

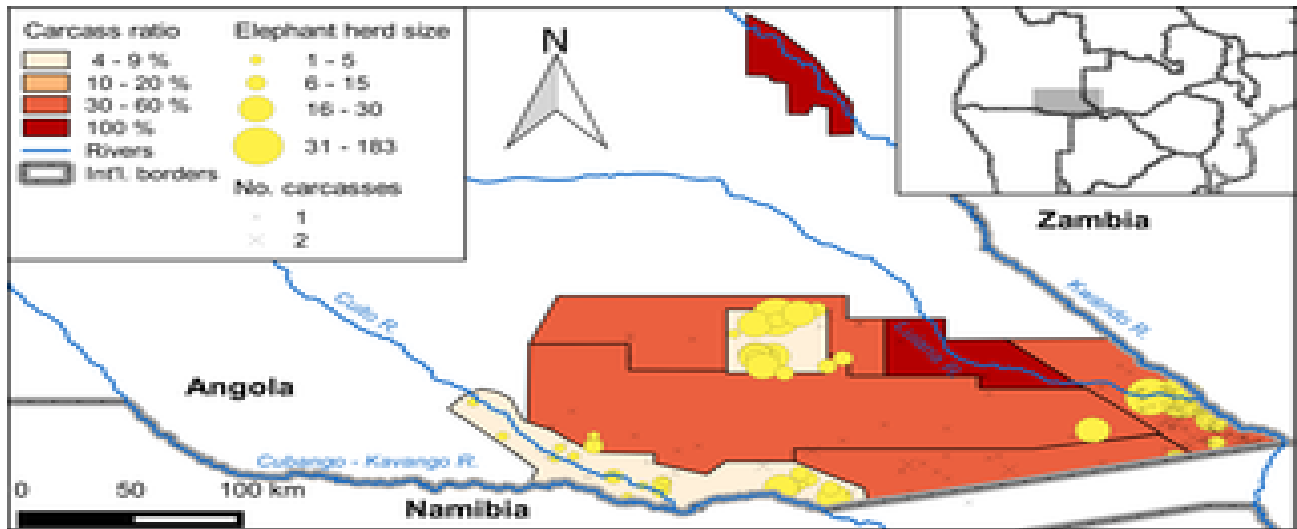
Eviction of the Elephants

How many times have you seen elephants while visiting the zoo? Probably pretty often, as many zoos have elephants as part of their attraction. The common occurrence of these animals gives the impression that there are a large number of them because we see them so often in these types of settings. This is also where we get our general knowledge about them, aside from movies and online stories. We see videos of travelers who get to meet elephants and see how well they interact with humans. What isn't commonly known, however, is that the elephants that we love and admire are endangered with the possibility of going extinct and it is almost entirely our fault. A study was done by S. Schlossberg, M. J. Chase, and C. R. Griffin on how exactly humans are affecting the population of African Savannah Elephants in south-east Angola in an attempt to fully understand what we can do to save them.

In order to find this information, scientists used planes and helicopters to survey the area and tracked the elephants via satellites. This allowed them to construct a study to find how the African Savannah Elephant populations have changed since 2005 as well as how poaching and human populations are affecting the population change. The study took place in the Cuando-Cubango province in southeast Angola during the dry season so that they could easily compare their findings to the 2005 study, which also took place in the same area during the dry season. They separated the area of study into different sections and surveyed just a small number of elephants from each one. When flying over each area, the scientists observed the number of elephants both dead and alive, other medium to large mammals, as well as any signs of human presence in each. While doing these observations, the scientists also found poachers camps, which they identified by the presence of weapons or drying racks. They took pictures of the elephant herds with a camera to help them in estimating the herd sizes. Along with the number of

elephants they could find, they also tracked migration patterns of 8 elephants who had been safely collared for scientific purposes as well as how these patterns changed when human presence was found nearby.

Through these methods, it was found that the population had a small decline from 2005-2015 that did not by itself indicate anything to worry about. However, it was also found that there was a large increase in the number of carcasses found. These two results together indicate a declining population because while the population was continuing to grow, it was decreasing faster due to the large amount of deaths. It was found that this decline in the population was due to the increasing deaths from poaching and human indicators. When the elephants would try to migrate towards areas around water during the dry, they were met with human indicators that stopped them from getting close. This prevented them from accessing the habitat necessary for survival in the dry season by making it a lot harder to get to water. Poaching, being one of the major reasons the elephant population is declining, had increased to a point where during the 2015 study it was being considered one of the worst poaching crises. Attached below is an image showing the carcass ratio as well as the size of the elephant herds. As can be seen in the figure, areas near water sources were where the highest number of carcasses were found due to humans preferring to live close to the water source, pushing the elephants out.



In conclusion, the African Savannah Elephants population is declining and they are now an endangered species. The reasoning behind this population decline is mainly because of humans pushing the elephants out of their habitats and the increase in poaching. Studies like these are important because they allow us to determine when a species needs our help. This specific study paves the way to planning ideas for the conservation of these elephants. This could be anything from protecting habitats so that elephants can no longer be “evicted” from their homes to enforcing laws that ban poaching. One question for further research would be “How can we stop the decline in the population of these animals?” Thanks to this study we will hopefully be able to find a way to ensure the survival of this species of elephant and eventually remove them from the endangered list.

References

Schlossberg, S., Chase, M. J., & Griffin, C. R. (2018). Poaching and human encroachment reverse recovery of african savannah elephants in south-east angola despite 14 years of peace. *PLoS One*, 13(3) doi:<http://dx.doi.org/10.1371/journal.pone.0193469>