

Rhogeessa gracilis. By J. Knox Jones, Jr.

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***Rhogeessa gracilis* Miller, 1897**
Big-eared Yellow Bat

Rhogeessa gracilis Miller, 1897:126. Type locality Piaxtla (elevation approximately 1100 m), Puebla, México.

CONTEXT AND CONTENT. Order Chiroptera, Family Vespertilionidae. The genus *Rhogeessa* includes two subgenera and six species according to LaVal (1973). *R. gracilis* is a member of the nominate subgenus and is monotypic.

DIAGNOSIS. A large species of *Rhogeessa* with long ears (about 18 mm), relatively long and three-banded hairs in the dorsal pelage, a relatively narrow skull (see figure 1), and a smooth (lacking cusps) lingual cingulum on the upper canine.

GENERAL CHARACTERS. A detailed description, particularly of external characters, has been given by Miller (1897). External and cranial measurements in millimeters of three adults from the Mexican state of Jalisco (after Watkins *et al.*, 1972) are, respectively: total length, 84, 89, 85; length of tail, 36, 43, 39; length of hind foot, 6, 8, 8; length of ear, 17.5, 18, 18; length of forearm, 33.3, 32.7, 33.5; greatest length of skull, 13.7, 13.7, 13.6; condylobasal length, 12.6, 12.5, 12.4; zygomatic breadth, 8.3, 8.4, 8.4; mastoid breadth, 7.1, 7.1, 7.2; breadth of braincase, 6.2, 6.1, 6.3; length of maxillary toothrow, 4.8, 4.8, 4.8; breadth across upper molars, 5.2, 5.3, 5.3.

The tricolored hairs of the dorsum are near Light Ochraceous-Buff on the distal fourth, paler buff immediately proxi-



FIGURE 2. Photograph of head and ears of preserved specimen (KU 92951) of *Rhogeessa gracilis*.

mally, and grayish brown on the basal half; ventrally, the hairs are bicolored, with pinkish buff tips and dark grayish brown bases (see LaVal, 1973). Dorsal hairs are 6 to 7 mm long. The dorsum of the uropatagium is sparsely furred to the level of the knees.

The cranium is moderate in size for the genus but relatively narrow. The slope of the forehead is steep and the braincase is moderately inflated. A sagittal crest is present but poorly developed, as are occipital crests. The third lower incisor is nearly as large as the second. The dental formula is $i\ 1/3, c\ 1/1, p\ 1/2, m\ 3/3$, total 30, and is shared with several other vespertilionid genera.

R. gracilis is most readily distinguished from other species in the genus by its long ears (see figure 2). The tricolored dorsal pelage is shared only with *R. alleni*, whereas the simple cingulum on the upper canine is shared only with *R. mira*.

DISTRIBUTION. The species is known only from western México—from northern Jalisco to central Oaxaca (see figure 3). Only nine specimens have been reported (LaVal, 1973), three from Jalisco, two from Puebla, and four from Oaxaca. The recorded altitudinal range is from 600 to 2000 m. No fossils are known.

FORM. The small baculum, distinctively triangular-shaped in dorso-ventral outline, has been figured by Brown *et al.* (1971) and LaVal (1973). Ranges in measurements for four bacula given by LaVal were: length, 0.72 to 0.80 mm; depth, 0.16 to 0.28;

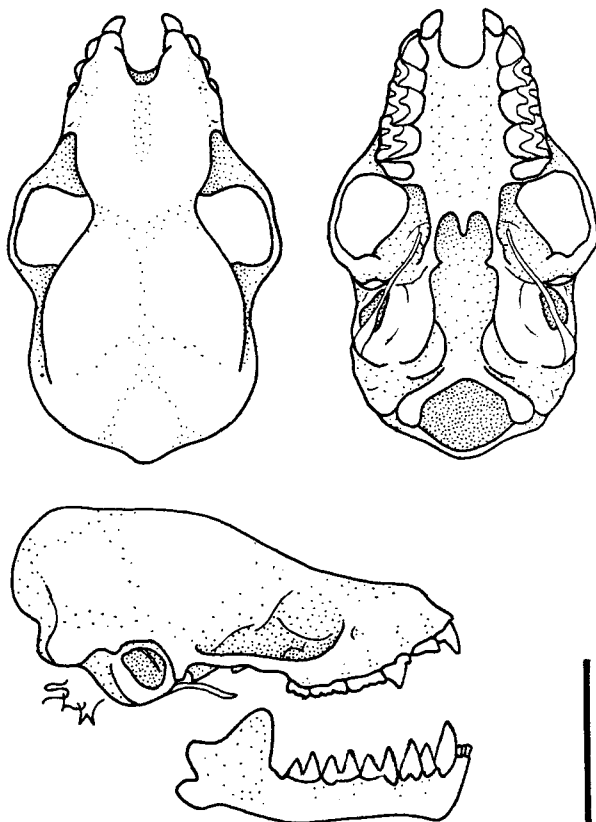


FIGURE 1. Dorsal and ventral views of skull, and lateral views of skull and lower jaw of *Rhogeessa gracilis* (male, KU 92951) from Jalisco. The black line represents 5 mm.

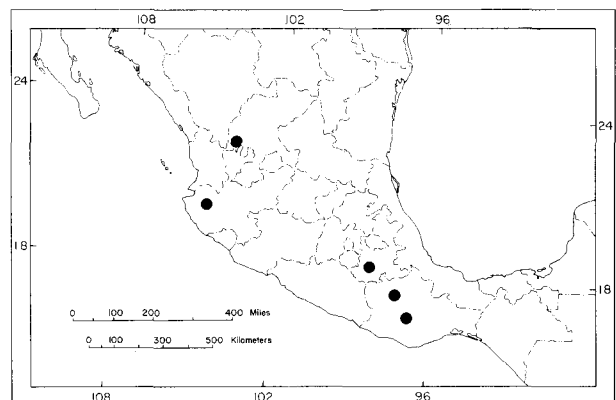


FIGURE 3. Known localities of occurrence of *Rhogeessa gracilis* (after LaVal, 1973).

width, 0.40 to 0.54. In lateral aspect, the baculum has a relatively straight shaft in comparison with other species of the genus.

According to LaVal (1973), scutellation of hairs is of the coronal type, the individual scales appearing as "cone-shaped rings which are bilaterally symmetrical, subtending a full 360°," and resembling a condition also found in *R. alleni*.

The teeth have been figured by Miller (1897).

ECOLOGY. Because *R. gracilis* is known from only nine specimens, little information on its natural history is available. Piaxtla, Puebla (the type locality), was described by Goldman (1951) as located in his "Arid Upper Tropical Zone." Goodwin (1969) noted that the range of the species in Oaxaca was "High elevations in the central part of the state," although he recorded one specimen from an unknown locality in the Isthmus of Tehuantepec. In Jalisco (Waktins *et al.*, 1972), a male and female were netted over a mountain stream in pine-oak forest, whereas a male was taken over an arroyo in oak forest.

A female captured in Jalisco on 15 May 1964 carried an embryo measuring 17 mm in crown-rump length. LaVal (1973) reported two July-taken subadults.

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