

**DO MARSUPIALS MAKE GOOD PREDATORS?
INSIGHTS FROM PREDATOR-PREY DIVERSITY RATIOS**

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ABSTRACT

Questions: Was mammalian predator diversity in South America unusually low during the Cenozoic prior to the Great American Biotic Interchange (GABI)? If yes, what factors might account for this? Does a similarly low diversity of predators characterize modern and fossil Australian faunas?

Data Studied: Predator and prey diversity for 386 modern mammal faunas, 13 South American paleofaunas, and 15 Australian paleofaunas.

Analysis Method: Regression of predator diversity on prey diversity by continent for both modern and fossil faunas and compared slopes and intercepts of the regression lines. Comparison, using ANOVA, of relative predator diversity (= predator-prey ratios) .

Conclusions: Predator diversity is much lower than expected in pre-GABI South American faunas and in modern and fossil Australian faunas. In all of these, marsupials are the primary predators.