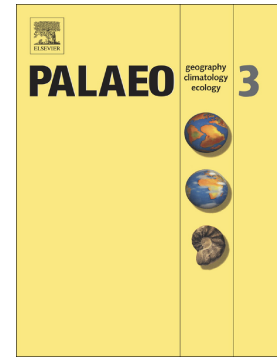


## Accepted Manuscript

Biogeography of extinction: The demise of insular mammals from the Late Pleistocene till today

Miranta Kouvari, Alexandra A.E. van der Geer



PII: S0031-0182(18)30232-3  
DOI: doi:[10.1016/j.palaeo.2018.06.008](https://doi.org/10.1016/j.palaeo.2018.06.008)  
Reference: PALAEO 8812

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 13 March 2018  
Revised date: 29 May 2018  
Accepted date: 3 June 2018

Please cite this article as: Miranta Kouvari, Alexandra A.E. van der Geer , Biogeography of extinction: The demise of insular mammals from the Late Pleistocene till today. *Palaeo* (2018), doi:[10.1016/j.palaeo.2018.06.008](https://doi.org/10.1016/j.palaeo.2018.06.008)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Biogeography of extinction: the demise of insular mammals from the Late Pleistocene till today

Miranta Kouvari<sup>1</sup> and Alexandra A.E. van der Geer<sup>1, 2\*</sup>

<sup>1</sup> Department of Geology and Geoenvironment, National and Kapodistrian University of Athens,  
Zografou, Greece

<sup>2</sup> Naturalis Biodiversity Center, PO Box 9517, 2300 RA Leiden, The Netherlands

\*Corresponding author at: Naturalis Biodiversity Center, Focus Group Endless Forms, Darwinweg 2,  
2334 CR Leiden, the Netherlands. Tel: +31 717519600.

*E-mail addresses:* [miranda.kou@gmail.com](mailto:miranda.kou@gmail.com) (M. Kouvari), [alexandra.vandergeer@naturalis.nl](mailto:alexandra.vandergeer@naturalis.nl) (A. van der Geer)

## Abstract

Extinction, speciation and immigration are the main factors shaping patterns of biodiversity on islands. In particular, the impact of the Late Pleistocene-Holocene extinction wave had a strong impact on the megafauna. Here we investigate the relationship between extinctions of insular endemic mammal species and their body mass, the size of the island and the first human arrival to the archipelago. Our data on islands worldwide show that megafauna was hit hard indeed. All islands lost their heaviest mammal species, whereas maximum surviving mammalian body size differs per archipelago, ranging from heavier than 100 kg (Philippines) to below 100 g (Canaries) and no surviving native mammals on the Galápagos. Although the number of extinctions is highest on larger islands, in line with predictions following from the species-area relationship, the percentage in relation to total number of endemic species is the lowest. Major part (almost 80 %) of extinctions of insular endemics took place after the first human arrival, with the highest percentages during the Late Pleistocene (34.5 %) and the Modern Era (31 %). This indicates an increased rate of extinctions

Download English Version:

<https://daneshyari.com/en/article/8868159>

Download Persian Version:

<https://daneshyari.com/article/8868159>

[Daneshyari.com](https://daneshyari.com)