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ABSTRACT BOOK

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Giorgio CARNEVALE, Etta PATACCA & Paolo SCANDONE











LAND MAMMAL COLONIZATION OF ISLANDS IS A MULTIFACTORIAL PRODUCT: A CRITIC TO THE UNWISE USE OF MODELS

Paul MAZZA¹, Sandro LOVARI², Federico MASINI³, Marco MASSETI⁴ & Marco RUSTIONI⁵

 1 Dipartimento di Scienze della Terra, Università degli Studi di Firenze, via La Pira, 4 - 50121 Firenze, Italy

²Dipartimento di Scienze Ambientali 'G. Sarfatti', Università degli Studi di Siena, Via T. Pendola, 62 - 53100 Siena, Italy

³Dipartimento di Geologia e Geodesia, Università degli Studi di Palermo, Via Archirafi, 22 - 90123 Palermo, Italy

 4 Dipartimento di Biologia Evoluzionistica 'Leo Pardi', Università degli Studi di Firenze, Via del Proconsolo, 12 - 50122 Firenze, Italy

⁵Museo di Paleontologia, Via Poggio Bracciolini, 36-40 - 52025 Montevarchi, Italy

The colonization of islands by terrestrial mammals has been the topic of a flurry of studies. Contributions normally tend to oversimplify the subject, focusing on specific key factors which are allegedly considered the best to explain why, how and when non volant terrestrial mammals reached islands and which are used to devise models. The subjectivity in the choice of key factors understandably leads to controversy and debate. Insular faunas are the multifactorial result of complex combinations of facts, conditions and processes. Hence, the faunal assemblages of each island should be inquired individually, on a case-by-case basis. Models, by definition, are simplified representations of reality, which turn into oversimplifications when reality is so overly complex as it is in islands; yet models are usually considered the unavoidable starting point of investigations. An evidence-based, multidisciplinary approach, instead, is highly recommended. Besides obvious paleontological evidence, we need to carefully inspect geological and stratigraphical information, climatological factors, sealevel evolution, paleogeographic characteristics, ecological, physiological and environmental factors, behavioral characters and ecological preferences, genetics and densities of colonizing populations, as well as taphonomic, sampling and analytical biases. The lack of some of this indispensable information seriously affects the reliability of interpretations and reconstructions.