

Cambridge University Press

0521019338 - Body Size in Mammalian Paleobiology: Estimation and Biological Implications

Edited by John Damuth and Bruce J. MacFadden

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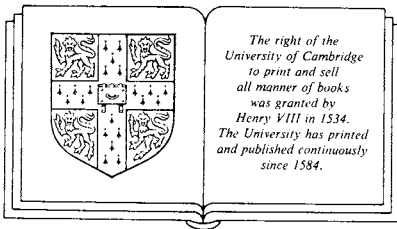
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Preface

Recent years have seen an increased interest among neontologists in the importance of body size as a major influence on an animal's adaptation to its environment and its place in the community. Along with this, there has been a surge of research by paleobiologists that uses estimates of body size for fossil species, particularly Cenozoic mammals.

This book is the result of a workshop held in Gainesville, Florida, at the University of Florida in April 1987. The purpose of the workshop was to bring together people with mutual interests in using body size as a tool in studies of mammalian evolution and paleobiology. We felt that much complementary research was being done by different investigators and that it was time to try to assess the relative reliability and comparability of body mass estimation techniques for fossil mammals, and to do so in the context of some of the applications of body mass estimates. We restricted our attention to the mammals for two reasons: Mammalian body size and related topics are currently highly active areas of research in both neontology and paleontology; and body mass estimation in other important fossil vertebrate groups, which have no (or only a few) extant members, necessarily requires different kinds of approaches both to estimation and to assessment of the outcome. In addition to review chapters, we sought primary research results, because we wanted this book to serve both as a practical introduction to the subject and as an indicator of where the field is heading.

John Damuth is grateful to the Smithsonian Institution for supporting him as a Visiting Scientist under the auspices of the Evolution of Terrestrial Ecosystems Program, Department of Paleobiology, 1986–8.

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of Florida for allowing us to host the Body Size Workshop there in April 1987.

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