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PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW MOUSE OF THE GENUS *NELSONIA*
FROM SOUTHERN JALISCO, MEXICO

HUGH H. GENOWAYS AND J. KNOX JONES, JR.

In October 1966 and again in February 1967, Percy L. Clifton of the Museum of Natural History, The University of Kansas, collected terrestrial vertebrates on El Nevado de Colima in the southern part of the Mexican state of Jalisco. Among the mammals obtained were seven specimens of the unique woodrat, *Nelsonia neotomodon*, which appear to represent a new subspecies that is named and described below.

***Nelsonia neotomodon cliftoni* new subspecies**

Holotype: Adult female, skin and skull, no. 109,437 Museum of Natural History, The University of Kansas; from 2.5 mi. ENE Jazmín, 6,800 ft, Jalisco; obtained on 20 October 1966 by Percy L. Clifton, original no. 11,706.

Geographic distribution: Known only from the type locality and from a place 4 mi. ENE Jazmín on the northwest slope of El Nevado de Colima; probably also occurs on nearby Volcán de Fuego in Jalisco and adjacent Colima.

Measurements: External and cranial measurements (in millimeters) of the holotype, followed by those of another adult female, two young adult females, and two young adult males, are, respectively: total length 251, 256, 234, 231, 238, 235; length of tail 126, 123, 110, 111, 111, 115; length of hind foot 29, 29, 27, 27, 28.5, 27.5; length of ear 24, 24.5, 23, 23, 23, 23.5; greatest length of skull 32.8, 33.9, 32.0, 31.5, 31.8, 33.0; zygomatic breadth 18.3, 18.6, 17.1, 17.1, 17.1, 17.9; mastoid breadth 13.5, 14.4, 13.4, 13.6, 13.3, 13.4; interorbital constriction 4.7, 4.7, 4.8, 4.8, 4.6, 4.9; rostral length 13.3, 13.8, 12.9, 12.6, 12.7, 13.2; rostral breadth 5.5, 5.9, 4.8, 5.1, 5.0, 5.1; length of maxillary toothrow 6.5, 6.9, 6.3, 6.3, 6.6, 6.6; depth of skull 10.7, 11.2, 10.5, 10.6, 10.1, 11.0; breadth of zygomatic plate 3.5, 3.5, 3.2, 3.4, 3.3, 3.3.

Comparisons: From *Nelsonia neotomodon neotomodon* (specimens examined from Zacatecas and northern Jalisco), *N. n. cliftoni* differs in many of the same ways—but not always to the same degree—as does *N. n. goldmani* (see Hooper, 1954: 7-8, and Merriam, 1903: 80). The most conspicuous ways in which *cliftoni* differs from *neotomodon* are in

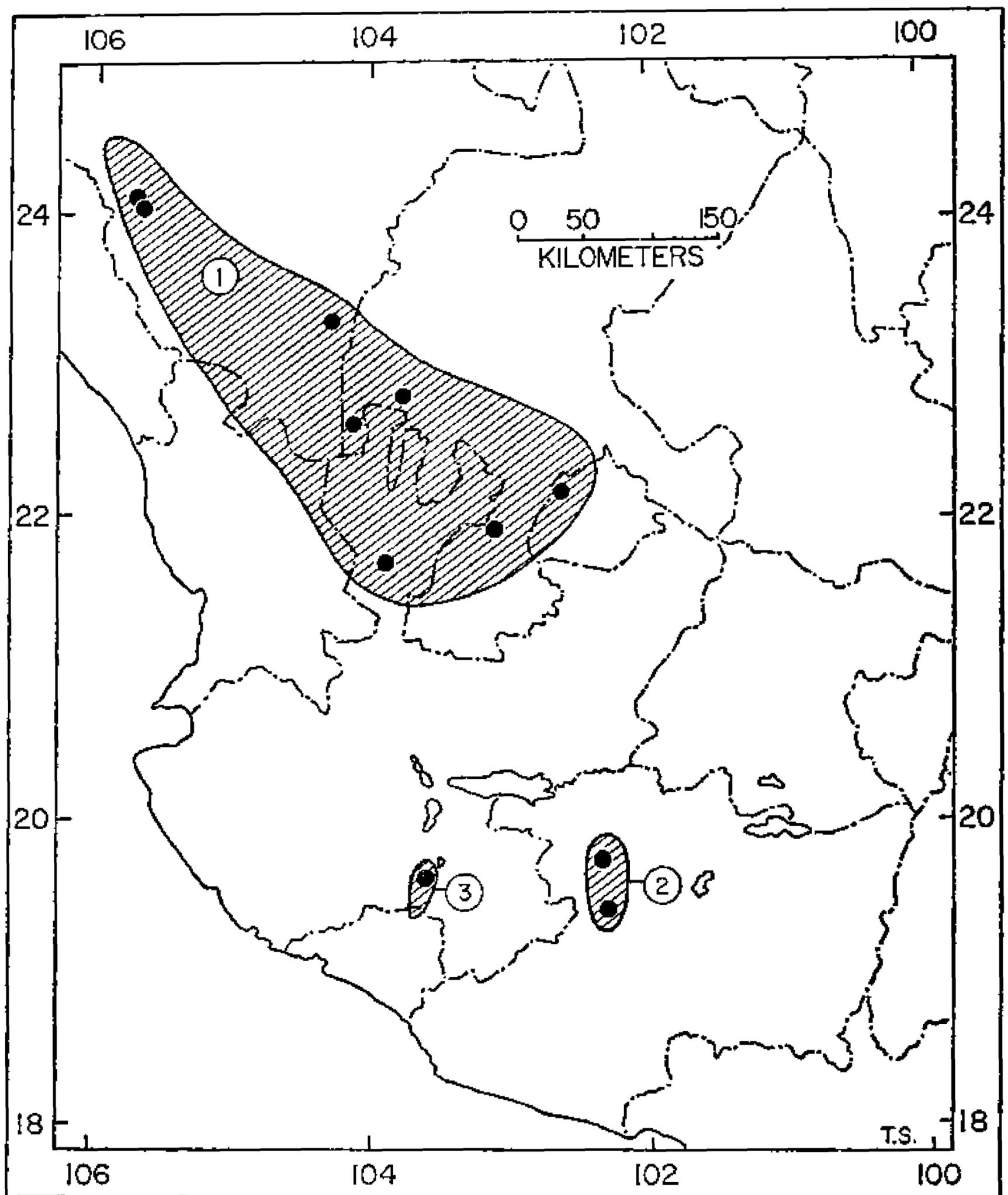


FIG. 1. Geographic distribution of *Nelsonia neotomodon*: (1) *N. n. neotomodon*; (2) *N. n. goldmani*; (3) *N. n. cliftoni*. Localities of occurrence plotted for the subspecies *neotomodon* and *goldmani* are from Hooper (1954: 6) and Baker and Greer (1962: 129).

being darker dorsally, in lacking a white tip on the tail, and in having dusky (rather than whitish) hind feet, broad zygomatic plates with correspondingly deep zygomatic notches, and larger auditory bullae. Also, *cliftoni* averages larger than *neotomodon* both externally and cranially.

From *Nelsonia neotomodon goldmani* of Cerro de Tancítaro and Cerro Patambán, Michoacán, *N. n. cliftoni* differs principally in having a flatter, less inflated braincase (and consequently a shallower skull reminiscent of the subspecies *neotomodon*), auditory bullae that are more

laterally directed posteriorly, and noticeably paler dorsal and lateral coloration (October-taken *cliftoni* compared with the February-taken holotype and paratypes of *goldmani*). The head and back of *cliftoni* is nearly intermediate in coloration between that found in the darker *neotomodon* and the paler *goldmani*. Considering the sides and cheeks, *cliftoni* can be distinguished from *goldmani* in having a paler, more ochraceous color to the pelage that is not so buffy as in *neotomodon*. In conventional measurements of the cranium, judging by the limited material available for comparison, *cliftoni* averages larger than *goldmani*, especially in greatest length of skull, zygomatic breadth, and rostral length (12.2–12.6 in three *goldmani*, 12.6–13.8 in six *cliftoni*) and has a shorter maxillary tooththrow relative to the length of skull.

Remarks: We suspect that *Nelsonia neotomodon cliftoni* is restricted geographically to the slopes of El Nevado de Colima and Volcán de Fuego (Volcán de Colima on some maps) in southern Jalisco and adjacent Colima. The range of *cliftoni* is isolated from that of *neotomodon* by the interior basins of central Jalisco (see Fig. 1). From *goldmani*, which occurs to the east in the high mountains of Michoacán, *cliftoni* may be isolated by the basins of the Río Tepalcatepec and Río Tuxpan and their tributaries and also in part by the broad valley containing the playas of Zapotlán and Sayula. It is conceivable that intermittent gene flow between *goldmani* and *cliftoni* has been maintained across the Sierra del Tigre and associated pine-capped highlands south of Lago de Chapala but this seems doubtful. Several field parties have collected in this area in recent years and have not taken *Nelsonia*, although it is noteworthy that the highest places in the Sierra del Tigre approximate the lowest elevation (6,800 ft) at which *cliftoni* has been taken along the road from Ciudad Guzmán to Jazmín.

Our six specimens of *cliftoni* from the type locality were obtained on 19–21 October 1966 in cool, pine-oak forest. The area had been recently logged and contained scattered cornfields. *Nelsonia* was taken in traps baited with rolled oats that were set in various places along a brushy, overhanging bank adjacent to a road. One was caught under a rock; others were trapped in trails along the bank and under a woodpile. Other species of rodents taken at the same place included *Liomys irroratus jaliscensis* (J. A. Allen), *Peromyscus boylii levipes* Merriam, *Peromyscus hylocetes hylocetes* Merriam, *Peromyscus maniculatus labecula* Elliot, and *Neotoma mexicana tenuicauda* Merriam. A juvenile male taken 4 mi. ENE Jazmín on 8 February 1967 was trapped in dense weeds at the edge of a cornfield along with *Reithrodontomys sumichrasti nert-erus* Merriam, *Peromyscus hylocetes hylocetes*, and *Peromyscus maniculatus labecula*. None of the four October-taken females (two adults, two young adults) was reproductively active.

We take pleasure in naming the new subspecies for Percy L. Clifton, field representative of the Museum of Natural History from 1961 to 1967, whose collections of vertebrates from Jalisco and elsewhere in Mexico have contributed materially to the research efforts of many scientists.

Specimens examined: JALISCO: 2½ mi. ENE Jazmín, 6,800 ft, 6 (KU 109434-38, 109440); 4 mi. ENE Jazmín, 7,700 ft, 1 (KU 111953).

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