browner above and more strongly barred below.


Wing ♂ 12.75, ♀ 13.10 in.; culmen 1.4 in.; crown and nape pale fulvous, with blackish central streaks; nape more tinged with rufous; crest long, black tipped with white; throat white with distinct central streak of black; foreneck and chest streaked with pale rufous; below white, with broad bands of pale rufous; oldest birds very much darker above and below, the bars below rufous brown, age apparently accounting for the light and dark forms of this species.


Slightly smaller; wing ad. 11.7 in.; crown black, edged with rufous; crest black, tipped with white; chin and throat buff with broad mesial black streak; chest tawny cinereous, with brownish shaft streaks; below white irregularly banded with pale rufous.


Wing ♂ 11.5; culmen 1.05 in.; "sides of face and neck dull rufous; chest white, the feathers edged with rufous and with triangular black centres; under wing-coverts rufous with paler edges; rufous bars on flanks broader and inclining to dark brown."

Wing ad. 12.3, bill stouter, culmen 1.5 in.; above purplish brown; crown and crest black; throat and chest grey, former with broad black central stripe; below white, banded with pale rufous; sides of face greyish, washed with rufous.


Wing ad. 11–12 in.; culmen 1.25 in.; above darker brown; ear-coverts dark cinereous instead of grey; chest rufous; below banded with darker rufous brown.


Smaller; wing (imm. ♀) 10.8 in.; below white without median black line on throat; breast and abdomen washed with creamy buff, sides and flanks washed with slight spots of pale tawny buff.


Wing ♂ 12.85–12.95; ♀ 13.15–13.60 in.; above brown, slaty black on wings; head, neck and chest ashy grey; with small occipital crest black; tail ashy brown, with broad subterminal and 3 other black bands; breast buffy white, banded with chestnut brown [blackish in oldest birds]; thighs and under wing and tail-coverts buffy rufous.


Smaller; wing ♂ 11.65–12.10; ♀ 12.5–12.85 in.

Scarcely smaller; wing ♂ 11.30–11.65; ♀ 11.85–12.35 in.; fore neck and chest very pale grey; bands on under parts narrower, as also those on under surface of quills.


Wing ♂ 11.25–11.90, ♀ 11.25–12.10 in.; head, neck all round, interscapulary region and chest ashy grey; crest blackish; scapulairs and inner secondaries chocolate brown; breast and flanks buffy white, with blackish brown crossbars; vent, under tail-coverts and under wing-coverts orange buff.


[Said to be larger.]


Size almost the same; under wing-coverts paler isabelline colom.


Slightly larger; wing ♂ 12.25–12.35; ♀ 12.50–13.05 in.


Bismarek’s Cuckoo-Falcon.

Wing ad. 12.50 in.; hind neck much darker grey; throat and chest light ashy grey, but chest with broad tips of rusty rufous, obscuring the grey; below closely and broadly

* Said to be a synonym (cf. Ogilvie Grant. Ibis. Suppl., ii., p. 270, 1915), and *B. s. stenozona* Gray, from Aru Is., seems non-separable.
barred with light rusty rufous; under tail-coverts buffy rufous.


Rufous Cuckoo-Falcon.

N. Molucca Islands (Halmahera, Morotai, Batchian, Ternate, etc.).

Gen. LXXXVIII. HENICOPERNIS Gray (1859).

Wings falling much short of end of tail; tail very long, more than five times length of tarsus; head slightly crested.

Size large; wing♀ 17.30; tail 11.5 in.; ♂ wing 14.20–14.50 in.; above ashy brown, broadly barred with black, except on lower back and rump; head and hind neck streaked with blackish and much varied with white; tail with 5 broad black bands; below creamy white, with broad streaks of dark brown on throat and breast, narrowing below; cere and bill bluish white, tip of latter blackish; feet yellowish white; iris orange yellow.


Long-tailed Kite.

Size similar; wing♂ 14–14.20 in.; much darker; wing-coverts and upper scapulars dark brown instead of banded with light and dark brown; dark bands broader and light bands narrower on wings; tail with 4 dark bands; below blackish brown with pale edgings.


Gurney's Long-tailed Kite.

Gen. LXXIX. MACHÆRHAMPHUS Westerm. (1851).

Head strongly crested; bill weak and slightly keeled; loral plumes produced above half the nostril.
Length ad. 18.5; wing 14.2; tail 7.8 in.; black, with a chocolate brown shade; a well-defined spot above and below eye white; throat and centre of chest white; chin and a broad streak down throat, as well as sides of latter, and a few spots on lower parts black.


Malacca Pern.

Rather smaller; wing ad. 13.9; tail 7.3 in.; above chocolate brown; white bases of feathers conspicuous on nape; above and below eye a broad white line; throat white, with dark brown moustachial line each side below gape and a faint central streak; wing quills dark brown, banded with white below; tail chocolate brown above, banded with pale brown, white below; under parts white; upper breast streaked with dark brown, lower breast and flanks dark brown mottled with white; bill bluish, black at tip; feet bluish white.


Anderson’s Pern.

[Not seen, doubtful form.]


Somaliland.

Gen. LXXX. PERNIS Cuv. (1817).

Size large; head usually only slightly crested; bill stouter; basal plumes not produced beyond posterior margin of nostril; wings and tail long; tarsus short, feathered about half way down.

Wing ♂ 15.75–16.75; tail 11 in.; plumage variable; normally above brown, with paler margins and black shaft-stripes; head ashy grey; nape mottled with white; wing quills darker at tips and with 2 basal dark bars, conspicuous on whitish under-side; upper
tail-coverts barred and tipped with white; tail paler brown, tipped with white, and with 3 dark bands; below white, with brown streaks on throat, large blotches on breast and smaller spots on flanks and abdomen; @ larger and with much less grey on head and more barred below. Imm.: head dark brown, rufous on sides and hind neck; tail more banded; below rufous brown, with distinct black shaft-streaks; later under parts become barred with white.

Honey Buzzard.

Larger; wing 18.75 in.; head, nape and band round lower throat brown, the nape mottled with white bases to all the feathers.

Siberian Honey Buzzard.

Slightly smaller; wing (Java) 17.25 in.; crest of long feathers; general colour deep chocolate brown, with black shaft lines below; crown black; sides of head grey and scaly-looking; an imperfect line across lower throat black; tail with very broad central band of pale ashy brown and broad terminal and less broad sub-basal black bands, the base brown mottled with ashy and white. Immature: buffish to white below, with broader shaft-stripes.

Crested Pern.
Wing ad. (av.) 16.5 in.; crown and sides of head ashy grey; general colour chocolate brown; tail with broad terminal black band and another narrower one nearer base, the wide interspace and basal band ashy brown; below with distinct black shaft-stripes.


Indian Crested Pern.

Smaller; length ad. 21.5; wing 14.7; tail 10.5 in.; above chocolate brown, the head blackish; feathers of hind neck margined with rufous; lores and feathers round eye grey; throat white, with distinct black shaft-stripes, and black moustachial and central streaks; chest tawny rufous, with broad central streaks of black; below white, barred with blackish brown; tail brown with 5 bars of darker brown and remains of other bars on the interspaces, the tip whitish.

268. *Pernis celebensis celebensis* Walden, Tr. Z. S., viii., p. 111 (1872) [Celebes, type in Br. Mus.]

Celebes Pern.

"Resembling *P. c. celebensis*, but with a long crest composed of one or two elongated feathers, usually measuring about 2.5 in. and coloured black with white bases; as a rule, not so richly coloured . . . the transverse banding on belly and under tail-coverts brown and white, not black and white, and black on under wing-coverts also paler."

ADDITIONAL SPECIES AND SUBSPECIES.


CORRIGENDA.

Pt. 1 p. 3 Gen. V. For Pseudogryphus read: Gymnogyps Less. (1842).
" " " 3. " VI. For Serpentarius read: Sagittarius Herman (1783):
" " " 4 No. 8b. For Gyps fulvus kobbi etc., read:
Gyps fulvus coprotheres (Forst.) Naturgesch. African.
Vögel, p. 35 (1798). [S. Africa.]

Pt. 2 p. 46 No. 139. For Buteo jakal, etc., read:
Buteo rufofuscus rufofuscus (Forst.) Naturgesch.
" " " 46 " 139a. For Buteo jakal archeri read:
Buteo rufofuscus archeri.
" " " 72 " 200c. Delete article and read:
Smaller and lacking 2 long crest feathers.
Spizaetus nipalensis fokiensis W. Selat., S. China.
Bull. B.O.C., xl., p. 37 (1919). [Fokien (breeding)
Prov., type in B.M.]

[Inserted by error in pt. 2 without ref. to publication,
owing to delay in pub. of Bull. B.O.C.]
A
SYNOPTICAL LIST
OF THE
ACCIPITRES
(DIURNAL BIRDS OF PREY)
PART IV.

Sub. Fam. VII. FALCONINÆ.

Bill short, curved from the base, with one distinct tooth near the end of cutting edge of upper mandible; nostrils usually circular with central tubercle; feet strong; tibia much longer than tarsus; toes long, talons curved and sharp; tarsus short, usually reticulated; wings long and pointed; size moderate, or small.

Gen. LXXX. MICROHIERAX Sharpe (1874).
Nostrils perpendicular ovals, without central tubercle; tarsus covered with broad scales in front and feathered nearly half way down; wings proportionately shorter than in Falco.

Size very small; length 5.5; wing ♂ 3.90-4.25; ♀ 4.10-4.40 in.; above greenish black; forehead, broad stripe above eye and down sides of neck, as well as collar on hind neck, white; primaries barred with white on inner webs; tail with 5 or 6 white bars on inner webs, basal one concealed and subterminal one either obsolete or a tiny spot; below entirely ferruginous, darkest on throat, vent and thighs and
paler on chest; sides of breast greenish black. Immature with stripes on sides of head rufous, instead of white, and throat, chest and breast white.


Red-breasted Pigmy Falcon.

Wings shorter; ♂ 3.75; ♀ 4.10 in.; throat vent and thighs only ferruginous, chest and breast silky white, the latter slightly washed with ferruginous; tail with the subterminal white band in the form of two fair-sized spots of white, much larger than in last form.


White-breasted Pigmy Falcon.

Size of *M. c. caerulescens*; wing ♂ 3.50, ♀ 4 in.; without the white collar on hind neck; no white eyebrow but sides of neck with a white patch; cheeks and ear-coverts forming a large rounded patch of black; chest white; abdomen and under tail-coverts pale chestnut, the longer under tail-coverts and whole flanks glossy black; tail with 5 or 6 white bars on inner webs, first one concealed; wing quills spotted rather than barred on inner webs.

* This is quite certainly the correct name for this species. Edwards’s plate accurately represents the Indian form except for the white neck band, a point which has given rise to much discussion, but there is no doubt this is an accidental variation, as in the Brit. Mus. coll. such a bird actually exists, without a trace of white collar, from Riocour’s collection. (B. M. Reg. No. 89, 5, 30, 48) marked “Malaisie,” and although not of the Indian race it proves the possibility of the collar being lost. The Indian form, it should be remarked has the under parts white (except vent and thighs) when immature, but nearly uniform ferruginous when adult. The eastern form on the other hand has, when adult, only a small throat patch and the vent and thighs ferruginous, with a wash of same on breast. In a large series a good deal of variation is found in the width and purity of the white collar, and Indian examples in particular often show a strong shading of black on it.

Slightly larger; wing ♂ 4.30, ♀ 4.75; above glossy black; forehead, narrow line above eye and down side of neck as well as entire under parts white; cheeks and ear-coverts as well as sides of breast black; thighs white; wing quills broadly banded with white on inner webs; tail with 5 or 6 white bars on inner webs.


Size similar; wing ad. 4.25; similar, but having an irregular white nape band and with more black on sides of body. [See pl. 8 *Oiseaux de la Chine*, David et Oustalet, 1877].


Size of *M. fringillarius*; (wing ad. 4 in.); greater part of crown as well as forehead white; region round eye black; cheeks white; no white stripe on sides of neck; below paler than in *M. fringillarius*, but sides and thighs black.


White-headed Pigmy Falcon.

Size similar; wing ♂ 4, ♀ 4.25 in.; above greenish black; primaries barred with white on inner webs in ♂, uniform black in ♀; cheeks, ear-coverts, sides of neck
and under surface silky white, the sides, flanks, thighs and lower under tail-coverts black; tail entirely black.


Luzon Pigmy Falcon.

Larger; wing ♂ 4.30-4.45; ♀ 4.60-4.80 in.; under wing-coverts and inner webs of primaries uniform black in ♂; belly, vent and under tail-coverts washed with pale fulvous.


Samar Pigmy Falcon.

Gen. LXXXI. POLIOHIERAX Kaup (1847).

Nostrils as in *Microhierax*; tarsus less feathered in front.

Size small; length ♂ 7.5; wing 4.6 in.; wing ♀ 4.8 in.; ♀ above bluish grey; head darker; forehead, sides of face and hind neck pure white; quills and tail brown, spotted on outer and barred on inner webs with white; upper tail-coverts white, as well as entire under parts; ♀, interscapular region and scapulars deep vinous chestnut.


African Pigmy Falcon.

Above with head and neck darker slaty grey; below with white bars on under surface of wings and tail broader; wings rather longer; feet stronger and stouter;
[back chestnut brown in both sexes according to Huglin].

Abyssinian Pigmy Falcon.

Larger; wing ♂ 5.7 in.; ♂ above slaty blue with black shaft lines; no white collar on hind neck; rump and upper tail-coverts white; tail with 3 bands of white, except on central feathers; below white, with black shaft lines, the flanks washed with grey; ♀ head and mantle bright ferruginous red.

Burmese Pigmy Falcon.

Gen. LXXXII. SPIZIAPTERYX Kaup (1851).

Nostrils round with central tubercle; outer toe longer than inner; middle toe very short; distance between tips of primaries and tips of secondaries less than half length of tail.

Length ad. 11.5; wing 6.35; tail 5.7 in.; above ashy brown, the head blackish brown; rump and upper tail-coverts creamy white; wing-coverts with blackish central streaks and spots of white on each web; quills blackish with large spots of white; tail black, all but central feathers spotted on outer and barred on inner web with white; sides of face, eyebrow and hinder part of cheeks white; below ashy white, with blackish central streaks.

272. Spiziapteryx circumcinctus Kaup, P.Z.S., 1851, p. 43. [Chile, errore = Argentina].
Spot-winged Falcon.
Gen. LXXXIII. HARPA Bp. (1855).

Size much larger; middle toe very long. Length ♀ 18.5; wing 10.8-11.4; tail 8.3 ins.; ♂ wing 9.8-10.3 in.; above blackish brown, narrowly barred, except on head, which is blackish, with pale rufous; quills and tail barred with greyish white; the tail bands 8 in number; ear-coverts and moustachial streak black; below buffy white, the breast and abdomen with central streaks of dark brown, broader on sides, which are also ocellated with large white spots; thighs and under tail-coverts bright rusty red with dark brown shaft-streaks.


Smaller; wing ♂ 9.9-2; ♀ 9.7-10.1 in.; plumage similar; [scarcely distinguishable except by sexing].


Gen. LXXXIV. FALCO Linn. (1758).

Distance between tips of primaries and tips of secondaries more than half length of tail; first and third quills equal, second longest; feet large and powerful; tarsus short, reticulated; toes long with curved and sharp claws, the outer toe rather longer than inner.

* H. australis (Hombr. & Jacq.) being not tenable, the small form has been re-named by Mathews and Iredale.
Length ♦ about 18 in.; wing 13.85-14.60, ♀ wing 12-12.75 in.; head, hind neck and wing-coverts blackish, as also cheeks, ear-coverts and short moustachial stripe; forehead and sides of neck behind ear-coverts white; rest of upper parts bluish slate, barred or arrow-headed with blackish; tail broadly barred with black and tipped with white; below white, with a buff tinge on breast, the chest with narrow black shaft stripes, breast spotted and belly and under tail-coverts irregularly barred with black; bill bluish; feet yellow. Immature brown above, with paler margins, including head; tail barred with pale rufous; immature also without the black head and longitudinally marked below.


Peregrine Falcon.

With the black of cheeks and ear-coverts reduced to a narrow stripe and the white band behind much increased.


Siberian Peregrine Falcon.

Very slightly larger; wing ♀ 13-13.15, ♀ 14.60-14.80 in.; chest with a more
reddish buff tint, and with few or no markings.

American Peregrine Falcon.

Size similar; darker above and below; the head not so black but more uniform with the dark plumbeous upper parts; below more heavily and broadly banded with blackish.

Peale’s Falcon.

Smaller than *F. p. peregrinus* and with more slender feet; wing ♂ 11.05-11.85, ♀12.60-13.40 in.; less heavily marked below and with the ground colour more ruddy.

Lesser Peregrine Falcon.
Slightly smaller; wing ♂ 10.65-11.20, ♀ 11.05-11.35 in.; duller in colour than *F. p. peregrinus* and with the dark bars on abdomen closer together.


Smaller than *F. p. peregrinus*; wing ♂ 12.0-13.0 in.; below tawny ferruginous, paler on throat and sides of neck, marked on flanks, thighs and under tail-coverts with a few spots and cross bars of black.


Wing ♂ 11.65-12 in.; ♀ 13.25-13.50 in., ♂ head and nape deep black, including sides of face, cheeks and ear-coverts; interscapulary region blackish, with obsolete bars of bluish grey; rest of upper parts bluish ashy, barred with black; tail blackish tipped with white, with broad subterminal and 11 other bars of black; throat and chest deep creamy buff, latter with a few black shaft stripes; below buffy white closely and narrowly barred with black, the sides and thighs tinged with grey; ♀ more ferruginous below and with the cross bars more irregular.


Size similar; wing ♂ 11.6 in.; darker above; chest much more rufous; under wing-coverts and axillaries more closely from Cape Colony to the Blue Nile.

Indian Peninsula; E. to S. China.

E. and W. Australia, Tasmania.
bared with black, the white inter-bars more rufous; under tail-coverts and thighs bared with bluish grey and black, instead of whitish and black.


Borneo, Greater Sunda Is., Philippine Islands, New Guinea Fiji Islands

Slightly larger; wing ♂ 12, ♀ 13.5 in.; entire head, including cheeks and ear-coverts, hind neck, interscapulary region and least wing-coverts deep black; rest of upper parts dark bluish ashy, barred and spotted with black; tail with the apical quarter black, rest bluish ashy, barred with black; under parts marked much as in *F. p. macropus*, but the bars broader and the lower parts with a pronounced grey shade.


Chile, Falkland Islands

Immature ♂ [Tring Mus.]. Wing 9 in.; above black with remains of rufous edgings; an indistinct collar on hind neck pale rufous; upper tail-coverts with broad ashy margins; tail slate, tipped buffy white and indistinctly barred with black; throat white, sides of head and moustachial patch black; below rufous fawn, narrowly striated with black.


E. Africa (Kilimanjaro district).
Smaller than *F. p. peregrinus*; wing ♂ 10.95-11.40, ♀ 11.10-11.60 in.; above much paler bluish grey, the cross bars fainter; crown dusky brown instead of black, the fore part tinged with rufous; entire hind neck rusty red, with some dusky mottlings; fore part of car-coverts and cheek stripe blackish; throat and sides of neck buffish white; below pale buffy fawn, breast unspotted, but sides with a few blackish spots, becoming bars on under wing and tail-coverts. Younger birds dark brown above, with rufous margins; hind neck creamy white, tinged with rufous; below creamy white, breast and flanks streaked with brown, more broadly on the latter.


Said to be darker above. [Doubtful form.]


Larger; wing ♂ 12, ♀ 13 in.; above lighter bluish grey; fore part of crown more rufous; hind part of crown greyish black; nape and hind neck clear rufous, with darker centres to many of the feathers; below buffy white, with arrow-head brown spots on centre of belly and bars on the sides; throat and chest unspotted.

N. Africa (N. of the Sahara) from W. Morocco to Egypt; in winter S. to Khartoum.
276b. *Falco pelegrinoides babyliicus* Gurney, Ibis, 1861, p. 218, pl. vii. [Oudh, type in Norwich Mus.]
Red-capped Falcon.

Size similar; wing ♂ 12, ♀ 14 in.; forehead whitish; fore part of crown black; rest of crown and nape brick-red, with black shaft stripes; moustachial stripe, feathers round eye and band down side of neck black; above dark brown, barred, except on interscapulaiy region, with blue-grey, inclining to fulvous on scapulai and secondaries and more regular and paler grey on rump; tail regularly barred with fulvous grey and blackish brown; below vinous buffish, warmer on breast; streaked on chest and slightly spotted on sides with blackish in most birds, but nearly unspotted in oldest examples.

South African Lanner.

Slightly larger; wing ♂ 12.35-12.85, ♀ 14-14.75 in.; above darker and more uniform; nape less rufous; slightly more spotted below, but with the ground colour more buffish white, and the chest as a rule free from markings.

Nubia, Egypt, Arabia, Palestine.

Nubian Lanner.

Very slightly larger; wing ♂ 12.90-13.60; ♀ 14.35-14.85 in.; lower parts more heavily spotted with black.


Abyssinian Lanner.

Similar to *F. b. feldeggii*, but paler and less marked with blackish on crown, also slightly smaller; wing ♂ 12.20-12.80, ♀ 13.35-14.25 in.


North African Lanner.

Size about the same; wing ♂ 12.20-12.90; ♀ 13.65-14.10 in.; with the under parts much more heavily spotted than in *F. b. biarmicus* and the ground colour more creamy white; crown and nape creamy rufous.


European Lanner.

Larger; wing ♂ 13.85-14.70, ♀ 15.45-16.60 in.; head pale rufous to rufous white.

Abyssinia, Shoa, Gallaland, Blue and White Niles, Sudan to Hausaland & Togoland

N. Africa (Atlas district from Tunis to W. Morocco).

S. Europe (Balkan countries [not extending to Russia], S. Italy.)
with narrow blackish shaft stripes; above earthy brown, all the feathers margined with rufous; quills with the white bars on inner webs uniting on the margins; tail barred with rufous white on the inner webs and with oval spots on the outer webs; sides of face and throat white, with dusky streaks on ear-coverts, but little indication of a blackish moustache; below whitish, the chest slightly and breast and belly thickly marked with blackish brown, more in form of bars on flanks. Immature: very little rufous on head; moustache stripe more apparent; tail with the central feathers generally unmarked; below more heavily and longitudinally marked.


Size similar; more barred above with pale rufous; tail regularly and closely barred across centre feathers, not marked with oval spots.


S.E. Europe (Balkan Penin. and S. Russia); Cyprus (cas.) C. Asia; to N.W. India and China in winter.

High plateaux of Central Asia: Thibet; Mongolia; Nepal; Baluchistan; China; in winter S. to India.
Smaller; wing ♂ 12.50-13.0, ♀ 14-14.60 in.; feathers of crown dull rufous, with blackish brown centres; nape rather paler and mottled with black; above ashy brown, with pale fulvous margins; rump paler and clearer grey; tail ashy grey, tipped with white; the outer feathers barred on inner web with whitish ashy; below white, with narrow black moustachial stripe; lower breast with a few dark shaft-streaks, flanks and thighs ashy brown.


Laggar Falcon.

Size similar; wing ♂ 12-13, ♀ 13-14 in.; above brown, with paler fulvous margins; crown and nape with whitish margins; tail tipped with white and all but the centre pair of feathers barred on inner webs with whitish, but outer webs scarcely spotted; below white, chest streaked and breast and belly spotted with brown, more in form of bars on flanks.


Prairie Falcon.

Size small; wing ♂ 10.6 in.; above ashy, with indistinct fulvous margins and blackish shaft-stripes, especially distinct on head and nape, latter of which is whitish tinged with rufous; tail with broad fulvous tip, and some obsolete black bars at apical end; below white, tinged with buff on flanks and vent, and with narrow blackish shaft-streaks, except on throat.

Grey Falcon.

Size large; wing ♂14.3, ♀15.8 in.; general colour blackish brown; forehead and sides of head and neck and under tail-coverts mottled with white; throat white, streaked with brown; breast slightly spotted with buff; tail barred.


Black Falcon.

Without bars on tail.


Queensland Black Falcon.

Size large; wing ♂13.60-14.80, ♀15.25-16 in.; head blackish grey; above dark slate grey barred with pale bluish grey; wings and tail browner, latter barred with bluish grey and tipped with white; below white with a broad slate brown moustachial stripe, the breast and abdomen with drop-shaped stripes and flanks barred; bill bluish, tip black; feet yellow.

Falco rusticolus rusticclus Linn., S.N. i., p. 88 (1758). [Sweden.]

Norwegian Gyrfalcon.

Larger; wing ♂14.5, ♂16 in.; above dark slate, barred with greyish white, the head streaked with dusky slate and buffish white; chin and throat white; below white, chest streaked and belly and sides spotted with slaty black.

Size similar; much darker above and below; above more sooty and with transverse markings darker; rump uniform without markings; thighs dark slaty, with buffy white transverse spots. Immature: very much darker; uniform dusky brown above.


Labrador Falcon.

Very slightly larger; wing ♂ 14.35-14.90, ♀ 16-17 in.; general colour white, the feathers above marked with a slaty black spot towards tip; tail pure white and head nearly so; below with slight striations on flanks only. Immature: markings much heavier and browner; head with dark stripes and tail with transverse dark markings.


Greenland Falcon & Arctic America; in winter to Brit. Isles; N.W. Europe; Northern United States.

* The Gyrfalcons visiting Canada and the Northern United States in winter appear to be dark immature birds of this form, and not *F. r. rusticolus* as stated in the A.O.U. Check List (1910).
[Not seen]. Size slightly larger and tail longer than in F. r. rusticolus; wing ♂ 14.7-15.5; ♀ 15.8-17 in.; (Sewertz).


Ural Gyrfalcon.

Wing ♂ 14.6; differs from *F. r. rusticolus* in having upper parts reddish brown washed with ash, under parts ochraceous with tear-shaped dark brown stripes; tail brown, tipped with pale ochreous, the two middle feathers unbarred, rest with indistinct oval transverse reddish brown spots; tarsus bare for more than half its length. (Dresser). [Not seen.]


Altai Gyrfalcon.

[F. lorenzi (Menzb.) a synonym.]

Size small; wing ♂ 10-10.50, ♂ 10.75-11 in.; above dark slate grey, darker on head and paler on rump; hinder part of cheeks and sides of neck buffy white, with well-defined black moustachial stripe below; nuchal collar reddish white; tail slate grey, all but middle pair of feathers barred on inner webs with ferruginous; below creamy white, striped on breast and flanks with black; thighs and under tail-coverts rust-red.

† *Hierofalco grebnitzkii* Sewertz. and Menzb., described from Bering Island, is probably synonymous with this form.
285. *Falco subbuteo subbuteo* Linn., S. N., i., p. 89 (1758.) ['"Europe"'=Sweden.]  
Hobby.

Size scarcely larger; above paler; below with the stripes rather smaller.

North African Hobby.

Paler above and with slightly longer wings than *F. s. subbuteo*; wing of ♂ nearly equal to wing of ♀ of typical form.

[= *F. s. cyanescens* Lonnberg.]  
Central Asian Hobby.

Slightly larger than *F. s. subbuteo*; wing ♂ about 10.75 in.; darker and more heavily marked below.

Kamtschatkan Hobby.

Similar to *F. s. subbuteo*, but smaller; wing ♂ 9.40-9.75, ♀ 9.85-10.15 in.

Chinese Hobby.

Europe; from Scandinavia and Brit. Isles to Mediterranean; W. Siberia; in winter S. to Africa & N.W. India.

Tunis, Algeria, Morocco.

Central Asia, S. to Chinese Turkestan and Assam.

E. Asia and Kamtschatka; S. in winter to Japan & N. China.

China, from Kwangtung Prov. N. to Shensi.

Wing ♂ 9.60-10, ♀ 9.75-10 in.; sexes dissimilar; ♂ above dark plumbeous; tail black; below blue-grey with faint blackish shaft-stripes; thighs, vent and under tail-coverts chestnut; under wing-coverts greyish black; cerc and feet brownish red; ♀ head and neck rufous; above ash grey, barred with darker grey; primaries barred with reddish white on inner webs; throat and cheeks reddish white; below rufous.

Red-footed Falcon.

Smaller; wing ♂ 9.25-9.70 in.; ♀ under wing-coverts pure white, instead of greyish black; feet orange; ♀ head browner and below paler rufous, the breast white broadly streaked with black, becoming bars on the flanks.

Eastern Red-footed Falcon.

S.E. Siberia; Mongolia, N. China; in winter to India and E. Africa.

* Hartert considers *F. v. obscurus* Tschusi from W. Siberia to be a synonym.
Larger; wing ♂ 12.40-12.90; ♀ 12-90-13.35 in.; sexes dissimilar; ♂ general color blackish slate, browner on upper parts; outer tail-feathers slightly barred with blackish; below with a trace of rufous, but the thighs dark slate; ♀ dark slate brown above, tail barred with rufous and blackish; hind cheeks and throat deep buff, with a conspicuous black moustachial stripe; breast buffish, becoming rufous on abdomen, striped with black; thighs deep chestnut.

Eleonora’s Falcon.

Smaller; wing ♂ 10.40, ♀ 11.2 in.; sexes similar; uniform leaden grey with black shaft-stripes to the feathers; primaries and tail with whitish bands on inner webs; cere, orbits and feet bright yellow; bill bluish.

Uniform Falcon.

Wing ♂ 8.5, ♀ 9.1 in.; above slaty black; head, cheeks and ear-coverts deep black; throat and sides of neck creamy white, washed with ferruginous; below chestnut, Islands of Mediterranean; W. Canaries; N. Africa, Algeria to Morocco; in winter S. to Madagascar.

E. Africa (coast from Red Sea to Madagascar): Arabian Coast.
immaculate in old birds; in younger birds heavily marked with drop-shaped spots of black.

    Indian Hobby.

Wing ♂ 8.50, ♀ 9.0-9.50 in.; chest usually with black shaft-stripes; above darker; tail nearly black; below darker chestnut; quills and tail below either banded or unbanded in New Guinea birds, not always unbanded.

    New Guinea Hobby.

Above paler; wings and tail browner slaty; inner webs always barred below with pale cinnamon, chestnut of lower parts paler, without black markings in adults.

    Central Indian Hobby.

Wing ♀ 9.6 in.; above sooty; primaries and tail-coverts with rufous bars on inner webs; throat buffy white; below black, with remains of chestnut edgings; thighs chestnut, streaked with black; younger bird chestnut below, streaked with black.

    Moluccan Hobby.
Wing ♂ 9.7, ♀ 10.5 in.; above slaty blue, darker on head and lighter on rump; primaries and tail barred on inner webs with rufous; hind neck tinged with rufous, forehead white; throat and sides of neck reddish white; below pale dull rufous, with a few dark shaft-stripes on breast and obsolete grey bars on flanks.

Little Falcon.

Smaller.

Murchison Falcon.

Larger than last form, and differs from typical form in its blue-grey upper surface and paler under surface.

Northern Little Falcon.

[Not seen.]

Timor Little Falcon.

Wing ♂ 8.5 in.; above dark slate grey, blackish on interscapulary region; primaries and tail feathers dark brown, latter barred with fulvous on inner web; forehead buffy white; throat and sides of neck white, washed with rufous; below rusty red, with central streaks of black on breast and sides; under wing-coverts buff, streaked with black.

[Not seen.]


Wing ♂ 9.45, ♀ 11 in.; above black, most of the feathers bordered with slate grey; tail with 3 bars of greyish white; throat white; below chestnut, except lower breast and under wing-coverts which are black, tipped and spotted with rufous buff.


Size small; length ♂ 9-10 in.; wing ♂ 7.3, ♀ 8.9; above slaty black; tail black, tipped with white, and with 3 or 4 narrow bands of greyish white; throat and sides of neck orange rufous to white with a tinge of rufous; breast black, finely barred with white; abdomen, thighs and under tail-coverts chestnut.

294. *Falco rufigularis rufigularis* Daud., Traité, ii., p. 131 (1800). [Cayenne.]

[F. albigularis Daud., a synonym.]

White-throated Bat Falcon.

Wing ♂ 7.85 in.; "upper surface dark slate grey instead of black; below with breast and sides of body dark brown, not black, and much more broadly banded with white."*

* A larger series is necessary to show if this form is really separable. Paraguayan birds (*F. ophryophanes* Salvad.) appear to me indistinguishable from typical birds.
Bolivian White-throated Falcon.

Wing ♂ 7.45, ♀ 8.45 in.; differs from *F. r. rufigularis* in being slate colour above, with black shaft-lines, instead of black with slightly paler margins; bend of wing white varied with buff; breast and sides of body blackish brown, instead of black, and the white bars broader.


Size moderate; length ♀ about 15.5; wing ♂ 10, ♀ 10.5 in.; ♂ above dull slaty, greyer on crown and lighter on rump; upper tail-coverts barred and tipped with whitish; tail blackish brown, with about 6 white bands; a band from behind eye round hind neck white, below which is a line of black on sides of neck; throat, chest, ear-coverts and sides of neck buffy white; sides of breast black, barred with white narrowly; belly and vent tawny buff; ♀ larger and more richly coloured; sides of head and under parts richer tawny.

Aplomado Falcon.

[Not seen.]

Arizona Falcon.
Size small; length ♂ 11.5; wing ♂ 8.25, ♀ 9 in.; head and hind neck chestnut red; above bluish slate, with remains of blackish cross bars, except on back and scapulars; tail narrowly barred with black, with a broad black subterminal band and white tips; eyebrow and moustachial stripe black; forehead, sides of head and neck, throat and chest white, with a few black shaft-lines on latter; below white thickly barred with black.

Red-headed Merlin.

Indian Peninsula.

Size similar; wing ♂ 8.6, ♀ 9.45 in.; paler, more barred above, especially on back and scapulars, and with bars on breast rather closer together.

African Rufous-necked Falcon.

Tropical Africa to South Africa.

Size small; length ♂ about 11 in.; wing 8, ♀ wing 8.5 in.; ♂ above dark to pale slate colour, with distinct black shaft-stripes, the head and wing-coverts darker; hind neck mottled with rufous buff; upper tail-coverts paler grey; tail tipped with fulvous and crossed with 3 black bands, and broad subterminal one; forehead, cheeks and throat fulvous, with narrow streaks of black, except on latter; below ochraceous buff, with dark brown shaft-streaks, broadest on the flanks; ♀ much browner above; tail umber brown with 4 buffish white bands.

* *Falco horsbrughi*, Gunning and Roberts, Ann. Trans., Mus. iii., p. 110 (1911). [Pretoria], is a synonym of this species, a fact ascertained from a drawing made by Lt. Finch Davies from the type and examined by Dr. Hartert and myself.

Pigeon Hawk.

Darker form.


Suckley's Merlin.

Size similar; wing ♂ 7.65-8, ♀ 8.50-8.85 in.; ♂ above rather lighter slate blue, with the black shaft-lines; below rather more rufous; tail slaty blue, tipped with white and with broad subterminal band, the other black bands nearly obsolete; ♀ above dark brown, tail with 5 narrow pale bands; below dull white streaked with brown.


Common Merlin.

Size similar; wing ♂ 7.75-8.10 in.; ♂ above lighter grey; ♀ above paler brown; much less heavily striped below.


[ Fuson, Korea.]

Asiatic Merlin.

N. America in winter S. to W. Indies and North. S. America.

N.W. America, Sitka to N. California.

N. Europe to Brit. Isles and Central Russia; in winter S. to N. Africa.

Asia; Turkestan to China, Japan and Ussuriland; in winter to Cyprus, Syria, India, S. China.
Slightly larger; wing ♀ 8.25 in.; above still paler grey and below with smaller and paler stripes; ♀ paler generally.


Pallid Merlin.

Larger; wing ♀ 8.90, ♀ 9.85 in.

gan-Burgazi Pass, Altai Mtns.*]

Altai Merlin.

Wing ♀ 7.70, ♀ 9 in.; ♀ above earth brown, with greyer centres and black shaft-lines to all the feathers; tail with 5 bands of ashy white and tipped with the same; below buffy white, striped with ochraceous brown, broadest on the flanks; ♀ more similar to ♀, but the feathers of upper parts with ochraceous spots.


Richardson's Merlin.

Gen. LXXXV. IERACIDEA Gould (1837).

Distance between tips of primaries and tips of secondaries less than half length of tail; tarsus transversely plated bear base of toes, and appreciably longer than in *Falco.*
Size moderate; wing ♂ 13 in., ♀ 14 in.; above sandy brown, most of the feathers edged with rufous; head with blackish shaft-stripes; tail ashy brown, tipped with white and barred with rufous; below creamy white with brownish shaft-streaks, and a dark brown moustachial stripe; thighs, axillaries and inner lower wing-coverts chestnut.

Striped Brown Hawk.

Less rufous above, more uniform darker brown, without shaft stripes; below without shaft-stripes, the sides blackish brown, often uniform blackish brown.


Smaller; wing (sex ?) 12.85 in.; above brown with buffy tips.

Tasmanian Brown Hawk.

Smaller.

Western Brown Hawk.

Wing ♀ 14.50 in.; dark phase; above and below smoky black or fuliginous brown.

* For the forms of this group, all very doubtfully distinct, see Mathews's Birds of Australia.

Cape York, North Australia.

Above dark rusty brown; cheeks black.


Northern Brown Hawk.

Northern Territory, N.W. Australia.

Very pale race.


Central Australian Brown Hawk.

Central Australia.

[Not seen.]


New Guinea Brown Hawk.

S.E. New Guinea.

Gen. LXXXVI. CERCHNEIS Boie (1826).*

With the general characters of *Falco*, but wings not so long and 3rd primary nearly equal to 2nd; outer and inner toes equal. (Plumage always rufescent; sexes usually dissimilar).

Size small; wing ♂ 9.10-9.75, tail 6.25-6.50; wing ♀ 9.65-10.25, tail 6.50-6.75 in.; ♂ above brick-red, with a few arrow-head black markings, especially on the inner secondaries; head and neck blue-grey,

* Against the opinion of many systematists I feel it desirable to separate this group from *Falco*, not only because they form a natural group, distinctive in colouration, but also because this group contains within it certain groups of species, closely connected, but having many ramifying forms, which it seems undesirable to treat of under *Falco*. 
with narrow black shaft lines; primaries
dark brown, notched with white; lower
back, rump and tail blue-grey, the tail
with broad subterminal band of black and
tipped with white; below pale rufous
fawn, chest with black streaks, becoming
spots on flanks; thighs rufous buff, throat
and under tail-coverts buff, unspotted; ♀
above entirely rufous, banded with black,
with only a bluish shade on rump; tail
rufous barred with black; below paler.

299. Cerchneis tinnuncula tinnuncula Linn.,
S.N., i., p. 90 (1758). [“Europe” = Sweden.] Common Kestrel.

Below deeper and warmer than in typical
form; which it quite equals in size.

299a. Cerchneis tinnuncula rupicolaformis Brehm,
Vogelfang, p. 29 (1855). [ex. Württemberg
MS.—“Egypt and Germany”; restricted
type loc. Egypt.] Egyptian Kestrel.

Larger and averaging paler above and
below; wings and tail longer, the latter
especially much longer than in other forms;
wing ♀ 9.85-10.10, ♂ 10.20-10.50; tail ♀
6.75-7.75, ♂ 7.0-8.0 ins.

Siberian Kestrel.

Smaller; wing ♀ 8.50-8.90, ♀ 8.90-9.50 in.; much darker above and below.


Canarian Kestrel.

Size similar; wing ♀ 8.8, ♀ 9 in.; a dark form approaching the last.


Cape Verde Kestrel.

Wing ♀ 8.40-8.90, ♀ 8.90-9.90 in.; above as pale as in *C. t. tinnuncula*, below deeper rusty.


East Canarian Kestrel.

Cape Verde Islands.

Siberia (Amur River to Yeneisci) and Mongolia; S. in winter to India, Ceylon, Assam, Burma and China.

W. Canary Islands (Tenerife, Gran Canary, Hierro, Palma, Gomera); Madeira.

Canyon Is. (Fuerteventura, Lanzarote.)

* Material from Siberia being very meagre, I have principally determined this form from the considerable number of large and long-tailed birds, always on the pale side, existing in collections from Ceylon, India, Assam, etc., which are obviously migrants from the north, and have no connection with the smaller and darker form breeding in N. India (*C. t. saturata*), with the rather darker but nearly typical bird breeding in W. Asia, or with the darker but large race breeding in Japan (*C. t. japonica*). A large immature ♀ bird in my collection from Ceylon has a tail measurement of 7.75 in. and there are birds in the Tring collection with nearly the same measurement.
Larger; wing ♂ 9.50-9.75, ♀ 10.0-10.55 in.; head darker than in \textit{C. t. tinnuncula};
dark spots on mantle larger and with
broad dark shaft-marks to the feathers;
below darker than \textit{C. c. tinnuncula}.

299f. \textit{Cerchneis tinnuncula japonica} Temm. and
Schleg., in Siebold's Fauna Jap. Aves, p. 2,
pl. 1, and 1b. (1844). [Japan.]
Japanese Kestrel.

Rather smaller; wing ♂ 9.10-9.50, tail 6;
w wing ♀ 9.50-10 in.; smaller and much
darker than \textit{C. t. tinnuncula}; much deeper
rufous above and more heavily spotted;
head and tail showing a great tendency to
a rufous wash, and tail more generally
with remains of black bars even when
adult; chest more heavily striped and
breast with larger spots.

299g. \textit{Cerchneis tinnuncula saturata} (Blyth) Jnl.
[Tenasserim.]
Himalayan Kestrel.

Smaller than \textit{C. t. tinnuncula}; wing ♂ 8.70-
9.45 in.; dark form approaching \textit{saturata}.

299h. \textit{Cerchneis tinnuncula carlo} Hart & Neu-
mann, J.f.O., 1907, p. 592. [Bissidimo near
Harrar, type in Tring Mus.]
Central African Kestrel.

Smaller than \textit{C. t. tinnuncula}; wing ♂ 9.50-
9.75, ♀ 10.0-10.55 in.; head darker than in \textit{C. t. tinnuncula};
dark spots on mantle larger and with
broad dark shaft-marks to the feathers;
below darker than \textit{C. c. tinnuncula}.

299f. \textit{Cerchneis tinnuncula japonica} Temm. and
Schleg., in Siebold's Fauna Jap. Aves, p. 2,
pl. 1, and 1b. (1844). [Japan.]
Japanese Kestrel.

Japan; S. in winter
to China &
Hainan.

Rather smaller; wing ♂ 9.10-9.50, tail 6;
w wing ♀ 9.50-10 in.; smaller and much
darker than \textit{C. t. tinnuncula}; much deeper
rufous above and more heavily spotted;
head and tail showing a great tendency to
a rufous wash, and tail more generally
with remains of black bars even when
adult; chest more heavily striped and
breast with larger spots.

299g. \textit{Cerchneis tinnuncula saturata} (Blyth) Jnl.
[Tenasserim.]
Himalayan Kestrel.

Mountains of N. India
to China;
in winter
S. to Tra-
vancore;
cas.Ceylon?

Smaller than \textit{C. t. tinnuncula}; wing ♂ 8.70-
9.45 in.; dark form approaching \textit{saturata}.

299h. \textit{Cerchneis tinnuncula carlo} Hart & Neu-
mann, J.f.O., 1907, p. 592. [Bissidimo near
Harrar, type in Tring Mus.]
Central African Kestrel.

Tropical
Africa (So-
maliland,
Abyssinia
and Blue
Nile to
Victoria
Nyanza &
Tangan-
yika);
S. Arabia.
Size of *C. t. tinnuncula*; wing ♂ 10 in.; similar in general colouration, but with sides of face dull blue-grey like head; ♀ tail blue-grey banded with black, instead of rufous.


Smaller; wing ♂ 8.70-9.20, ♀ 9-9.60 in.; ♂ above deep bay, with broad arrow-head markings of black; head and hind neck uniform, streaked with black; rump, upper tail-coverts and tail bluish grey, latter with broad black subterminal band and white tips; throat rufous white; below bay colour, streaked on breast and arrow-headed on flanks with black; ♀ more banded above; tail with extra dark bars, besides the subterminal one.

Moluccan Kestrel.
*[C. t. orientalis* a synonym.]

Smaller; wing ♂ 7.85 (Celebes) -9.20 (Java), ♀ (Flores) 9 in.; paler, with more greyish cheeks and ear-coverts, much whiter under wing-coverts and lighter underside.

Javan Kestrel.

S. Africa, (Natal, Cape Colony, Damara-land).

Molucca Is. (Amboyna, Bouru, Ceram, Goram, Peling Is., Halmahera, Morotai, Ternate, Batchian).

Celebes, Lesser Sunda Is. to Kangean; Java.
Size similar; wing ♂ 9.3, ♀ 9.8 in.; ♂ above pale rufous, almost unspotted; head pale bluish grey, washed with rufous, and with black shaft-lines; rump and tail blue-grey, latter with broad subterminal black band and white tips; sides of face greyish white; below buffish white, the chest tawny buff, that and sides with black shaft-stripes; under wing-coverts white; ♀ head and tail like back, the tail barred with black.

Nankeen Kestrel.

Dusky Nankeen Kestrel.

Smaller; below darker, decided cinnamon pink; tail rusty cinnamon.

Westralian Nankeen-Kestrel.

Larger; wing ♂ 11, ♀ 11.4 in.; ♂ above tawny rufous, with broad cross-bars of black; head uniform, but streaked with black; rump and upper tail-coverts blackish, barred with fulvous; tail ashy rufous, banded with black, the subterminal band broad, followed by a white tip; primaries blackish brown, the inner ones mottled with rufous on inner webs and spotted on outer webs; below dull tawny rufous, breast streaked with brown, flanks more heavily marked; under wing-coverts white; ♀ similar, but flanks more barred.
Larger African Kestrel.

Smaller, much paler above.

Somali Kestrel.

Rather darker, tail with narrower black bars, the pale ones more blue grey.

East African Kestrel.

Wing ♂ 10.6 in.; plumage above and below fox red; head narrowly and back and wing coverts more broadly streaked with black; the greater wing-coverts with remains of bars; primaries black, margined and tipped with paler red; tail darker red, with about 15 bars of black; throat unmarked, but rest of under surface with narrow central streaks of black.

303. *Cerchneis alopex alopex* (Heugl.) Syst. Uebers., p. 10 (1856), and Ibis, 1861, p. 69, pl. iv. [prov. Galabat.]
Fox-coloured Kestrel.

Desert Kestrel.

N. E. Africa, (Bogosland to Shoa); Equat. Africa (Redjaf).

Togo Hinterland; Gold Coast Hinterland?
Smaller; wing ♂ 7.4, ♀ 8.2 in.; ♂ above, including head and neck, light rufous, streaked on head and neck and arrow-headed on scapulars and wing-coverts with black; rump and upper tail-coverts dark bluish grey with more or less of black arrow-head markings; tail bluish grey banded with black, the subterminal band very broad; forehead, sides of head and under parts creamy white, tinged with rufous on chest, which is marked with elongated black spots, becoming more oval on breast and flanks; under wing-coverts white, streaked with black; ♀ similar.

304. *Cerchneis newtoni* Gurney, *Ibis*, 1863, p. 34, pl. 11. [Madagascar.]
Madagascar Kestrel.

Size similar; wing ♂ 7, ♀ 7.6 in.; above dull foxy rufous, with rather broad bars of black; head with blackish shaft-stripes; tail deep bay, with 6 bands of black; below white, with large oval spots of brownish black, smaller and more longitudinal on flanks; ♀ similar.

Mauritius Kestrel.

Smaller; wing ♂ 5.6, ♀ 6.3 in.; ♂ above maroon-chestnut, with a few black shaft-lines and spots, chiefly on wing coverts and scapulars; rump, upper tail-coverts and tail bluish grey, latter with broad subterminal and 4 other black bands; head dark bluish grey; sides of face paler; below isabelline fawn colour, unspotted; ♀ scarcely differs.

Seychelles Kestrel.
Size small; wing ♂ 9.10-9.70, ♀ 9.10-9.80 in.; ♂ head, hind neck, rump, upper tail-coverts and tail blue-grey, latter tipped with white and with broad subterminal black band; rest of upper parts cinnamon rufous, unspotted; greater wing-coverts and inner secondaries blue-grey, shaded with rufous externally; primaries dark brown; throat whitish; chest and breast pale cinnamon, marked with small black spots, larger on the flanks, abdomen and under tail-coverts yellowish white; ♀ more like that of C. t. tinnuncula, but smaller and distinguished by its white claws.

_Cerchneis naumannii naumannii_ Fleischer, Sylvan, 1817-18, p. 174 (1818). [S. Germany and Switzerland.]

Lesser Kestrel.

Size similar; wing ♂ 9.6 in.; darker above and below, and without spots below when adult, or with minute spots on sides when less mature; wing-coverts almost entirely blue-grey, only innermost ones slightly washed with rufous.

_Cerchneis naumannii pekinensis_ Swinh., P.Z.S., 1870, p. 442. [Pekin.]

Chinese Lesser Kestrel.
Slightly smaller; wing ♂ 9 in.; above with red of mantle very much paler; below paler fawn colour and uniform without spots, except a few on sides in less mature birds.  


Length ad. 10-11, wing 7.50-8.00 in., tail 5-6 in.; head slaty, crown usually rufous; above rufous, more or less barred with black (according to age); tail with subterminal band of black and white tips; outer feathers more or less white, with one or more extra partial bands of black on inner webs (according to age); below buffish white, the chest pale cinnamon fawn, more or less finely spotted with black on sides of body (according to age). [Specific distinctions: crown generally rufous; chest washed with rufous; sides spotted.]†

* I have described this form from a presumed typical ♂ from Samarkand, May 1st, 1908, alt. 2,000 ft., D. Carruthers coll., in the Brit. Mus. coll. An example in the Brit. Mus. coll. from Somaliland, very pale and unspotted below, is as pale above as the Samarkand bird and is evidently referable to this form; the line of migration to N.E. Africa being a quite natural one. Examples from Central and S.E. Africa are however C. n. naumannii.

† Opinions differ greatly as to the specific and subspecific value of the American Kestrels, but I think it desirable to give specific rank to the typical race of each of the three groups of forms, and I have pointed out the principal characters on which I base these species. Some ornithologists appear to me to have failed to grasp the most important factors in determining the subspecies of these groups of forms, and to have attached undue importance to tail markings and the spotting of under parts, characters which vary with maturity and require to be considered with great caution. The spotting below is common to the less mature birds of all three groups, but disappears with age entirely in the isabellina group and varies in the other two, while the rufous on crown is likewise common to all three when immature, but disappears in the isabellinæ and cinnamomina groups, yet is usually retained in the sparveria group. The markings of the outer pair of tail feathers and the width of the subterminal tail band are most unreliable characters in themselves, as a series of old and young of both sexes in my collection from one district in Venezuela shows.
American Kestrel.

Smaller; wing ♂ 7.50, tail 5.25 in.; appreciably paler; tail relatively longer and paler; wing-coverts less spotted; rufous crown patch appreciably larger; below with larger, rounder and more numerous black spots; chest cinnamon fawn.

Western Kestrel.

Smaller; wing ♂ 6.50, ♀ 6.75; paler; with rufous crown patch; subterminal tail band wide (25 mm.); below buffish white, well marked with black.

Lower Californian Kestrel.

Smaller; wing ♂ 7-7.50 in.; under parts nearly immaculate in old birds, the ground colour either cinnamon fawn or nearly white; throat white.

Size small; wing ad. 6.9 in.; above more heavily banded with black, the tail barred broadly with black even when mature, but bars obsolete on central feathers in some examples; below creamy white, chest washed with fawn, with large black spots on breast and sides.


Wing ♂ 6.80 in.; head slate, usually without rufous on crown, and black bands on back nearly absent; below white,♀ unspotted in oldest birds, or with a few black spots on sides in less mature; inner webs of primaries white, the black bars nearly obsolete; ♀ with bands above narrower than in typical form; below much whiter, slightly streaked on sides of breast with pale brown.

* I am unable to say definitely what race inhabits the Bahama Islands, not having seen examples.

† I am unable to separate the Porto Rico race [Cerchneis sparveria loquacula Riley, Smith. Coll., xlvi., p. 284, 1904; Vignes I.] as so far as the scanty material available shows it is not distinguishable from caribbeearum.

‡ Almost dead white in Cuban birds, with scarcely any colour on chest, but two San Domingo examples seen have a strong cinnamon shade on chest; as they show one or two spots on sides they are apparently younger birds.

Wing \( \delta \) 7.25; tail 5.25 in.; above darker than \( C. s. \) phalena, especially tail; back more heavily banded with black; tail band slightly broader; head darker slate, either without rufous, or with a small and indistinct nape patch; below creamy white, including the chest, and much more heavily striped on chest and spotted on breast and sides with large black spots; thighs and vent unspotted.

308f. Cerchneis sparveria guatemalensis* subsp. nov. [\( \delta \) Capetillo, Guatemala, J. J. Rodriguez, in coll. H. Kirke Swann; \( \delta \) Huchuetenango, Guatemala, June, 1897, W. B. Richardson, in coll. Brit. Mus., Reg. No. 98, 12, 1, 91.] Central American Kestrel.

Larger; length ad. about 11 in.; wing \( \delta \) av. 7.80, tail 5.50 in.; \( \delta \) with no rufous on crown; \( \varphi \) usually with partial crown patch; \( \delta \) tail with one narrow (av. 13 mm.) black subterminal band and white tips mixed with rufous; the tips of central pair and inner webs of outer pair of feathers rufous; below white, chest with decided tinge of fawn, and with large black rounded spots on sides; \( \varphi \) with much narrower (almost linear) bands on

* The Central American form here designated is the resident form, and I have added a co-type in the Brit. Mus. coll. obtained in June as my own type is without date. It is true that North American migrants (principally of the western form, phalena) occur commonly in Central America, but I regard the birds with heavily marked under-parts, little or no colour on chest, and little or no red on crown, as quite distinct and forming the resident race in Central America.
tail-coverts and tail, which is much paler; below whiter with narrower and paler stripes
(Specific distinctions: ♂ slate crown without rufous, pale chest, and spotted under parts; ♀ narrower and more regular bars on tail-coverts and tail.)


[Chile.]
Cinnamon Kestrel.

Slightly smaller; wing ♂ av. 7.10, tail 5 in.; tail with the subterminal black band appreciably wider (av. 22 mm.); sides moderately spotted with black; ♀ tail darker red, and with broader, straighter and more complete cross-bars, the subterminal one broader; below with broader and darker brown stripes.


[Paraguay, type in U.S. Nat. Mus.; new name for Falco gracilis (nec Lesson) Swains., Anim. in Menag., p. 281, 1838, Bahia, Braz., type in Brit. Mus.]
Brazilian Kestrel.

Brazil, N. to Amazon River (?). S. to N. Argentina. E. to Paraguay and the eastern slopes of Andes in Bolivia and Peru.

* Line of demarcation in Paraguay, Bolivia and S. Peru uncertain.
Size similar; wing ♂ 7-7.50 in.; tail 5.25; ♀ wing 7.25-7.5 in.; ♂ head much darker, blackish slate; above darker rufous; tail band 18-22 mm. (central widest, northern and southern narrowest); below much deeper cinnamon; spots on sides fewer (except in less mature birds); ♀ above (including tail) and below much darker cinnamon rufous; wing quills washed with rufous on inner webs, the black bars much narrower and white inter-spaces 6 mm. wide; tail bands narrow and regular as in C. s. cinnamomina, but underside much less white and bars appearing much narrower, with no black terminal band.

[C. c. cauce Chapm. and C. c. andina Cory, synonyms.]*
Andean Kestrel.

Slightly larger; wing ♂ 7.50 in.; more deeply coloured and more heavily marked; vent and under tail-coverts clear buff;

* I think that the absence of exact locality for Mearns’s type cannot be held to disqualify his name, as it seems certain the example came from some part of Ecuador, and I accept “interior of Ecuador” as a sufficient locality, since I am unable to distinguish four (?) separate races for Ecuador as set forth by Cory (Field Mus. Pub. Orn., Ser. i., pp. 319-23). C. c. cauce appears to me to be a northern extension of this dark form, reducing in size slightly; C. c. andina appears to rest on the largest and darkest birds, with fewest spots on sides, and presumably the most mature, judging by the description and by presumed examples I have seen. His C. c. peruviana, being the paler southern examples, is in my opinion untenable, as most Peruvian birds can be referred either to cinnamomina or australis. There are only two groups of forms in South America, the larger cinnamomina and the smaller isabellina. If a bird is of fair size and has spotted sides when quite adult it must belong to the former, and if small, with unsnottled sides when adult, it must belong to the latter. To treat both as forms of sparveria, as Cory does, is confusing. It cannot be too strongly emphasised that the spotting in the isabellina group is immaturity; in cinnamomina it remains in the adult, but must vary as we get away from the typical race. Andina by its size appears to belong to the cinnamomina group, and according to Cory’s description the spots are not entirely absent.
spots below larger and more numerous; ♀ under parts (except throat) much deeper, in some specimens dull rufous, obscurely streaked and spotted with blackish; vent and thighs clear buff.


Juan Fernandez Kestrel.

Smaller and paler; ♂ length 9.50; wing 7; tail 5 in.; head and nape bluish slate, without rufous when fully ad.; above rufous, with only one or two small specks of black; wing-coverts slate blue, slightly spotted with black; primaries with black bars more or less obsolete, not extending across webs; tail with black subterminal band 15-25 mm. wide, and white tips; outer web of outer feather white, inner rufous; below light pinkish cinnamon, unspotted (except in less mature birds); thighs and vent white; ♀ below isabelline, with a few fine streaks and spots of pale brown on chest and sides of breast; nape often with rufous patch or tinge. [Specific distinctions: small size, slate crown, and unspotted under parts.]


Isabelline Kestrel.

Length ♂ 9 in.; wing 7-7.25; tail 5 in.; ♀ wing 7.50-7.70, tail 5.25 in.; ♂ above darker rufous, with only a few black spots and bars; head blackish slate with no rufous patch when adult; primaries...
barred right across inner webs; tail with broader black subterminal band (25-30 mm.); below decided rufous cinnamon, unsotted in ad. (less mature with a few black spots on sides); ♀ and juv. ♀ isabella rufous below with dark brown streaks and spots; crown with more or less rufous.

Venezuelan Kestrel.

Wing shorter; ♂ av. 6.50, ♀ 6.90 in.; similar to last form but with a greater tendency to banding above and to heavy black spotting below in less mature birds; ad. ♂ below isabella rufous unsotted; tail band av. 25 mm. [Barely separable form.]

310b. Cerchiefes isabellina brevipeennis Berl., J.f.O. 1892, p. 91. [Curacao.]
Curacao Kestrel.

* C. i. intermedia Cory (Field Mus. N. H. Orn., i., p. 325 (1915), seems to be non-separable. The average wing of his examples is the same as the measurement of his type of ochracea; the narrower band on the tail seems scarcely a reliable distinction, while the white spotting on outer webs of primaries is a very variable character. C. i. margaritensis Cory (T. c., p. 297), I am also unable to distinguish, as examples with the paler under parts occur in the Merida district along with the darker birds. His C. i. perplexa (t. c., p. 327) I am unable to distinguish, dark and pale-breasted birds occurring together as I have before pointed out; while C. i. distincta (t. c., p. 297) is most certainly typical isabella, the principal character, the obsolete bars on inner webs of primaries, being present in Brit. Guiana examples.
Wing ♂ 7.7-7.25, ♀ 7.40-7.55 in.; head, neck, back and wing-coverts slaty blue; with a tinge of rufous on interscapulary region; rump, upper tail-coverts and tail deep bay, the tail tipped with white and with a broad subterminal bar of black; throat and sides of face whitish; below chestnut-fawn, paler on vent, and shaded with greyish on flanks, with one or two spots of black.


Gen. LXXXVII. DISSODECTES Sclat. (1864).

With the characters of Cerchneis but with a more or less constant double-toothed mandible, and plumage not rufescent.

Wing ♂ 8.9; general plumage slaty grey (paler below) with dark shaft-lines to the feathers; tail with whitish bands on inner webs; throat and sides of face whitish.


Smaller; wing ♂ 8.3; head and neck whitish ashy, with distinct blackish shaft-stripes; rest of upper parts blackish brown, the primaries darker and banded on inner webs with white; rump and upper tail-coverts white, shaded with grey; tail greyish white, banded with black, the subterminal band broad; throat whitish; under parts ashy brown.
Dickinson’s Kestrel.

Wing♂ 8.75, ♀ 9.1 in.; above ashy grey with black shaft-stripes, paler and bluer grey on rump and upper tail-coverts; scapulars and wing-coverts barred with greyish black; primaries blackish, barred with rufous or whitish on inner webs; tail black, all but the 2 central feathers barred with greyish white; forehead and throat whitish, streaked on throat and barred below with ashy brown.

Madagascar Grey Kestrel.

Sub. Order III. **PANDIONES**.

Gen. LXXXVIII. **PANDION** Savigny (1809)

Plumage very close and compact, wanting the accessory plumule; no facial disk; eyes placed laterally in the head; nostrils generally not concealed by bristles; tarsus reticulated; toes devoid of feathers, the under surface rough, covered with small pointed scales; the outer toe reversible.

Size large; length ad. about 24 in.; wing 19-20.90 in.; head white, the crown striped with blackish brown; nape feathers elongated and lanceolate; ear-coverts and stripe through eye blackish brown; above dark brown, with paler margins to most of feathers; tail dark brown, inner webs barred with dark brown and whitish; below white, the breast varied with pale brown centres to the feathers; bill black; feet blue.

Size similar; dark markings of head blacker; above darker and richer brown; less marked on under side.


Similar to typical race, but smaller; wing ad. 16.50-18.25 in.; head much whiter; feet bluish white.


Europe, from Lapland (and formerly Scotland) to the Mediterranean and Coasts of N. Africa and Red Sea; S. Arabia; N. Asia to Japan and Kamtschatka.

N. America N. to Newfoundland and Alaska; S. in winter to Central America; S. America. S. to Peru and Paraguay.

Australia; Tasmania; Moluccas; New Guinea; Philippines; Sunda Is.

Gen. LXXXIX. POLIOAETUS Kaup (1850).

Wing ♂ 18, ♀ 20.4 in.; above brown, darker on wings, the primaries blackish; head and neck all round ashy grey; tail white, with broad terminal bar of brown; breast brown; belly white; under side of wing leaden brown, with a white spot at base of primaries; feet yellowish white.


Smaller; wing ♀ 16.2 in.; above ashy brown, back and wings darker; tail pale brown at base, blackish brown subterminally, the tip white; throat, breast and under wing-coverts ashy brown; belly white; feet bluish white.

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