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Swann, H. Kirke

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PART I.—JULY, 1919.

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A  
**SYNOPTICAL LIST**  
OF THE  
**ACCIPTRES**

(Diurnal Birds of Prey)



**PART I.**

(SARCORHAMPHUS TO ACCIPITER)

Comprising Species and Subspecies described up to 1914, with  
their Characters and Distribution

BY

**H. KIRKE SWANN, F.Z.S.**

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1919.



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

PART I.

ORDER CATHARTIDIFORMES.

Fam. I. CATHARTIDÆ (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.
1. *Sarcorhamphus gryphus gryphus* (Linn.), Syst. Nat., i., p. 86 (1758).      Andes of S. America.  
Great Condor.

- Plumage brown [doubtfully distinct].
- 1a. *Sarcorhamphus gryphus equatorialis* Sharpe, Cat. Birds B.M., i., p. 21 (1874).      Ecuador.  
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., N. & Central  
Sept., pl. xi. (1807). America,  
Black Vulture. Cuba,  
Jamaica.

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

- 3a. *Catharista urubu foetens* (Wied), Beitr. Naturg. S. America.  
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 Tropical  
(1758). S. America  
S. American Turkey Vulture. from  
Colombia to  
Chile & Brazil.

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

- 4a. *Cathartes aura septentrionalis* (Wied), J.f.O., N. America  
1856, p. 119. (United  
N. American Turkey Vulture. States) S. to  
Honduras.

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

- 4b *Cathartes aura falklandicus* (Sharpe), Ann. Falkland Is.,  
N.H., (4), xi., p. 133 (1873). Patagonia,  
Falkland Island Turkey Vulture. Chile.

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

- 4c. *Cathartes aura perniger* (Sharpe), Cat. Bds., Venezuela,  
B.M., i., p. 25 (1874). Guiana,  
Venezuelan Turkey Vulture. N. Brazil,  
Peru.

\* *Cathartes atratus* (Bartr.) of most authors.



Head orange ; shafts to primaries above and below white\*.

- 4d. *Cathartes aura urubitinga* Pelz., Sitz. Akad. Wien, xlv., p. 7 (1861).  
 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. S. California to lower California.

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.

6. *Serpentarius serpentarius serpentarius* (Miller), Var. Subj. Nat. Hist., pl. 28, (1785).  
 Secretary Bird. S. & E. Africa N. to Benguela on W. and Zambesi on E.

Paler.

- 6a. *Serpentarius serpentarius gambiensis* Ogilby, P.Z.S., 1835, p. 105.  
 Northern Secretary Bird. Senegambia, Sudan to Shoa.

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 ("Bds. of Bahama," p. 134, 1890) says shafts of *C. aura septentrionalis* 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
- S.E. Europe,  
N.E. Africa,  
C. Asia to  
India &  
China.

## 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.
- S. Europe,  
(acc. Britain),  
N. Africa,  
Arabia,  
Palestine.

Plumage paler and more isabelline reddish.

- 8a. *Gyps fulvus fulvescens* Hume, Ibis, 1869, p. 356.  
Indian Griffon.
- N.W. India,  
Himalayas,  
Afghanistan.

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.
- S. Africa,  
N. to Zam-  
besi and  
Damaraland.

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

9. *Gyps himalayensis* Hume, *Rough Notes*, i., p. 14 (1869).  
Himalayan Griffon.
- Turkestan,  
Himalayas,  
Thibet.

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.
- N.E. Africa,  
Abyssinia,  
N. Nigeria,  
Senegambia.

- Plumage above browner ; below whitish.
- 10a. *Gyps rueppelli erlangeri*, Salvad., Bol. Mus. Torino, xxiii., No. 576 (1908).  
Erlanger's Vulture. Abyssinia,  
Erythræa,  
Somaliland.
- Head bare ; ruff and upper parts dark brown with fulvous central streaks ; rump white ; below light brown with white streaks ; crop-patch brown.
11. *Gyps indicus indicus* (Scop.) (\*), Del. Faun. et Flor. Insubr., ii., p. 85 (1786).  
Indian Long-billed Vulture. India, Indo-Chinese countries,  
Malay Peninsula.
- Above pale earthy brown ; below whity brown ; crop-patch dark brown ; ruff white (Hume).
- 11a. *Gyps indicus pallescens* Hume, Stray Feathers, i., p. 150 (1873).  
Pallid Vulture. N.W. India.

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.
12. *Gymnogyps bengalensis* (Gmel.), S.N., i., p. 245 (1788).  
Indian White-backed Vulture. India, Indo-Chinese countries,  
Malay Peninsula.
- Above and crop-patch dark brown ; below pale brown, with yellowish-white shaft lines.
13. *Gymnogyps africanus africanus* (Salvad.), Nat. Stor. R. Accad. Torin., 7th May, 1865, p. 133.  
African White-backed Vulture. N.E. Africa,  
Khartoum to Abyssinia & Upper White Nile.
- Plumage more greyish.
- 13a. *Gymnogyps africanus schillingsi* Erlanger, Orn. Mb., xi., p. 22 (1903).  
Paler. German E. Africa.
- 13b. *Gymnogyps africanus fuelleborni* Erlanger (t.c.)  
Nyasaland to Angola.

\* Reichenow's *Gyps cinnamomeus* 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.*) Togoland.

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.

14. *Jorgos tracheliotus* (Forst.) Levaillant, *Reise Afr.*, ii., p. 362, pl. 12 (1791).  
Sociable Vulture. S. Africa.  
Egypt,  
Abyssinia,  
Upper White  
Nile, cas. in  
Europe.

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

15. *Otogyps calvus* (Scop.), *Del. Faun. Insubr.*, ii., p. 85 (1786).  
Pondicherry Vulture. Turkestan,  
India, Burma,  
Siam, Cam-  
bodia.

Gen. XI. LOPHOGYPS Bp. (1854).

Head covered with down; no neck-lappet.

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

16. *Lophogyps occipitalis* (Burch.), *Trav.*, ii., p. 329 (1824).  
White-headed Vulture. N.E. Africa  
& S. Africa,  
Senegal on W.

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. S. Europe,  
Africa S. to  
Mashonaland,  
Mediterra-  
nean Persic  
sub-region to  
N.W. India.

- [Doubtfully distinct.]
- 17a. *Neophron percnopterus rubripersonatus* Zaruday & Harms., Orn. Mb., x., pp. 52-3 (1902). Persian Baluchistan.
- Smaller than typical form; length 21 in.; wing 15.5.
- 17b. *Neophron percnopterus ginginianus* (Lath.), Ind. Orn. i., p. 7 (1790). Indian Peninsula, very rare in Ceylon.

Gen. XIII. NECROSYRITES 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.

18. *Necrosyrtes monachus monachus* (Temm.), Pl. Col., i., pl. 222 (1823). N.E. & E. Africa, W. Africa.

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

- 18a. *Necrosyrtes monachus pileatus* (Burch.), Trav., ii., p. 105, (1824). S. Africa.
- Hooded Vulture.

Fam. II. FALCONIDÆ.

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

Sub-Fam. I. POLYBORINÆ.

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.

19. *Polyborus plancus* (Mill.) Var. Subj. Nat. Hist., Pl. 17 (1778). S. America, Patagonia to 20° S. lat. on W. & Amazon on E. side.
- 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.
20. *Polyborus cheriway* (Jacq.), Beitr., p. 17, tab. 4 (1784).  
Audubon's Caracara. S. United States, Central America, Northern S. America.
- Paler insular race.
- 20a. *Polyborus cheriway pallidus* Nelson, Pr. Biol. Soc., Wash., xii., p. 8 (1898).  
Tres Marias Caracara. Tres Marias Is., W. Mexico.
- 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.
21. *Polyborus lutosus* Ridgw., Bull. U.S. Geol. Surv. Terr., i, p. 459 (1875).  
Guadeloupe Caracara. Guadeloupe Is., W. Mexico.
- Gen. XV. IBYCTER Vieill. (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. Amazon District of S. America.
- Plumage black with greenish reflections, but abdomen white ; face and throat deep red.
23. *Ibycter americanus* (Bodd.), Table Pl. Erl., p. 25 (1783).  
Red-throated Caracara. Tropical S. America and Central America, from Brazil to Guatemala.
- Plumage black with greenish reflections, but upper tail coverts, base and tip of tail and abdomen white.
24. *Ibycter megalopterus* (Meyen), Nov. Act. Cæs., xvi., Suppl., i., p. 64, pl. 7 (1834).  
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.
25. *Ibycter albigularis* (Gould), P.Z.S., 1837, p. 9. Patagonia.  
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.
26. *Ibycter carunculatus* (Des Murs), Rev. et Mag. Zool., 1853, p. 154. Highlands of Ecuador and Colombia.  
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. Patagonia, E. of Andes.  
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). Falkland Is.  
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.
29. *Milvago chimachima* (Vieill.), N. Dict., v., p. 259 (1816). Brazil and Amazonia to Guiana, Colombia & Panama.  
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.
30. *Milvago chimango* (Vieill.), N. Dict., v., p. 260 (1816). S. America from S.E. Brazil to Tierra del Fuego.  
Chimango Caracara.

## Sub-Fam. II. ACCIPITRINÆ.

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.

31. *Polyboroides radiatus* (Scop.), Del. Faun. et Flor. Madagascar. Insubr., ii., p. 85 (1786).  
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.

32. *Polyboroides typicus* Smith, S. Afr. Q. J., i., p. 107 (1830).  
Banded Gymnogene. S. Africa,  
W. Africa,  
N.E. Africa  
(Abyssinia &  
White Nile).

## 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. Europe and  
Siberia, N.E.  
Africa, India,  
China, Japan  
(winter).



- 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.
34. *Circus macroscelis* A. Newton, P.Z.S., 1863, p. 180.  
Madagascar Harrier. Madagascar.
- Throat and chest white; upper tail-coverts white, banded with ashy grey.
35. *Circus macrurus* (S. G. Gmel.), N. Comm. Petrop., xv., p. 439, pls. viii., ix. (1771).  
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.]
- 36a. *Circus pygargus abdullæ* Floericke, Orn. Mb., iv., p. 155 (1896).  
Caucasus.
- c. Thighs white, barred across with orange rufous.
- Throat and chest white, barred with orange tawny; upper tail-coverts white.
37. *Circus cinereus* Vieill., N. Dict., iv., p. 434 (1816).  
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.

38. *Circus assimilis assimilis* Jard. and Selb., Ill. Orn., Ser. i., pl. 51 (1828). Spotted Harrier. E. Australia, Tasmania, Celebes.

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

- 38a. *Circus assimilis rogersi* Math., Nov. Zool., xviii., p. 244 (1912). Lesser Spotted Harrier. N.W. Australia.

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.

39. *Circus approximans approximans* Peale, U.S. Explor. Exped., viii., p. 64 (1848). Fijian Harrier. Fiji Islands.

Larger.

- 39a. *Circus approximans gouldi* (Bp.), Consp., i., p. 34 (1850). Allied Harrier. S. & E. Australia, Tasmania.

Smaller.

- 39b. *Circus approximans inexpectatus* Math., Nov. Zool., xviii., p. 245 (1912). Little Allied Harrier. N.W. & N. Australia.

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

- 39c. *Circus approximans drummondi* Math. & Iredale, Ibis, 1913, p. 419. New Zealand Harrier. New Zealand.

- 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. S. Africa below 10° S. lat.

- Throat and chest creamy buff, the latter streaked with brown ; upper tail-coverts white.
41. *Circus æruginosus æruginosus* (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).
- 41a. *Circus æruginosus harterti*, Zedl., J.f.O., 1914, p. 133. N. Africa.  
Hartert's Harrier.
- 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 Réunion, ii., p. 12 (1863). Reunion Is., Comoro Is.  
Maillard's Harrier.
- Markings on throat and chest browner and broader ; under tail-coverts also streaked.
43. *Circus wolfi* Gurney, P.Z.S., 1865, p. 823, pl. xlv. New California, New Hebrides.  
Wolf's Harrier.
- Throat and chest white, streaked with black ; upper tail-coverts white with remains of ashy brown bars.
44. *Circus spilonotus* Kaup, Contr. Orn., 1850, p. 59. E. Siberia, in winter to E. China, Indo-Burman countries, Malay Archipelago.  
Eastern Marsh Harrier.
- The same, but with distinct transverse spots of dusky cinereous on upper tail-coverts.
45. *Circus spilothorax* Salvad. and d'Alb., Ann. Mus. Civ. Genov., vii., p. 807 (1875). S.E. New Guinea.  
New Guinea Harrier.

- Throat and chest black; upper tail-coverts barred with black.
46. *Circus melanoleucus* (Forst.), Indisch. Zool., p. 12, pl. xi. (1781). Pied Harrier. E. Siberia, Mongolia, E. and S. India, Burma, Malay Pen., Borneo, Philippines (winter).
- 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. E. side of S. America, from Magellan Str. to Brit. Guiana and Venezuela, Trinidad.
- b. Thighs black.
- Throat and chest brownish black; upper tail-coverts white, the lower ones spotted with black.
48. *Circus maurus* (Temm.), Pl. Col., i., pl. 461 (1828). Black Harrier. S. Africa.

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. *C. melanoleucus.*

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

Below tawny buff, streaked with brown; upper tail-coverts white. *C. cyaneus.*

Below nearly white, streaked with brown. *C. hudsonius.*

Below creamy buff, with pointed spots of rufous brown; upper tail-coverts white. *C. spilonotus.*

Below buffy white, with rufous centres to the feathers; upper tail-coverts white. *C. pygargus.*

Below creamy white, with streaks of brown; upper tail-coverts white, barred with dark brown. *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.

*C. æruginosus.*

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

*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.

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

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

Upper E. Peru, Guiana  
Panama.

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

51. *Micrastur ruficollis ruficollis* (Vieill.), N Dict., 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.
- 51a. *Micrastur ruficollis zonothorax* (Cab.), J.f.O., 1865, p. 406. Colombia, Venezuela  
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.
52. *Micrastur gilvicollis* (Vieill.), N. Dict., x., p. 323 (1817). S. America from Colombia & Amazonia to E. Peru and to 20° S. lat. in Brazil.  
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.
53. *Micrastur guerilla guerilla*, Cass., Pr. Phil. Acad., 1848, p. 87. Mexico, Guatemala, Honduras.  
Grey-throated Harrier-Hawk.
- Above greyer; chest suffused with rufescent buff.
- 53a. *Micrastur guerilla jugularis* Gurney, List Diurnal Bds. Prey, pp. 25, 117 (1884). Brazil, Venezuela, Colombia.  
Rufous-chested Harrier-Hawk.
- Slightly larger than *M. g. guerilla*; less pure white below, and dusky bars broader and heavier, especially on belly, thighs and under tail-coverts.
- 53b. *Micrastur guerilla interstes* Bangs, Auk, 1907, p. 289. Costa Rica to Colombia and Ecuador.  
Bangs's Harrier-Hawk.

Gen. XX GERANOSPIZIAS Sunde. (1873).

Tarsus scaled beneath; 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 cærulescens cærulescens* (Vieill.), N. Dict., x., p. 318 (1817).  
Grey Crane-Hawk. . . . . Venezuela,  
Guiana,  
W. Brazil,  
Peru, Bolivia  
Argentina.
- Under parts barred with whitish.
- 54a. *Geranospizias cærulescens gracilis* (Temm.), Pl. Col., i., pl. 91 (1824).  
Wood Hawk. . . . . Brazil,  
Paraguay.
- Like *G. c. cærulescens*, except that general plumage is slaty black.
- 54b. *Geranospizias cærulescens niger* (Du Bus), Bull. Ac. Roy. Brux., xiv., p. 103 (1847).  
Black Hawk. . . . . Central  
America from  
S. Mexico to  
Panama.

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. . . . . W. Africa,  
Gold Coast  
to Gaboon.

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.

56. *Parabuteo unicinctus unicinctus* (Temm.), Pl. Col., pl. 313 (1824).  
One-banded Buzzard-Hawk . . . . . S. America,  
northward  
from Chile  
on W. and  
Buenos Ayres  
on E.

General colour sooty black, tinged with chestnut on rump. (Female more brownish.)

- 56a. *Parabuteo unicinctus harrisi* (Audub.), B. Am., pl. ccxciii., 1831; Orn. Biog., v., p. 30.  
Harris's Buzzard-Hawk. 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.

57. *Melierax canorus canorus* (Rislach), in Thunb., Diss. Ac., iii., p. 264 (1799).  
Chanting Goshawk. S. Africa below 15° S. lat.

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. N.E. Africa, Sudan to Mogador, W. Arabia.  
[= *M. polyzonus* of authors.]

Much lighter form.

- 57b. *Melierax canorus neumanni*, Hart., Vög. Pal. Fauna, ii., p. 1165 (1914).  
Neumann's Goshawk. Nubia to Sudan & Hausaland.

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

- 57c. *Melierax canorus poliopterus* Cab., in Decken's Reise, iii., Vög., p. 40 (1869).  
E. African Goshawk. 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.

58. *Melierax mechowi* Cab., J.f.O., 1882, p. 229.  
Angola Goshawk.

Angola,  
Damara-  
land to  
Mashonaland,  
Nyasaland.

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.

59. *Melierax gabar* (Daud.), Traité, ii., p. 89 (1800).  
Red-faced Goshawk.

S. Africa,  
E. & N.E.  
Africa.

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

- 59a. *Melierax niger* (Vieill.), Enc. Meth., iii., p. 1269 (1823).  
African Black Goshawk.

S. and E  
Africa.

#### Gen. XXIV. ASTUR Lacep. (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.

60. *Astur gentilis gentilis*, Linn, S.N., i., p. 89 (1758).  
Common Goshawk.

Europe and  
Siberia; in  
winter to N.  
Africa and  
Himalayas.

Smaller and darker race.

- 60a. *Astur gentilis arrigonii* Kleinsch., Orn. Mb., xi., pp. 152-3 (1903).  
Sardinian Goshawk.

Sardinia.

- Less brownish, purer grey
- 60b. *Astur gentilis schvedowi* Menz., Orn. Geogr. N. Asia to  
Eur. Russia, p. 439 (1882). Thibet.  
Siberian Goshawk.
- “ White ” race.
- 60c. *Astur gentilis candidissimus* Dyb., Bull. Soc. Kamtschatka  
Zool. France, viii., p. 353 (1883).  
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, N. America  
fig. 3 (1812). (except  
American Goshawk Pacific side),  
acc. in Brit.  
Isles.
- Markings of lower parts fine and delicate and  
so dense as to present a nearly uniform appear-  
ance ; tail bands obsolete.
- 61a. *Astur atricapillus striatulus* Ridgw., Hist. N. W. North  
Am. Birds, iii., p. 240 (1874). America,  
Western Goshawk. 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.
62. *Astur hensti* Schl., Mus. P.B. Revue Accipitr., Madagascar.  
p. 62 (1873).  
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). S. E. Africa.  
African Goshawk.
- Below lighter ; cross bands more distinct ; no bars on under wing-coverts.
- 63a. *Astur tachiro sparsimfasciatus*\* Reichen., *Orn. Mb.*, iii., p. 97 (1895). Zanzibar Is.,  
Zanzibar Goshawk. Brit. E. Africa,  
Victoria Nyanza.
- Flanks and transverse bars more richly rufescent.
- 63b. *Astur tachiro unduliventer* (Rüpp.), *Neue Wirb.*, p. 40, *t. f.* 18, *fig.* i. (1835). N. E. Africa  
Abyssinian Goshawk. (Abyssinia).
- Thighs rufous, without bars ; under wing-coverts white.
- 63c. *Astur tachiro macroscelides* Hartl., *J. f. O.*, 1855, pp. 354, 360. W. Africa  
West African Goshawk. (Gold Coast to Sierra Leone).
- 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). Hilly parts  
Indian Crested Goshawk. of India  
and Ceylon,  
Malay Archipelago.
- Larger.
- 64a. *Astur trivirgatus rufitinctus* McClell., *P. Z. S.*, 1839, p. 153. E. Himalayas  
Larger Crested Goshawk. to Assam,  
Indo-Chinese countries,  
Formosa.

\* *A. tachiro nyanseæ* Neumann, *Orn. Mb.*, xiii., p. 138 (1902) is a synonym, *cf.* Sharpe, *Zool. Rec.*, 1902, *Aves*, p. 45.

- c. Above brown ; head bluish grey ; tail with about 4 dark bars ; below white, with broad *streaks* of brown ; thighs barred with blackish brown.
65. *Astur griseiceps* Schl., Mus. P.B., Astures, Celebes.  
p. 23 (1862).  
Grey-headed Goshawk.
- d. Smaller (length, ♂, 10.7 in.) ; above brownish ash ; sides of head and of neck rufous ; tail with 6 dark bars ; below white, barred with rufous.
66. *Astur brutus* (Poll.), Nederl. Tijdschr., iii., Mayotte Is.  
p. 80 (1866). (Comoro  
Least Goshawk. Group).
- e. Above blackish slate or slate ; tail with 2 more or less regular white bands ; below pale vinous to rufous, with indications of white bars ; length 15-in. (adult).
67. *Astur toussenellii toussenellii* (Verr.), Rev. et W. Africa  
Mag., 1854, p. 538. (Gaboon).  
Toussenell's Goshawk.
- Smaller ; length 13-in. (♂) ; thighs chestnut.
- 67a. *Astur toussenellii lopezi* \* Alex., Bull. B.O.C., Cameroon &  
xiii., p. 49 (1903). Fernando Po.
- Smaller ; length 11 in. (♂) ; below banded with white and chestnut.
- 67b. *Astur toussenellii castanilius* (Bp.), Rev. et W. Africa  
Mag. de Zool., 1853, p. 578. (Gold Coast  
Chestnut-sided Goshawk. to Gaboon ?),  
Cameroon.
- Without white bars below ; thighs white.
68. *Astur trinotatus* (Bp.), Consp., i., p. 33 (1850). N. Celebes.  
N. Celebean Goshawk.
- Paler below, with more white on abdomen.
- 68a. *Astur trinotatus hæsitandus* (Hart.), Nov. S. Celebes.  
Zool., iii., p. 162 (1896).  
S. Celebean Goshawk.

\* 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.
69. *Astur henicogrammus* Gray, P.Z.S., 1860, p. 343.  
Gray's Goshawk. Moluccas (Halmahéra, Morotai).
- g. Above slate grey ; bars on tail nearly obsolete ; below cinnamon rufous, without white bars ; length ♀ 15.8 ; ♂ 12.5 in.
70. *Astur iogaster* (Mull. et Schl.), Naturl. Gesch., p. 110 (1839-44).  
Rufous-bellied Goshawk. Moluccas (Ceram and Amboina).
- Slightly smaller ; below more vinous red.
71. *Astur etorques etorques* (Salvad.), Ann. Mus. Civ. Genov., vii., p. 901 (1875).  
New Guinea Goshawk. New Guinea, Salawati and Jobi Is., Bismarck Archipelago.
- Whole under side deep rufous cinnamon.
- 71a. *Astur etorques rufoschistaceus* Rothsch. and Hart., Nov., Zool., ix., p. 590 (1902).  
Ysabel Is. Goshawk. Ysabel Is., Solomon Archipelago.
- Smaller and darker.
- 71b. *Astur etorques rubianæ* Rothsch. and Hart., Nov. Zool., xii., pp. 250-1 (1905).  
Solomon Island Goshawk. Solomon Is. (Rubiana, Rendova, Gizo).
- Lighter above.
- 71c. *Astur etorques bougainvillei* Roth. and Hart., Nov. Zool., xii., pp. 250-1 (1905).  
Bougainville Is. Goshawk. N. Solomon Is. (Shortland Group & Bougainville Is.).
- Smaller (length of ad. 12.2 in.) and more delicate grey above.
- 71d. *Astur etorques misoriensis* (Salvad.), Am. Mus. Civ. Genov., vii., p. 904 (1875).  
Misori Goshawk. Is. of Misori, N.W. New Guinea, Jobi Is. (?)

- Under wing and tail-coverts whitish ; thighs reddish white.
- 71e. *Astur etorques pulchellus* Ramsay, Jnl. Linn. Soc., xvi., p. 131 (1881). Ramsay's Goshawk. Solomon Is. (Cape Pitt, Florida Is., Guadalcanar, Ysabel Is.)
- h. Above paler ashy grey ; crown bluish ; tail uniform ; below paler salmon colour, with remains of white bars on breast, more numerous on abdomen.
72. *Astur sylvestris* (Wall.), P.Z.S., 1863, pp. 484, 487. Flores Goshawk. Lesser Sunda Is. (Flores).
- 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. Ceylon. Travancore.
- Larger and lighter grey.
- 73a. *Astur badius dussumieri* Temm., Pl. Col., livr. 52, pl. 308 (1824) Shikra. Whole of Indian Peninsula.
- Above paler bluish ; below with broader and brighter vinous bands.
- 73b. *Astur badius poliopsis* (Hume), Stray Feathers, ii., 1874, p. 325. Hume's Shikra. Burma, Assam, Cachar, Tenasserim, Siam, and Gamboja to to Cochin China, Formosa.
- Tail slightly longer and more barred.
- 73c. *Astur badius cenchroides* Severtz, Turkist. Jevotn., p. 63 (1873). Severtzow's Shikra. Central Asia (Turkestan), Baluchistan, E. Persia and Punjab, Sind (winter).

- Mantle blackish slate; below paler salmon colour, under wing-coverts distinctly barred.
- 73d. *Astur badius brevipes* Severtz., Bull. Soc. Imp. Nat., Moscou, xxxiii., p. 234, tab. i.-iii. (1850).  
Levant Shikra. Central Russia, Dalmatia, Greece, Turkey, Asia Minor, Persia, Syria, Egypt.
- 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. N.E. Africa, Sudan to Senegambia, Sierra Leone, Nigeria.
- Below with numerous distinct narrow bars of pale rufous; under wing-coverts barred like breast.
- 73f. *Astur badius polyzonides* (Smith), Ill. Zool. S. Afr., pl. xi. (1838).  
Little Barred Goshawk. S. Africa, N. to Nyasaland.
- Tail with only one indistinct subterminal bar; under wing-coverts white.
74. *Astur butleri* Gurney, Bull. B.O.C., vii., p. xxvii. (1898).  
Butler's Goshawk. Car Nicobar Is., Bay of Bengal.
- Tail with 5 bars; body below, pale buffy vinous without bars.
75. *Astur soloensis soloensis* (Lath.), Gen. Hist., i., p. 209 (1821).  
Horsfield's Goshawk. China, S. in winter to New Guinea.
- Tail bars obsolete above.
- 75a. *Astur soloensis cuculoides* Temm., Pl. Col., i., pl. 110, 129 (1823).  
Chinese Goshawk. N. China, S. in winter to Malay Archipelago.
- 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. Papuasias, etc., i., p. 64 (1879).  
White-headed Goshawk. Bouru.

1. Above as last, but tail with blackish bars ;  
below entirely white.
77. *Astur poliocephalus* (Gray), P.Z.S., 1858, pp. 170, 189. New Guinea,  
Salawati,  
Mysol,  
Waigiou and  
Aru Is.  
Grey-headed Goshawk.
- m. Above uniform slate colour ; tail with 7  
darker bars ; below entirely white.
78. *Astur francescii francescii* (Smith), Afr. Q. Jnl., Madagascars.  
ii., p. 280 (1834).  
Frances's Goshawk.
- Smaller and darker above.
- 78a. *Astur francescii pusillus* Gurney, Ibis, 1875, Joanna or  
p. 258. Anjuan Is.  
Joanna Island Goshawk. (Comoro  
Group).
- n. Above brownish ash colour ; below white  
barred with dull ashy.
79. *Astur clarus clarus* (Lath.), Ind. Orn. Suppl., E. side of  
p. xiii. (1801). Australia.  
Grey Goshawk.
- 79a. *Astur clarus cooktowni* (Math.), Nov. Zool., N. Queens-  
xviii., p. 245 (1912). land.  
Northern Grey Goshawk.
- o. Above and below pure white.
80. *Astur novæhollandiæ* (Gmel.), S.N., i., p. 264 Tasmania,  
(1788). N.S. Wales,  
White Goshawk. S. Australia.
- Smaller ; wing ♂ 7.8 against 10.4 in.
- 80a. *Astur novæhollandiæ leucosomus* Sharpe, Cat. New Guinea,  
Bds. B.M., i., p. 119 (1874). Waigiou,  
Lesser White Goshawk. N. Queens-  
land ?
- p. Above slate black ; below white streaked and  
barred with black.
81. *Astur eudiabolus* Roth. & Hart., Bull. B.O.C., Mountains of  
xxxv., p. 8 (1914). Brit. New  
Black-and-White Goshawk. Guinea.
- q. Above blackish slate ; below white.
82. *Astur haplochrous* (Scat.), Ibis, 1859, p. 275, New  
pl. viii. Caledonia.  
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.
83. *Astur albigularis albigularis* (Gray), Ann. N.H., (4) v., p. 327 (1870).  
White-throated Goshawk. Solomon Islands (S. Christoval Ugi, Guadalcanar.)
- Larger ; cheeks white ; below with some black shaft streaks and cross bars [doubtful form].
- 83a. *Astur albigularis meyerianus* Sharpe, Jnl. Linn. Soc., xiii., p. 458, pl. xxii. (1877).  
Meyer's Goshawk. Jobi Is. N.W. New Guinea, Ceram-Laut.
- Tail with 4 whitish bands above ; cheeks and ear-coverts black.
84. *Astur jardinei*\* Gurney, Ibis, 1887, p. 96, pl. iii.  
Jardine's Goshawk. Brit. Guiana.
- Above dark lead grey ; below pale grey.
85. *Astur poliogaster* (Temm.), Pl. Col., i., pl. 264 (1824).  
Grey-bellied Goshawk. Brazil (Ypanama), Paraguay
- 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.
86. *Astur pectoralis* Bp., Rev. et Mag. de Zool., 1850, p. 490.  
Red-collared Goshawk. Brazil, Guiana, Ecuador.
- b. Above brownish slate ; inner webs of tail-feathers obscurely barred ; below, breast rufous brown barred with slate, rest paler barred with white.
87. *Astur natalis* Lister, P.Z.S., 1888, p. 523.  
Christmas Island Goshawk. Christmas Is.

\* 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. albigularis*.

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. albigularis albigularis*, and I have therefore omitted it.

- e. Above light bluish grey; tail not visibly barred; throat white; below pale vinous red, length, ♂, 13.5; ♀, 16.5 in.
88. *Astur rufitorques* Peale, U.S. Explor. Exped., Fiji Islands. p. 68; pl. 19 (1848).  
Fijian Goshawk.
- Larger; above darker, except head; below with some white bars; throat bluish grey.
89. *Astur griseigularis griseigularis* Gray, P.Z.S., 1850, p. 343.  
Grey-throated Goshawk. Molucca Is. (Halmahéra, Batchian, etc.), Obi. Is.
- 89a. *Astur griseigularis buruensis*, Stresemann, Nov. Zool., xxi., p. 381 (1914). Bouru, S. Moluccas.
- Smaller; above as *A. rufitorques*; below pale vinous red; belly white.
90. *Astur albiventris* Salvad., Ann. Mus. Civ. Genov., vii., p. 982 (1875).  
White-bellied Goshawk. Kè or Kei Is., Moluccas.
- Above lighter.
91. *Astur polionotus* Salvad., Mem. Accad., Torino, xl., p. 147 (1889).  
Tenimber Is. Goshawk. Timor Laut.
- d. Above black; tail barred on inner webs only; below vinous chestnut; throat black.
92. *Astur melanochlamys melanochlamys* (Salvad.), Ann. Mus. Civ. Genov., vii., p. 905 (1875).  
Black-backed Goshawk. N.W. New Guinea.
- Above more slaty black; below paler.
- 92a. *Astur melanochlamys schistacinus* Rothsch. and Hart., Nov. Zool., xx., p. 482 (1913).  
Mt. Goliath Goshawk. Mount Goliath, Dutch New Guinea.
- 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. Timor.
- 93a. *Astur torquatus sumbaensis* (A. B. Meyer), Abhandl. Ber. Mus., Dreed., 1892-3, p. 3.  
Sumba Goshawk. Lesser Sunda Is. (Sumba).

- 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. E. Australia, S. to Tasmania, Norfolk Is.
- Smaller : " wing 236 mm."
- 94a. *Astur fasciatus didimus* (Math.), Austral Avian Rec., i., p. 33 (1912). Northern Goshawk. N.W. Australia, Northern Territory.
- Below paler ; under wing-coverts barred with vinous grey.
- 94b. *Astur fasciatus cruentus* Gould, P.Z.S., 1842, p. 113 (1843). West Australian Goshawk. W. Australia.
- 94c. *Astur fasciatus polycryptus* Rothsch. and Hart, Nov. Zool., xxii., p. 53 (1915). New Guinea, New Britain, New Ireland, D'Entrecasteaux Group, Waigiou Is.
- 94d. *Astur fasciatus insularis*, F. Sarasin, Novæ Caledonia Zool. Aves, p. 8 (1913). New Caledonia, New Hebrides, Loyalty Is.
- 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. Lesser Sunda Is. (Lombok), S.W. Islands, Moluccas.

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, ♂, 11.5, wing 6 in.
96. *Nisoides moreli* Pollen, Bull. Soc. Sc. Réunion, 1866, p. 62. W. Coast of Madagascar.  
Morell's Goshawk.

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 ♂, 15.8 ; ♀, 18 in. Minimum ♂, 8.8 ; ♀, 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.
97. *Accipiter nisus nisus* (Linn.), S.N., i., p. 92 (1758). Europe and N. Asia, in winter to Algeria, N.E. Africa, India, China.  
Common Sparrow-Hawk.
- Smaller, darker above, more closely and thickly barred below.
- 97a. *Accipiter nisus wolterstorffi* Kleinschm., Orn. Mb., ix., p. 168 (1901). Sardinia.  
Sardinian Sparrow-Hawk.
- Above bluer.
- 97b. *Accipiter nisus punicus* Erlanger, Orn. Mb., v., p. 187 (1897). Tunis.  
Tunisian Sparrow-Hawk.
- 97c. *Astur nisus nisisimilis* Tickell, Jnl. As. Soc. Beng. ii., p. 571 (1833). India, Kashmir, Assam, Burma, Afghanistan, Turkestan.  
Indian Sparrow-Hawk

- Above lighter and greyer, with dark shaft stripes; dark tail bands nearly obsolete; below barred with greyish.
- 97d. *Accipiter nisus pallens* Stejn., Pr. U.S. Nat. Mus., xvi., p. 625 (1893). Kamtschatka, Japan.  
Kamtschatkan Sparrow-Hawk.
- Insular race [with light and dark phases.]
- 97e. *Accipiter nisus teneriffæ* Laubmann, Verhandl. Orn. Ges., xi., p. 164 (1912). Teneriffe.  
Teneriffe Sparrow Hawk.
- Blackish slaty above, darkest on head and nape; bars on tail broad and pronounced; below with bars broad and decided.
- 97f. *Accipiter nisus melanoschistus* Hume, Ibis, 1869, p. 356. Himalayas.  
Himalayan Sparrow-Hawk.
- 97g. *Accipiter nisus ladygini*\* Bianchi, Ann. Mus. St. Petersb., viii., p. 11 (1903). E. Thibet.
- Above blackish brown; below white, barred with greyish black.
98. *Accipiter granti* Sharpe, Ann. & Mag. N.H. (6), v., p. 483 (1890). Madeira.  
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). N. America, in winter S. to Guatemala.  
Sharp-shinned Hawk.
- Paler and more cinnamomeous below; thighs with cinnamon rufous predominating.
- 99a. *Accipiter fuscus rufilatus* (Ridgw.), Pr. U.S. Mus., xi., p. 92 (1888). West U.S., W. to Rocky Mts., N. to Kodiak, S. to Cent. America.  
Western Sharp-shinned Hawk.
- Smaller and more slender; cheeks rufous; below nearly white, especially the thighs.
- 99b. *Accipiter fuscus fringilloides*† (Vig.), Zool. Jnl., iii., p. 434 (1828) [ex Cuba]. Cuba, Haiti (?).  
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.
100. *Accipiter cooperi cooperi* (Bp.), Am. Orn., i., pl. 10, f. 1 (1828). N. America (Middle and Southern U.S.).  
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.
- 100a. *Accipiter cooperi mexicanus* Swains., Faun. Bor. Am., ii., p. 45, footnote (1831) [ex Mexico]. W. United States to C. America.  
Mexican Sparrow-Hawk.
- Sides of neck, a band running to hind neck, and upper part of breast greyish ash.
- 100b. *Accipiter cooperi gundlachi* (Lawr.), Ann. Lyc. N.Y., vii., p. 252 (1862). Cuba.  
Gundlach's Sparrow-Hawk.
- Above slaty grey; below white, throat unspotted, rest minutely banded or vermiculated with greyish brown.
101. *Accipiter superciliosus* (Linn.), S.N., i. p. 128 (1766). Tropical S. America, N. to Panama.  
[=*A. tinus*, auct. 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). S. Africa, to to Mozambique on E. and Angola on W.  
Little Sparrow-Hawk.
- Sides paler; bars darker and broader.
- 102a. *Accipiter minullus intermedius* Erlang., J. Orn., pp. 171-6, 1904. Abyssinia (S. Shoa).
- 102b. *Accipiter minullus hilgerti* Erlang., J. Orn., pp. 171-6, 1904. Arusi, Galla Land, N.E. Africa.

- 102c. *Accipiter minullus tropicalis* (Reich.), Jr. f. O., E. Africa.  
p. 139, 1898.  
Upper tail-coverts conspicuously white ;  
barrings below blackish brown with very  
little rufous.
- 102d. *Accipiter minullus erythropus* (Hartl.), J.f.O., W. Africa,  
1855, p. 354. Gold Coast to  
Red-legged Sparrow-Hawk. Cameroons.
- 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. Ovampo  
367, pl. vi. Land, S.W.  
Gurney's Sparrow-Hawk. Africa, to  
Zambesi  
Country,  
Nyasaland, S.  
Abyssinia,  
Gambaga  
(Gold Coast).
- d. Above blackish brown ; tail uniform above,  
with paler bands beneath ; below white,  
thickly barred with greyish black.
104. *Accipiter madagascariensis* Verr., S. Afr. Q. Madagascar.  
Jnl., ii., p. 282 (1834).  
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.
105. *Accipiter collaris* (Kaup), MS. in Mus. Brit. Colombia.  
undé ; Scl., Ibis, 1860, p. 148, pl. 6.  
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.
106. *Accipiter cirrocephalus* (Vieill.), N. Dict., x., E. Australia.  
p. 329 (1817).  
Collared Sparrow-Hawk.

- Darker above.
- 106a. *Accipiter cirrocephalus broomei* (Math.), Nov. Zool., xviii., p. 247 (1912).  
Broome's Sparrow-Hawk. W. Australia,  
Northern  
Territory.
- Above clearer bluish slate; below brighter rufescent with less distinct whitish bars; thighs with bare indications of bars.
- 106b. *Accipiter cirrocephalus papuanus* Rothsch. & Hart., Nov. Zool., xx., p. 482 (1913).  
Papuan Sparrow-Hawk. Dutch New  
Guinea.
- D. Thighs uniform ashy grey; red collar on hind neck.
- a. Above blackish slate; red collar extending to upper interscapular region; tail with 10 or 11 darker bands, obsolete on outermost feathers; below pale ashy grey, sides of neck chestnut.
107. *Accipiter rubricollis* Wall., P.Z.S., 1863, pp. 19, 21, pl. iv.  
Red-collared Sparrow-Hawk. Moluccas  
(Morotai,  
Bouru).
- Above "dark blue slaty grey"; rufous collar round hind neck.
108. *Accipiter brachyurus* (Ramsay), Pr. Linn. Soc. N.S.W., iv., p. 465 (1879)  
S.E. New  
Guinea.
- b. Bars on tail nearly obsolete; below uniform clear vinous, paler on thighs; lower abdomen white.
109. *Accipiter erythrauchen erythrauchen* Gray, P.Z.S., 1860, p. 344.  
Grey-throated Sparrow-Hawk. Moluccas  
(Halmahéra  
Batchian,  
Obi Is.)
- 109a. *Accipiter erythrauchen ceramensis*, Schl., Mus. P.B. Astures, p. 39 (1862)  
Ceram.
- 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. Astures, p. 32 (1862).  
Red-bellied Sparrow-Hawk. Celebes.



Above darker slate grey ; sides of face and neck vinous like under parts.

- 110a. *Accipiter rhodogaster sulaensis* (Schl.), Vog. Ned. Ind. Valke, pp. 26, 64, pl. 16, f. 3, 4 (1866). Sula Is. Sparrow-Hawk.

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.
111. *Accipiter erythrocnemis* Gray, List Accipitr. B.M., p. 70 (1848). S. America, Brazil to Bolivia.  
Grey-backed Sparrow-Hawk.

Above darker and browner ; head blackish ; thighs pale ochre.

112. *Accipiter chionogaster* (Kaup), P.Z.S., 1851, p. 41. Central America. (Guatemala, Nicaragua)  
White-bellied Sparrow-Hawk.

- Above plumbeous ; thighs cinnamon rufous.\*
113. *Accipiter salvini* (Ridgw.), Bull. U.S. Geol. Surv., ii., p. 121 (1876). Venezuela.  
Salvin's Sparrow-Hawk.

- b. Above deep slaty grey, including sides of face ; below chestnut.
114. *Accipiter ventralis ventralis* Sclat., P.Z.S., 1866, p. 303. S. America, Venezuela to Colombia.  
Chestnut-bellied Sparrow-Hawk.

Above and below plumbeous ; abdomen mixed with ferruginous rufous.

- 114a. *Accipiter ventralis nigriplumbeous* Lawr., Ann. Lyc. N.Y., ix., p. 270 (1869). Ecuador and Peru.  
Plumbeous Sparrow-Hawk.

- c. Above deep slate ; nape mottled with white ; side of face and under surface tawny rufous.
115. *Accipiter rufiventris* Smith, S. Afr. Q. Jnl., i., p. 231 (1830). S. Africa, Togoland.  
African Sparrow-Hawk.
- 115a. *Accipiter rufiventris perspicillaris* Rüpp., Neue Abyssinia.  
Wirb. Vog., p. 41 (1836).  
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.
116. *Accipiter sharpei* Reich., Vog. Afrikas, i., p. 564, pl. 2 (1901).  
Sharpe's Sparrow-Hawk. W. Africa, Cameroon to Benguela.
- 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.
117. *Accipiter hartlaubi* (Verr.), in Hartl., Orn. W. Afr., p. 15 (1857).  
Hartlaub's Sparrow-Hawk. W. Africa (Senegambia to Togoland).
- b. With 2 white spots on centre tail feathers ; breast faintly barred with grey ; sides pale vinous.
118. *Accipiter batesi* Sharpe, Bull. B.O.C., xiii., p. 50 (1902).  
Bates's Sparrow-Hawk. Cameroons.
- 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, ♂, 6.6 ; ♀, 7.4.
119. *Accipiter virgatus virgatus* (Temm.), Pl. Col., i., pl 109 (1823).  
Java Sparrow-Hawk. Greater Sunda Is., Java, N. Borneo, Sarawak.
- 119a. *Accipiter virgatus besra* Jerd., Madras Jnl. Lit. Sci., x., p. 84 (1839).  
Besra Sparrow-Hawk. S. India, Ceylon.
- Larger ; wing, ♂, 6.5-7.1 ; ♀, 8.35 ; below with markings much browner.
- 119b. *Accipiter virgatus affinis* (Hodgs.), in Gray's Zool. Misc., p. 81 (1844).  
Larger Besra Sparrow-Hawk. 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.

- 119c. *Accipiter virgatus confusus*, Hart., Nov. Zool., xvii., p. 209 (1910). Philippine Islands.  
 [= *Accipiter manillensis* (Meyen)].  
 Philippine Sparrow-Hawk.

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

- 119d. *Accipiter virgatus rufotibialis* Sharpe, Ibis, 1887, p. 437. N.W. Borneo  
 Whitehead's Sparrow-Hawk. (Mt. Kina Balu), Sarawak (Mt. Dulit).

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

120. *Accipiter gularis* (Temm. & Schl.), Faun. Jap. Japan, Aves, p. 5, pl. 2 (1850). N. China, Japanese Sparrow-Hawk. Formosa, Malay Archipelago, Philippine Is.

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

121. *Accipiter guttatus* (Vieill.), N. Dict., x., p. 327 (1817). S. America  
 White-throated Sparrow-Hawk. (Paraguay and Bolivia).

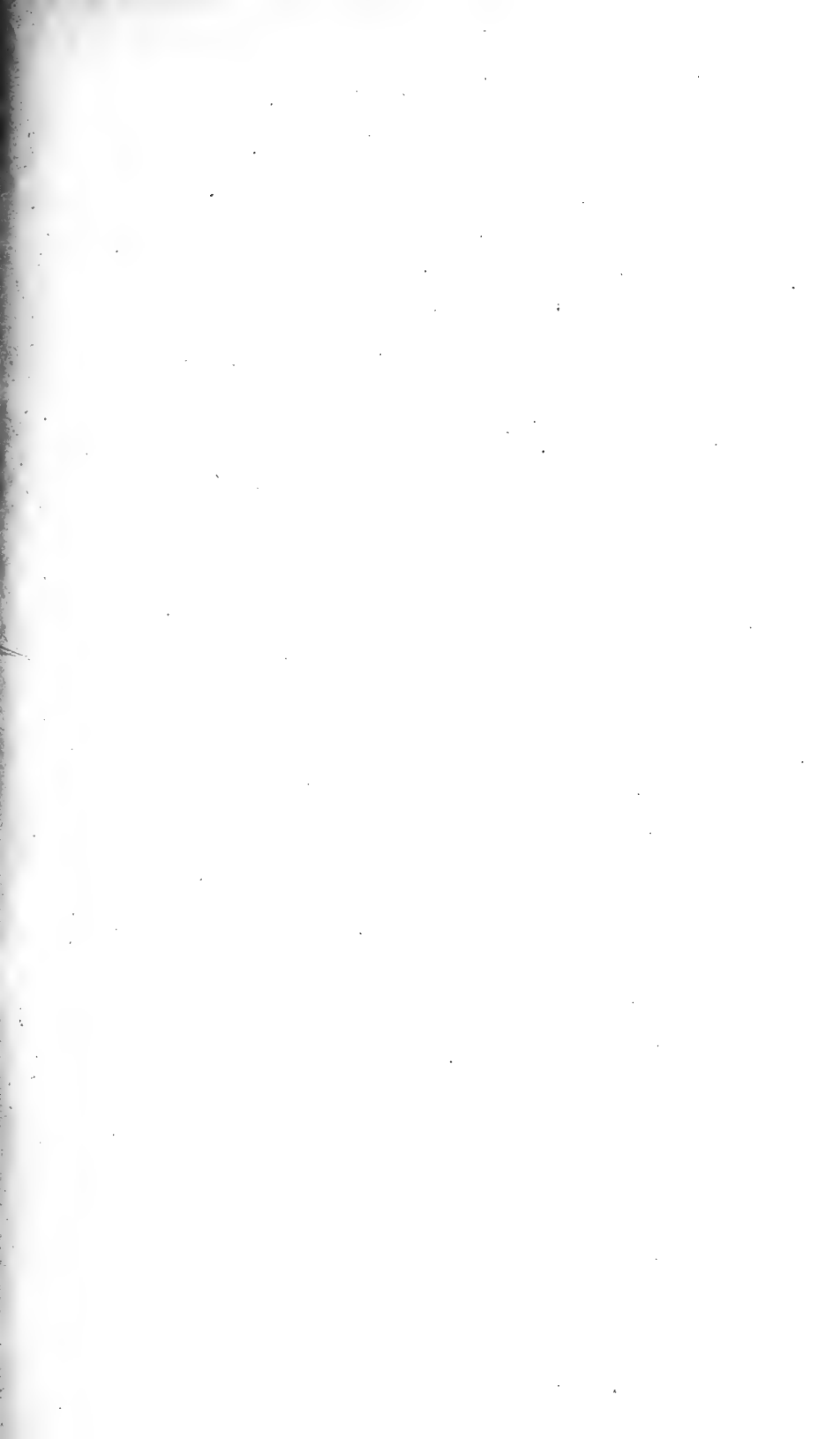
d. Tail with 5 black bands; head black; sides of face and under surface slaty blue, with blackish shaft stripes; thighs and under wing-coverts rufous.

122. *Accipiter pileatus* (Temm.), Pl. Col., i., pl. 205 (1824). S. America  
 Black-capped Sparrow-Hawk. (Brazil, Paraguay).

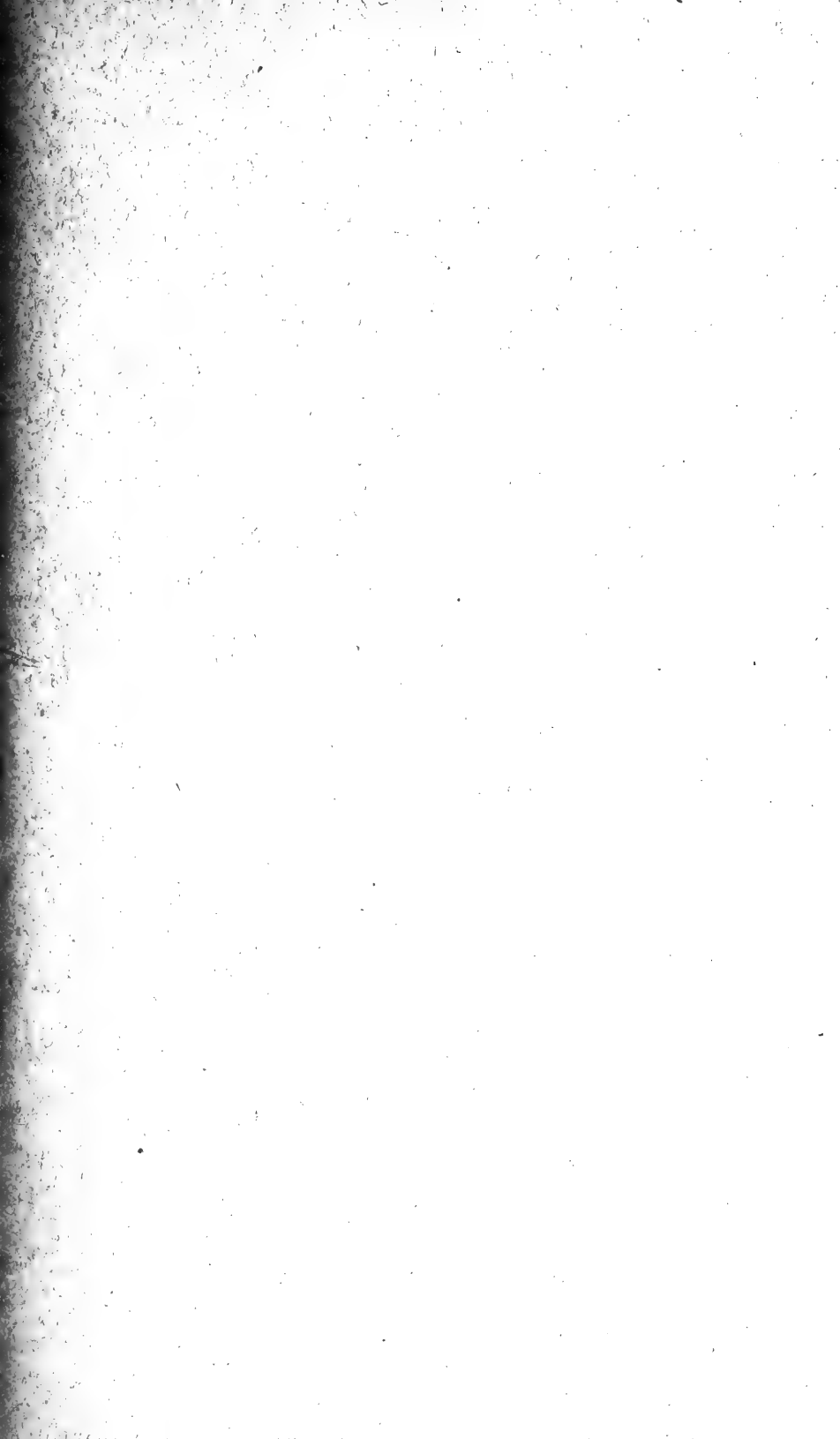
e. Under wing-coverts white, rufous along carpal bend; thighs rufous; tail with 4 dark bars.

123. *Accipiter bicolor* (Vieill.), N. Dict., x., p. 325 (1817). S. Mexico to  
 Four-banded Sparrow-Hawk. 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.
124. *Accipiter chilensis* Phil. & Landb., Arch. f. Naturg., 1864, p. 43. Chile to Str. of Magellan, Patagonia.  
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.
125. *Accipiter melanoleucus* Smith, S. Afr. Q. Jnl., i., p. 229 (1830). S. Africa, W. Africa (Cameroon Gold Coast, Gaboon, Niger), Cape Verde Is., Abyssinia, Uganda.  
Black-and-White Sparrow-Hawk.

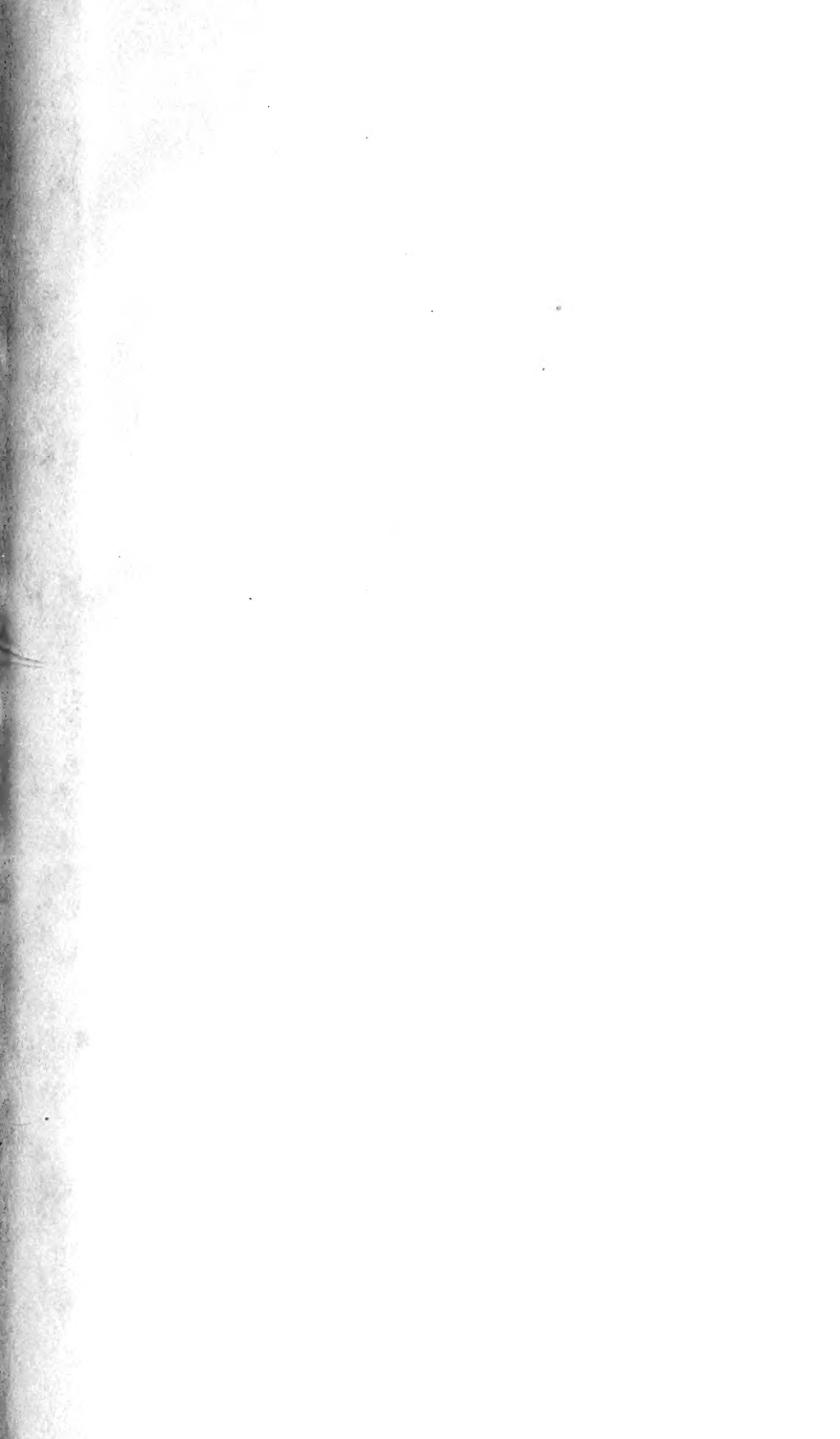














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