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Peromyscus slevini.

By Sergio Ticul Álvarez-Castañeda and Patricia Cortés-Calva

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Peromyscus slevini Mailliard, 1924

Slevin's Mouse

Peromyscus slevini Mailliard, 1924:1221. Type locality "Santa Catalina Island (25°43′50″N Lat.), 17 miles NE of Punta San Marcial, Lower California" [Baja California Sur], México.

CONTEXT AND CONTENT. Order Rodentia, suborder Sciurognathi, family Muridae, subfamily Sigmodontinae, genus *Peromyscus* (Musser and Carleton 1993), subgenus *Peromyscus*. *P. slevini* is monotypic (Hall 1981).

DIAGNOSIS. *Peromyscus slevini* (Fig. 1) has a distinct accessory cusp or enamel loop on M2 and 3 pairs of mammae (Burt 1934). *P. slevini* probably derived from mainland species of the subgenus *Peromyscus* (Burt 1934). Mailliard (1924) reported that *Peromyscus californicus* was similar in size to *P. slevini*, but in reality, external measurements of *P. slevini* are greater. *P. slevini* is paler than *P. californicus*.

Skull is similar to that of *P. californicus*, but narrower. Nasals exceed margin of premaxillae (Hall 1981). Condylobasilar length is similar to *P. californicus*, but skull of *P. slevini* is heavier. Teeth are similar to *P. californicus*, but larger.

GENERAL CHARACTERS. *Peromyscus slevini* has a large body and medium-length tail. Upper parts are pale cinnamon with a mixture of dusky hairs dorsally; underparts are white with a mixture of cinnamon hairs pectorally. Feet are creamy white; forelegs are pale cinnamon. Tail is bicolor, above darker than dorsum of body, underside is almost white. Measurements (in mm) of 2 Slevin's mice (59641 female, 59642 male, Museum of Vertebrate Zoology), respectively, are: total length, 210, 214; length of tail vertebrae, 97, 109; length of hind foot, 25, 26; ear length, 19, 19.

Skull (Fig. 2) possesses interparietal rhomboidal. Incisive foramens are proportionally large. Mandible is strong (Mailliard 1924). Skull measurements (in mm) for the 2 Slevin's mice above were, respectively: greatest length of skull, 30.7, 29.6; breadth of braincase, 12.8, 12.3; zygomatic breadth, 15.2, 14.7; interorbital constriction, 4.6, 4.4; length of nasals, 12.1, 11.9; alveolar length of maxillary toothrow, 4.8, 4.9; alveolar length of mandibular toothrow, 4.8, 5.0.

DISTRIBUTION. *Peromyscus slevini* is known only from Catalina Island, Gulf of California (Fig. 3), México (Alvarez-Castañeda and Cortés-Calva 1999; Hall 1981). Fossils are unknown.

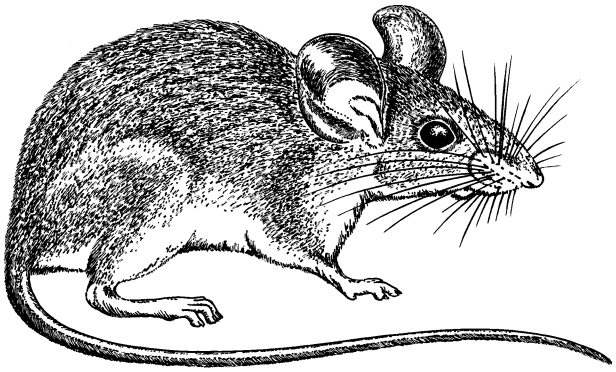

FIG. 1. *Peromyscus slevini* (Museum of Vertebrate Zoology, University of California, 59642) from Isla Santa Catalina, Baja California Sur, México. Drawing by Oscar Armendariz.

FORM AND FUNCTION. Baculum has a bulbous base, somewhat rounded, concave above, and convex below. Its base is appreciably thicker in dorsoventral diameter than shaft. Sixteen bacula ranged from 10.5 to 13.1 mm in length and from 1.3 to 1.6 mm in basal width (Burt 1960). Average size of testes of 7 males collected in November was 4.7 mm (range, 2.0–9.0 mm). Eight females captured during the same period were lactating and none was pregnant.

ECOLOGY. Catalina Island was once connected to the peninsula of Baja California and has remained above sea level since its formation (Murphy 1983). The island is located 23 km E of the peninsula and is 40 km² in surface (20 km greatest length and 3.5 km greatest width—Nieto-Garibay 1999). Ca. 96 species of plants have been recorded (Moran 1983); the main plants are copal (*Bursera hindsiana*), torote (*B. microphylla*), palo colorado (*Colubrina*

FIG. 2. Dorsal, ventral, and lateral views of cranium and lateral view of mandible of an adult male *Peromyscus slevini* (Museum of Vertebrate Zoology, University of California, 59642) from Catalina Island, Baja California Sur, México. Greatest length of cranium is 29.6 mm. Photograph by Sergio Rosas.

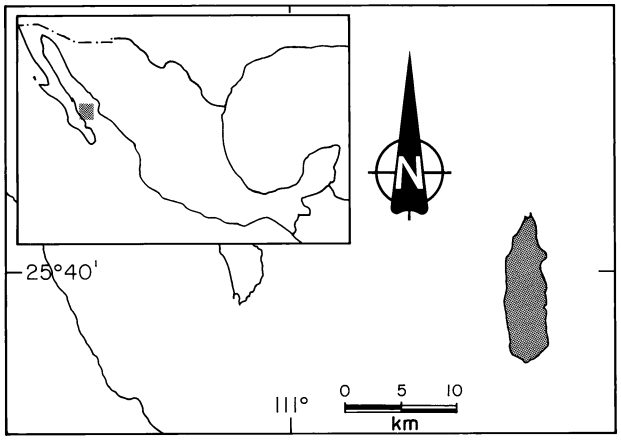

FIG. 3. Geographic distribution of *Peromyscus slevini* in Baja California Sur, México. *P. slevini* is endemic to Catalina Island (Álvarez-Castañeda and Cortés-Calva 1999).

viridis), incienso (*Encelia farinosa*), palo amarillo (*Esenbeckia flava*), golondrina (*Euphorbia polycarpa*), biznaga (*Ferocactus diguetii diguetii*), frutilla (*Lycium* species), mangle (*Maitenus philantoide*), cholla (*Opuntia cholla*), cardón (*Pachycereus pringlei*), jojoba (*Simmondsia chinensis*), and pitaya agría (*Stenocereus gummosus*). Rattlesnakes (*Crotalus catalinensis*) are very common on the island.

In his 1931 field notes, Burt indicated that *P. slevini* was abundant and was even out in the daytime. It was captured in the bottom of a draw, where the soil was sandy (W. H. Burt, in litt.).

In 1993 no specimens were collected, 15 were collected in 1995, and 4 were caught in 1998, using 480, 150, and 220 trap-nights, respectively. The specimens were identified as *P. slevini*, but reidentified as *P. eremicus* (M. Carleton, pers. comm.). *P. eremicus* was not previously recorded on the island. These specimens were used by Hafner et al. (2001) to revise the subgenus *Haplomylomys* of the Sea of Cortez, based on the *eremicus* group affinity of DNA data.

Probably *P. eremicus* was brought to the island by fishermen, and is known to be in competition with *P. slevini*. Therefore, the mammal species on the island is expected to change. Slevin's mouse is considered endangered by the Mexican government (Norma Oficial Mexicana 2002) but is not listed in the Convention on International Trade in Endangered Species (2001).

REMARKS. *Peromyscus slevini* may be derived from *P. maniculatus* ancestral stock. *P. slevini* is an exception to the prevalent pattern of relationship for mammals in the Gulf of California, where insular taxa generally originate from the nearest mainland source (Carleton 1989; Lawlor 1983).

Peromyscus is from the Greek: *pera* for small or small bag, *mys* for mouse, and *iskos,* a diminutive suffix, meaning a smaller mouse (Álvarez-Castañeda and Álvarez Solórzano 1997). The specific epithet *slevini* is dedicated to Joseph R. Slevin, who was Curator of Herpetology at the California Academy of Sciences in San Francisco.

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SERGIO TICUL ÁLVAREZ-CASTAÑEDA AND PATRICIA CORTÉS-CALVA, CENTRO DE INVESTIGACIONES BIOLÓGICAS DEL NOROESTE, A. C., APARTADO POSTAL 128, LA PAZ, BAJA CALIFORNIA SUR, C. P. 23000, MÉXICO.