Cosmopolitan and endemism dynamics of terrestrial mammals across the Cenozoic

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Abstract

How life history traits, such as diet, are related to the distribution of taxa across the landscape.

Introduction

Previous work on mammalian site similarity has focused on organismal dietary distributions of terrestrial mammals in the Neogene Old World [1, 2]. Here, I expand that analysis the entire Cenozoic of North America and analyze both diety and locomotor categories of terrestrial mammals.

Methods

Mammalian taxonomic occurence information was obtained from the Paleobiology Database (`http://www.paleodb.org`). Taxonomic occurence information was restricted to only mammals occuring in North America during the Cenozoic. Ambiguously identified taxa were excluded from all analyses (e.g. aff., cf., ?). Temporal, geologic, dietary and life habit informaiton was also compiled for all taxa.

Because terrestrial assemblages across the Cenozoic do not preserve as complete a record of community structure, taxonomic abundance distributions were not analyzed.

Following Sidor et al. [3] and Vilhena et al. [4]

Relative abundance

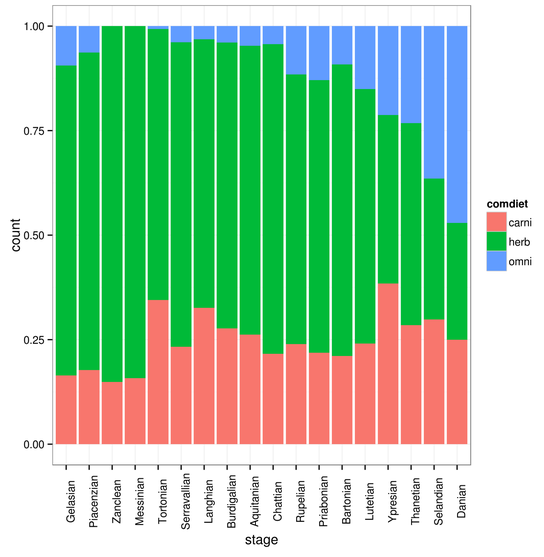

Figure: Relative abundance of mammalian dietary categories.

Results

Fancy

Biogeographic networks

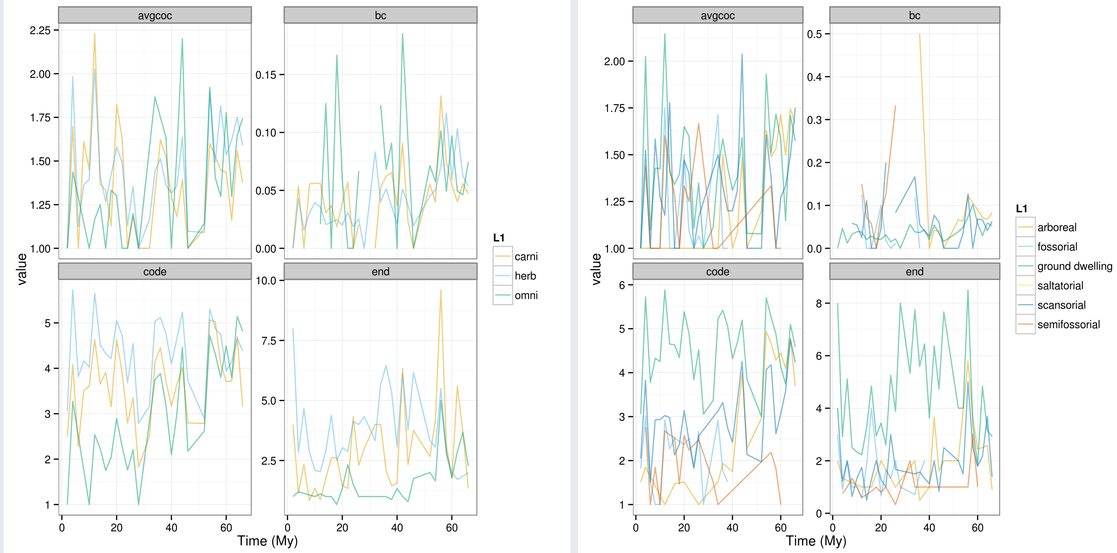

Figure: Biogeographic network summary statistics from the 2 My bins.

Discussion

Conclusions

Acknowledgements

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Bibliography

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