

# Review of: "The Dual Role of Culture in Evolutionary Play: Anthropogenic Expansion Vss Destruction of Biodiversity"

Cristian Villagra<sup>1</sup>

<sup>1</sup> Universidad Metropolitana de Ciencias de la Educación

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The article addressed interesting points regarding domestication's effect on biodiversity. For instance, it has been suggested that local and native subsistence farmers play a key role as keepers of crop biodiversity, and also, their practices are less aggressive toward native diversity (Hufford et al., 2019). Also, evidence in favor and against a positive effect on genetic diversity due to human intervention has been found in forest ecosystems (Ledig, 1992). Nonetheless, it would be desirable to talk a little further about the problems that arise after the initial net increase in biodiversity led by domestication, as the origin of domesticated animals and crops also led to biotic homogenization. For instance, according to anthropologic pieces of evidence, introducing domesticated animals into the Balkans (8000 years ago) has been associated with forest clearance, habitat fragmentation, and pervasive effects on ecological interactions (Mc Clure, 2013). You can find lots of these examples; for instance, the pre-industrial expansion of Europeans into the Americas also led to a reduction of biodiversity coupled with the expansion of introduced domesticated crops.

I also recommend further comment a little on Agroecology and its links with native practices for agriculture and husbandry (Altieri et al., 2020; Henríquez-Piskulich et al., 2021). This is quite in connection with what the author is proposing. A little less self-citation would be desirable. There are many authors all over the world that can be referenced instead.

Below, I suggest some pertinent literature to review and cite in this work:

Altieri, Miguel A., and Clara I. Nicholls. "Agroecology: Challenges and Opportunities for Farming in the Anthropocene." *International Journal of Agriculture and Natural Resources* 47, no. 3 (2020): 204–15. <https://doi.org/10.7764/ijanr.v47i3.2281>.

Henríquez-Piskulich, Patricia A., Constanza Schapheer, Nicolas J. Vereecken, and Cristian Villagra. "Agroecological Strategies to Safeguard Insect Pollinators in Biodiversity Hotspots: Chile as a Case Study." *Sustainability* 13, no. 12 (June 14, 2021): 6728. <https://doi.org/10.3390/su13126728>.

Hufford, Matthew B., Jorge C. Berny Mier y Teran, and Paul Gepts. "Crop Biodiversity: An Unfinished Magnum Opus of Nature." *Annual Review of Plant Biology* 70, no. 1 (2019): 727–51. <https://doi.org/10.1146/annurev-arplant-042817-040240>.

Ledig, F. Thomas. "Human Impacts on Genetic Diversity in Forest Ecosystems." *Oikos* 63, no. 1 (1992): 87–108. <https://doi.org/10.2307/3545518>.

McClure, Sarah B. "Domesticated Animals and Biodiversity: Early Agriculture at the Gates of Europe and Long-Term Ecological Consequences." *Anthropocene*, When Humans Dominated the Earth: Archeological Perspectives on the Anthropocene, 4 (December 1, 2013): 57–68. <https://doi.org/10.1016/j.ancene.2013.11.001>.

Smýkal, Petr, Matthew N. Nelson, Jens D. Berger, and Eric J. B. Von Wettberg. "The Impact of Genetic Changes during Crop Domestication on Healthy Food Development." *Agronomy* 8, no. 3 (March 2018): 26. <https://doi.org/10.3390/agronomy8030026>.