

Accepted Manuscript

The impacts of Cenozoic climate and habitat changes on small mammal diversity of North America

Joshua X. Samuels, Samantha S.B. Hopkins

PII: S0921-8181(16)30152-7
DOI: doi: [10.1016/j.gloplacha.2016.12.014](https://doi.org/10.1016/j.gloplacha.2016.12.014)
Reference: GLOBAL 2540
To appear in: *Global and Planetary Change*
Received date: 30 April 2016
Revised date: 16 December 2016
Accepted date: 21 December 2016



Please cite this article as: Joshua X. Samuels, Samantha S.B. Hopkins , The impacts of Cenozoic climate and habitat changes on small mammal diversity of North America. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Global(2016), doi: [10.1016/j.gloplacha.2016.12.014](https://doi.org/10.1016/j.gloplacha.2016.12.014)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

The impacts of Cenozoic climate and habitat changes on small mammal diversity of North America

SAMUELS, Joshua X.

Department of Geosciences, East Tennessee State University, Johnson City, TN, 37614,
samuelsjx@etsu.edu

HOPKINS, Samantha S.B.

Clark Honors College and Department of Geological Sciences, University of Oregon, Eugene,
OR 97403, shopkins@uoregon.edu

Abstract

Through the Cenozoic, paleoclimate records show general trends of global cooling and increased aridity, and environments in North America shifted from predominantly forests to more open habitats. Paleobotanical records indicate grasses were present on the continent in the Eocene; however, paleosol and phytolith studies indicate that open habitats did not arise until the late Eocene or even later in the Oligocene. Studies of large mammalian herbivores have documented changes in ecomorphology and community structure through time, revealing that shifts in mammalian morphology occurred millions of years after the environmental changes thought to have triggered them. Smaller mammals, like rodents and lagomorphs, should more closely track climate and habitat changes due to their shorter generation times and smaller ranges, but these animals have received much less study. To examine changes in smaller mammals through time,

Download English Version:

<https://daneshyari.com/en/article/5755294>

Download Persian Version:

<https://daneshyari.com/article/5755294>

[Daneshyari.com](https://daneshyari.com)