Public Opinion and Reports of Human-Elephant Conflicts in the Amboseli Ecosystem

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INTRO

Within Kenya and Tanzania, elephant resources have been progressively threatened by the increase of human agricultural practices. “Expansion of human settlements and agricultural fields across Asia and Africa has resulted in widespread loss of elephant habitat, degraded forage, reduced landscape connectivity, and a significant decline in elephant populations relative to their historical size and overall range”(Shaffer, 2019). This imbalance of resources creates strain on elephant livelihoods and increases the chances of human- elephant conflict. Students gathered questions to ask the community experiencing these conflicts in order to determine their commonality and tactics of prevention. These questions included the frequency of the events, results of conflicts, the severity of damage, and the current means of prevention. This paper is a review of the community study and is outlined through explanation of the methods used, results found, conclusions drawn, and the reflection on the processed data.

METHODS

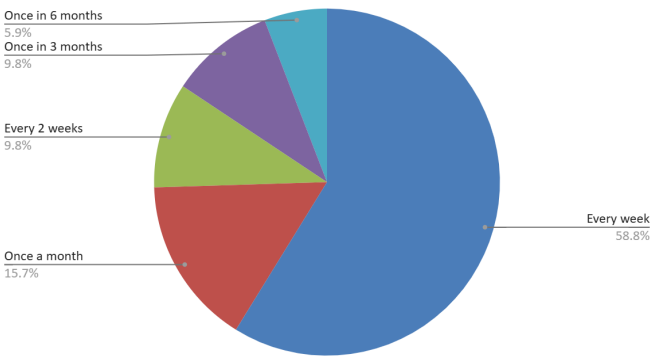
Within the past week, students have worked to research the causes and effects of human-elephant conflicts. This research was then tested by going into local villages and asking questions related to the present issue. In groups of three, students were sent out to three different communities to ask a total of 56 people their opinions of human-elephant conflicts. Using a guide, community members were asked to answer a variety of questions relating to their prevention and experience with human-elephant conflicts. This data was then processed and synthesized to determine each community's opinion on how best to manage this local issue. Some flaws within the data collection include but are not limited to; improper translation, time and location restraints and personal bias of community members.

RESULTS

<u>Commonality and Causes of Human - Elephant Conflict</u>

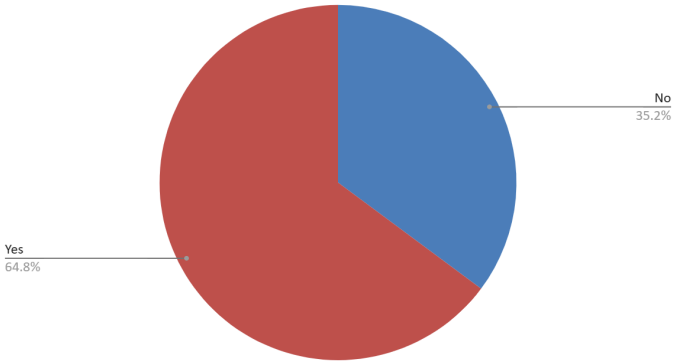
The commonality of human-elephant conflicts is observed in Figure 1. Overall, all three communities averaged an opinion of observing a human-elephant conflict every week, making up 58.8% of responses. This is often due to an imbalance in resource distribution due to human intervention. When desperate for forage, elephants turn to the crops of farmers that have thrived through meticulous human care. This reasoning is supported by 85.5% of respondents noting that most conflicts occur during the dry seasons, when water is scarce. This raiding of crops is a direct threat to the livelihood

Figure 1: How Frequently do HECs Occur in Your Village?



of farmers and creates violent conflicts when realized."It is common that farmers will not tolerate elephants because of huge costs incurred to crop raiding, and especially because these costs are not compensated by neither the government nor the conservation agencies" (Okello, 2016). All respondents reported receiving no compensation for elephant damages despite some applying through the government for proposed supplied funds. By receiving no financial support from agencies , elephant conflicts result in major financial disruptions. In addition to crops, damage to livestock, property, and humans themselves are all threats posed to communities by elephants.

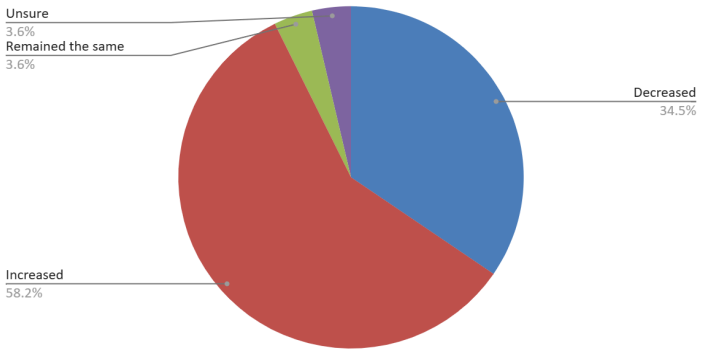
Figure 2: Have People Been Attacked by Elephants in Your Village?



Severity of Conflicts and Trends

Within Figure 2 it is noted that 64.8% of respondents have experienced elephant attacks within their village. Shown in Figure 3 is the trend of human-elephant conflict over the past five years, which has been reported as increasing by 58.2% of respondents. These figures together show the commonality and predicted future presence of these conflicts, suggesting that elephant attacks and damage due to elephant communities are very prevalent and threatening to local communities. Living in close quarters with elephants, these conflicts have been shown to threaten the lives of both humans and elephants. "As humans transform the landscape, pushing human and elephant populations to live in ever closer proximity, the likelihood of conflict increases with often fatal results" (Shaffer, 2019). Human death or injury due to elephant conflict was reported at a percentage of 60.5% throughout community members making confronting an elephant a fatal risk. In addition, local community members or agencies will often kill an elephant that has caused a human death for the safety of the village. This leads to the unnecessary death of an endangered species due to poor resource management.

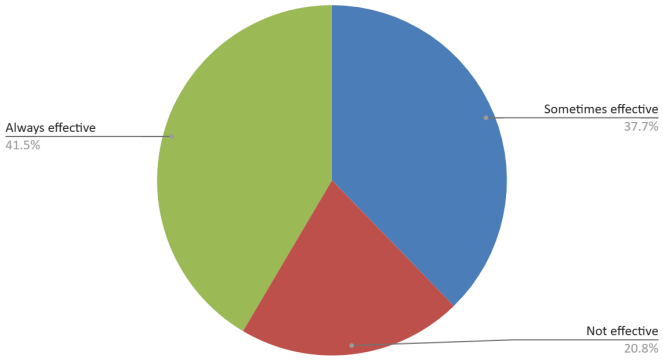
Figure 3: What has been the trend of conflicts with elephants within the last 5 years?



Prevention Strategies and Effectiveness

When reviewing tactics from the community, different prevention strategies have been adapted to encourage elephants to move away from farms. These strategies include flashlights, fire, midnight guarding, loud noises, fences, and support from KWS and BLF. Overall the strategies have reports of varying effectiveness and some community members have entirely given up on prevention due to the scale of the elephants themselves. “Some farms are surrounded by simple fences, with bells attached, some with rickety wooden houses or watchtowers to guard crops from approaching elephants. Some farms have a skinny dog tied up by the crop to bark and alert farmers to oncoming risk. Farmers have little capacity to defend their ripening crops against raids by elephants at night” (Evans, Adams, 2018). Overall it was recorded that 79.6% of respondents were extremely worried about being injured or losing property over human-elephant conflicts. This impending threat of elephants destroying the livelihoods of crop owners creates a majority negative view towards elephants as a species.

Figure 4: How effective have these strategies been, in general?



Conclusion

Human-elephant conflicts are a prominent threat to the livelihoods of community members living in the Amboseli ecosystem. The imbalance of resources due to an increase in agricultural practices is increasing the conflicts and their severity. These types of severe conflicts often end in human death or injury. In addition, it often results in the elimination of the elephant. This has affected the livelihoods of the surrounding crop holders as well as the local opinion on elephants as a species.

Reflexivity

After reviewing the data we have gathered from community members, the damage that elephants brought to community homes was surprising to me. None of the people we spoke to have ever received compensation for their damages as the government promised, and must repair expensive amounts of damage themselves. This was a fact that was often told with much anger due to the unjust promise from the government to pay for these interferences. Many people recounted stories of very recent deaths and encounters with elephants and reported being scared about elephants in general. They have become one of the most dangerous and unpredictable threats that they need to navigate. As a conservation student I was able to entirely see why a negative view of elephants existed in this community and found a real motivation for looking for ways to make the communities safer.

I was surprised to be so welcomed into others homes as a foreigner and I found a lot of empathy as people recounted their stories of dangerous encounters with elephants. I noticed a strong sense of pride in each home from families for the home they built within the community.

After hearing many personal stories and analyzing data, the root of the problem in my eyes is the elephants themselves having a lack of available resources to supply their basic needs. Water has been diverted for farming irrigation drying up once abundant forage. Private land has been fenced in for community protection, fragmenting the land an elephant needs to roam. Elephants have only responded to the intervention humans have implemented by following resources into farms. In order to provide the necessary space, food, and water elephants require, a massive reduction in agriculture would need to take place. This is a rather unrealistic demand given the immense amount of profit that agriculture has brought to the area. So rather, solutions must be made to control the amount of resources used within the area and sufficiently protect communities from further conflicts. If elephants are able to find the resources they need without treading into community land there will be far fewer conflicts. However, if human intervention keeps taking place, they will continue to adapt to our conflict preventative measures in order to get the resources they need to survive.

The research done within this community is a small step in a very big project, but it's important to thank the people who helped complete this research letting us better understand the prevalence of the issue. Thank you to the students and translators collecting data from the community, as well as the survey participants and professors that helped make this research possible.

References

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