

THE RIDGWAY WHIP-POOR-WILL AND ITS ASSOCIATED AVIFAUNA
IN SOUTHWESTERN NEW MEXICO

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The Ridgway Whip-poor-will, or the Buff-collared Nightjar (*Caprimulgus ridgwayi*) is a little-known caprimulgid inhabiting arid western North America south to Guatemala and Honduras. The northern limits of distribution have until recently been thought to run approximately along the boundary of the "Alamos faunal district" of van Rossem (1931:238), which is to say from slightly to the northeast of Hermosillo, Sonora, to the Sierra Madre Occidental. Allan R. Phillips reports (*in litt.*) that he has taken the species 13 miles west of Ures and northeast of Huásabras, Sonora. Understanding concerning the northern limits of the range of the bird will now have to be revised, for the species actually occurs, apparently as a breeding population, at least as far north as extreme southwestern New Mexico.

On June 23, 1958, we collected a male *Caprimulgus ridgwayi* (K.U. 35627) in Guadalupe Canyon, elevation 4200 feet, Hidalgo County, New Mexico; this is the first record for the United States. The locality, on the property of L. G. Johnson, is two miles east of the Arizona-New Mexico state line and about three miles north of the international boundary. The bird seemed to be holding a breeding territory and probably was capable of effective breeding; the testes measured 9.5 x 5 mm., and the sperm ducts were enlarged. At least one other male was located in an adjacent area, and we believe that we also saw females. We were not successful in flushing the birds in the daytime, however, and our observations on the presumed females were made at dusk when visibility was poor.

Major characteristics of the habitat of the bird in New Mexico are similar to those of habitats of the birds farther to the south. Rocky hillsides of moderate slope (fig. 1) grown to fairly open stands of juniper (*Juniperus deppeana*) and various thorny shrubs (mainly mesquite, *Prosopis*) were used for daytime roosting and for much of the foraging period, although for the latter the birds also came down onto the Arroyo Guadalupe floodplain. The birds were absent from dryer areas lacking rocks and boulders that were grown to less complex vegetation (mainly creosote bush, *Larrea tridentata*). In such areas we found Poor-wills (*Phalaenoptilus nuttallii*) only; probably the exclusiveness of the two caprimulgids is due to differential habitat selection.

Our observations on where the Ridgway Whip-poor-will was found seem in line with other, brief descriptions of the habitat of the birds. Alvarez del Toro (1949:272) mentions capturing one on "great rocks at the foot of a cliff," Sutton (1951:261) mentions the bird occurring "invariably in dry gorge bottoms," and Davis (1957:364) writes that the bird was found "usually in rather open, semi-arid woods or in brushy islands in savannahs." We also found the bird in southern Sonora, 8 miles southeast of Alamos, in 1958, and here it occurred on the moderate slopes abutting the Río Cachujaqui; these hillsides are rocky and contain a mixture of short-tree forest dominants and thorny shrubs characteristic of arid Sonora. In both New Mexico and Sonora we found the birds roosting in fairly heavy cover.

Caprimulgus ridgwayi in New Mexico and Sonora behaved in similar fashion. Their periods of calling activity covered about 40 minutes each evening at and shortly subsequent to dusk and a similar period of time just before daylight. The birds at dusk seemed to call from their daytime roosting sites, although some moved a little as it became darker. They ceased to call when they began to forage and except for rare, isolated calls remained silent until dawn. Birds that, by their calling, were located in a



Fig. 1. North-facing slope in Guadalupe Canyon, Hidalgo County, New Mexico, frequented by Ridgway Whip-poor-will in June, 1958. The specimen was taken from bare branches of *Juniperus deppeana* two-thirds up the small draw to the right.

general way at dawn would call again the following evening from apparently the same places. The voice is distinctive and has no close resemblance to that of any other North American caprimulgid except that it has an undeniable caprimulgid timbre. Davis (1957:364) recorded songs consisting of 7 to 18 notes in ascending scale with a terminal slur. In New Mexico we heard 11 to 13 staccato notes, and in Sonora the birds ordinarily gave 9 notes. Allan R. Phillips (*in litt.*) states that people in western México refer to the bird as *presteme-tu-cuchillo*, and this name rather accurately gives the impression of the voice of this bird if the first five syllables are spoken in ascending scale and the penultimate syllable is accented.

What we saw of the flight indicated that it occurs close to the surface of the ground—perhaps rarely in excess of five feet, and usually lower. The birds perched most frequently four to six feet up in scrubby vegetation, and occasionally they rested on the ground. This may indicate that the foraging beat of this bird is a low one, lower than that of the nighthawks (*Chordeiles*), Chuck-wills-widow (*Caprimulgus carolinensis*), and Whip-poor-will, *C. vociferus* (see additionally van Rossem, 1927:27), but perhaps nearly the same as that of the Spot-tailed Whip-poor-will, *C. maculicaudus* (see conflicting statements of Davis, 1957:364, and Zimmerman, 1957:125), the Poor-will (*Phalaenoptilus* and the Parauque, *Nyctidromus albicollis* (van Rossem, *loc. cit.*).

Because two Ridgway Whip-poor-wills were seen in New Mexico, and these were calling and were probably territorial, we believe the occurrence of the species in this marginal locality is not due to chance. It is of more than passing interest to note also some other factors that tend to support this belief.

Vegetation.—The vegetation of Guadalupe Canyon is a mixture of elements characteristic of xeric scrublands and riparian woodland. The dominant vegetation along the floodplain is Arizona sycamore (*Platanus wrightii*) and cottonwood (*Populus fremontii*),

and the major subdominant is hackberry (*Celtis reticulata*). The vegetation of the rocky hillsides has already been alluded to; in addition to the junipers and mesquites there is an exceedingly wide variety of thorn-scrub subdominants and it is within this complex of scrub vegetation that an affinity with floras of xeric Sonora can be seen. These coincidences are probably parallel with the coincidences in avian distribution mentioned below, and both doubtless reflect a tendency for the climatic environment of Guadalupe Canyon to approach that of areas farther to the south.

Avian associates.—Some birds typical of arid tropical scrub or short-tree forest edge are found in limited numbers in Guadalupe Canyon. Nowhere else in New Mexico are quite so many of these species found, and most of the nearby canyons in Arizona also lack some of the species under consideration. In addition to *Caprimulgus ridgwayi* the following species are abundant breeding birds of arid tropical scrub: Violet-crowned Hummingbird (*Amazilia violiceps*), Broad-billed Hummingbird (*Cynanthus latirostris*), Coppery-tailed Trogon (*Trogon elegans*), Rose-throated Becard (*Platypsaris aglaiae*), Olivaceous Flycatcher (*Myiarchus tuberculifer*), and Red-eyed Cowbird (*Tangavius aeneus*). All except the Violet-crowned Hummingbird are known to breed in Guadalupe Canyon, and it may also breed there (Levy, 1958:350). It may be added that the Thick-billed Kingbird (*Tyrannus crassirostris*) was found as a breeding bird in the canyon in 1958, by Seymour Levy (in press), and we likewise saw it there. The remaining avifauna (about 40 species) can be divided into two almost equal groups; one of species ranging widely in the west and also found in arid tropical brush and woodland; and one of species *not* found in arid tropical situations to the south.

The number of species shared in common between Guadalupe Canyon and Alamos, Sonora, is notable in comparison to the number of species shared between the canyon and other, nearby canyons draining low-lying mountains. The senior author made censuses of the breeding avifauna of Deer Creek, 8 miles east of San Luis Pass (foothills of the southern Animas Range), Hidalgo County, New Mexico, in May and June, 1957. This canyon is about 40 airline miles east of the head of Guadalupe Canyon, across two low ranges of hills. At San Luis Pass the continental divide is less than 6000 feet in elevation. The dominant vegetation along Deer Creek is qualitatively similar to that of Guadalupe Canyon: Arizona sycamore, cottonwood, hackberry, mesquite, and juniper; but, there is additionally a great deal of buckhorn cholla (*Opuntia spinosior*). Three visits were made to this locality and it is likely that nearly all of the breeding birds were recorded that year.

Of the breeding birds of Guadalupe Canyon only 38 per cent occur also on Deer Creek; yet, 55 per cent occur also at Alamos, Sonora. At this relatively simple level of comparison it should be apparent that the avifauna of Guadalupe Canyon is not closely allied with those of canyons to the east in New Mexico, in spite of similar arid climate and vegetation. Rather the avifauna bears, in certain respects (*not* that of relative density), a close resemblance to the avifaunas characteristic of xeric tropical areas to the south.

The point we would like to emphasize is that the occurrence in Guadalupe Canyon of such forms as *Caprimulgus ridgwayi* seems not to be accidental but is more likely a part of a meaningful pattern of distribution, reflecting reasonably similar occurrences of certain ecologic variables along the western slope of the Sierra Madre.

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