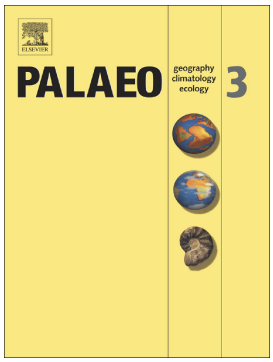

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Diet reconstruction for an extinct deer (Cervidae: Cetartiodactyla) from the Quaternary of South America

Alline Rotti[a]*, Dimila Mothé[a], Leonardo dos Santos Avilla[a], Gina M. Semprebon[b]

[a]Laboratório de Mastozoologia, Departamento de Zoologia, Universidade Federal do Estado do Rio de Janeiro, Avenida Pasteur, n 458, sala 501, Urca, Rio de Janeiro, RJ, 22290-240, Brazil. allinerotti@gmail.com; dimothe@hotmail.com; leonardo.avilla@gmail.com

[b]Bay Path University, Department of Biology, Longmeadow Street 588, Longmeadow, MA, 01106, United States of America. gsempreb@baypath.edu

*Corresponding author

Abstract

Among the extinct cervids of the Pleistocene in South America, *Morenelaphus* has the most abundant fossil record and the broadest geographic distribution. However, the paleoecology of *Morenelaphus* is poorly known, especially its dietary patterns; thus, this study aims to recognize the feeding habits of this extinct cervid through analysis of microwear. The microwear analysis indicated a mixed-feeder diet for *Morenelaphus*; both high pit values and frequency of individuals with low number of fine scratches indicated the consumption of grasses, possibly including grit (siliciclastic sediment), ingested during feeding. Also, our results suggest that *Morenelaphus* possibly went extinct at the Pleistocene-Holocene transition as a result of climate/environmental changes and/or a physiological/nutritional crisis.

Keywords: *Morenelaphus*; Enamel Microwear; Pleistocene; Paleoecology; Paleodiet