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Glironia venusta. By Larry G. Marshall

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GLIRONIA Thomas, 1912

Glironia Thomas, 1912a:239. Type species Glironia venusta Thomas, 1912a:240 by original designation.

CONTEXT AND CONTENT. Order Marsupialia, Superfamily Didelphoidea, Family Didelphidae, Subfamily Caluromyinae. The genus *Glironia* includes only one living species, *Glironia* venusta.

Glironia venusta Thomas, 1912

Bushy-tailed Opossum

Glironia venusta Thomas, 1912a:240. Type locality, Pozuzo, Huánuco, Perú, altitude, 800 meters.

Glironia aequatorialis Anthony, 1926:1. Type locality, Boca de Lagarto Cocha on the Río Aguarico above its confluence with the Río Napo, Napo-Pastaza, Ecuador.

Glironia criniger Anthony, 1926:2. Type locality, junction of Río Curaray and Río Napo, Department of Loreto, Ecuador.

CONTEXT AND CONTENT. Context noted above. Glironia venusta is monotypic.

DIAGNOSIS. A medium-sized opossum; general proportions and appearance similar to species of *Marmosa*. Ears are large, oval, naked, blackish in color, and proportionately smaller than in species of *Marmosa*. Texture of body fur varies from soft and velvety to dense and woolly. Hairs of back are 7 to 8 mm long. Body is generally a fawn or cinnamon-brown dorsally, and gray to buffy-white ventrally. Bases of ventral hairs are slaty and tips buffy-white. Hands and feet are a dull brownish-white to gray.

A broad, prominent, dark brown to black stripe extends through each eye and gives the appearance of a mask (figure 1). Stripes begin on sides of rhinarium, pass across eyes dorsal to ears, and terminate behind ears. A narrow, grayish-white band of hairs, which are slaty colored at their bases, extends along midline of head from rhinarium to nape of neck and separates the dark eye stripes.

Tail is cylindrical and thickly furred, and it gives a bushy appearance much as in *Dromiciops* (Tate, 1933:15), with bushyness decreasing toward tip. Hairs near the middle of the tail are 14 to 15 mm long. The tail is naked along distal two-thirds of ventral mid-line in some specimens, but is furred in others. The tail at its base is colored like the back, but gradually darkens toward the tip, which is variably colored—it may be distinctly white, or may be only sprinkled with whitish hairs.

Hallux is large and opposable as in species of Marmosa.

Female (FMNH 41440) has four abdominal mammae and lacks all traces of a pouch.

Rostrum of skull is proportionately longer, lower and narrower than in species of Marmosa. Nasals are long and are expanded posteriorly, reaching their greatest breadth at maxillary-frontal contact. Supraorbital processes are broad and form wing-like ledges over orbits. Ear region is generalized—the ossified part of each auditory bulla is formed by a small tympanic wing of alisphenoid anteriorly, a weakly expanded ectotympanic laterally, and a very small tympanic process of periotic posteriorly (figure 2).

Canines are weakly developed and are more upright than in species of Marmosa; P1 is small; P2 and P3 are large and subequal in size with small cuspules at anterior and posterior ends. Molars are weakly developed with M1 slightly smaller than M2 and M3, which are subequal in size, and M4 which is reduced. Protocones are low and broad, metacones are slightly larger than paracones on M1 through M3, but paracone is larger than metacone on M4. Stylar shelf and cusps are reduced in size compared with those of species of Marmosa, but are similar to those of species of Caluromys and Caluromysiops. Stylar cusps are subequal in size and are joined basally, forming a comblike ridge along labial edge of stylar shelf (figure 3).

Mandibular ramus is long and shallow dorsoventrally (figure 4). Lower incisors are more proclivous than in species of Marmosa; pl is reduced in size, p2 and p3 are large and subequal in size; all lower premolars have posterobasal cusps; m1 through m3 are generally subequal in size, m4 is slightly smaller. Trigonid cusps are high and distinct, with paraconid smaller than metaconid. Talonid is as broad as trigonid and is distinctly basined.

GENERAL CHARACTERS. Dental formula is as in other didelphids: i 5/4, c 1/1, p 3/3, m 4/4, total 50. External dimensions (in mm) are: length of head and body, 160 to 205; length of tail, 195 to 225; length of hind foot, about 27 to 31; and length of ear, 22 to 25. Skull dimensions are: condylobasal length, 43.5 to 43.7; zygomatic breadth, 25.8 to 26.4; length of nasals, 18.7 to 20.0; maximum breadth of nasals, 6.4 to 7.4; breadth of nasals medially, 3.4 to 3.7; interorbital breadth, 7.1 to 7.5; greatest breadth across supraorbital ridges, 9.3 to 11.0; maximum breadth of braincase, 17.0 to 18.0; length of palate, 23.5 to 26.5; breadth of palate between outer corners of M3, 11.5 to 12.2; length of M1-M3, 6.6 to 7.0; greatest length of mandible, 34.6 to 35.1. Data compiled from Anthony (1926:2, 3), Cabrera (1919, 1957), Cabrera and Yepes (1960), Goodwin (1953:223), Thomas (1912a:241), and Walker et al. (1968:18).

DISTRIBUTION. This animal occurs in the tropical zones of the upper Amazonian regions of Bolivia, Ecuador, and Perú

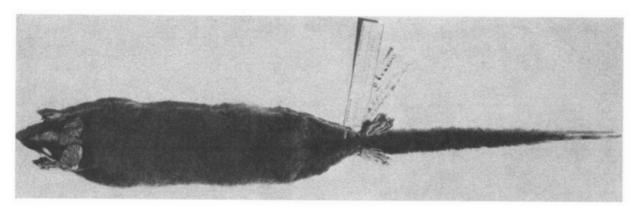


FIGURE 1. Photograph of Glironia venusta (FMNH 41440, female, from Río Bobonazo, Montalvo, Ecuador) shown in dorsal view. Total length of specimen is 410 mm.

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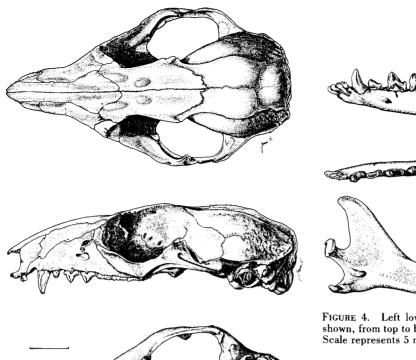


FIGURE 2. Skull of *Glironia venusta* (FMNH 41440) shown, from top to bottom in dorsal, lateral, and ventral views. Scale represents 5 mm.

(figure 5). The type BM(NH) 12.1.15.7, the skin and skull of an adult male, was collected in April 1908 by L. Egg from Pozuzo, Huánuco, Perú, at an elevation of 800 meters (Thomas, 1912a:240). Thomas (1912b:47) recorded a second specimen from the Yungas region of Bolivia, which is an immature male in spirit in the collection of the BM(NH). An adult female (AMNH 71395, skin and skull), was collected on 15 January 1926 by Ramon Olalla

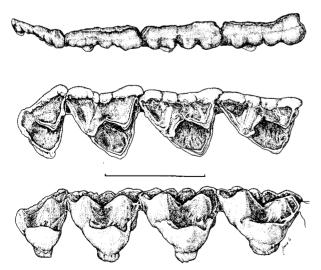


FIGURE 3. Detail of right upper molars of *Glironia venusta* (FMNH 41440) shown, from top to bottom in lateral, occlusal, and medial views. Scale represents 3 mm.

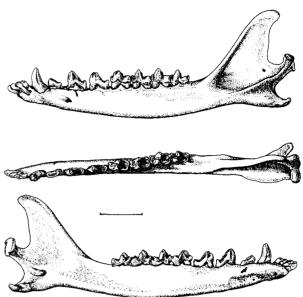


FIGURE 4. Left lower jaw of *Glironia venusta* (FMNH 41440) shown, from top to bottom in lateral, occlusal, and medial views. Scale represents 5 mm.

and sons from the Boca de Lagarto Cocha on the Río Aguarico above its confluence with the Río Napo, Napo-Pastaza, Ecuador (Anthony, 1926:1). A second specimen (AMNH 71394, skin and skull of an adult female) was collected on 5 December 1925 by R. Olalla and sons from Napo-Pastaza, junction of the Río Curaray and Río Napo, Perú (Anthony, 1926:2). A previously unrecorded specimen (FMNH 41440, skin and skull of an adult female) was collected on 10 February 1932 by R. Olalla from the Río Bobonazo, Montalvo, Ecuador. Glironia venusta is known only from the five specimens listed above. No fossils of this genus or species are recognized.

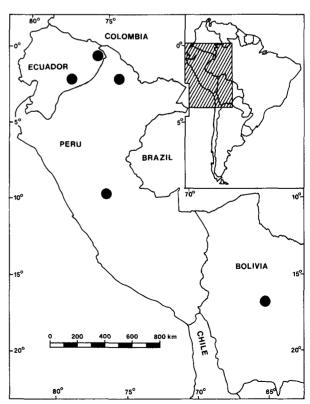


FIGURE 5. Map of Ecuador, Perú, and Bolivia showing records of occurrence (dots) of Glironia venusta.

ECOLOGY. The habits and natural history of these opossums have not been recorded. Four of the five known specimens were collected by commercial animal dealers and all were taken in heavy, humid, tropical forests (Walker et al., 1968:18). Glironia is presumed to be arboreal as suggested by the large opposable hallux.

REMARKS. Glironia was long placed in the didelphid subfamily Didelphinae (see Simpson, 1945:42). Based mostly on certain dental and reputed basicranial similarities, Reig (1955) placed Glironia, Caluromys, and Caluromysiops in the Microbiotheriinae along with the undoubted living microbiothere Dromiciops. The reputed basicranial similarities of Glironia, Caluromys, and Caluromysiops with Dromiciops were later controverted by Segall (1969). Kirsch (1977) argued that the dental similarities of Glironia, Caluromys, and Caluromysiops with Dromiciops and fostil microbiotheres are the result of convergence. Accordingly, he created a new subfamily, the Caluromyinae, for these three genera.

ETYMOLOGY. The generic name Glironia is formed from the Latin Glir, meaning dormouse, and the Greek suffix -ia, denoting quality or condition. Glironia literally refers to the general resemblance of this animal to a dormouse. The specific name venusta is Latin for elegant or charming.

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