ORDER FALCONIFORMES BIRDS OF PREY

Family CATHARTIDAE American Vultures

CORAGYPS ATRATUS (BECHSTEIN)

BLACK VULTURE

Vultur atratus Bechstein, in Latham, Allgem. Ueb., Vögel, 1, 1793, Anh., 655 (Florida).

Coragyps atratus atratus van Rossem, 1931 c, 242 (Guaymas; Saric; Pesqueira; Obregon; Tesia); 1934 d, 428 (Oposura).—Bent, 1937, 43, in text (Guaymas; Tonichi).—Abbott, 1941, 417 (Guaymas).—Huey, 1942, 363 (boundary at Quitovaquita).

Cathartista atrata Belding, 1883, 344 (Guaymas).—Salvin and Godman, 1901, 133 (Guaymas).

Common, locally abundant, resident of Lower Sonoran and Tropical zones almost throughout the State, except that there are no records as yet from the deserts west of longitude 113°, nor from any of the islands. Concentration is most likely to occur in the vicinity of towns and ranches. A rather rapid extension of range to the northward seems to have taken place within a relatively few years for the species was not noted by earlier observers anywhere north of the limits of the Tropical zone (Guaymas and Oposura). It is now common nearly everywhere, a few modern records being Nogales and Rancho La Arizona southward to Agiabampo, with distribution almost continuous and with numbers rapidly increasing southerly, May and June, 1937 (van Rossem notes); Pilares, in the northeast, June 23, 1935 (Univ. Mich.); Altar, in the northwest, February 2, 1932 (Phillips notes); Magdalena, May, 1925 (Dawson notes; [not noted in that locality by Evermann and Jenkins in July, 1887]). The highest altitudes where observed to date are Rancho La Arizona, 3,200 feet; Nogales, 3,850 feet; Rancho Santa Bárbara, 5,000 feet, the last at the lower fringe of the Transition zone.

CATHARTES AURA TETER FRIEDMANN

WESTERN TURKEY VULTURE

Cathartes aura teter Friedmann, Proc. Biol. Soc. Wash., 46, Oct. 26, 1933, 188 (Riverside, California); ibid., in text (Guadalupe Cañon).—Huey, 1935, 251 (Punta Peñascosa).

Cathartes aura septentrionalis (not Cathartes septentrionalis Wied) van Rossem, 1931 c, 241 (Guaymas; Tobari Bay; El Doctor; Pesqueira; Saric; etc.); 1932, 131 (Tiburon Island).—Abbott, 1941, 417 (Guaymas).

Cathartes aura (not Vultur aura Linnaeus) Belding, 1883, 344 (Guaymas).—Evermann and Jenkins, 1888, 68, 69 (Magdalena; Guaymas).—Allen, 1893 a, 34

(Fronteras).—Salvin and Godman, 1901, 134, part (Guaymas; Fronteras).—Stone and Rhoads, 1905, 689 (lower Colorado River).

Common resident throughout the State, apparently irrespective of zonal or associational considerations. It is usually decidedly less numerous than the Black Vulture in Tropical zone towns and lowlands, but outnumbers that species northerly and at higher elevations. Some additional localities are Cajón Bonito Creek; Sonoyta; common resident of all boundary localities (Mearns notes); El Álamo; Rancho Costa Rica (Lamb notes); Rancho Santa Bárbara; Agiabampo (van Rossem notes).⁵

Family Accipitridae Kites, Hawks, and Allies

ACCIPITER GENTILIS APACHE VAN ROSSEM

SIERRA MADRE GOSHAWK

Accipiter gentilis apache van Rossem, Proc. Biol. Soc. Wash., 51, May 19, 1938, 99 (Paradise, Cochise County, Arizona); ibid., in text (Yecora).

Astur atricapillus (not Falco atricapillus Wilson) Salvin and Godman, 1899, 45, part (Yecora).

Accipiter atricapillus striatulus (not Astur atricapillus striatulus Ridgway) van Rossem, 1936 d, 126 (Yecora; crit.).

The only known occurrence in Sonora is that of a single adult, taken by Lloyd at Yécora on April 13, 1888, and now in the collection at the British Museum. The altitude given, "8,500 feet," is probably in excess of the actual elevation

ACCIPITER COOPERII MEXICANUS SWAINSON

WESTERN COOPER HAWK

Accipiter Mexicanus Swainson, Fauna Bor.-Amer., 2, 1831 [Feb., 1832], 45, footnote (Real del Monte, Hidalgo, México).

Accipiter cooperii mexicanus van Rossem, 1931 c, 242 (Saric; Chinobampo); 1932, 131 (Tiburon Island); 1934 d, 428 (Alamos; Oposura).

Accipiter cooperi mexicanus Thayer and Bangs, 1906, 18 (La Chumata).

Accipiter cooperi (not Falco cooperii Bonaparte) Salvin and Godman, 1899, 46, part (Hermosillo).—Stone and Rhoads, 1905, 689 (lower Colorado River).—Bailey, 1928, 160, part (San Luis Mountains).

Accipiter cooperii cooperii Huey, 1942, 364 (Gray's Ranch; Quitovaquita, [Arizona]).

⁵ The only specimen of the Turkey Vulture collected in Sonora seems to be one from Guadalupe Cañon identified by Friedmann as *teter*. It is likely that all northern records belong under this name, but whether it applies also to Tropical zone resident birds remains to be determined.

Fairly common resident of timbered localities northerly, chiefly in the Upper Sonoran zone although possibly breeding locally in Lower Sonoran areas westward to about longitude 113°. Definite or very probable breeding localities are the Pajaritos Mountains, San Luís Mountains, the Sierra de San Antonio, and the Sierra de Oposura. Much more common and widespread in fall, winter, and early spring, when occurring generally over the State and on Tiburón Island. Further stations are San José de Guaymas, January 20, 1933 (Lamb notes); Santa Cruz River on the boundary, August 20 and September 4, 1892; San Pedro River, October 11, 1892; Hall's Ranch and Guadalupe Cañon, October 2, 1892; Sonoyta and Pozo de Luís, December 29, 1893 to January 25, 1894 (U. S. Nat. Mus.; Mearns notes).6

ACCIPITER STRIATUS VELOX (WILSON)

NORTHERN SHARP-SHINNED HAWK

Falco velox Wilson, Amer. Orn., 1812, 116, pl. 45, fig. 1 (Banks of the Schuylkill River, near Philadelphia, Pennsylvania).

Accipiter velox Allen, 1893 a, 34 (Granados).—Price, 1899, 91 (Iower Colorado River).—Stone and Rhoads, 1905, 681 (30 miles below Yuma).—van Rossem, 1931 c, 242 (Tecoripa; Saric, Tesia).

Accipiter striatus velox van Rossem, 1934 d, 428 (Alamos).

Common migrant and winter visitant in Sonoran and Tropical zones throughout the State, although most records are from northerly localities. Additional records are from 15 miles south of San Luís (Dickey coll.); Pozo de Luís and Sonoyta, December 29, 1893 to January 25, 1894; (Mearns notes). San José de Guaymas, January 20, 1933 (Lamb notes); San Pedro River, October 10, 1892; San José Mountains, October 5 and 6, 1892; Santa Cruz River, November 6, 1892; Colorado River at Monument 204, March 28, 1894; Cajón Bonito Creek, September 8 to 28, 1893; (U. S. Nat. Mus.; Mearns notes). Extreme dates are September 8 (Cajón Bonito Creek) and March 28 (Monument 204). However, Huey (1942, p. 363) records a specimen from Quitovaquita, just on the Arizona side of the boundary as late as May 1, 1939.

⁶ While convinced that the Cooper Hawks of the Pacific coast and northwestern México constitute a recognizable race, the name mexicanus is of dubious applicability. The type locality favors the probability that mexicanus was based on a migratory individual of the nominate race, cooperii.

ACCIPITER STRIATUS SUTTONI VAN ROSSEM

MEXICAN SHARP-SHINNED HAWK

Accipiter striatus suttoni van Rossem, Auk, 56, No. 2, April 7, 1939, 127 (Mesa del Chipinque, Nuevo León, México); ibid., in text (Tesia).—A. O. U. Comm., 1944, 444 (lowlands of Sonora).

Accipiter velox (not Falco velox Wilson) van Rossem, 1931 c, 242, part (Tesia).

Known only as a rare winter and early spring visitant in the lower Mayo River valley. The two specimens of record (Dickey coll.) were taken by Wright at Tesia on December 29, 1929, and March 23, 1930.

BUTEO ALBICAUDATUS HYPOSPODIUS GURNEY

SENNETT WHITE-TAILED HAWK

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

Status uncertain. Three solitary individuals were seen (unmistakably) between Empalme and Potam in the Yaqui River valley on May 12, 1937, by van Rossem and Hannum. The date suggests that these might have been breeding birds. J. T. Wright states that he saw this species in summer (dates not recalled) in this same general region. He collected an adult male (examined in the Chicago Nat. Hist. Mus.) at Tres Marías near Alamos on October 21, 1934.

BUTEO JAMAICENSIS CALURUS CASSIN

WESTERN RED-TAILED HAWK

Buteo calurus Cassin, Proc. Acad. Nat. Sci. Phila., 7, 1855, 281 (near Fort Webster, Río Mimbres, New Mexico).

Buteo borealis calurus Belding, 1883, 344 (Guaymas).—Price, 1899, 91 (lower Colorado River).—Stone and Rhoads, 1905, 689 (lower Colorado River).—Thayer and Bangs, 1906, 18 (La Chumata).—van Rossem, 1931 c, 242 (El Doctor; Guaymas); 1932, 131 (Tiburon Island); 1934 d, 428 (Alamos).—Sheffler, 1931 a, 138 (Imuris).—Huey, 1935, 251 (Punta Peñascosa); 1942, 364 (Gray's Ranch, etc.).

Buteo borealis (not Falco borealis Gmelin) Salvin and Godman, 1900, 61, part (Guaymas).

Buteo borealis socorroensis (not of Nelson) Brewster, 1902, 85, part, in text (Alamos).

Buteo rufescentior Salvin and Godman, 1900, 61, part, in text (Sonora [Hermosillo, part]).

Fairly common resident throughout the State, irrespective of altitude or zonal considerations, except that records from the Tropical zone coastal plain south of Guaymas are lacking. Additional records are Nogales, May 6; Rancho La Arizona, May 9; Magdalena, May 10; Guirocoba in

May and early June; and Rancho Santa Bárbara, June 8 to 17, 1937 (van Rossem notes); Pilares, July 15, 1935 (Univ. Mich.; juvenile just from nest, identified by Brodkorb and Van Tyne as "good calurus"); Cajón Bonito Creek and Guadalupe Cañon (common; breeding; July, 1892, Mearns notes); San Bernardino River on the boundary, August 15 and September 3, 1892; San Pedro River, October 10, 1892; Santo Domingo, January 15, 1894 (U. S. Nat. Mus. catl., and Mearns' notes).

BUTEO JAMAICENSIS FUERTESI SUTTON AND VAN TYNE

FUERTES RED-TAILED HAWK

Buteo jamaicensis fuertesi Sutton and Van Tyne, Occ. Pap. Mus. Zool., Univ. Michigan, No. 321, Sept. 23, 1935, 1 (Calamity Creek Bridge, 22 miles south of Alpine, Brewster County, Texas).—van Rossem, 1942 f, 450 (Hermosillo).

Buteo borealis (not Falco borealis Gmelin) Salvin and Godman, 1900, 61, part (Hermosillo, part).

Rare winter visitant. One record, that of a typical adult female in the British Museum (90.4.26.140), taken at Hermosillo on November 23, 1887, by (or for) F. Ferrari-Perez. Examined by van Rossem in September, 1933, when identified as "kriderii"; re-examined in June, 1938, and August, 1939, when reidentified as fuertesi.

BUTEO ALBONOTATUS ALBONOTATUS KAUP

ZONE-TAILED HAWK

Buteo albonotatus Kaup, Isis von Oken, 1847, Heft 5, [May], col. 329 (México).—van Rossem, 1934 d, 429 (Alamos; Hacienda de San Rafael; Oposura).

Buteo albonotatus albonotatus van Rossem, 1931 c, 243 (Obregon).

Buteo abbreviatus (not of Cabanis) Salvin and Godman, 1900, 59, part (Hermosillo).

Fairly common summer visitant in the Upper Sonoran and lower parts of the Transition zones (chiefly oak or oak-pine associations) east of the western desert region; also occurs in winter in lower Sonoran and Tropical zone lowlands from about latitude 29° southward. Further records are from Rancho La Arizona (the westernmost station), May 8, 1937; Rancho Santa Bárbara, June 12, 1937 (van Rossem notes); Rancho Costa Rica, December 16, 1932 (Lamb notes); 2 miles east of Guirocoba [no date], 1939 (Mus. Vert. Zool.); San Luís Mountains on the boundary, June 1 (eggs) and July 7, 1892; Cajón Bonito Creek, July 4, 1892, by Mearns and Holzner (U. S. Nat. Mus. catl.). The Hermosillo specimen in the British Museum was taken by, or for, Ferrari-Perez, in November

or December, 1887. Price's observation (1899, 91) of "hundreds" seen in the Colorado delta on December 3, 1898, is obviously an error in identification. Huey (1942, p. 364) reports this hawk from Dowling Well and Gray's Ranch, Lower Sonoran localities on the Arizona boundary, on May 9 and 13, 1939. However, these occurrences may pertain to migrating or non-breeding individuals.

BUTEO NITIDUS MAXIMUS (VAN ROSSEM)

NORTHERN GRAY HAWK

Asturina plagiata maxima van Rossem, Condor, 32, Nov., 1930, 103 (San Javier, Sonora, México); *ibid.*, in text (Saric; Guirocoba; Chinobampo; Magdalena).—1931 c, 243 (same locs.).

Buteo nitida maxima A.O.U. Comm., 1944, 445 (San Javier).

Buteo plagiatus maximus van Rossem, 1934 d, 429 (Alamos; Hacienda de San Rafael; Nacozari; crit.).

Asturina plagiata (not of Schlegel) Allen, 1893 a, 34 (Fronteras; Oputo) — Salvin and Godman, 1900, 74, part (Fronteras; Oputo).—Sheffler, 1931 a, 138 (Imuris).

Asturina plagiata plagiata Miller and Griscom, 1921, 4, part (Sonora; crit.). Asturina nitida plagiata Peters, 1931, 240, part (San Javier).

Fairly common summer visitant to wooded areas (chiefly riparian associations) in Sonoran zones eastward from the longitude of the Pajaritos Mountains and Guaymas. Resident and more numerous in the Tropical zone in the extreme south, and there reaching the coastal plain where suitable timber occurs. The statement (van Rossem, 1931 c) that this hawk is a permanent resident throughout the State is not justified; there are no northerly winter records. Additional localities are Agiabampo, May 14; San Francisco Cañon, May 29; Rancho Santa Bárbara, June 10, breeding in Transition zone; Tesia, June 22, 1937 (van Rossem notes); Guirocoba, common in December, 1941 (Sheffler notes). Arrival and departure dates for northern localities are March 29 (Nacozari) and October 26 (Oputo).

BUTEO SWAINSONI BONAPARTE

SWAINSON HAWK

Buteo suainsoni Bonaparte, Geog. and Comp. List, 1838, 3 (Columbia River=Fort Vancouver, Washington).—Allen, 1893 a, 34 (Fronteras).—Salvin and Godman, 1900, 68 (Fronteras).—Thayer and Bangs, 1906, 18 (Opodepe).—van Rossem, 1931 c, 243 (El Alamo)—Bent, 1937, 233 (Opodepe).

Common summer visitant to Sonoran zone river valleys and deserts south to about the latitude of Guaymas. There are no records for the

Tropical zone, nor for the extreme northwest other than the almost impossible one of "several seen" in the Colorado delta in February (Stone and Rhoads, 1905, 689). Additional stations are Pesqueira, June 21, 1931 (Bishop coll.); Santa Ana, May 11, 1937 (Dickey coll.); Santa Ana to Guaymas, May 11 and 12, 1937 (common, nest building; van Rossem notes). Extreme dates are May 11 (Santa Ana) and September 23 (Fronteras).

PARABUTEO UNICINCTUS SUPERIOR VAN ROSSEM

NORTHWESTERN HARRIS HAWK

Parabuteo unicinctus superior van Rossem, Trans. San Diego Soc. Nat. Hist., 9, no. 33, Feb. 17, 1942, 377 (Laguna Dam, Imperial Co., California); ibid., in text (Sonora).

Buteo harrisi (not of Audubon) Salvin and Godman, 1900, 56, part (Guaymas). Parabuteo unicinctus harrisi Belding, 1883, 344 (Guaymas).—van Rossem, 1931 c, 242 (Tesia; 10 miles N. of Guaymas).—Dickey and van Rossem, 1938, 119 (Sonora; crit.).—Abbott, 1941, 418 (Guaymas).

Parabuteo unicinctus harrissi [sic] Stone and Rhoads, 1905, 689 (lower Colorado River).

Common resident of Lower Sonoran and Tropical zones from the Colorado River eastward to the limits of the western desert area and south to the Sinaloa boundary. Easternmost stations to date are Pozo de Luís, Santa Ana, Cerro Blanco, and Guirocoba. Unpublished stations are Pozo de Luís, January 4, 1892; Sonoyta, January 17, 1892 (U. S. Nat. Mus.); Cerro Blanco, April 15, 1903; Camoa, October 18, 1934 (Chicago Nat. Hist. Mus.); Rancho Costa Rica, December 13, 1932 (Lamb notes); Santa Ana to Agiabampo, pairs at frequent intervals, May 11 to 13, 1937; Guirocoba, May, 1937; Colonia Independencia, May 3, 1937, common (van Rossem notes). Mearns' field book lists a specimen taken on the Arizona side of the boundary at San Bernardino Ranch, August 3, 1892. Corresponding occurrences are to be expected in Sonora.

HYPOMORPHNUS URUBITINGA RIDGWAYI (GURNEY)

RIDGWAY BLACK HAWK

Urubitinga ridgwayi Gurney, List. Diurn. Bds. Prey, 1884, 148 (Guatemala). Hypomorphnus urubitinga ridgwayi Peters, 1931, 244 (Sonora).—van Rossem, 1934 d, 429 (Alamos).

Status uncertain. Known only from the two specimens taken by Frazar at Alamos on March 8, 1888. It is quite possible that this black hawk is really not so uncommon in Sonora as the single record might indicate.

BUTEOGALLUS ANTHRACINUS MICRONYX VAN ROSSEM AND HACHISUKA

NORTHWESTERN BLACK HAWK

Buteogallus anthracinus micronyx van Rossem and Hachisuka, Trans. San Diego. Soc. Nat. Hist., 8, June 15, 1937, 361 (Arivaipa Creek, Graham Co., Arizona); ibid., in text (Alamos; Girocoba).

Urbitinga anthracina (not Falco anthracinus Lichtenstein) Thayer and Bangs, 1906, 18 (Opodepe or La Chumata).

Urubitinga anthracina anthracina Bent, 1937, 263, part, (Sonora).

Buteogallus anthracinus anthracinus van Rossem, 1934 d, 430 (Alamos).— Aldrich and Bole, 1937, 47 (Cajon Bonito Creek).

Common summer visitant to riparian associations from the Pajaritos Mountains eastward to the San Luís Mountains and southward throughout the State. There are, however, no tide-water records. Absence from the northwestern deserts is due, in all probability, to the lack of permanent streams. Resident in the Tropical zone, at least in the vicinity of Alamos and Guirocoba. Further localities are Rancho La Arizona, nesting May 9; Rancho Santa Bárbara, nesting, 5,000 feet, June 9, 1937 (van Rossem notes); Pilares, June 25, 1935 (Univ. Mich.); Mayo River valley, October 17, 1930 (Wright notes); Guirocoba, December 3 to 5, 1941 (common; Sheffler notes). Seasonal dates for the northern part of the State are May 9 (Rancho La Arizona) and September 27 (Cajón Bonito Creek).

AQUILA CHRYSAËTOS CANADENSIS (LINNAEUS)

GOLDEN EAGLE

Falco canadensis Linnaeus, Syst. Nat., ed. 10, 1, 1758, 88 (in Canada=Hudson Bay).

Aquila chrysaëtos canadensis Huey, 1935, 251 (Punta Peñascosa).—Bent, 1937, 313, in text (San Bernardino River).

Aquila chrysaëtos (not Falco chrysaëtos Linnaeus) Price, 1899, 91 (lower Colorado River).

Apparently a not uncommon resident across the northern part of the State. Records include mountains, plains and deserts and extend from the San Luís Mountains to the Colorado River. Additional stations are Cajón Bonito Creek and the San Luís Mountains, July, 1892; San Luís Springs at Monument 66, September 24, 1893; Pozo de Luís, December 29, 1893 to January 8, 1894; considered to be common throughout the boundary region (Mearns notes); Tiburón Island, April 5, 1935 (Mus. Vert. Zool.). The last named locality is the southernmost recorded to date.

CIRCUS CYANEUS HUDSONIUS (LINNAEUS)

Marsh Hawk

Falco hudsonius Linnaeus, Syst. Nat., ed. 12, 1, 1766, 128 (ad fretum Hudsonis=Hudson Bay).

Circus budsonius Salvin and Godman, 1899, 43 (Hermosillo).—Stone and Rhoads, 1905, 689 (Iower Colorado River).—van Rossem, 1931 c, 243 (Tecoripa); 1932, 131 (Tiburon Island; San Esteban Island; San Carlos, San Pedro, Kino, and Tepopa Bays).—Huey, 1942, 364 (Sonoita River).

Circus hudsonicus [sic.] Huey, 1935, 251 (Punta Peñascosa).

Common migrant and winter visitant, distributed probably over the whole of the lowlands, although all records to date are from about latitude 27° northward. Further occurrences are from Colorado River opposite the mouth of the Hardy, March 26, 1894; Santa Cruz River, November 12 and 16, 1892 (Mearns and Holzner in U. S. Mat. Mus. catl.); 9 miles southwest of Cuidad Obregón, November 24; Tóbari Bay, November 25, 1944 (Sheffler notes; "fairly common"); El Doctor, December 8, 1925 (Dickey coll.); El Alamo, December 5, 1932 (Lamb notes); Magdalena, April 20, 1925 (Dawson notes) Sonoyta, January 9 to 29, 1894 (Mearns notes). Extreme dates are November 12 (Santa Cruz River) and April 20 (Magdalena).

GERANOSPIZA NIGRA LIVENS BANGS AND PENARD

SONORA BLACK HARRIER

Geranospiza cuerulescens livens Bangs and Penard, Proc. Biol. Soc. Wash., 34, June 30, 1921 (Álamos, Sonora, México).—Bangs, 1930, 187 (location of type). Geranospiza nigra livens Peters, 1931, 268 (Alamos).—Swann, 1925, 157 (Alamos; ctit.).—van Rossem, 1934 d, 430 (Alamos).

Geranos pizias caerulescens livens Swann, 1922, 1, following 233 (Alamos).

Resident in Tropical zone riparian associations in the extreme southern part of the State. In addition to the original pair collected by Frazar at Alamos on February 9, 1888, there are two specimens in the Dickey collection taken by van Rossem and Hannum. One of these, an adult male, was collected at Guirocoba on June 2, 1937; the other, an immature male, is from Tesia in the lower Mayo River valley, June 19, 1937. The only winter record is that of a specimen taken at Guirocoba on November 17, 1944 (Sheffler notes). At the McCarty ranch at Guirocoba the owners had preserved portions of two immature birds which were killed at that place in September or October, 1936.

Family PANDIONIDAE Ospreys

PANDION HALIAETUS CAROLINENSIS (GMELIN)

OSPREY

Falco Haliaetos y carolinensis Gmelin, Syst. Nat., 1, Pt. i, 1788, 263 (in America = South Carolina).

Pandion haliaëtus carolinensis Belding, 1883, 344 (Guaymas).—Mailliard, 1923, 455 (San Esteban Island; Tepopa Bay; Pelican Island).—van Rossem, 1931 c, 243 (San Pedro Nolasco Island; Guaymas; Tobari Bay); 1932, 131 (Tiburon Island).—Huey, 1935, 251 (Punta Peñascosa).

Pandion haliaetus (not Falco haliaetus Linnaeus) Salvin and Godman, 1897, 39, part (Guaymas).

Common resident of the entire Gulf area. There are three instances of inland occurrence: Rancho La Arizona, May 7, 1937 (van Rossem notes); Cajón Bonito Creek, September 27, 1893 (U. S. Nat. Mus. catl.); (northeastern) Sonora, April 23, 1909 (Mus. Comp. Zoöl.).

Family FALCONIDAE Caracaras and Falcons

HERPETOTHERES CACHINNANS EXCUBITOR VAN ROSSEM

Northern Laughing Falcon

Herpetotheres cachinnans execubitor van Rossem, Trans. San Diego Soc. Nat. Hist., 9, Nov. 21, 1938, 10 (Volcán de Colima, Jalisco, México); ibid., in text, (extreme southern Sonora).

Herpetotheres cachinnans (not Falco cachinnans Linnaeus) Lawrence, 1874, 300 (western and southern Sonora).—Salvin and Godman, 1901, 112, part (west and south Sonora).—Sheffler and van Rossem, 1944, 140 (Guirocoba; nesting).

Resident in the Tropical zone foothills in the vicinity of Guirocoba. Known occurrences are as follows: single individual seen by van Rossem near Guirocoba, June 2, 1937; three pairs nesting in the same locality May 9 and 11, 1941 (two adults, one immature, one downy young, and two eggs in Sheffler collection); immature in post-juvenile molt, November 16, 1944. These data tend to verify the old Lawrence (1874) statement, made on the authority of Grayson, that the Laughing Falcon occurs in "southern and western Sonora." The specific localities of Grayson's observations are unknown.

⁷ Wetmore (1944, pp. 35-38), has challenged the validity of excubitor on the ground that the paleness or buffiness in Mexican birds is a result of local relative humidity and because one specimen examined by him from eastern Guatemala exceeds in wing length the maximum of excubitor. Granted that he is correct on these two items (although neither is evident in the material examined by me), I do not see that they invalidate the race. He has shown no overlap whatever in tail length since there is actually a biatus between the largest chapmani (232 mm.)

POLYBORUS CHERIWAY AMMOPHILUS VAN ROSSEM

MEXICAN CARACARA

Polyborus cheriway ammophilus van Rossem, Ann. and Mag. Nat. Hist., ser. 4, Oct. 1939, 441 (Tesia, Sonora, México).

Polyborus cheriway auduboni (not Polyborus audubonii Cassin) van Rossem, 1931 c, 243 (Tesia; Guaymas; Tobari Bay; Tecoripa; San Javier; Pesqueira; Guirocoba; 25 miles S. E. of Guaymas); 1934 d, 430 (Oposura).—Bent, 1937, 132, part, in text (Sonora).—Abbott, 1941, 417 (Guaymas).

Polyborus cheriway (not Falco cheriway Jacquin) Belding, 1883, 344 (Guaymas).—Bendire, 1892, (Sonora).—Salvin and Godman, 1901, 125, part (Guaymas).

Common resident of Lower Sonoran and Tropical zones from the Arizona border southward, though apparently absent from the extreme northwestern desert and from the northeastern valleys north of Moctezuma. Like the Black Vulture, and for the same reasons, the Caracara is most likely to be found in the vicinity of habitations. Some localities in addition to those published are Caborca, February 2, and Puerto Libertad, February 4, 1932 (Phillips notes); El Alamo, December 3, and Rancho Costa Rica, December 9, 1932 (Lamb notes); Sonoyta, January 9, 1894 (U. S. Nat. Mus.); Santo Domingo, in January or February, 1894 (Mearns notes); Magdalena, March 27, 1936 (Benson notes); Rancho La Arizona; Hermosillo; Ciudad Obregón; Navojoa; Agiabampo, May, 1937; Kino Bay; Tepopa Bay, January, 1932 (van Rossem notes).

FALCO MEXICANUS SCHLEGEL

PRAIRIE FALCON

Falco mexicanus "Lichtenstein" Schlegel, Abh. Geb. Zool., heft 3, 1843, 15 (México)—Salvin and Godman, 1901, 115 (Hermosillo).—Huey, 1935, 251 (Punta Peñascosa); 1942, 364 (Gray's Ranch).

Fairly common winter visitant to Lower Sonoran deserts south at least to Hermosillo. Records to date, all of which are western except one, are San Pedro River on the boundary, October 14, 1892; Santo Domingo, January 15, 1894 (U. S. Nat. Mus. catl.); Pozo de Luís, December 29, 1893 to January 8, 1894 (Mearns notes); Hermosillo, November 28 and December 22, 1887. Gray's Ranch on the boundary, March 21 and 23, 1939.

and the smallest excubitor (235 mm.) examined by either of us and the average general size of excubitor (see also tarsus, middle toe, and bill measurements in the original description) is entirely too large to be ignored. Two recently taken Sonora specimens (Sheffler collection) measure: & wing, 295; tail, 248; & wing, 295; tail, 252.

FALCO PEREGRINUS ANATUM BONAPARTE

DUCK HAWK

Falco Anatum Bonaparte, Geog. and Comp. List, 1838, 4 (Great Egg Harbor, New Jersey).

Falco peregrinus anatum Bancroft, 1927 b, 194 (San Esteban Island)—van Rossem, 1931 c, 244 (Tecoripa; San Pedro Martir Island; San Esteban Island); 1932, 132 (Tiburon Island).

Fairly common resident of suitable Gulf islands and probably of the mainland coast. Mainland records, most or all of which are probably those of transients or winter visitants, are San Bernardino River on the boundary, August 19, 1892 (U. S. Nat. Mus.); 9 miles S. W. of Ciudad Obregón, November 24; Tóbari Bay, November 25, 1944 ("actually abundant—as many as 6 in sight at once"; Sheffler notes); Tecoripa, March 2, 1929 (Dickey coll.).

FALCO ALBIGULARIS PETROPHILUS VAN ROSSEM AND HACHISUKA

NORTHWESTERN BAT FALCON

Falco albigularis petrophilus van Rossem and Hachisuka, Proc. Biol. Soc. Wash., 50, Aug. 7, 1937, 107 (Guirocoba, Sonora, México).

Known in Sonora only from the vicinity of Guirocoba, where resident in limited numbers. To date, specimens have been collected as follows: breeding pair taken by van Rossem and Hannum on May 29 and June 1, 1937; breeding pair taken by Benson and Sibley, April 27, 1939 (Mus. Vert. Zool.); breeding female taken by Sheffler (with eggs), May 9, 1941; two specimens taken, three others seen by Sheffler, November 17 and 18, 1944.

FALCO COLUMBARIUS COLUMBARIUS LINNAEUS

EASTERN PIGEON HAWK

Falco columbarius Linnaeus, Syst. Nat., ed. 10, 1, 1758, 90 (in America = South Carolina).—Salvin and Godman, 1901, 120, part (Hermosillo).

One casual or accidental midwinter record, an adult male taken by (or for) Ferrari-Perez at Hermosillo on December 28, 1887.8

⁸ I have examined this specimen (in the British Museum) on several occasions and cannot escape the conclusion that it is in fact an example of the nominate race.

FALCO COLUMBARIUS BENDIREI SWANN

WESTERN PIGEON HAWK

Falco columbarius bendirei Swann, Bull. Brit. Orn. Club, 42, No. 265, Feb. 2, 1922, 66 (Fort Walla Walla, Washington).—Kenyon, 1942, 443 (south of Nogales).

Apparently a not uncommon winter visitant south at least to the Mayo River valley. Specimens have been examined as follows: San Pedro River, October 25, 1892; Colorado River at Monument 204, March 24, 1894 (Mearns and Holzner in U. S. Nat. Mus.); Camoa, October 16, 1934 (Wright in Chicago Nat. Hist. Mus.); 9 miles S.W. of Ciudad Obregón, November 24; seen at Tóbari Bay, November 25, 1944 ("fairly common at both places"; Sheffler coll. and notes). Six individuals seen by Kenyon in the Upper Sonoran Zone south of Nogales on February 2, 1942, must of course be allocated provisionally.

FALCO COLUMBARIUS RICHARDSONII RIDGWAY

RICHARDSON PIGEON HAWK

Falco (Hypotriorchis) richardsonii Ridgway, Proc. Acad. Nat. Sci. Phila., 1870 [Mch. 14, 1871], 145 (Interior of North America mouth of Vermilion River, South Dakota).

Falco columbarius richardsoni Dawson, 1923, 1634 (Sonora). Falco richardsoni Salvin and Godman, 1901, 120 (Hermosillo; crit.).

Winter visitant. The three known occurrences are a specimen (examined) in the British Museum, taken by, or for, Ferrari-Perez at Hermosillo, November 21, 1887, and two specimens in the U. S. National Museum taken by Mearns and Holzner on the Santa Cruz River on the boundary, October 10 and November 6, 1892.

FALCO SPARVERIUS SPARVERIUS LINNAEUS

AMERICAN SPARROW HAWK

Falco sparverius Linnaeus, Syst. Nat., ed. 10, 1, 1758, 90 (in America=South Carolina).

Falco sparverius sparverius van Rossem, 1931 c, 244 (30 miles S.W. of Magdalena; Obregon; Tesia); 1934 d, 430 (Guaymas; Alamos; 35 miles S. of San Pedro).

(?) Falco sparverius subsp. van Rossem, 1932, 132 (Tiburon Island).

Falco sparverius phalaena van Rossem, 1931 c, 244, part (El Doctor, part; Tecorpia); 1934 d, 430, part (Alamos).

Common migrant and winter visitant nearly everywhere, although most common at lower levels. This is possibly the breeding race of the northern and eastern interior, but data are not available for decision. Further specimens have been examined from San José Mountains, August 11,

1892; Santa Cruz River, October 23, 1892 (U. S. Nat. Mus.); Camoa, February 9, 1931 (Bishop coll.), October 11 and 15, 1934 (Chicago Nat. Hist. Mus.); Bonancita, December 17, 1905; Guaymas, March 4, 1905 (Mus. Comp. Zoöl.). Extreme dates are August 11 (San José Mountains) and April 24 (near Magdalena).

FALCO SPARVERIUS PENINSULARIS MEARNS

MEXICAN SPARROW HAWK

Falco sparverius peninsularis Mearns, Auk, 9, No. 3, July, 1892, 267 (San José, Baja California, México)—Bond, 1943, 176 (Guaymas; range in Sonora). Falco sparverius phalaena (not Tinnunculus phalaena Lesson) van Rossem, 1931 c, 244, part (El Doctor, part; Obregon; Guaymas; 12 miles W. of Magdalena; 15 miles S. of Nogales); 1934 d, 430, part (Cumpas).—Sheffler, 1931 a, 138 (Imuris).

- (?) Falco sparverius deserticolus (not of Mearns) Allen, 1893 a, 34 (Granados; Nacori).—Price, 1899, 91 (lower Colorado River).
- (?) Tinnunculus sparverius (not Falco sparverius Linnacus) Salvin and Godman, 1901, 121, part (Hermosillo; Granados; Nacori).

Fairly common resident of Lower Sonoran and Tropical zone deserts and river valleys throughout the State, although evidently decidedly less numerous southerly. Additional specimens have been examined from Agiabampo, April 19, 1933 (Lamb coll.); Presidio near Guaymas, March 28, 1905; Batamoti, November 27, 1905; San Marcial, November 20, 1905 (Mus. Comp. Zoöl.); Kino Bay, February 16, 1935; 4 miles south of International boundary, below San Miguel, Arizona, January 17, 1928 (Nat. Hist. Mus.) 9

ORDER GALLIFORMES GALLINACEOUS BIRDS

Family CRACIDAE Curassows and Guans

ORTALIS WAGLERI GRISEICEPS VAN ROSSEM

SONORA CHACHALACA

Ortalis wagleri griseiceps van Rossem, Bull. Mus. Comp. Zoöl., 77, No. 7, Dec., 1934, 431 (Alamos, Sonora, México); ibid.. in text (Hacienda de San Rafael).—Hellmayr and Conover, 1942, 167 (Guirocoba; Alamos; Chinobampo; crit.).—Peters, 1943, 54 (re. type).

Ortalida wagleri (not of Gray) Lawrence, 1874, 306 (Sonora).

Ortalis wagleri van Rossem, 1931 c, 244 (Guirocoba; Chinobampo); 1942 e, 77 (Sonora; subgen.)—Peters, 1934, 18, part (southern Sonora).

⁹ According to the careful studies of R. M. Bond, Sparrow Hawks from interior Sonora north of the Tropical zone come within the belt of intergradation between *peninsularis* and *sparverius*. Until known breeding material becomes available for final determination the former name is used arbitrarily for the small, presumably resident birds of that area.