

# Review of: "Biodiversity, Anthropogenic"

Anna Maňourová<sup>1</sup>

<sup>1</sup> Czech University of Life Sciences Prague

**Potential competing interests:** No potential competing interests to declare.

This very interesting topic highlights the need for more profound research and understanding of domestication phenomena, even in the “modern” age. I appreciate the complexity of the manuscript combining insight from animal and plant science as well as anthropology. The text is written in nice lively language and makes the paper easy to read, even for someone who is not an expert in the field. However, in my opinion, the text sometimes generalises too much, which may result in questionable and/or inaccurate conclusions.

One of my primary concerns is using the term “novel species” which are created during the domestication process. Domestication is undoubtedly leading to morphological, physiological, and genetic changes that are making the domesticated taxa clearly distinguishable from the wild ancestors. However, no new species can be created by this process (from a biological point of view). We can talk about varieties, hybrids, ecotypes, and subspecies but not about new species. This would be done through speciation which is even more complex than man-driven domestication.

I would be careful with being too narrow-minded about how indigenous people always were the guardians of biodiversity; some of them actually pushed species to extinction to survive/improve their livelihoods. Maasai people are not a good example of hunters and gatherers.

Another suggestion would be to define some of the terms used, e.g. biodiversity; because there are many perspectives, and a clear definition would help the reader to better understand the given context.

What is the mainstream biology curriculum? To me it sounds like a strong statement which would need to be supported by a clear definition and examples.

Double check the use of scientific names: e.g. *Canis lupus familiaris*; *Oryza sativa*; *Musa paradisiaca* – this usually refers more to a plantain (*Musa x paradisiaca*) than to common banana.

Are you sure about the *Oryza rufipogon* being domesticated 12,000 years ago? In general, rice domestication is referred to happen about 9,000 years ago. Please correct *Oryza saliva*.

Do you think naming the specific genes responsible for certain traits is necessary? Is it somehow supporting the main message of the paper? In that complex text, I found it rather distracting.

In my view, the last chapter should also summarise the major points to support and clarify the aim/idea of the text.

