

TUSKLESS ELEPHANTS – NEW RESEARCH ON AN INTERESTING PHENOMENON

THE ZAMBEZI SOCIETY - OCTOBER 2021



A group of tuskless elephant cows and their calves photographed in Mana Pools National Park

The apparently high number of tuskless elephants (almost always females) that are seen among elephant populations in the Zambezi Valley areas has been a subject of speculation and research for a number of years. Prof John Hanks studied the phenomenon in Zimbabwe in the 1990s, and further studies in Luangwa were published in 1995 - See [Tusklessness in African Elephants - a Future Trend](#))

The common reason given for this is that centuries of selective ivory hunting and poaching activity in Southern Africa has removed many large-tusked elephants from the gene pool, and that tuskless animals (which are almost never targeted) have been able to reproduce more successfully, resulting in an increase in tuskless elephant numbers over the decades.



A tuskless cow elephant rests in the October heat of Mana Pools, with her tusked calf standing by.

Now, a new study following Mozambique's recent 20-year-long civil war (in which it lost 90% of its elephants to poaching by armed forces), has shown that as the population recovered after the war, a relatively large proportion of females were born tuskless. While elephants with tusks were specifically targeted for their ivory which was sold to finance the conflict, those without tusks were left alone, leading to an increased likelihood they would breed and pass on the tuskless trait to their offspring.

Nothing new in this, one would think. But what IS new is that this research shows that the phenomenon is linked to sex and related to specific genes that generate a tuskless phenotype more likely to survive in the face of poaching.

Read the full scientific research article in SCIENCE here: [Ivory poaching and the rapid evolution of tusklessness in African elephants](#)

Popular media articles summarising the recent research can be found here:-

[Scientific American - October 2021](#)

[The Guardian - October 2021](#)