

A new genus of eomyid rodent from the Miocene of Nevada

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The description of a new genus (*Apeomyoides*) of eomyid rodent from the Miocene of Nevada increases the diversity of known taxa, enhances the geographic range, and extends the biochronology for the Apeomyinae (Eomyidae). Three groups of Eomyidae are known from the fossil record of North America. Of the three groups, Neogene taxa include four genera representing the Eomyinae and two genera representing the Apeomyinae; no genera of the subfamily Yoderimyinae are known from the Neogene of the continent. This diversity represents a significant reduction of eomyid taxa compared to the Paleogene, from which 17 genera of eomyines and three genera of yoderimyines are known. In Eurasia, 11 genera of eomyids occurred during the Neogene, with a few taxa that persisted until about 2 million years before present. At present, there are no known eomyids from the last 4.5 million years of the Neogene in North America. *Apeomyoides savagei* is referable to the subfamily Apeomyinae based on several key structures of the teeth and mandible. This new eomyid is part of the Eastgate local fauna, collected from volcanic ash deposits of the Monarch Mill Formation, Churchill County, Nevada. *Apeomyoides* has an occlusal pattern that shares characteristics of apeomyines from both North America (*Megapeomys* and *Arikareomys*) and Eurasia (*Apeomys* and *Megapeomys*). The unique occlusal pattern and large size of *Apeomyoides* demonstrates that not all eomyids from North America were small or that their lineages decreased in size through time. *Apeomyoides* also may provide evidence, which challenges the hypothesis that eomyids within a single lineage from North America became more lophodont in geologically younger genera.

Key words: Rodentia, Eomyidae, *Apeomys*, *Apeomyoides*, *Megapeomys*, Miocene, Barstovian, Nevada.

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