



CURRENT STATUS OF THE RICE RAT, *ORYZOMYS COUESI PENINSULARIS*

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Only one rice rat, *Oryzomys couesi peninsularis*, occurs in Baja California. This endemic taxon was described as a full species by Thomas in 1897, from six specimens found near Santa Anita, in the southern part of the peninsula (Fig. 1). No ecological data were given with the description. This species was relegated to subspecies status within *O. couesi* by Hall (1981); however, this decision was subjective and did not result from a thorough review of geographic variation in *O. couesi*.

In 1906, Goldman (1951) collected specimens of *O. c. peninsularis* from Santa Anita and San Jose del Cabo. Vegetation near the ranch of Santa Anita was characterized by Giant Cactus (*Ferocactus* sp.) and other desert plants. There was a strong tropical mixture of vigorous and abundant plant growth all along the bottom of the valley, including tall fan palms (*Washingtonia robusta*). The fertile valley was said to be 1 or 2 miles wide and irrigated from the river, with large fields of sugarcane and other crops. Goldman (1951) also stated that the river was permanent and this valley was the most prosperous agricultural part of the peninsula.

Nelson (1922) suggested that *O. c. peninsularis* might have been introduced in bananas or other farm products from the western coast of mainland Mexico where *O. couesi* is common. To analyze this hypothesis, I attempted to collect rice rats from both Santa Anita and the lagoon of San Jose del Cabo.

In 1991, 1992, and 1993, I made several trips to these two areas and others that might be suitable for this species. I logged more than 950 trap nights using Sherman livetraps and Museum Special snap traps baited with rolled oats, but I caught no rice rats. In Santa Anita, the traps were set in fields of sugarcane, chile, tamarind, oranges, palms, corn, areas with secondary vegetation, and in the arid tropical scrub. However, I collected only specimens of *Chaetodipus spinatus*, *Peromyscus eva*, and *Neotoma lepida*. At San Jose del Cabo, traps were located in areas with palms and cattail, both on the sides of the lagoon; however, only *Neotoma lepida* was collected.

From aerial photographs and ground inspection of potential habitats, I estimated that suitable areas for this species in the cape region of Baja California is, at most, about 13 km<sup>2</sup>. Goldman (1951) stated, and I confirmed through interviews with older inhabitants, that near the first part of this century, Santa Anita valley contained a permanent river. This river no longer exists and the water that is used for agriculture is now pumped from a depth of more than 40 m. In San Jose del Cabo, the lagoon was polluted after development of the area as a tourist center. The lagoon was also reduced through agricultural use. These factors, along with the relative vulnerability of *O. c. peninsularis*, might have resulted in its extinction. Further attempts to locate populations of *O. c. peninsularis* are ongoing, as well as a re-evaluation of its taxonomic status.

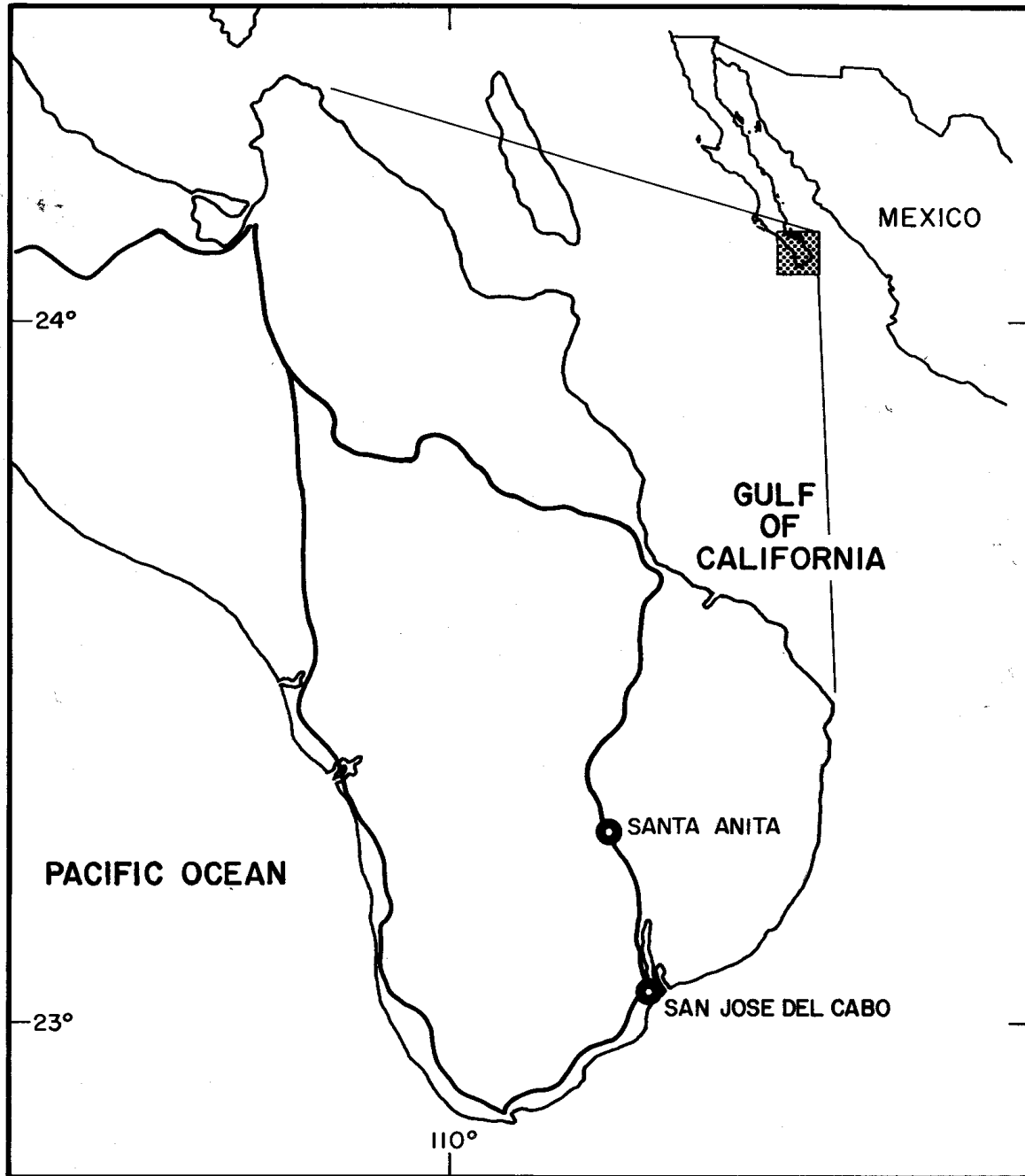


FIG. 1—Map of the distribution of *Oryzomys couesi peninsularis*.

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