

Reithrodontomys spectabilis. By J. Knox Jones, Jr.

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Reithrodontomys spectabilis
Jones and Lawlor, 1965

Cozumel Island Harvest Mouse

Reithrodontomys spectabilis Jones and Lawlor, 1965:413. Type locality 2.5 km N San Miguel, Isla Cozumel, Quintana Roo.

CONTEXT AND CONTENT. Order Rodentia, Family Cricetidae (considered by some authorities to be only a subfamily of Muridae), Subfamily Cricetinae. The genus *Reithrodontomys* currently includes 19 Recent species, arranged in two subgenera. *R. spectabilis* belongs to the subgenus *Aporodon* and therein to the *R. mexicanus* group of species.

DIAGNOSIS. Size large both externally and cranially; pelage short and relatively sparse; braincase relatively flattened and uninflated; zygomatic arches broad and strong; rostrum relatively short and broad; incisive foramina rarely reaching level of first molar; teeth large. See Fig. 1 and key in Spencer and Cameron (1982).

GENERAL CHARACTERS. The Cozumel Island harvest mouse is the largest member of the *R. mexicanus* group (as defined by Hooper, 1952) and among the largest species of the genus. The tail is long in relation to the head and body (134 to 148% in adults) and scantily haired. Overall color of upperparts brownish ochraceous, brighter on sides; underparts grayish white, the

individual hairs white terminally and grayish basally; pinkish buff pectoral spot present in some individuals; tail dark brown above, only slightly paler below; dark tarsal stripe not extending onto hindfoot. Additional cranial and dental characters include mesopterygoid fossa broad; auditory bullae large but only moderately inflated; first and second upper and lower molars typical of subgenus *Aporodon* in having well-developed mesoloph(oids) and mesostyles(oids); third lower molar essentially a replica of the first two.

Average and extreme external and cranial measurements (mm) of eight adults, four males and four females, are (Jones and Lawlor, 1965): total length, 213.8 (205 to 221); length of tail, 125.7 (121 to 132); length of hindfoot, 21.3 (20 to 22); greatest length of skull, 25.2 (24.6 to 26.2); zygomatic breadth, 12.3 (11.8 to 12.7); interorbital breadth, 3.7 (3.5 to 3.9); breadth of braincase, 11.2 (11.0 to 11.5); depth of skull, 9.0 (8.5 to 9.4); length of rostrum, 9.0 (8.7 to 9.8); breadth of rostrum, 4.2 (3.9 to 4.5); length of incisive foramen, 4.5 (4.4 to 4.8); breadth of mesopterygoid fossa, 1.7 (1.5 to 1.8); length of palatal bridge, 4.0 (3.8 to 4.3); length of maxillary toothrow, 3.8 (3.7 to 3.9); length of lower molar row, 3.5 (3.4 to 3.7). Weight of the eight individuals averaged 20.2 (18.1 to 21.4) g.

DISTRIBUTION. Known only from Cozumel Island off the east coast of the Yucatan Peninsula. There is no fossil record.

FORM. The baculum was described by Jones and Lawlor (1965) as "long (9.5 and 10.9 mm in the two adult males), slender, curved dorsally at the distal end, broadly arrow-shaped basally (width at base 1.1 and 1.2 mm in the two adult bacula studied), possibly largest among members of genus."

ONTOGENY AND REPRODUCTION. Virtually nothing is known concerning reproduction and development in this species. A sample taken in August included both juveniles and subadults, and a female obtained on 9 August had been lactating recently. The testes of two adult males in the sample measured 13 and 14 mm in length.

ECOLOGY. The Cozumel Island harvest mouse was discovered in 1962 by members of a field party from the University of Kansas (Jones and Lawlor, 1965; Jones et al., 1974). No specimens taken subsequently have been reported. Some individuals were trapped along with *Oryzomys* in tangled, second-growth vines adjacent to scrub forest. Others were taken in the forest in traps set at the bases of trees and along a stone fence, and one was caught by hand at night as it climbed among the branches of a small tree. No ectoparasites were found on any of the 16 specimens in the original series.

LITERATURE CITED

Hall, E. R. 1981. The mammals of North America. Second ed. John Wiley and Sons, New York, 2:601-1181 + 90.
Hooper, E. T. 1952. A systematic review of the harvest mice (genus *Reithrodontomys*) of Latin America. Misc. Publ. Mus. Zool., Univ. Michigan, 77:1-255.
Jones, J. K., Jr., and T. E. Lawlor. 1965. Mammals from Isla Cozumel, Mexico, with description of a new species of harvest mouse. Univ. Kansas Publ., Mus. Nat. Hist., 16:409-419.
Jones, J. K., Jr., H. H. Genoways, and T. E. Lawlor. 1974. Annotated checklist of mammals of the Yucatan Peninsula, Mexico II. Rodentia. Occas. Papers Mus., Texas Tech Univ., 22:1-24.
Spencer, S. R., and G. N. Cameron. 1982. *Reithrodontomys fulvescens*. Mamm. Species, 174:1-7.

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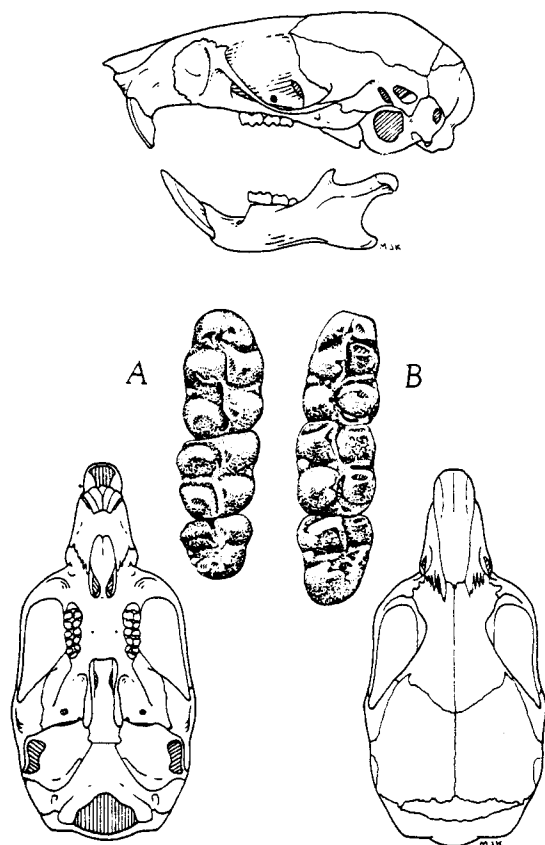


FIGURE 1. Dorsal, ventral, and lateral views of skull and lateral view of lower jaw ($\times 2$), and occlusal views of right upper (A) and left lower (B) molars ($\times 10$) of *Reithrodontomys spectabilis* (\varnothing , KU 92293) from Isla Cozumel, Quintana Roo (after Hall, 1981).