

Peromyscus dickeyi. By Patricia Cortés-Calva and Sergio Ticul Alvarez-Castañeda

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***Peromyscus dickeyi* Burt, 1932**

Dickey's mouse

Peromyscus dickeyi Burt, 1932:176. Type locality "Tortuga Island (Latitude 27°21' N., Longitude 111°54' W.), Gulf of California, Lower California [Baja California Sur], México."

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

DIAGNOSIS. *Peromyscus dickeyi* is the only member of the subgenus *Haplomylomys* that has a tail decidedly shorter than length of head and body (Burt 1932).

GENERAL CHARACTERS. *Peromyscus dickeyi* (Fig. 1) has a large body and short tail. Color of upper parts (worn pelage) is dusky washed with "pinkish cinnamon"; ears and head are dusky; lateral line is present along body; soles of hind feet are naked; tail is bicolored; underparts are white with a faint pectoral spot in some specimens of "pinkish cinnamon"; young individuals and adults in new pelage have underparts washed with "pinkish cinnamon" (Burt 1932:176). June specimens in new pelage are darker gray. Skull (Fig. 2) is broad and square; zygomatic arches are nearly parallel-sided; rostrum is strong; nasals are wide anteriorly; premaxillae project well beyond posterior limits of nasals; incisors are strong; auditory bullae are small; lower jaw is strong, nearly as large as in *Peromyscus californicus insignis* Rhoads; ridges for muscle attachments are prominent (Burt 1932). Average measurements with parenthetical ranges for 15 (8 females and 7 males) specimens from the Centro de Investigaciones Biológicas del Noroeste collection are (in mm): total length, 196.5 (186–203); length of tail, 95.4 (90–100); length of hind foot, 23.2 (22–24); length of ear from notch, 20.2 (19–22); greatest length of skull, 26.41 (25.3–27.6); zygomatic breadth, 13.31 (12.5–13.7); interorbital constriction, 3.96 (3.7–4.3); length of nasal, 9.79 (9.0–10.2); breadth of the brain case, 11.10 (10.5–11.6); length of maxillary tooth row, 4.23 (4.0–4.4); length of mandibular tooth row, 4.34 (4.0–4.5); mass, 28.6 g (23–35 g).



FIG. 1. Specimen of *Peromyscus dickeyi* endemic to Isla Tortuga. Photograph by S. Ticul Alvarez-Castañeda.

DISTRIBUTION. *Peromyscus dickeyi* known only from Isla Tortuga, Gulf of California (Fig. 3), México (Awise et al. 1974; Burt 1932; Hall 1981). No fossils of *P. dickeyi* are known.

ONTOGENY AND REPRODUCTION. A pregnant and lactating female was collected in October, whereas in May specimens had no reproductive activity. Average size (in mm) and parenthetical range of the testes of the males in May ($n = 10$) was 5.1 (4–7) and in October ($n = 7$) was 7.5 (6–9).

ECOLOGY. Isla Tortuga is a volcano 37 km east of the peninsula, with an area of 6.3 km² (Gastril et al. 1983). Greatest elevation is 310 m (Batiza 1978). The main plants on Isla Tortuga are ciruelo (*Cytocarpa edulis*), inciense (*Encelia farinosa*), pega-pega (*Eucnide cordata*), garambullo (*Lophocereus schottii*), cholla (*Opuntia cholla*), cardón (*Pachycereus pringlei*), and pitaya agria

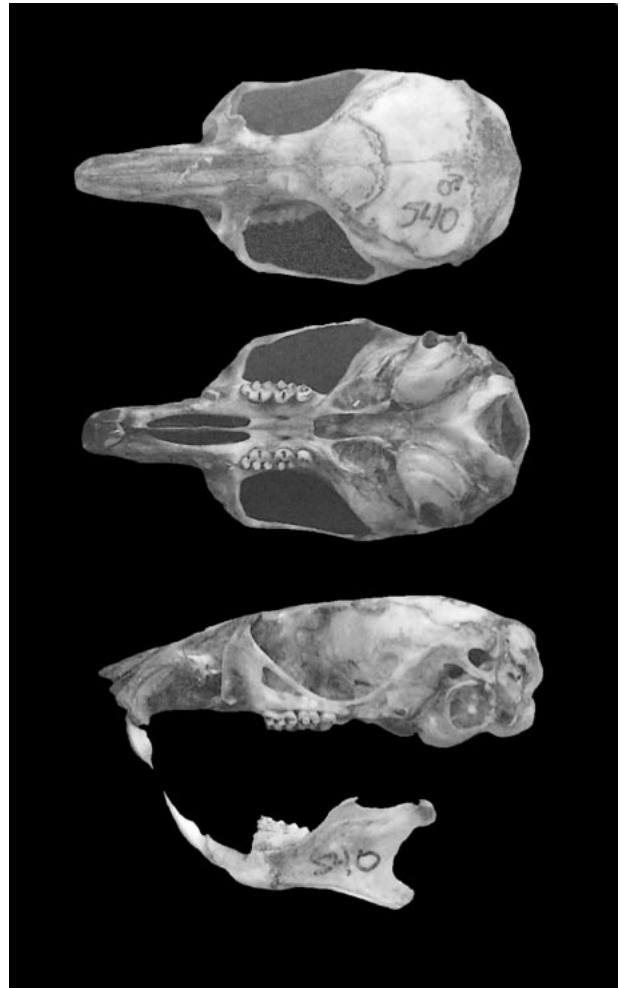


FIG. 2. Dorsal, ventral, and lateral views of cranium and lateral view of mandible of *Peromyscus dickeyi* (adult female from Isla Tortuga, Baja California Sur, Mexico, in the mammal collections of the Centro de Investigaciones Biológicas del Noroeste, number 540). Greatest length of cranium is 26.09 mm. Photograph by S. Ticul Alvarez-Castañeda.

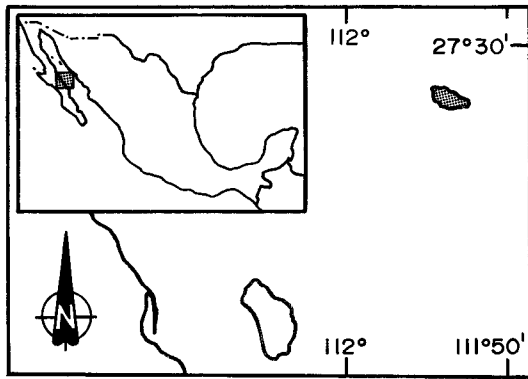


FIG. 3. Distribution of *Peromyscus dickeyi* in Baja California Sur, Mexico (modified from Hall 1981).

(*Stenocereus gummosus*—León de La Luz and Pérez Navarro 1997).

Burt in his field notes (January 1932; housed in the Donald R. Dickey Collection, University of California at Los Angeles Archives) said "four young mice were taken from a nest beneath a rock where also, at the time, was a rattlesnake (probably looking for a meal)." This species is rare with only 9% of captures in 490 trap-nights (Alvarez-Castañeda and Cortés-Calva 1999). The same rate of capture was obtained in May 1999. Specimens were collected from a slope near the crater.

No loci were polymorphic across 18 individuals (Avisé et al. 1974). Dickey's mouse is considered rare by the Mexican Government (Norma Oficial Mexicana 1994).

REMARKS. Dickey's mouse is included in the subgenus *Haplomylomys* (Carleton 1989; Hooper 1968). It is genetically similar to *P. eremicus*, especially the western subspecies of *P. eremicus*, and similar to *P. merriami* (Avisé et al. 1974). *P. dickeyi* presumably originated from an *eremicus*-like progenitor (Lawlor 1983).

Peromyscus is from the Greek meaning smaller mouse as follows: *pera* for small or small bag, *mys* for mouse, *iskos* a diminutive suffix (Alvarez-Castañeda and Alvarez Solórzano 1996). The specific epithet *dickeyi* is in honor Donald R. Dickey, who collected the first series on Isla Tortuga (Burt 1932) and sponsored the expedition.

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