

Review of: "Stakeholders' Perception of Socioecological Factors Influencing Forest Elephant Crop Depredation in Gabon, Central Africa"

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Potential competing interests: No potential competing interests to declare.

Unfortunately, most studies within the field of human-wildlife conflicts (HWCs) often only focus on addressing the symptoms and not the underlying root causes. Thus, I really appreciate that you emphasized that improvements in livestock or crop protection are not enough and that the basic requirements of affected farmers, as well as involved wildlife, have to be accounted for in order to defuse HWCs. Especially when reading through the discussion section, it became very clear that the needs of elephants are not accounted for, and thus they are driven to forage upon anthropogenic food sources, further escalating the conflict.

However, considering that Lope National Park covers an area of roughly 4,200 km², the sample size of 24 interviewees from only two villages surrounding the park seems too small. In order to make this survey among the residents of Kazamabika and Ramba representative of the park's surroundings, more settlements should have been included. In case it would not have been feasible to conduct these interviews in every village that neighbors the park, it would have been enough to focus on one or two districts or all villages surrounding a certain section of the park. At least the locations of Kazamabika and Ramba should have been included in Figure 1 in order to give an impression of which area these findings can be representative.

In the abstract, I would suggest transforming the first two sentences as follows: "Crop depredation incidents (CDIs) by African forest elephants (*Loxodonta cyclotis*) around Gabon's national parks threaten both the villagers' livelihoods and the persistence of this critically endangered species. While most CDI-mitigation efforts have focused on improving crop protection, we, however, argue that conflicts will continue to escalate unless broader villager and elephant needs are addressed simultaneously."

In the beginning of your Introduction, you state that crop depredation incidents caused by *L. cyclotis* result in rural poverty. While these incidents certainly contribute to the economic limitations of rural communities, they are not the sole reason for it, which is why I would transform the sentence as follows: "Crop Depredation Incidents (CDIs) caused by forest elephants (*Loxodonta cyclotis*) have persisted in Africa's Congo Basin, further exacerbating rural poverty (Lahm, 1996; Parker & Osborn, 2006; Madden & McQuinn, 2014)."

Furthermore, within the third paragraph on the second page of your manuscript, you state that CDIs recently increased all over Gabon, yet you did not mention any source material that could support such a development. Are there any studies or

data from the Gabon wildlife conservation authorities supporting such a claim?

Additionally, at the end of this paragraph, you imply that the establishment of the national parks would further CDIs, but that is not fully true as you explain during the discussion section of your manuscript. There you point out the lack of native fruit-bearing trees as a natural food source for elephants in these protected areas prior to their establishment and that elephants seek the proximity of villages due to anthropogenic food sources. The basic idea to protect both humans and wildlife by spatially separating them from one another would be answered on the temporal and spatial overlap between elephants and villagers, identified as a main problem by your research. Thus, the lack of natural food sources for *L. cyclotis* within protected areas is furthering CDIs, not the establishment of the national parks.

When you introduce your study area, you could give more information about the national park's key habitats and their condition. Are there any known issues regarding human encroachment, such as poaching or logging? I would also transform the last two sentences of this paragraph as follows: "The frequency of CDIs within the surroundings of Lope National Park is one of the highest known in Gabon (Walker, 2012), which is why we chose to conduct our research there, because it represents a repository of relevant local ecological and environmental data."

Instead of highlighting the 13 other national parks in Figure 1, the map should present a detailed overview of Lope National Park and its surroundings, including the locations of Kazamabika and Ramba, as well as a clear distinction between the three mentioned landscape contexts: "Multiple-use forest," "Protected areas," and "Village areas."

Furthermore, when explaining your interview procedure, you mentioned separating villagers into two groups according to the ban on elephant hunting in 1981, which is an excellent idea. Was the ability to verify whether crop protection effectiveness decreased due to the ban on lethal measures your reason for that comparison between the two groups? Unfortunately, you did not show how the results of the interviewees differed between these two groups during your manuscript's results section. Also, I wanted to ask, how interviewing the family members prior to their elders prevented them from influencing their interviews, after all, they are still the ones translating for you?

How did you determine to which coded item a person was counted if that person referred to multiple coded items? How did you determine to which theme an interview was linked when its paragraphs drew a connection to multiple themes?

In Figure 2 up to Figure 4, I would suggest using a solid vertical line cutting through the two bars instead of a star. This would make it easier to determine the exact value of the average across all interviewees.

On page 9, the space between "interactions" and "were" is missing; the same is true on page 11 in the case of "primarily" and "economic," and on page 13 between "this" and "disruption."

For Figure 5 and Figure 6, I would recommend using colors instead of the thickness of arrows to indicate their linkage; this would make it easier to determine that connections are most important.

In order to defuse conflicts, the underlying reasons of each involved party must be understood, which is what you aimed for in your research by interviewing conservationists as well as affected subsistence farmers. Unfortunately, the sampling

size of interviewed villagers is very small, and you gave no reference to the location of the two villages, such that it is hard to verify how representative your findings are. You did not provide context information on Lope National Park and gave a lot of context about the actual situation within the discussion section of your manuscript. Yet the article offers valuable insight into how the different stakeholders perceive the ongoing human-wildlife conflict and manages to bring together the various pieces of the puzzle. If possible, I would prefer to include more interviewees in the research, but it would also help a lot if you would mark the locations of Kazamabika and Ramba on the map depicting the Lope National Park and its surrounding.