LETTER TO THE EDITOR

Gigantopithecus blacki extinction and human threats to *Tapanuli orangutans*: lessons from past and present challenges

Heslley Machado Silva^{1*}

Abstract

Background This letter explores the historical challenges faced by *Gigantopithecus blacki*, a colossal ape, during the Pleistocene period in southern China, emphasizing its extinction approximately 300,000 years ago due to climate change. *Main body*: Drawing parallels, the research sheds light on the imminent threat to *Tapanuli orangutans* in Southeast Asia, underscoring the role of human intervention. The paradox emerges as Homo sapiens, despite claiming wisdom, becomes a significant threat through climate change and deforestation, exacerbated by the dissemination of scientific misinformation. *Conclusion*: The text urges humanity to reorient its development, emphasizing the need for responsible environmental stewardship to ensure a sustainable and balanced future for both Earth and its primate inhabitants.

Keywords *Gigantopithecus blacki*, Pleistocene extinction, *Tapanuli orangutans*, Human intervention, Environmental stewardship

Background

Gigantopithecus blacki, a colossal ape measuring 3 m and weighing up to 300 kg, defied the challenges of the Ice Age (Pleistocene period) for more than 2 million years in southern China, feeding exclusively on plants. However, approximately 300,000 years ago, it faced extinction due to climate change, as recorded in the journal Nature, which may offer us important lessons (Basin and Provinces 2023). Simultaneously, the orangutan survived the same events but now faces an imminent threat due to human intervention. The *Tapanuli orangutan*, being the most endangered species of large primates, is at an even greater risk than anticipated, according to a recent study (Meijaard et al. 2021).

*Correspondence:

Heslley Machado Silva

heslley@uniformg.edu.br

Springer Open

¹ Science and Education Department, State University of Minas Gerais and University Center of Formiga, Liz Flower Street, 117, Garden Flowers, Ibirité, Minas Gerais, Brazil

Main body

These events in Southeast Asia highlight that even robust and adaptable primates are not invulnerable in the face of climate change and habitat degradation. The paradox emerges when we observe that *Homo sapiens*, the self-styled wise man, is the main agent of these threats, contributing significantly to climate change and deforestation. The dissemination of scientific fake news by some incautious 'sapiens' denying the serious climate phenomena aggravates the understanding of the challenges faced, as is currently the case with the Brazilian Amazon Rainforest (Silva 2023). To avoid a fate like that of its Asian cousins, humanity urgently needs to reorient its development. Scientists have long been warning about the limits of natural resources and the potentially irreversible consequences of climate change.

Conclusion

It is imperative that we give credence to these warnings by fundamentally changing our relationship with natural resources and with nature itself. Only in this way will we

© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.





be able to avoid irreversibility that could culminate in our own extinction, guaranteeing a sustainable and balanced future for the Earth and avoiding the fate of our cousins.

Acknowledgements

Not applicable.

Author contributions

 $\ensuremath{\mathsf{HMS}}$ participated of all the letter's elaboration.

Funding

Not applicable.

Availability of data and materials Not applicable.

Declarations

Ethics approval and consent to participate Not applicable.

Consent for publication

Not applicable.

Competing interests The authors declare that they have no competing interests.

Received: 20 March 2024 Accepted: 3 April 2024 Published online: 09 April 2024

References

- Basin B, Provinces H (2023) The demise of the giant ape *Gigantopithecus blacki*. Nature. https://doi.org/10.1038/s41586-023-06900-0
- Meijaard E, Nimatullah S, Dennis R, Sherman J, Onrizal, Wich SA (2021) The historical range and drivers of decline of the *Tapanuli orangutan*. PLoS One 16:1–23
- Silva HM (2023) Brazilian amazon: environmental and economic tragedy. Rev Sertão Sustentável 5:90–99

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Heslley Machado Silva did his postdoctoral at the University of Minho, Portugal. He got his PhD in Education at the Federal University of Minas Gerais, Brazil. Currently, he is a professor in the State University of Minas Gerais (UEMG) and University Center of Formiga/MG (UNIFOR/MG).