points along the northern boundary, all of them apparently on the Arizona side. The status of this owl is probably that of a not uncommon winter visitant in the northern part of the State.

ASIO FLAMMEUS FLAMMEUS (PONTOPPIDAN)

SHORT-EARED OWL

Strix flammea Pontoppidan, Danske Atlas, 1, 1763, 617, pl. 25 (Sweden). Asio flammeus flammeus van Rossem, 1932, 135 (Tiburon Island). Asio accipitrinus Price, 1899, 92 (lower Colorado River).

A winter visitant in the northern part of the State. There are three records; single individual seen on the lower Colorado River, December 4, 1898 (at which date Price was on the Sonora side of the river); one seen on Tiburón Island, January 1, 1932; one taken on the Santa Cruz River, November 11, 1892 (U. S. Nat. Mus.).

ORDER CAPRIMULGIFORMES GOATSUCKERS AND ALLIES

Family CAPRIMULGIDAE Goatsuckers

CHORDEILES ACUTIPENNIS TEXENSIS LAWRENCE

TEXAS NIGHTHAWK

Chordeiles texensis Lawrence, Ann. Lyc. Nat. Hist. N. Y., 6, 1857, 167 (Texas [= Ringgold Barracks, near Río Grande]).

Chordeiles acutipennis texensis Ridgway, 1914, 581 (Sonora).—Oberholser, 1914, 103 (Colorado River opp. mouth of Hardy; San Marcial; San Bernardino Ranch; San Bernardino River; Mon. 204.).—van Rossem, 1931 c, 252, part (Saric; El Alamo; Tesia, part); 1934 d, 438 (Oposura; Granados; Alamos); 1942 d, 73 (Rancho La Arizona; El Alamo; Pilares; Hermosillo; crit).—Brodkorb, 1940, 543, part (El Alamo; Hermosillo; Pilares).

Common summer visitant to Lower Sonoran deserts south to about latitude 29°, penetrating locally into the Upper Sonoran. Occurs occasionally in winter in the Tropical zone southerly and possibly at more northerly points. Migratory and summer dates not so far published are from Cajón Bonito Creek and Guadalupe Cañon, July 2, 1892 (Mearns notes); Hermosillo, June 24 and 25, 1932; Pilares, July 3, 1935 (Univ. Mich.); Rancho La Arizona, May 9, 1937; San Luís, May 2 and 3, 1937 (van Rossem notes); Magdalena, May 13, 1925 (Dawson notes). Winter dates are San Marcial, November 10, 1905 (Mus. Comp. Zoöl.); Tesia, January 28, 1930 (Univ. Mich.). A definite migratory date is from Tesia, March 15, 1930, a locality where micromeris is the breeding form (Dickey

coll.). The March 2, Alamos specimen (van Rossem, 1934 d) has not been examined in the present connection.

CHORDEILES ACUTIPENNIS MICROMERIS OBERHOLSER

MEXICAN NIGHTHAWK

Chordeiles acutipennis micromeris Oberholser, Bull. U. S. Nat. Mus., 86, April 6, 1914, 100 (Xbac, Yucatán, México).—van Rossem, 1942 d, 73 (Guaymas; Obregon; Tecoripa; Tesia; Camoa; crit.).

Chordeiles acutipennis (not of Lawrence) Hartert, 1892, 616, part (Sierra de Alamos).—Salvin and Godman, 1894, 397, part (Sierra de Alamos).

Chordeiles acutipennis texensis van Rossem, 1931 c, 252, part (Tecoripa; Obregon: Tesia; Guaymas; Agiabampo).—Brodkorb, 1940, 543, part (Tesia; Cajeme; Guaymas).

Common resident in the Tropical zone, from about Guaymas and Tecoripa southward to the Sinaloa boundary. Specimens have been examined from the following localities: Guaymas, June 28, 1928; Tecoripa, March 8 to 29, 1929 (intergrades toward texensis); Ciudad Obegón, November 1, 1929; June 20, 1928; Tesia, March 15 and 16; February 3, 1930; Camoa, June 10, 1931; Agiabampo, June 8, 1930. There is a specimen in the Museum of Vertebrate Zoology taken at Buenos Aires, 13 miles N. W. of Navojoa, May 7, 1939. The three specimens recorded by Hartert from the Sierra de Álamos are most likely to be placed under micromeris since Lloyd was in that locality from May 23 to 25, 1888.

CHORDEILES MINOR HENRYI CASSIN

WESTERN NIGHTHAWK

Chordeiles Henryi Cassin, Illustr. Birds Calif., Texas [etc.], 1, pt. 8, [March 13], 1855, 239 (Fort Webster, New Mexico).

Chordeiles henryi Baird, 1859, 7 (Los Nogales).

Chordeiles popetue, var. henryi Brewer, 1874, 404, in text (Los Nogales).

Chordeiles virginianus henryi Ridgway, 1914, 272 (Nogales).—Oberholser, 1914, 65 (Nogales).

Chordeiles minor henryi Bailey, 1928, 342 (Sonora).—van Rossem, 1931 c, 252 (Saric); 1934 d, 438 ([Sierra de] Oposura).—A.O.U. Comm. 1931, 176 (Sonora).—Peters, 1940, 188 (northern Sonora).—Bent, 1940, 231, in text (Oposura; Los Nogales);

Chordeiles popetue (not Caprimulgus popetue Vieillot) Baird, 1858, 151, part (Los Nogales).

Probably a fairly common summer visitant in the Transition and Upper Sonoran zones of the higher ranges in the eastern part of the State; nesting, as in most other localities, probably confined to the Transition. Recorded as "very common" about Nogales in June, 1855; specimen taken

by Cahoon at Oposura (undoubtedly the Sierra de Oposura), June 10, 1887; observed as common in the Transition zone at Rancho Santa Bárbara, June 9 to 15, 1937, but no specimens taken (van Rossem notes).

PHALAENOPTILUS NUTTALLII NUTTALLII (AUDUBON)

NUTTALL POOR-WILL

Caprimulgus Nuttallii Audubon, Birds Amer., 7, 1844 (oct. ed.) 350, pl. 495 (Upper Missouri=between Fort Pierre and mouth of Cheyenne River, South Dakota).

Phalaeno ptilus nuttallii nuttallii Ridgway, 1914, 548, part (Sonora).—Cory, 1918, 126, part (Sonora).—van Rossem, 1931 c, 252, part (Saric); 1941 a, 247 (Rancho La Arizona; crit.).—Peters, 1940, 194 (Sonora).

Antrostomus nuttalli Baird, 1859, 6, in text (Santa Cruz).

Rather common summer visitant to the Upper Sonoran zone in the northern part of the State from the Pajaritos Mountains eastward. Occurs in winter on Tiburón Island (Mus. Vert. Zool., November 3 and 4, 1941) and probably at mainland localities in the western deserts. Mearns' notes record what is almost certainly this subspecies from Guadalupe Cañon in early July, 1892, and September 27, 1893. Specimens from the Pajaritos Mountains are not typical and incline toward adustus.

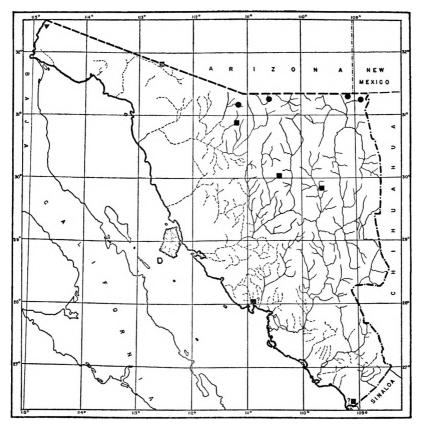
PHALAENOPTILUS NUTTALLII ADUSTUS VAN ROSSEM

SONORA POOR-WILL

Phalaenoptilus nuttallii adustus van Rossem, Condor, 43, No. 5, Sept. 18, 1941, 247 (Bate's Well, Pima County, Arizona, alt. 1,500 feet); *ibid.*, in text (El Alamo; Providencia Mines; Moctezuma).—Huey, 1942, 366 (International boundary at Gray's Ranch).

Phalaenoptilus nuttallii nuttallii (not Caprimulgus nuttallii Audubon) Ridgway, 1914, 548, part (Providencia Mines).—Cory, 1918, 128, part ("Sonora" [=Providencia Mines]).—Dickey, 1928, 153, in text (Sonora =[Oposura]).—van Rossem, 1931 c, 252, part (El Alamo); 1934 d, 438 (Oposura).—Bent, 1940, 193, part, in text (Alamos=error for El Alamo).

Summer visitant to Lower Sonoran deserts from about longitude 113° (Quitovaquita and Gray's Ranch) southeast (El Alamo and Providencia Mines) to the Moctezuma River valley (Oposura). Whether this race is resident or migratory is unknown; present dates extend only from late April to early July. Some race of the Poor-will, most probably the present one, occurs in summer in the Tropical zone (Guaymas, May 11, and Agiabampo, May 15 and 16, 1937 (van Rossem notes), but its status has not been determined.



MAP 6. Distribution of *Phalaenoptilus nuttallii*. Circles, *P. n. nuttallii*; inverted triangle, *P. n. hueyi*; squares, *P. n. adustus*.

PHALAENOPTILUS NUTTALLII HUEYI DICKEY

DESERT POOR-WILL

Phalaenoptilus nuttallii hueyi Dickey, Condor, 30, No. 2, Mch. 15, 1928, 152 (Bard, Imperial County, California).

Phalaenoptilus nuttalli nitidus ? Price, 1899, 92 (lower Colorado River).

Poor-wills were frequently heard in early May, 1937, at San Luís on the Sonora side of the Colorado River (van Rossem notes). Price records seeing an individual in the same locality on December 2, 1898. The occurrence of *hueyi* as the resident race in immediately adjacent localities in Arizona and Baja California presupposes almost to a certainty the

similar status of the Poor-wills of the lower Colorado River Valley in Sonora. No specimens, though, have been collected to date.

CAPRIMULGUS RIDGWAYI RIDGWAYI (NEI.SON)

RIDGWAY WHIP-POOR-WILL

Antrostomus ridgwayi Nelson, Auk, 14, Jan., 1897, 50 (Tlakisla, Guerrero, México).

Antrostomus ridgwayi ridgwayi van Rossem, 1931 c, 251 (Chinobampo; Guirocoba; crit.).

Caprimulgus ridgwayi ridgwayi Peters, 1940, 198 (Sonora).

Common, occasionally abundant, summer visitant to the Tropical, Upper Sonoran, and even the lower fringe of the Transition zones from Agiabampo and the lower Mayo River valley east to the Chihuahua and Sinaloa boundaries. The earliest arrival date is February 18 (possibly wintering individual), but there are no data relative to fall departure. Breeding begins with the advent of the rains about the last of June. Extremes of altitude range from sea level to at least 5,500 feet, with little or no association preference shown. Besides the two previously published occurrences, the Ridgway Whip-poor-will was heard at Agiabampo, May 13; near Alamos (commonly), May 19; San Francisco Cañon, May 31; Rancho Santa Bárbara, in early June; Guirocoba, (abundant), May 20 to June 16; Tesia (common), June 21 to 24, 1937 (van Rossem notes; Dickey coll.; Sheffler coll.).²⁴

CAPRIMULGUS VOCIFERUS ARIZONAE (BREWSTER)

STEPHENS WHIP-POOR-WILL

Antrostomus vociferus arizonae Brewster, Bull. Nuttall Orn. Club, 5, No. 2, April, 1881, 69 (Chiricahua Mountains, Arizona).—Bent, 1940, 182, in text (Alamos).

Caprimulgus vociferus arizonae van Rossem, 1934 d, 438 (Alamos; Mina Abundancia).

Antrostomus vociferus macromystax (not Caprimulgus macromystax Wagler) Ridgway, 1914, 520, part (Alamos; Mina Abundancia).

²⁴ I am quite unable to follow Griscom (1932, p. 192) in his suggestion that ridgwayi is possibly a race of salvini. It differs radically from salvini in the pattern of the tail spotting and the only close resemblance is in the conspicuous buffy collar. Actually, ridgwayi is a small, bleached out, distinct species most closely allied to vociferus. It agrees with vociferus in tail pattern and plumage markings in general, and the buffy collar, while wide and conspicuous in most cases, is occasionally broken up and not so very different from some vociferus. This is particularly true in the darkest individuals.

Summer visitant to the Transition zone in the more easterly part of the State. Occurs at lower elevations in migration (Mina Abundancia, April 25) and even in the Tropical zone in winter (Alamos, February 27). Midsummer records are from the Pajaritos Mountains (Arizona side of the boundary), June 17, 1931 (L. Miller coll.); the San Luís Mountains, July 5 to 13, 1892 (U. S. Nat. Mus.; Mearns notes), and El Tigre Mountains, July 27 and 28, 1935 (Univ. Mich.). The record of Evermann and Jenkins (1888, p. 67) of this species heard at Nogales in July is most unlikely and doubtless pertains to the Poor-will.²⁵

ORDER APODIFORMES SWIFTS AND HUMMINGBIRDS

Family APODIDAE Swifts

CHAETURA VAUXI VAUXI (TOWNSEND)

VAUX SWIFT

Cypcelus Vauxi J. K. Townsend, Nar. Journ. Rocky Mts., April, 1839, 348 (Columbia River=Fort Vancouver, Washington).

Chaetura vauxi van Rossem, 1931 c, 252 (10 miles N. of Guaymas).

Detected as a late spring migrant at two widely separated points. Noted as migrating "in flocks" at Magdalena on April 20, and May 14 and 15, 1925 (Dawson notes); specimen taken from a small flock 10 miles north of Guaymas, May 9, 1930 (Dickey coll.).

AËRONAUTES SAXATALIS SAXATALIS (WOODHOUSE)

WHITE-THROATED SWIFT

Acanthylis saxatalis Woodhouse, Rep. Sitreaves' Expl. Zuni and Colorado Rivers, 1853, 64 (Inscription Rock, New Mexico).

Aëronautes saxatalis saxatalis Rogers, 1939, 465 (Sonora; crit.).—Twomey, 1942, 403, in text (Sonora; crit.).

[Chaetura] saxatilis Giebel, 1872, 628 (Sonora).

Aëronautes melanoleucus Allen, 1893 a, 36 (Granados).—Ridgway, 1911, 687, part (Senoyita, "etc.").

Seemingly a resident throughout the eastern and central part of the State, except that there are no records from any locality within the Tropi-

²⁵ Whether *vociferus* and *ridgwayi* ever come into direct contact at the edges of their respective zonal habitats during the breeding season is problematical. *Vociferus* is present in southwestern Chihuahua very close to the Sonora boundary but only *ridgwayi* was found at Rancho Santa Bárbara in June, 1937. The call notes are utterly different and were the two species ever to occupy the same locality the fact could be ascertained by ear alone.