

## THE EARED POOR-WILL

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THE Eared Poor-will, *Otophanes mcleodii* Brewster, has remained one of the least-known birds of the North American continent since it was first described by Brewster (1888) from a specimen collected by McLeod in Chihuahua. A second specimen was collected near San Marcos, Jalisco, by Lloyd, in 1889 and was recorded by Salvin and Godman (1894: 391). Thereafter, nothing new concerning the species was published for half a century. A previously unreported specimen (a female) in the American Museum of Natural History was taken by J. H. Batty on 31 May 1905 at La Laja, Jalisco, supposedly at ca. 3,000 meters, although, as noted below, this is most probably an inaccurate estimate. Finally, two more specimens were secured in Guerrero, in 1938 and 1941, by the veteran collector W. W. Brown, Jr. The first series (four specimens) was taken a few years later by W. J. Sheffler and E. N. Harrison on the Sonora-Chihuahua border. All of these recent specimens were recorded by Miller (1948), who named the Guerrero birds as a race distinct from the Sonora-Chihuahua series on the basis of color differences between one male and one female of each. This closed the history of our knowledge of the species until 17 February 1959.

At about 2200, on that night, as we drove toward Autlán de Navarro, southwestern Jalisco, from the coast at La Barra de Navidad, we saw two small night-jars alight briefly in the drainage ditch by the roadside ahead of us. Realizing the possible significance of the birds, we began to hunt the nearby precipitous slopes of the mountain. Eventually, by means of a beam from a head lamp, the senior author located three birds in an oak; two of these were calling steadily. One of the calling birds was collected (S 5893)<sup>1</sup> and proved to be the elusive *Otophanes mcleodii*.

Further strenuous efforts yielded no other specimens that night. We therefore pitched camp at the nearest possible site, at La Cumbre, a pass in the foothills of the Sierra de Autlán, 15.7 kilometers (9.4 miles) south-southwest of Autlán de Navarro. (All distances given are by automobile speedometer.) At this spot six kilometers (3.6 miles) north-northeast from the original point of observation, these poor-wills were also calling. The night was clear, with the moon about one third full. The following evening, again clear and moonlit, our assistants collected two specimens (WFVZ 5435) near this camp, while the junior author obtained another at the original site.

<sup>1</sup>S = Sheffler Collection; WFVZ = Western Foundation for Vertebrate Zoology.

Subsequently, we found *Otophanes* to have a fairly wide distribution in southwestern Jalisco and adjacent Colima; the senior author, in April and May 1959, secured a series from La Cumbre and from other points. The first known young and eggs were also discovered. Thus, our combined field notes enable us to present a brief account of this virtually unknown species.

#### ECOLOGY

The Eared Poor-will seems to be, essentially, a species of dry, semi-open oak or pine-oak slopes and barrancas at middle altitudes. We have never found it on the low, arid plains of Colima or coastal Jalisco, in the Arid Thorn Scrub and Arid Thorn Forest. However, a rectrix was found and a bird heard calling on 26 May 1959 where these plains are dissected by the cliff-bound Río Naranjo, 36.7 kilometers (22 miles) east of Colima City. The river is narrowly bordered at this point by tall Gallery Forest, but it is probable that the features of this locality attractive to *Otophanes* are the steep, rocky slopes and the cold air drainage down the canyon from the east slope of the Volcán de Colima. Likewise, we have never found the species in the dense Humid Pine-Oak Forest nor in Fir Forest of the higher altitudes. (Capitalized vegetation zone names used herein follow the terminology adopted by the senior author in a forthcoming paper on the avifauna of Colima and adjacent Jalisco.) During a period of eight weeks spent in various field camps in the upper Sierra de Autlán and on the upper slopes of the Volcán de Colima, no *Otophanes* were observed. Conversely, with the sole exception of the Río Naranjo area, we found it at no point below the lowest oaks.

Salvin and Godman (*op. cit.*) state that their specimen was collected by Lloyd “. . . on 11th May, 1889, at an altitude of 8,000 feet above the sea level in the mountains of Jalisco.” This altitude on the Volcán de Colima would be well into the Humid Pine-Oak Forest; Batty's supposed altitude would, of course, be still higher. While on a trip to Great Britain this summer, however, the senior author had the opportunity to examine Lloyd's specimen in the British Museum. Lloyd's original field label on the specimen states clearly that the elevation was 5,000 feet (1,600 meters); this is almost exactly the same altitude where the senior author observed and collected *Otophanes*, in May 1959, near San Marcos, Jalisco (WFVZ 6091). The general altitudinal range of the species in the Colima-southwestern Jalisco region can thus be considered as between 660 and 2,000 meters above sea level. In addition to the areas previously mentioned, we observed and collected

*Otophanes* at Hacienda San Antonio, on the south (Colima) side of the Volcán de Colima, and in and near the Barranca Beltrán, a few kilometers west and northwest of San Marcos.

#### LIFE HISTORY

*Otophanes mcleodii* is a typical poor-will in habits, although possibly a bit more active through the night than other caprimulgids. During the active breeding season, we have heard it calling shortly after dusk, at and after midnight, and again just before dawn. On one dark, foggy night in early May, at La Cumbre, the birds called steadily until midnight, and a male, still calling vociferously, was collected at 0215. The period of maximum calling activity, in May, is from dark to about 2200 after which the calls become more sporadic. We have never heard one call nor seen one fly in daylight.

Both sexes call with a striking, clear whistle, which has a falling cadence. The long note is often preceded by a shorter, more abrupt note on the same key. The call sometimes has a slight quality of a double whistle, as though it had an overtone; the whole call may be represented by the letters: *kee-keeoor*. Besides this characteristic call, our assistants state that the female occasionally utters a short, trilled, "churring" note when disturbed. The birds respond readily to a whistled imitation of the call, but do not normally move from their calling position. However, on 8 April 1959 a male (WVZ 5639), which had been steadily answering the senior author's whistles, came a distance of nearly a kilometer across a deep barranca, by short flights, and finally alighted on a low oak sapling not five meters away from his calling position. This was, perhaps, at the height of the breeding season.

We do not know whether the birds call after the breeding season, since from 19 May to 23 June 1959 we were in other areas; in July, however, several hours were spent in listening for calling birds on the lower slopes of the Volcán de Colima. None was heard, nor were any calls noted during similar surveys in November and on 29 December at La Cumbre. There is no good evidence that *Otophanes* migrates, although a certain amount of local wandering is suspected; its year-long distribution remains poorly understood.

The first two males collected (S 5893, WVZ 5435), on 17 and 18 February, had slightly enlarged testes: the first had testis measurements of 5 x 2 and 4 x 2 mm.; the second, 3 x 2 and 3 x 2 mm. Both were calling vociferously when collected. The male collected on 8 April (WVZ 5435) had larger testes, 7 x 4 and 5 x 3 mm. A male

(S 6155) collected on 29 April had testes of exactly the same size and was also calling steadily. A female (S 6139) collected the same night held two large ova, 14 x 12 and 12 x 11 mm. She was in the company of three other birds, all calling continuously from the ground near a rock outcrop. Two of the accompanying birds were also collected and proved to be males (S 6140, S 6158) with enlarged testes. One of these males, when picked up from the ground after the shot, was found to have been incubating two eggs. Unfortunately, both eggs were destroyed by the dust shot. The nest was a round, bare, scraped-out depression on the ground, in short grass, at the base of the cliff. All of the specimens mentioned above were taken in the La Cumbre area.

Another male (WFVZ 6091) was shot on a nest on 6 May, in a thick covert of pine (*Pinus teocote*), 4.2 kilometers (2.5 miles) west of San Marcos, Jalisco. This bird also had greatly enlarged testes and had called sporadically. This time the two unspotted, ivory-white eggs were saved intact; they form the first clutch known of this species. The nest was a bare patch of dirt scraped out of the pine needles. On 9 May, in the La Cumbre area, a female (S 6228) was collected on the nest. Both eggs were slightly damaged by the dust shot, but were successfully patched up and form the second known clutch. This bird had the ovary enlarged and the oviduct well developed, but had no large, developing ova. On 16 May, in the San Marcos area, a male (WFVZ 6294) and a female (WFVZ 6295) were taken. The male had enlarged testes, but the female had the ovary only slightly enlarged. Both were calling from the limbs of pine trees. Our last specimens were taken on 18 May, at a point an estimated five kilometers (three miles) by trail northeast of Hacienda San Antonio, Colima, in a dry pine and grass area. These specimens represent the first record of occurrence of the species within the state of Colima. The male (S 6310) was calling from the ground at the edge of a steep barranca; it had enlarged testes. The female (WFVZ 6317), however, was silent. She was covering a single fledgling on a nest of bare earth; the ovary was only slightly enlarged. The chick was collected and preserved in alcohol for a possible later anatomical study and description.

From the foregoing data on reproductive status, we deduce that the breeding season in this region begins sometime in February. Egg laying probably begins about 20 April, and the nesting period then lasts at least until late May.

From our scanty observations on *Otophanes* in other than reproductive activities, we feel safe in saying that the species will be found to be typically caprimulgid in most of its habits. When feeding, the

Eared Poor-will does so from a clear spot near brush or tall grass, from which it flutters up about one meter above the ground to catch insects; this behavior is very similar to the feeding jumps of *Phalaenoptilus nuttallii*, although *Otophanes* may not fly quite as high as does the latter. When perched on tree limbs, it does so in the typical manner of the family, *i.e.*, lengthwise along the limb: we have no evidence that it feeds from a tree perch. If one brief observation is typical, the mouth gapes open widely when calling. Most of the calling was done by birds on the ground or on rocks, but, as noted previously, some birds definitely called from tree perches. The stomach contents of several birds were noted as "unidentified insect remains."

The following soft parts description is appended, since, to the best of our knowledge, no complete description of these parts has been heretofore published. This description was taken from an adult male (S 6155), shot about 2300, 29 April 1959 at La Cumbre, Jalisco. The bird was examined at 0700 the next day, in full daylight, and the following notes made:

Culmen dusky, tip almost black. Mandible light gray. Bare skin at chin pinkish-flesh. Mouth white, inside of mandible pinkish. Iris dark pinkish-brown. Front of tarsometatarsus violaceous-gray, pinker behind. Feet and claws dusky. Sole of foot buffy to grayish-buff. The "ears" are not obvious in the field.

Other night birds taken in the same areas with *Otophanes* were *Otus trichopsis*, *Glaucidium gnoma*, *G. minutissimum*, *Caprimulgus vociferus*, *C. ridgwayi*, and *Nyctidromus albicollis*.

#### VARIATION

As long ago as 1894, on the basis of the two then-known specimens, Salvin and Godman, with remarkable acuity, pointed out that the female is redder throughout than the male. The considerable series now available bears out this sexual dimorphism; it is seemingly most constant on the scapulars, on the rump, and, to some extent, on the rectrices. There also seems to be, however, a definite seasonal variation in color due, in all probability, to wear and to the stages of the molt. Our May specimens do not differ appreciably from the May series taken by Sheffler and Harrison on the Sonora-Chihuahua border. Our February birds, however, average considerably darker. None of our specimens, taken in February, April, and May, was molting. It would thus appear that *Otophanes*, like various other caprimulgids, has a single annual molt, in late summer.

The specimens mentioned above are, with one exception, deposited in the permanent collection of the Western Foundation of Vertebrate

Zoology, Los Angeles, California, and in the private collection of Mr. W. J. Sheffler, of Los Angeles.

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