

Vol. I By James Lee Peters.- Cambridge Harvard University Press
1931.

Order Falconiformes
Suborder CATHARTAE

Family CATHARTIDAE

Genus Vultur Linné (189)

Vultur Linné, Syst. Nat., ed. 10, 1. 1758, p. 86. Type, by subsequent designation, vultur gryphus Linné. (Allen, Bull. Am. Mus. Nat. Hist., 24, 1907, p. 11.)¹
cf. Swann, Monogr. Bds. Prey, pt. 1, 1. 1924, p. 2-4.

- 1 Vultur gryphus Linné. (189)
Vultur gryphus Linné, Syst. Nat., ed. 10, 1. 1758 p. 83. (Chile) Andes of western Venezuela and Colombia. south in the mountains to the Straits of Magellan; occurs also in Patagonia south of the Rio Negro. Specimens from Paracé. Patia N. v. S.

Genus SARCORAMPHUS Duméril (189)

Sarcoramphus Duméril, Zoologie Analytique, 1806, p. 32. Type, by subsequent designation, Vultur papa Linné. (Vigors, Zool. Journ., 2., 1825, p. 381, note, and p. 384.)
cf. Swann, Monogr. Bds. Prey, pt. 1, 1924, p. 5-6.

1 In Science (N.S., 24, 1906, p. 775-776) J.A. Allen showed that the type of Vultur Linné should be V. gryphus, but also showed how that species might be the type of Sarcoramphus and Gryphus; the first valid designation appears to be that given above.

- 2 Sarcoramphus papa (Linné) (190)
Vultur Papa Linné, Syst. Nat., ed. 10, 1, 1758, p. 86. ("India occidentalis" - Sarimam, designated by Berlepsch, Nov. Zool., 15, 1908. p. 289.).
Tropical Mexico south through Central and South America northern Argentina. Specimens from the llanos. - seen at Rio Yaguajay. Rio Ariguanicito. Str. Reata.

Genus CORAGYPS Geoffroy (190)

Coragyps Geoffroy, in Le Maout, Hist. Nat. Ois., 1853, p. 66 Type, by monotypy, Vultur urubu Vieillot - Vultur atratus Bechstein.
cf. Swann, Monogr. Bds. Prey. pt. 1, 1924, p. 7-10.

- Coragyps atratus atratus (Bechstein) (190)
Vultur atratus Bechstein, Latham, Uebers, Vogel, 1, 1793, Anh., p. 655. (Florida, ex Bartham.)
North America from Kansas, Illinois, Indiana and Maryland to the Gulf States and south through Mexico and Central America to Panama. Specimens everywhere in Colombia?

- 3 Coragyps atratus foetens (Lichtenstein) (190)
Cathartes foetens Lichtenstein, Verz. ausgest. Saug. und Vog., 1818, p. 30. (Paraguay.)
South America; south to Chiloe Island on the west and about lat. 40° on the east. Specimens everywhere.

Genus CATHARTES Illiger (190)

Cathartes Illiger, Prodrum, 1811, p. 236. Type, by subsequent designation, Vultur aura Linné. (Vigors, Zool. Journ., 2, 1825, p. 384.)

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cf. Swann, Monogr. Bds. Prey, pt. 1, 1924, p. 11-18.
Wetmore, Bull. U.S. Nat. Mus., no. 133, 1926, p. 88-90.

4 Cathartes aura ruficollis Spix (191)

Cathartes ruficollis Spix, Av. Bars., 1, 1824, p. 2. (Interior of Bahia and Piahy.)
Venezuela the Guianas and Brazil south to Paraguay (Northern Argentina and Uruguay?) *specimens from Barro Colorado - A. D. G. and Maicao.*

5 Cathartes aura jota (Molina) (191)

Vultur Jota Molina, Sagg. Stor. Nat. Chili, 1782, p. 265. (Chile, restricted to Concepcion by Swann, Syn. Accip., ed. 2, 1921, p. 4.)
Cathartes aura meridionalis Swann, Syn. Accip., ed. 2, 1921, p. 3. (Colombia).
? Cathartes occipitalis Stolzmann, Ann. Zool. Mus. Polon. Hist. Nat., 4, 1925, p. 319. (Huambo, 3700 feet, northeastern Peru.)
Western South America from Colombia to northern Chile and western Argentina. *specimens from Canca - Valle.*

6 Cathartes urubitinga Pelzeln (191)

Cathartes Uribitinga "Natterer," Pelzeln, Sitzungs. K. Akad. Wiss. Wien, 44, 1861, p. 7. (Southern and central Brazil.)
Northeastern Venezuela, the Guianas and Brazil south to northern Argentina and Uruguay. *specimens from the Rio Yagui - and Villavieja - N. W. C. and Valle del Cauca - Girard - Maicao - Sta. Marta.*

Superfamily FALCONOIDEA

Family ACCIPITRIDAE¹

Subfamily ELANINAE

Genus ELANUS Savigny

Elanus Savigny, Descr. Egypte, 1, 1809, p. 69, 97. Type, by monotypy, Elanus caesius Savigny - Falco caeruleus Desfontaines.
cf. Hartert, Vog. pal. Fauna, 2, 1914, p. 1184-1185.
MacGregor, Man. Phil. Bds., pt. 1, 1909, p. 234-235.
Mathews, Bds. Austr., 5, 1916, p. 197-210.
Salvin and Godman, Biol. Centr.-Americana, 3, 1901, p. 97-98
Stuart Baker, Fauna Brit. Ind., ed. 2, Bds., 5, 1928, p. 125-127.

7 Elanus leucurus leucurus (Vieillot) (193)

Milvus leucurus Vieillot, Nouv. Dict. Hist. Nat., 20, 1818, p. 563.

Wrongly printed as 556. (Paraguay).

South America from Venezuela to central Chile, Argentina (Córdoba, Buenos Aires) and Uruguay. *specimens from Canca - Maicao - and the llanos - Sta. Marta - Palmira - Valle - Ambato.*

Subfamily PERNINAE *lema*

Genus ELANOIDES Vieillot (194)

Elanoides Vieillot, Nouv. Dict. Hist. Nat., 24, 1818, p. 101.
Type, by monotypy, Milan de la Caroline - Falco forficatus Linné.
cf. Chapman, Bull. Am. Mus. Nat. Hist., 55, 1926, p. 237.
Salvin and Godman, Biol. Centr.-Americana, 3, 1901, p. 95-97.

Elanoides forficatus forficatus (Linné) (194)

Falco forficatus Linné, Syst. Nat., ed. 10, 1, 1758, p. 89. (Carolina, ex Catesby.)
Breeds locally from northern Minnesota, southern Indiana and South Carolina to eastern Mexico. Winters south of the United States; area not known. *specimens from Poyagan and the llanos.*

Chondrocyperax megarhynchus (Desmurs) (200)

Regerkinus Cymindio Megarhynchus "Kamp" Desmurs in
Castelnau, Voyage, 1, 1855, Div., p. 9, pl. 1.
(Saraguen, Ecuador?).

Andes of Venezuela; eastern Ecuador; eastern
Peru; Bolivia.

8 Elanoides forficatus yetapa (Vieillot) (194)

Milvus yetapa Vieillot, Nouv. Dict. Hist. Nat., 20, 1818, p. 564. (Paraguay ex Azara.) cf. also Tabl. Encyc. Méth., 3, 1823, p. 1205.

Central América south to Bolivia, Paraguay, northeastern Argentina ~~and~~ southern Brazil. *specimens from Paraguay and the llanos?*

Genus ODONTORCHIS Kaup (199)

Ondontiorchis Kaup, Classif. Säug. und Vög., 1844, p. 124 Type, by monotypy, cayannensis - Falco cayannensis Gmelin, p. 269. (Not of p. 263) - Falco palliatus Temminck. Micraëtus Bertoni, An. Cien. Paraguayos (1), 1901, p. 156. Type, by monotypy, Micraëtus holmbergianus Bertoni - Falco palliatus Temminck. cf. Hellmayr, Field Mus. Nat. Hist. Publ. Zool. Ser., 12, 1929, p. 457.

9 Odontriorchis palliatus (Temminck) (199)

Falco palliatus "P. Max." Temminck, Pl. Col., livr. 23. 1822, pl. 204.

(Brazil and Guiana - Rio Peruhype, southern Bahia, accepted by Hellmayr as type locality.)

Micraëtus Holmbergianus Bertoni, An. Cien. Paraguayos (1), 1901, p. 156.

(Banks of the Alto Panamá, lat. 25° 47' S., Paraguay.)

Odontoirchis palliatus guianensis Swann. Syn. Accip., ed. 2, 1922, p. 159.

(Near Paramaribo, Surinam.)

Odontoirchis palliatus mexicanus Swann, Syn. Accip., ed. 2, 1922, p. 159.

(Tampico, Mexico.)

Tropical Mexico south through Central and South America (including Island of Trinidad) to Bolivia and southeastern Brazil. *Specimens from Cas. colicito (M) seen again Chocó K.V.S.*

Genus CATHROHIERAX Lesson (200)

Cathrohierax Lesson, Echo du Monde Savant, (2), 7, 1843, col. 61.

Type, by monotypy, Daedalion erythronus Lesson - Falco uncinatus Daudin.

cf. Chubb, Bds. Brit. Guiana, 1, 1916, p. 267-269.

Salvin and Godman, Biol. Centr.-Americana, 3, 1901, p. 101-103.

10 Cathrohierax uncinatus (Temminck) (200)

Falco uncinatus "Illiger" Temminck, Pl. Col. livr. 18, 1822, pl. 103, 104. 115. ("Vicinity of Rio to the north of Brazil and all of Guiana.")

Tropical Mexico, through Central and South America to northern Argentina; Island of Grenada, Lesser Antilles.

specimens from La Plata and el Tumbes. - (K.V.S. - San Martín Maicao (F.))

Subfamily MILVINAE *Sarna guilla*

Genus HARPAGUS Vigors (200)

Harpagus Vigors, Zool. Journ., 1. 1824, p. 338. Type, by subsequent designation, Falco bidentatus Latham. (Gray, List Gen. Bds., 1840, p. 4.)

cf. Carriker, Ann. Carn. Mus., 6, 1910, p. 469.

Chubb, Bds. Brit. Guiana, 1, 1916, p. 272-274.

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1. The first part of the report is devoted to a description of the experimental setup and the results of the measurements. The second part is devoted to a discussion of the results and a comparison with the theoretical predictions.

2. The experimental setup consists of a vacuum chamber of 10 cm diameter, equipped with a gas inlet and a gas outlet. The chamber is evacuated to a pressure of 10^{-5} Torr. The gas is introduced through the inlet and its pressure is measured by a Pirani gauge. The gas is then expanded through a nozzle and its velocity is measured by a laser Doppler velocimeter.

3. The results of the measurements show that the velocity of the gas increases with the pressure of the gas in the chamber. This is in agreement with the theoretical predictions. The velocity of the gas is also affected by the geometry of the nozzle and the properties of the gas.

4. The theoretical predictions are based on the assumption of a steady-state flow of the gas. This assumption is valid for the present experiment, since the time scale of the measurements is much longer than the time scale of the gas flow.

5. The results of the measurements are compared with the theoretical predictions. The agreement is good, within the experimental error. This confirms the validity of the theoretical model.

6. The results of the measurements are also compared with the results of other experiments. The agreement is good, within the experimental error. This confirms the validity of the theoretical model.

7. The results of the measurements are also compared with the results of other experiments. The agreement is good, within the experimental error. This confirms the validity of the theoretical model.

11 Harpagus bidentatus bidentatus (Latham) (200)

Falco bidentatus Latham, Ind. Orn., 1. 1790, p. 38. (Cayenne.)
Colombia to the Guianas, south to Peru, eastern Bolivia,
Matto Grosso and northern Maranhao.

The birds recorded as Chondrohierax megarhynchus by Dabbene
(Hornero, 3, 1926, p. 391-394) from Tucumán appear to be-
long to uncinatus. *Specimens from El Estero, K. V. S. and the
rio Cuadryan (Chapala) - Caracoli (M.)*

Genus ICTINIA Vieillot (201)

Ictinia Vieillot, Analyse, 1816, p. 24, Type, by monotypy,
Milan-Cresserelle Vieillot - Falco plumbeus Gmelin.
cf. Salvin and Godman, Biol. Centr.-Americana. 3, 1901, p.
103-105.

12 Ictinia plumbea (Gmelin) (201)

Falco plumbea Gmelin, Syst. Nat., 1, pt. 1, 1788, p. 283.
(Cayenne, ex Latham.)

Ictinia plumbea vagans Miller and Griscom, Am. Mus. Novit.,
no. 25 1921, p. 5. (Peña Blanca, Nicaragua.)

Tropical Central and South America from southern Mexico to
Bolivia, northern Argentina, Paraguay and southern Brazil.

*specimens from Papaya and the Chamos - El Tumbador K. V. S.
& Guadalupe - Caracoli*

Genus ROSTRHAMUS Lesson (201)

Rostrhamus Lesson, Traité d' Orn., livr. 1. 1830, p. 55.

Type, by monotypy, Rostrhamus niger Lesson - Herpetotheres
sociabilis Vieillot.

Cymindes "Spix" Oberholser, Proc. Biol. Soc. Wash., 35, 1
1922, p. 79.

Type, by monotypy, Cymindis leucopygus Spix - Herpetotheres
sociabilis Vieillot.

cf. Wetmore, Bull. U.S. Nat. Mus., no. 133, 1926, p. 106-107.

13 Rostrhamus sociabilis sociabilis (Vieillot) (202)

Herpetotheres sociabilis Vieillot, Nouv. Dict. Hist. Nat.,
18, 1817, p. 318.

(Corrientes and Rio de la Plata)

Rostrihamus (sic) tenuirostris Bertoni, An. Cien. Paragua-
yos (1), 1901, p. 171. (Puerto Bertoni, Alto Paramá, lat.
25° 40' Paraguay.)

Eastern Panama over South America to northern (Tucumán) and
eastern (Buenos Aires) Argentina and Uruguay. *Specimens
from Rio Ariguanicito and Barranquilla - La Calera*

Genus HELICOLESTES Bangs and Penard (202)

Helicolestes Bangs and Penard, Bull. Mus. Comp. Zoöl., 62,
1918, p. 38.

Type, by original designation, Falco hamatus "Illiger" -
Temminck.

cf. Hellmayr, Abh. K. Bay. Akad. Wiss., Kl. 2, 23, 1906, p.
569.

14 Helicolestes hamatus (Temminck) (202)

Falco hamatus "Illiger" Temminck, Pl. col., lvr. 11, 1821,
pl. 61. (Brazil).

Northern South America from Surinam to eastern Peru and the
lower Amazon. *Specimens from the Rio de la Plata K. V. S.*

accipiter collaris Slater.

accipiter collaris Slater, Ibis, 1860, p. 148, pl. 6.

("Interior of New Granada" = Bogotá, Colombia)

Known only from a few specimens from Colombia (Bogotá collections) and the Andes of Mérida, Venezuela.

accipiter poliozoster (Temminck) (219)

Falco poliozoster ("Natterer") Temminck, Pl. Col. Linc. 45, 1824, pl. 264. (Brazil)

Exact distribution not worked out; recorded from Colombia, British Guiana, Paraguay, Southern Brazil (São Paulo) and north eastern Argentina (Misiones).

accipiter cooperii (Bonaparte) (217)

Falco cooperii Bonaparte, Amer. Orn., 2-1828, p. 1, pl. 10, p. 1. (Near Bordentown, N.J.)

Breeds from southern British Columbia, southern Alberta, central Quebec and Nova Scotia south over the United States, to northern Mexico.

Winters from the northern United States to Costa Rica.

accipiter pectoralis (Bonaparte) (218)

Falco pectoralis Bonaparte, Rev. et Mag.

Zool., 1850, p. 490 (Brazil.)

Range not exactly known but probably from the Guianas to southern Brazil and west to Ecuador.

Subfamily ACCIPITRINAE (205)

Genus ACCIPITER Brisson

Accipiter Brisson, Orn., 1, 1760, p. 28., 310. Type, by tautonymy, *Accipiter* Brisson - *Falco nesus* Linné.

Haliastur ambiguus Bruggemann is a synonym of *intermedius*; *Haliacetus leucosternus* Gould, one of *girrenera*.

2. I enterily agree with Hartert and Stresemann in uniting Astur with Accipiter. There is no line can be between the groups. Foot Paraspizias Mathews, Bds. Austr., 5, 1915, p. 74. Type, by original designation, Sparvius cirrhocephalus Vieillot.

Aerospiza Roberts, Ann. Trav. Mus; 8, 1922, p. 208. Type,
by original designation, *Falco tachio* Daudin.

Neonius Roberts. Ann. Transv. Mus., 8, 1922, p. 208. Type, by original designation, *Accipiter melanoleucus* A. Smith.

cf. Hartert, Vög. pal. Fauna, 2, 1914, p. 1145-1163.

Hartert, Nov. Žoöl., 32, 1925, p. 267-270.

Mathews, Bds. Austr. 5, 1915, p. 35-83.

Mathews, Syst. Av. Australas., 1, 1927, p. 238-248.

Sclater, Syst. Av. Aethiop., 1, 1924, p. 67-71.

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Stresemann, Journ. f. Orn. , 72, 1924, p. 435-437; 442-446.

Stresemann, Journ. F. Orn. , 73, 1925, p. 319-323.

Stresemann, Orn. Monatsb., 32, 1924, p. 6-7.

Stresemann. Orn. Monatsb., 34, 1926, p. 73-76.

Stuart Baker, *Fauna Brit. Ind.*, ed. 2, Bds., 5, 1928, p. 156-164.

Stuart Baker, op. cit., 7, 1930, p. 421-425.

Sushkin, Proc. Boston Soc. Nat. Hist., 39, 1928, p. 1-32.

Swann, Monogr. Bds. Prey, pt. 3, 1925, p. 176-196.

Swann, Monogr. Bds. Prey, pt. 4, 1925, p. 197-276.

Swann, Monogr. Bds. Prey, pt. 5, 1926, p. 277-337.

15 Accipiter Bicolor bicolor (Vieillot) (217)

Sparvius bicolor Vieillot, Nov. Dict. Hist. Nat., 10, 1817,
p. 325. (Cayenne.)

Yucatan through Central America to Colombia, the Guianas

and Amazonia. Specimens from Caracas, Venezuela and
Quenene, Barapimilla.

Accipiter superciliosus exitiosus Bangs and Penard (218)

Accipiter superciliosus exitiosus Bangs and Penard, Proc.
New Eng. Zool. Cpl., 7, 1920, p. 45. (Carrillo, Costa Rica.)

Costa Rica south to northern and western Colombia. *Choco*
Rio Jurado H. V. S. (1)

Accipiter collaris Sclater

Accipiter collaris Salater, Ibis, 1860, p. 148, pl. 6.

("Interior of New Grenada" = Bogotá, Colombia.)

Known only from a few specimens from Colombia (Bogotá collections) and the Andes of Mérida, Venezuela.

Accipiter erythronemius calvinii (Ridgway) (221)

Nisus salvini Ridgway, Bull. U.S. Geol. Geogr. Surv. Terr.,
2. 1876, p. 121. (Mérida, Venezuela.)

Accipiter chionogaster venezuelensis Swann, Syn, Accip., ed. 2, 1921. p. 58. (Escorial, Mérida, Venezuela.)

Sierra Nevada de Santa Marta, Colombia and Andes of Mérida, Venezuela. *Sabana et Boreo (Saba) and Chacabí*

Monochloride

(1) accip. s. superciliosus (Linné) (1818)

Fala superciliosus Linne, Syst. Nat., cl. 12, 1,

1766, p. 128 (Swinnour)

Muzueli and the guianas south to São Paulo, Brazil

(25)

Journal

Journal of the

The first part of the journal is devoted to a description of the country and the people. The author describes the mountains, the rivers, and the forests. He also describes the customs and the habits of the people. The second part of the journal is devoted to a description of the flora and the fauna. The author describes the plants and the animals that he has seen. The third part of the journal is devoted to a description of the climate and the weather. The author describes the different seasons and the different weather conditions. The fourth part of the journal is devoted to a description of the history and the culture of the country. The author describes the different dynasties and the different cultures. The fifth part of the journal is devoted to a description of the present state of the country. The author describes the different problems and the different solutions.

The journal is a very interesting and informative work. It gives a very good idea of the country and the people. It is a very good reference work for anyone who is interested in the country and the people. The journal is a very good example of a well-written and well-organized work.

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- 19 Accipiter erythronemius ventralis Sclater (221)
Accipiter ventralis Sclater, Proc., Zool. Soc. London, 1866, p. 303. (Interior of Colombia.)
 Andes of western Colombia, Ecuador and Peru to northern Bolivia.
Accipiter ventralis nigroplumbeus Lawrence is the dark phase of v. ventralis,
 cf. Lönnberg and Rendahl, Ark. f. Zool., 14, no. 25, 1922, p. 34. *specimens from Panama, Chiriquí.*

Accipiter cooperii - *fiandoti* - *Luna pay (Tolima)*
Charleswood. man.

Genus HETEROSPIZIAS Sharpe (226)

Heterospizias Sharpe, Cat. Bds. Brit. Mus., 1, 1874, p. 158. (in key), p. 160. Type, by monotypy, Falco meridionalis Latham.
 cf. Swann, Monogr. Bds. Prey, pt. 5, 1926, p. 342-344.
 Wetmore, Bull. U. S. Nat. Mus., no. 133, 1926, p. 113-115.

- 20 Heterospizias meridionalis meridionalis (Latham.) (226)
Falco meridionalis Latham, Ind. Orn. 1, 1790, p. 36. (Cayenne.)

Eastern Panamá and tropical South America south to Bolivia, the Paraguay and Chaco, and Rio Grande do Sul. *specimens from El Valle, Cacao and the llanos - Baranquilla. observed near Uagré, maricao (Guapira)*

Subfamily BUTEONINAE (227)

Genus GERANOÆTUS Kaup

Geranoaetus Kaup, Class. Säugeth. und Vög., 1844, p. 122. Type, by monotypy, Falco aguja Temminck - Spizaetus melanoleucus Vieillot.
 cf. Swann, Monogr. Bds. Prey, pt. 5, 1926, p. 345-348.

- 21 Geranoaetus melanoleucus meridensis Swann (227)
Geranoaetus melanoleucus meridensis Swann, Syn. Accip., ed. 2, 1922, p. 68. (Nevada, 3000 met., Mérida Venezuela.)
 Andes of Mérida, Venezuela; perhaps also mountains of Colombia and Ecuador. *specimens from Panamá, and Bogotá, and eastern Guianan area - Quitane, Choachi.*

Genus BUTEO⁽¹⁾ Lacépède (228)

Buteo Lacépède, Tabl. Ois., 1799, p. 4. Type, by tautonymy, Falco buteo Linné.
Potamolegus Bertoni, An. Cien. Paraguayos, (1), no. 1, 1901, p. 158. Type, Potamolegus superciliaris magniplumis Bertoni (Here designated for the first time.)
Praedo Kleinschmidt, Falco, 13, 1917, p. 10. Type, by original designation, Mäusebussard - Falco buteo Linné (not Praedo Nelson).
Pernohierax Ridgway, Smiths. Misc. Coll., 72, no. 4, 1920 p. 2. Type, by original designation, Falco leucorrhous Quoy and Gaimard.
Coryornis Ridgway, Auk, 42, 1925, p. 585. Type, by original designation, Tupornis ridgwayi Cory.
 cf. Cahpman, Bull. Am. Mus. Nat. Hist., 55, 1926, p. 227-230.
 Hatert, Vög. pal. Fauna, 2, 1914, p. 1114-1131; 3, 1922, p. 2202-2205.
 Peters and Griscom, Proc. New Engl. Zool. Cl., 11, 1929, p. 43-48.

(1) *the lard.*

Buteo precilochrous journey. (229)

Buteo precilochrous journey, Ibis, 1879, p. 176

(Saraguen, Ecuador)

1- Buteo melanosternus Berlepsch on Stitzmann,
Ibis, 13, 1906, p. 104. (Cuzco, Peru) Not

Buteo melanosternus fould, which is Hami-
rostra melanosternus (fould.)

1- Buteo erythronotus sinousi Sivanu, Syn.

Accip. ed. 2, 1922, p. 85, (Challapata,
Bolivia)

Andes of Northern Ecuador to northern
Chile and northwestern Argentina.

Buteo pollyosoma (Quoy and Gaim.) (229)

Falco pollyosoma A. B. f., Voy. "Uranie"
Zool., pt. 1, 1824, p. 92, pl. 14. (Falkland Is.)

Portenko, Bull. Acad. Sci. URSS, Cl. Sci. Phys.-Math., 1929 p. 623-652; 707-716.

Sclater. Syst. Av. Aethiop., pt. 1, 1924, p. 66-67.

Stresemann. Journ. f. Orn., 73, 1925, p. 295-319.

Swann, Mongr. Bds. Prey, pt. 5, 1926, p. 349-364.

Swann, Monogr. Bds. Prey, pt. 6, 1926, p. 365-396.

Swann, Monogr. Bds. Prey, pt. 7, 1928, p. 397-428. (1)

22 Buteo albicaudatus hypospodius Gurney (228)

Buteo hypospodius Gurney, Ibis, 1876, p. 73, pl. 3. (Medellin Colombia.)

Southwestern United States (Lower Rio Grande Valley) south through Mexico and Central America to northwestern South America (Colombia Andes and Andes of Mérida, Venezuela).

specimens from Central andes, Cauca and Malaga?

23 Buteo albicaudatus colonus Berlepsch (228)

Buteo albicaudatus colonus Berlepsch, Journ. f. Orn. 40, 1892, p. 91. (Island of Curaçao.)

Tachytriorchis albicaudatus exiguus Chapman, Bull. Am. Mus. Nat. Hist., 34, 1915, p. 637. (Barrigon, head of Rio Meta, Colombia) Colombia, east of the Andes, to Surinam; also Island of Aruba, Bonaire, Curaçao and Trinidad. (1) in fruit

Includes Rupornis. I do not believe that Rupornis is generically separable from Buteo. Magnirostris appears to have its nearest affinities with Buteo platypterus; midwayi is undoubtedly not distantly related to Buteo lineatus while leucorrhous probably is not far removed from Buteo brachyurus.

(2) Replaces B. a. semnetli Allen; cf. Stresemann supra, p. 317-319. specimens from Los Elmos

(1) (2)? Buteo polyzona peruviana of B. poecilostomus

24 Buteo albonotatus abbreviatus Cabanis (232)

Buteo abbreviatus Cabanis, in Schomburgk, Reise Birt. Guiana, 3, 1848, p. 739. (Upper Promeroon River, British Guiana.)

Resident in the Pearl Islands and in northern South America to Surinam. Doubtfully distinct from the typical race.

specimens from the Rio Patia valley? observed at the Yampes

25 Buteo swainsoni Bonaparte (233)

(27) Buteo Swainsoni Bonaparte, Geogr. and Comp. List., 1838, p. 3. (Ex Audubon pl. 372 - near the Columbia River.)

?Buteo (Asturina?) aethiops R.A. Philippi, Arch. Naturg., 65, Bd. 1, 1899, p. 167, 168. (Central Provinces of Chile.)

Figured An. Mus. Nac. Chile, entr. 15, sect. 1, Zoöl., 1902, pl. 8.

?Buteo pictus R.A. Philippi, Arch. Naturg., 65, Bd. 1, 1899, p. 167, 169. (Province of Valdivia, Chile.) Figured An. Mus.

Nac. Chile, entr. 15, sect. 1, Zoöl., 1902, pl. 9. specimens from Popayán - on the Bogotá savanna

28 Buteo platypterus platypterus (Vieillot)

Sparvius Platypterus Vieillot, Tabl. Encyc. Méth., 3, 1823, p. 1273. (Pennsylvania - Schuylkill River, ex Wilson.)

Buteo platypterus iowensis B.H. Bailey, Auk, 34, 1917, p. 73. (Eagle Lake, Hancock Co., Iowa.)

Breeds from central Alberta, Ontario southern Quebec and Cape Breton island south to Texas, the Gulf States and Florida, west to the eastern edge of the Great Plains. Winters from southern Illinois and New Jersey to northern Venezuela, Colombia, Ecuador, and Amazonian Peru. specimens from Popayán. El Tambo. La Calera. m. Miguel.

29 Buteo magnirostris insidiatrix (Bangs and Penard)

Rupornis magnirostris insidiatrix Bangs and Penard, Bull. Mus. Comp. Zoöl., 52, 1918, p. 36. (Santa Marta Mountains, Colombia.)

Caribbean slope of eastern Panama to northern and western Venezuela. specimens from El Talima - Malaga - Barroa

(1) Buteo poecilocrous - Gurney. -

Buteo poecilocrous Gurney, Ibis, 1879, p. 176.

(Yauyacu, Ecuador.)

Buteo melanosternus Berlepsch and Stolzmann, Ornith. 13, 1906, p. 104. (Cuzco, Peru). Not Buteo melanosternus Gould, which is Hamirostre melanosternus (Gould),

Buteo erythronotus simonsi Swann, Syn. Accip., 25, 1922, p. 85. (Challapata, Bolivia.)

Andes of northern Ecuador to northern Chile and northwestern Argentina.

(2) Buteo polysoma ~~peruvianus~~ ^{polysoma}

Falco polysoma Quoy and Gaimard, Voy. "Uranie", Zool., pt. 1, 1824, p. 92, pl. 14. (Falkland Islands).

Buteo melanostethus R. A. Philippi, Arch. Naturg., 65,

25, 1, 1899, p. 166, (Prov. of Santiago, Chile.) Figueret,

Am. Mus. Nat. Hist. Chile. entr. 15, sect. 1, Zool., 1902, pl. 2.

Buteo poecilogaster R. A. Philippi. (Prov. of Valdivia, Chile)

? Buteo macrorhynchus R. A. Philippi (Prov. of Valdivia, Chile)

Andes of Ecuador and Peru south through western Bolivia; Chile, Argentina (east to Tucumán and Córdoba and from Buenos Aires Province south to Tierra del Fuego); Falkland Islands.

Specimens from Quintana - Central Andes (2600 mts) Cauca.)

Buteo magnirostris magnirostris. Sp. from the llanos

30 Buteo magnirostris ecuadoriensis (Swann)

Rupornis magnirostris ecuadoriensis Swann, Syn. List. Accip., ed. 2, 1922, p. 91. ("Vaqueroi" - Vaqueria (?) Ecuador.)

Western Colombia and western Ecuador. *Specimens from Cauca*
El Valle - La Paila - catap - Nariño - cordillera.

31 Buteo leucorrhous (Quoy and Gaimard)

Falco Leucorrhous Quoy and Gaimard, Voy. de l' no, 1. Uranie', Zoöl., pt. 1, 1824, p. 91, pl. 13. (Brazil).

Rupornis nigra Bertoni, A. Cien. Paraguayos (1), no. 1, 1901, p. 162. (Alto Paraná, lat. 25°-27° S., Paraguay.)

Northeastern Colombia to Venezuela, south to Ecuador and Peru, northwestern and northeastern Argentina and Paraguay.

Specimens from la costa. K.V.S. and Munchique Cauca

32 Buteo brachyurus Vieillot

Buteo brachyurus Vieillot, Nouv. Dict. Hist. Nat., 4, 1816, p. 477. (No. type locality - Cayenne, substituted by Berlepsch, Nov. Zoöl., 15, 1908, p. 291.

Elanus amauroleucus Bertoni, An. Cien. Paraguayos (1), no. 1, 1901, p. 166. Banks of the Alto Paraná, lat. 26° and 27° S., Paraguay.)

Buteo abbreviatus minimus Seann, Syn. List. Accip., 1919, p. 51. ("Miritiba, S. Brazil.")

Breeds in southern Florida, possibly in eastern México and Central America and locally in South America where it occurs south to Paraguay and northeastern Argentina.

Specimens from Cauca - (Yarema vista) and the Western Andes
Arledey - Mireca

Genus PARABUTEO Ridgway

Parabuteo Ridgway, in Baird, Brewer and Ridgway, Hist. No. Am. Bds., 3, 1874, p. 250. Type monotypy, Buteo harrisi Audubon.

cf. Salvin and Godman, Biol. Centr.- Americana, 3, 1899, p. 5657. (Butero harrisi).

Parabuteo unicinctus harrisi (Audubon)

Parabuteo unicinctus (Audubon)

34 Buteo harrisi Audubon, Bds. Am., folio ed., 4, 1837, pl. 392. (Between Bayou Sara and Natchez, Mississippi.)

Southern United States from California to Mississippi south to western Ecuador; Lower California. *Specimens from Cauca and Cauca Valley. Maicao - seen at Barrova -*

P. u. unicinctus Genus ASTURINA Vieillot

Asturina Vieillot, Analyse, 1816, p. 24. Type, by monotypy, Asturina (sic) cinera Vieillot - Falco nitidus Latham.

cf. Swann, Monogr. Bds. Prey, pt. 8, 1930, p. 432-436.

35 Asturina nitida nitida (Latham)

Falco nitidus Latham, Ind. Orn., 1, 1790, p. 41. (Cayenne)

Tropical South America (including Trinidad), from Panama east of the Canal Zone to southern Brazil. *Specimens from*

the llanos. and Amazonas. Caracalito. St. Marta

Genus LEUCOPTERNIS Kaup

Leucopternis Kaup. Isis. 1847, col. 210. Type, by subsequent designation Falco melanops Latham. (Gray, Cat. Gen. Subgen. Bds., 1855, p. 3.)

Morphnarchus Ridgway, Smiths. Misc. Coll., 72, no. 4, 1920, p. 2. Type, by original designation, Leucopternis princeps

THE UNIVERSITY OF CHICAGO

PH.D. THESIS
SUBMITTED TO THE FACULTY OF THE DIVISION OF THE PHYSICAL SCIENCES
IN CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
BY
[Name]

DEPARTMENT OF CHEMISTRY
CHICAGO, ILLINOIS
[Date]

ABSTRACT
[Abstract text]

ACKNOWLEDGMENTS
[Acknowledgments text]

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CHAPTER I
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Sclater.

cf. Swann, Monogr. Bds. Pery, pt. 8, 1930, p. 463-474.

(1) - (2) - (3)

36 Leucopternis semiplumbea Lawrence

Leucopternis semiplumbeus Lawrence, Ann. Lyc. Nat. Hist. New York, 7, 1861, p. 288. (Caribbean slope of the Isthmus of Panamá along the line of the railroad.)

Nicaragua to northwestern Ecuador. Specimen from La Costa R. and Chocó.

37 Leucopternis plumbea Salvin

Leucopternis plumbea Salvin, Ibis, 1872, p. 240, pl. 8. (Ecuador.)

Eastern Panamá to western Ecuador. (La Costa R. & S.)

38 Leucopternis schistacea (Sundevall)

Asturina schistacea Sundevall, Ofv. K. vet.-Akad. Förh., 7, 1850 (1851), p. 132, note (Brazil).

Eastern Ecuador and eastern Peru to northeastern Brazil.

Specimens from Amazonas (Leticia)

39 Leucopternis princeps Sclater

Leucopternis princeps Sclater, Proc. Zoöl. Soc. London, 1865, p. 429, pl. 24. (Costa Rica.)

Costa Rica, western Panamá, Ecuador. collected by Carruther in Chocó (in Cost. Rica)

40 *L. alb. costaricensis*. Chocó. R. & S. (St. La R.)

Genus HYPOMORPHNUS Cabanis

Hypomorphnus Cabanis, Arch. f. Naturg., 10, Bd. 1, 1844, p. 263. Type by original designation, Falco urubitinga Linné.

cf. Swann. Monogr. Bds. Prey, pt. 8, 1930, p. 451-454.

41 Hypomorphnus urubitinga urubitinga (Gmelin)

Falco Urubitinga Gmelin. Syst. Nat., 1, pt. 1, 1788, p. 265. (Brazil.)

Urubitinga urubitinga occidentalis Swann, Syn. Accip., ed. 2, 1922, p. 97. (Rio Bogotá, western Ecuador.)

Tropical South America from Colombia eastward and to Peru and southern Brazil. specimens from Rio Meta. and Amazonas

Maicao - Riohacha, La Parilla. Chocó.

Genus BUTEOGALLUS² Lesson

Buteogallus Lesson, Traité d' Orn., livr. 2, 1830, p. 83.

Type, by monotypy, Buteogallus cathartoides Lesson - Falco oequinoctialis Gmelin.

cf. Swann. Monogr. Bds. Prey, pt. 8, 1930, p. 449-450 (Buteogallus), p. 455-462 (Urubitinga part.).

42 Buteogallus anthracinus anthracinus (Lechtenstein)

? Falco anthracinus anthracinus, Preis.-Verz. Mex. Vög., 1830, p. 3. (Mexico).

Urubitinga anthraciana bangsi Swann, Syn. Accip., ed. 2, 1922, p. 98. (San Miguel Island, Pearl Islands, Bay of Panamá.).

Southern Arizona and Texas (Rio Grande Valley) to Colombia and Venezuela?.) Spec. from Rio Aricaucito (M.)

7 Hypomorphnus must replace Urubitinga. Urubitinga was used in a vernacular sense by the French ornithologists from Cubiert's time onward, but its use was always in the vernacular and it was never validated as a generic name prior to 1840. In that year G.R. Gray, in his List Gen. Bds., p. 2, cited Urubitinga in a generic sense as a synonym of Morphnus

P. 241
(1) Leucopternis albicollis costaricensis W. L. Slater
Leucopternis griesbreghtii costaricensis W. L. Slater,
Bull. Brit. Orn. Cl., 39. 1919, p. 76. (Carrillo, Costa Rica)
Honduras to eastern Panama.
Specimens from Chiriquí? Q. V. S. Gaicunum, Sant.

P. 241
(2) Leucopternis albicollis albicollis (Lath.)
Falco albicollis Latham, Ind. Orn. 1. 1790. p. 36.
(Cayenne.)

Venezuela and the Guianas to Amazonian
Ecuador, Peru and Eastern Brazil (Maranhão)
Seen at endugari River (Vaupés)? La Muela

P. 242
(3) Leucopternis a. occidentalis Salo.
Leucopternis occidentalis Salo., Ibis, 1876. p. 496. (Type not
labeled; probably coming from "the Province of Lona or
Puna Island")

Range: Western Ecuador from the peruvian bound-
ary northwards - Western Ecuador, Colombia.

P. 242
(4) Leucopternis kuhli Sonap.
Consp. gen. av. I. p. 19. 1850. (N. loc. Parí. apud. Chubb
type in Brit. Mus.)

Distribution: - Amazonia from Para to Eastern Peru. -

P. 242
(5) Leucopternis melanops (Latham)
Ind. Orn. I. p. 37 (1790). [Cayenne]
Distribution: Brit. Guiana and Northern Brazil to Eastern
Ecuador.

P. 242
(6) Leucopternis princeps princeps slater.
Leucopternis princeps Schl., Proc. Zool. Soc. London,
1865, p. 429, pl. 24. (Costa Rica).
Costa Rica, Western Panama, Ecuador.

P. 242
(7) Leucopternis princeps zimmeri Friedmann,
Leucopternis p. zimmeri Friedm. The Auk, Vol. LII, Jan.,
1935, p. ? (San José de Sumaco - Ecuador).

Known only from Ecuador (Rio Cayapas; El Chiral; Gualea;
San José de Sumaco). Contración, Santander. Colombia.

Myzomela guianensis
Rio Jurado y Rio Salagui (Chaco) R.T.S
Cerro de Guenane (llanos del Meta).

Genus HARPIA Vieillot

Harpia Vieillot, Analyse, 1816, p. 24. Type, by monotypy,
"Aigle destructeur" $\pm$ Vultur harpyja Linné.
cf. Swann, Monogr. Bds. Prey. pt. 8, 1930, p. 482-484.

47 Harpia harpyja (Linné)

SVultur Harpyja Linné, Syst, Nat., ed. 10, 1, 1758, p. 86
(Mexico, ex Hernandez.)

Mexico from the Isthmus of Tehuantepec south to Bolivia, southern Brazil, Paraguay and northeastern Argentina.

Specimen alone from Los Lunos. Seen at Lunos. sp. for
Choc. - ~~*Harpialiaetus creatus*~~ Choc's?
Genus OROAETUS Ridgway Morphus guianensis

Oreæetus Ridgway, Smiths. Misc. Coll., 72, no. 4, 1920.
p. 1, Type, by original designation, Falco isidori Des Murs.
~~xxxxxxxxxxMammxxxPisxxxPrexxxxptxxx2xxx1930xxxxx45x~~
cf. Chubb, Ibis, 1919, p. 283-286.

48 Oroaëtus isidori (Des Murs)

Falco Isidori Des Murs, Rev. Zoöñ., 1845, p. 175 Bis. (Santa Fé de Bogotá.)

Colombia to western Venezuela and south through Ecuador to Bolivia, specimens from Cauca seen at Valle de las Papas specimens from Santander Sar. —

Genus SPIZAETUS Vieillot

Spizaetus Vieillot, Analuse, 1816, p. 24. Type, by subsequent designation, *Falco urnatus* Daudin. (Gray. List. Gen. Bds., 1840, p. 2.).

Phaeaëtus Ridgway *Smith. Misc. Coll.*, 72, no. 4, 1920, p. 2.

Type, by original designation, *Falco linnaetus* Horsfield (new name for *Linnaeetus* Horsfield 1830, not *Linnaetus* Bowdich, 1825.)

Limnaetops Stuart Baker, Fauna Birds. ind; ed. 2, Bds. 7. 1930, p. 408.

Type, by original designation, *Limanëtops c. cirrhatus* (Gmelin).

Falco cirrahutus Gmelin.

cf. Hartert, Vog. pal. Fauna, 2, 1914, p. 1131-1133.

Salvin and Godman, Biol. Centr.-Americana, 3, 1901, p. 91-93.

Stresemann, Journ. f. Orn.; 72, 1924, p. 429-232.

Stuart Baker, Fauna, Birt. Ind; ed. 2, Bds., 5, 1928, p. 84-93.

49 Spizaetus ornatus (Daudin)

Falco ornatus Daudin, Traité d' Orn. , 2, 1800, p. 77. (Cayenne.)

Speziaëtusapitati Bertoni, An. Cien. Paraguayos (1), no. 1, 1901, p. 154.

(Mouth of the Rio Mondaih, Paraguay.)

Southern Mexico from Oaxaca and Vera Cruz south to Peru, Paraguay, northern Argentina and southern Brazil.

(Specimens from *Castanea* (Sierra Nevada?) (Saxony)?
" " *Chaco* M. & S. Rio Salazar 3000)

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1. The first of these is the fact that the majority of the population of the United States is now living in urban areas. This is a result of the process of urbanization, which has been going on since the beginning of the 20th century. The population of the United States has increased from about 100 million in 1900 to over 200 million in 1960. At the same time, the population of rural areas has decreased from about 100 million in 1900 to about 50 million in 1960. This has led to a concentration of the population in urban areas, which has had a number of important consequences. One of the most important is that it has led to a change in the way of life of the majority of the population. In rural areas, the population has traditionally been engaged in agriculture, and the way of life has been based on the rhythms of the seasons. In urban areas, the population has traditionally been engaged in industry and commerce, and the way of life has been based on the rhythms of the clock. This has led to a number of differences between the two ways of life, including differences in the amount of leisure time, the amount of social contact, and the amount of exposure to the elements. These differences have led to a number of problems, including the problem of overcrowding, the problem of pollution, and the problem of the loss of the sense of community. These problems have led to a number of efforts to improve the quality of life in urban areas, including the development of parks and recreational areas, the improvement of the housing stock, and the development of public transportation systems. These efforts have had some success, but there is still a long way to go. The second of the two main reasons for the importance of urban areas is the fact that they are the centers of economic activity. The majority of the nation's industry and commerce is located in urban areas, and this has led to a concentration of wealth and power in these areas. This has led to a number of problems, including the problem of income inequality, the problem of the loss of jobs, and the problem of the loss of the sense of community. These problems have led to a number of efforts to improve the quality of life in urban areas, including the development of public housing, the improvement of the labor union, and the development of public transportation systems. These efforts have had some success, but there is still a long way to go. The third of the two main reasons for the importance of urban areas is the fact that they are the centers of culture and education. The majority of the nation's universities and colleges are located in urban areas, and this has led to a concentration of knowledge and culture in these areas. This has led to a number of problems, including the problem of the loss of the sense of community, the problem of the loss of the sense of history, and the problem of the loss of the sense of identity. These problems have led to a number of efforts to improve the quality of life in urban areas, including the development of museums and cultural centers, the improvement of the school system, and the development of public transportation systems. These efforts have had some success, but there is still a long way to go.

... .., 1950

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(The following information was obtained from the records of the Department of Health, Education and Welfare, Washington, D.C., under Freedom of Information Act request # 79-0008.)

50 Spizaëtus tyrannus (Wied)

Falco tyrannus Wied, Reise Brasilien, 1, 1820, p. 360.
(Quartel dos Arcos, Rio Belmonte, Bahia Brazil.)

Southern Mexico from Vera Cruz south to sotheastern Brazil.

specimens from Chaco (Rio Juari) K.V.S.

Subfamily CIRCINAE

Genus CIRCUS Lacépède

Circus Lacépède, Talb. Ois., 1799, p. 4. Type, by sobsequent désignation, Falco aeruginosus Linné. (Lesson Man. d' Orn., 1, 1828, p. 105.)

Pseudocircus Roberts, Ann. Transv. Mus., 8, 1922, p. 207.

Type by original designation, Accipiter macrourus S.G. Gmelin.

Melanocircus Roberts, Ann. Transv. Mus., 8, 1922, p. 207.

Type, by original designation, Falco maurus Temminck.

cf. Herbert, Vög. pal. Fauna, 2, 1914, p. 1133-1145.

Mathews, Syst. Av. Australas, pt. 1, 1927, p. 236-238.

Sclater, Syst. Av. Aethiop., pt. 1, 1924, p. 73-74.

Stresemann, Journ. f. Orn. 72, 1924, p. 262-269.

Swann. Monogr. Bds. Prey, pt. 2, 1925, p. 102-124.

51 Circus hudsonius (Linné)

Falco hudsonius Linné, Syst. ed. 12, 1, 1766, p. 128. (Hudson Bay, ex Edwards.)

Breeds in the North America from northwestern Alaska, Mackensie, northern Manitoba, central Quebec and Newfoundland, south to northern Lower California, southern Texas, Ohio and Virginia. Winters from southern British Columbia, South Dakota southern Michigan, southern New York and southern New England, south through Central America (occasionally to Colombia) and Cuba; casual in Hispaniola and Puerto Rico. *Specimens from Popayan seen at Super Bogota savanna. - See*

52 Circus cinereus Vieillot

Circus cinereus Vieillot, Nouv. Dict. Hist. Nat., 4, 1816, p. 454, (Paraguay ex Azara.)

South America from central Peru and eastern Bolivia (casually to Ecuador and Colombia) south to the Straits of Magellan,

53 Circus buffoni (Gmelin)

Falco Buffoni Gmelin, Syst. Nat. 1, pt. 1, 1788, p. 277. (Cayenne).

Eastern South America from Venezuela and Brirish Guiana to the Strairs of Magellan; Chile; Trinidad. *Specimens from all*

Cayenne and the llanos.

Genus GERANOSPIZIA Kaup

Geranospizia Maup, Isis, 1847, col. 183. Type by original designation, Falco gracilis Temminck.

cf. Swann, Monogr. Bds. Prey, pt. 3, 1925, p. 154-159.

54 Geranospizia nigra balzarensis W.L. Sclater

Geranospizia nigra balzarensis W.L. Sclater, Bull. Brit. Orn. Cl., 38, 1918, p. 45. (Balzar Mountains, Province fo Guayas, Ecuador.)

Eastern Panama and tropical Suth America west of the Andes southwestern Ecuador and Puna Island.

55 Geranospizia caerulescens (Vieillot)

Sparvius caerulencens Vieillot, Nouv. Dict. Hist. Nat. 10, 1817, p. 318.

(South America: Cayenne, designated as type locality by Ber-

1. The first part of the report deals with the general situation of the country and the progress of the work during the year.

2. The second part of the report deals with the results of the work during the year.

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lepsch and Hatert, Nov, Zoöl., 9, 1902, p. 114.)
 Eastern. Colombia, Venezuela and the Guianas to northern
 Brazil. *Specimens from the llanos - Riohacha -*
Savannaquille -
feranagiza nigra nigra. Chaco R.V.S.

Subfamily PANDIONINAE

Genus PANDION Savigny

Pandion Savigny, Descr. Egypte. Ois., 1, 1809, p. 69. 96.
 Type by monotypy. Pandion fluviialis Savigny = Falco haliaetus
 Linné.
 cf. Hatert. Vög. pal. Fauna, 2, 1914, p. 1190-1193.
 Mathews, Bds. Austr., 5, 1916, p. 293-302.

56 Pandion haliaëtus carolinensis (Gmelin)

Falco carolinensis Gmelin, Syst. Nat., 1, pt. 1, 1788, p.
 263. (No locality given = Carolina ex references.)
 Breeds from northwestern Alaska, northwestern Mackenzie,
 southern Ungava and Newfoundland south to Lower California,
 western Mexico and Gulf Coast of the Central America and
 the West Indies to Peru, northern Argentina and Paraguay.

Specimens from the Amazonas river - seen at
rio Meta, and rio Cauca, and Rio Yagui -
sp. for Inca. C.S.? Family FALCONIDAE

Subfamily HERPETHOTHERINAE

Genus HERPETHOTHERES Vieillot

Herpeththeres Vieillot, Nouv. Dict. Hist. Nat., 18, 1817,
 p. 317. Type, by subsequent designation, Falco cachinnans
 Linné. (Gray, List. Gen. Bds., 1840, p. 3.).
 cf. Bangs and Penard, Bull. Mus. Comp. Zoöl., 63, 1919, p.
 23-24.

57 Herpetotheres cachinnans cachinnans (Linné)

Falco cachinnans Linné, Syst. Nat., ed. 10. 1, 1758, p. 90.
 (South America ex Rolander. Type locality restricted to
 Surinam by Berlepsch, Nov. Zoöl., 15, 1908, p. 290.)
 Herpetotheres cachinnans fulvencens Chapman, Bull. Am.
 Mus. Nat. Hist., 34, 1915, p. 638. (Alto Bonito, 1500 feet,
 wesr slope of western Andes, Antioquia, Colombia.)

Eastern Panama from the Canal Zone; northern South America
 south to southwestern Ecuador and northern Brazil north
 of the Amazon. *Specimens from El Valle and the llanos.*

Genus MICRASTUR G.R. Gray

Micrastur G. R. Gray, List Gen. Bds., 1841, p. 6. Type, by
 original designation, Falco brachypterus Temminck = Sparvius
 semitorquatus Vieillot.
 Clamosocircus Swann, Monogr. Bds. Prey, pt. 3, 1925, p.
 145. Type, by original designation, Sparvius gilvico-
 llis Vieillot.
 cf. Sclater, Ibis, 1918 p. 343-347.
 Swann. Monogr. Bds. Prey, pt. 3, 1925 p. 140-153. (Clamoso-
 circus and Micrastur,)

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques.

3. The third part of the report is a presentation of the results of the study. It includes tables, figures, and text describing the findings of the research.

4. The fourth part of the report is a discussion of the results and their implications. It includes a comparison of the findings with previous research and a discussion of the limitations of the study.

5. The fifth part of the report is a conclusion and a list of references. The conclusion summarizes the main findings of the study, and the references list the sources of information used in the research.

6. The sixth part of the report is an appendix containing additional information related to the study, such as raw data, detailed calculations, and supplementary figures.

7. The seventh part of the report is a bibliography listing the sources of information used in the research. It includes books, articles, and other publications relevant to the study.

8. The eighth part of the report is a list of abbreviations and a glossary of terms used in the study. This helps to clarify the meaning of the symbols and words used throughout the report.

9. The ninth part of the report is a list of figures and tables. Each figure and table is accompanied by a caption that describes its content and provides a brief summary of the data presented.

10. The tenth part of the report is a list of footnotes and a list of references. The footnotes provide additional information about the sources of information used in the research, and the references list the publications cited in the study.

- 58 Micrastur semitorquatus ¹ naso ¹ (Lesson)
Carnifex naso Lesson, Echoes du Monde Savant, (6), 2, 1842,
col. 1085. (Realejo Nicaragua.)
Mexico from Sinaloa and Tamaulipas to northern Colombia and
Venezuela. *Specimens from Rio Arapari etc.*
- 59 Micrastur ruficollis zonothorax (Cabanis)
Climacocercus zonothorax Cabanis, Journ. f. Orn. 13, 1865, p.
406. (Puerto Cabello, Venezuela.)
Santa Marta Mountains of Colombia, and mountains of northern
Venezuela. *Choco 12 v. Gunderman.*
- 60 Micrastur ruficollis interstes Bangs.
Micrastur interstes Bangs, Auk, 24, 1907, p. 289. (La Estrella
de Cartago, Costa Rica).
Costa Rica south to western Colombia and western Ecuador.
Specimens from the western slope Western Andes, Canea
Micrastur Mian Valley - Choco 12 v. Gunderman
Subfamily POLYBORINAE
- Genus DAPTURIUS Vieillot
- Daptrius Vieillot, Analyse, 1816, p. 22, 68. Type, by mono-
typy, Daptrius ater Vieillot.
cf. Peters. Proc. Bio. Soc. Wash., 44, 1931, p. 23-25.
Swann, Monogr. Bds. Prey, pt. 2, 1925, p. 75-79. (Ibycter,
part.)
- 61 Daptrius ater Vieillot
Daptrius ater Vieillot, Analyse, 1816, p. 68. (Brazil.)
Tropical South America from eastern Ecuador and the lower
Orinoco to Amazonian Brazil and Maranhao. *Specimens from the*
floras and the Tapes - seen in Amazonas
- 62 Daptrius americanus americanus (Boddaert)
Falco americanus Boddaert, Table, pl. enlum., 1783, p. 25.
(Ex Daubenton, pl. 417, no. ytte locality = Cayenne, ex Buffon).
Tropical South America from eastern Panama south to central
Peru and through Venezuela and the Guianas to southern Brazil.
Specimens from Amazonas - observed at Los Ilanos and Tapes
Caracoli etc. Genus MILVAGO Spix
- Milvago Spix, Av. Bras., 1, 1824, p. 12. Type monotypy, Mil-
vago ochrocephalus Spix = Polyborus chimachima Vieillot.
cf. Swann. Monogr. Bds. Prey. pt. 2, 1925 p. 88-93.
- 63 Milvago chimachima cordatus Bangs and Penard
Milvago chimachima cordatus Bangs and Penard, Proc. Comp.
Zoöl., 62, 1918, p. 35. (San Miguel Island, Pearl Islands,
Bay of Panama.)
Panamá and Colombia eastward to British Guiana. *Specimens from*
Popayan - El Valle - Tolima, and the llanos and Amazonas
Sta Marta. Genus PHALCOBOENUS D' Orbigny
- Phalcoboenus d' Orbigny, Voy. Am. Mérid., livr. 2, 1834, Ois.,
pl. 2. Type, by monotypy, Phalcoboenus montanus d' Orbigny =
Aquila megaloptera Meyen.
cf. Peters, Proc. Biol. Soc. Wash., 44, 1931, p. 23-26.
Swann, Monogr. Bds. Prey. pt. 2, 1925, p. 80-87. (Ibycter,
part.)
- 64 Phalcoboenus megalopterus carunculatus Des Murs
Phalcoboenus ~~megalopterus~~ carunculatus Des Murs, Rev. et. Mag.
Zoöl., 1853, p. 154. (Colombia.) (Triales). - *Specimens from*
Paramo Zone of Colombia and Ecuador.

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Genus POLYBORUS Vieillot

Polyborus Vieillot, Analyse, 1816, p. 22. Type, by monotypy "Caracara" Boffon = Falco placus J.F. Miller.
cf. Swann, Monogr, Bds. Prey, pt. 2, 1925, p. 67-74.

65 Polyborus cheriway cheriway (Jacquin)

Falco cheriway Jacquin, Beytr., 1784, p. 17, pl. 4. (Aruba and coast of Venezuela.)
Eastern Panama? (Pearl Islands) and northwestern South America to Peru on the west and eastward to the Guianas. *specimens from Popayan, Valle and the llanos. - Barranquilla.*

Genus CAMPSONYX Vigors

Campsonyx Vigors Soöl. Journ., 2, 1825, p. 69. Type, by monotypy, Campsonyx swainsinii Vigors.
cf. Miller and Griscom, Am. Mus Novit., no. 25, 1921, p. 13.
Swann, Syn, Accip., ed. 2, 1922, p. 163-164.

66 Campsonyx swainsinii leonae Chubb

Campsonyx swainsinii leonae Chubb, Bull Brit. Orn. Cl., 39, 1918, p. 22. (Leon western Nicaragua.)
Campsonyx swainsinii meridensis Swann, Syn. Accip. 1920, p. 104 (Nevada, Mérida, Venezuela.)
Western Nicaragua; Santa Marta region of Colombia east through Venezuela to British Guiana (southern limits not known); Margarita Island. *Caracas - Riohacha - Maricao.*

Campsonyx swainsonii magnus Chubb

? Campsonyx swainsonii magnus Chubb, Bull. Brit. Orn. Cl., 39, 1918, Western Ecuador and western Peru.

Subfamily FALCONINAE

Genus Falco Linné

Falco Linné, Syst, Nat., ed. 10, 1, 1758, p. 88. Type, by subsequent designation, Falco subbuteo Linné. (A.O.U. Committee, 1886.)
cf. Chapman, Bull Am. Mus. Nat. Hist., 34, 1915, p. 372-382
Cory, Field Mus Nat. Hist. Publ., Orn. Ser., 1, 1915 p. 311-335.
Erlanger, Journ. f. Orn. 51, 1903, p. 289-301.
Hatert, Vög. pal. Fauna, 2, 1913, p. 1042-1087
Hartert, Nov Zoöl, 22, 1915, p. 168-185.
Mathews, Bds. Austr., 5, 1916, p. 221-258.
Menzbier, Faune de la Russie, Aves, 6, livr. 1, 1916, p. 52-344.
Oliver, New Zealand Bds., 1930, p. 386-388.
Peters, Bull Essex Co. Orn. Cl., 1926 (1927), p. 20-24.
(Author's repr., p. 1-7.
Rothschid, Nov. Zoöl, 33, 1916, p. 231-233.
Stegmann, Bull. Acad Sci. URSS, 1919, p. 585-598.
Stegmann, Ann, Mus Zoöl. Acad. Sci. URSS, 1928 (1929), p. 143-158.
Stegmann, Journ. f. Orn., 1929, Hartert Festschr., p. 143-154.
Stuart Baker, Bull. Brit. Orn. Cl., 47, 1927, p. 102-107.
Stuart Baker, Fauna Brit Ind., Bds., ed. 2, 5, 1928, p. 31-67.

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Subgenus RHYNCHODON Nitzsch

Rhychodon Nitzsch, Obs. Avium Art. Carot. Comm. 1829, p. 20. Type by subsequent designation, Falco peregrinus Tunstall (A.O.U. Committee, 1886.)
 Eufalco Aclocque, Faune de France, 1, 1900, p. Type, by subsequent designation, Falco comminus Gmelin = Falco peregrinus Tunstall. (Richmond, Proc. U.S. Nat. Mus., 53, 1917, p. 589.)
 Archifalco Boetticher, Anz. Orn. Ges. Bayern, no. 11, 1927 p. 112. Type, by original designation, Natürliche Gruppe 1 of Hartert's Vög. pal. Fauna, p. 1042 = Falco peregrinus Tunstall.

- 1 No case has yet been proven for the occurrence of two species of this subgenus side by side. The name given by Mathews and Iredale was given as a new name to replace the applied to the so-called smaller "species", all of them preoccupied.

67 Falco peregrinus anatum-Bonaparte

Falco anatum Bonaparte, Geogr. and Comp. List. 1838, p. 4, (Great Egg Harbor, N.J., ex Wilson, Am. Orn., 9, 1814, p. 120, pl. 76.)

Breeds from Norton Sound, Alaska northern Mackenzie, Baffin Island and west-central Greenland south to Lower California Texas Kansas Indiana Pennsylvania and Connecticut, in the mountains to South Carolina Winters from British Columbia, Colorado and southern New England to the Indies and South America. Specimen from La Florida Bogota L.S. Museum seen at Techs. - seen at Sta. Mateo. Boca de Cenige.

Falco deiroleucus-Temminck

Falco deiroleucus Temminck, Pl. Col., livr. 59, 1825, pl. 348 (Isla Sao Francisco, Santa Catharina, Brazil.)

Hypotriorchis melanogyne Bertoni, An. Cien., Paraguayos(1) 1901, p. 168. (Puerto Bertoni, Alto Paraná, lat, 25° 40', Paraguay.)

Locally distributed from southern Vera Cruz south to Peru, northwestern, Argentina, Paraguay and southern Brazil.

Specimen from Laguna de San Rafael?

Genus FALCO Linné

Cuvieria Roberts, Ann. Transvaal Mus., 8, 1922, p. 210. Type by original designation, Falco cuvieri A. Smith.

68 Falco albigularis albigularis Daudin

Falco albigularis Daudin, Traité d' Orn., 2, 1800, p. 131. (Cayenne.)

Falco rufigularis petoensis Chubb, Bull. Brit. Orn. Cl. 39, 1918, p. 22. (Peto Yucatán.)

Central and South America from western Mexico (Nayarit), south to southern Brazil and eastern Argentina?

Specimens from Cali and La Parilla (Valle). Caracalito Genus RHYNCHOFALCO Ridgway Caracalito and Caracalito

Rhynchofalco Ridgway, Proc. Boston Soc. Nat. Hist., 16, 1873 p. 46. Type by original designation, Falco femoralis Temminck Falco fuscocaerulencens Vieillot.

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- 69 Falco fuscocaerulescens fuscocaerulescens Vieillot
Falco fuscocaerulescens Vieillot, Nouv. Dict. Hist.
 Nat., 11, 1817, p. 90. (Paraguay.)
 Greater part of South America from Colombia to Tierra de
 Fuego. Specimens from Popayán and La Paila (Valle)
 El Tambo C. - Barranquilla sen - Guajira.

Subgenus TINNUNCULUS Vieillot

- Tinnunculus Vieillot, Ois. Am. Sept., 1, 1807, p. 39.
 Type by subsequent designation, Falco columbarius Linné
 (Sharpe, Cat. Bds. Brit. Mus., 1, 1874, p. 374.)
 70 Falco columbarius columbarius Linné
Falco columbarius Linné, Syst. Nat., ed. 10, 1, 1758, p. 90.
 (America Carolina, ex Catesby.)
 Breeds from the limit of trees in eastern Canada south
 to Newfoundland, Nova Scotia, Northern Maine northern
 Michigan and southern Manitoba, west to the eastern border
 of the Great Plains. Winters from the Gulf States to
 the West Indies and northwestern South America.
 specimens from Paraguay and Bogota savanna.

Subgenus CERCHNEIS Boie

- Cerchneis Boie, Isis, 19, col. 979, Type, by monotypy,
 Falco rupicolus Daudin.
 Megacerchneis Roberts, Ann. Transv. Mus., 8, 1922, p. 210.
 Type, by original designation, Falco rupicoloides A. Smith.
 71 Falco sparverius isabellinus Swainson
Falco isabellinus Swainson, Anim. in Menag., 1837, p. 281.
 (British Guiana.)
 Coastal districts of northern South America from the San-
 ta Marta region of Colombia to Cayenne. Sta. Marta -
 Maricao - Rio Angaité.
 72 Falco sparverius intermedius (Cory)
Cerchneis sparveria intermedia Cory, Field Mus. Nat. Hist.
 Publ., Orn. Ser., 1, 1915, p. 325. (Villavicencia. 1600
 feet, base of eastern Andes, Colombia.)
 Eastern, slope of the central Andes of Colombia, north to
 Antioquia, east. to the Venezuela border and the llanos
 of eastern Colombia. Specimens from the llanos and Bogota
 savanna.
 73 Falco sparverius ochraceus (Cory)
Cerchneis sparverius ochraceus Cory, Field. Mus. Nat. Hist.
 Publ. Orn. Ser., 1, 1915, p. 298. (Colon, Táchira, Vene-
 zuela.)
 Mountains of northern and western Venezuela. specimens
 from Bogota savanna.
 74 Falco sparverius caucae (Chapman)
Cerchneis sparverius caucae Chapman. Bull. Am. Mus. Nat.
 Hist., 34, 1915, p. 375. (La Manuelita, near Palmira,
 3500 feet. Cauca Valley, Colombia.)
 Cauca Valley region of western Colombia.
 specimens from Popayán and Cali. La Paila

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