

# The mystery of the elephant graveyards

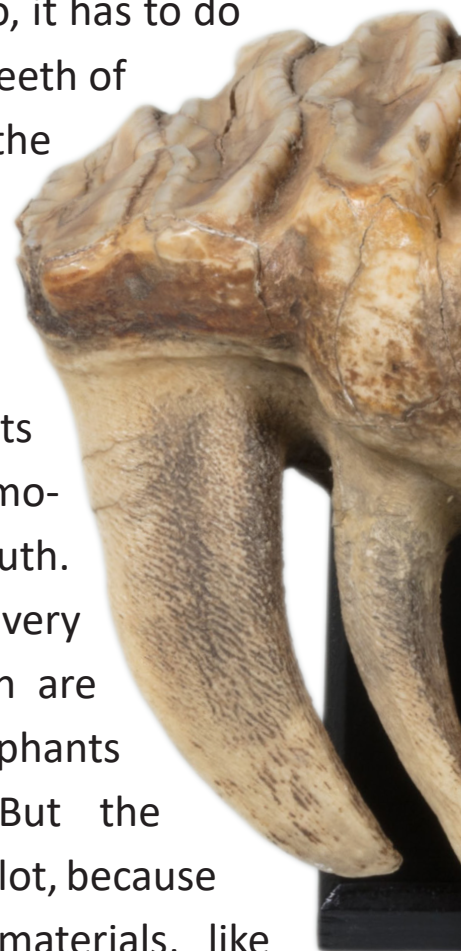
There are legends about elephant graveyards, some mystical places found in the African Jungle. In the past, many adventurers were searching for them in the hope of finding a lot of ivory there. But they were not successful. The legend also became part of the pop culture, for example, in the Disney Movie “The Lion King”. But the existence of elephant graveyards has never been scientifically proven.

Elephants are very intelligent animals. Just like us, they are mourning their dead relatives. They stop even years after the death of a relative at its bones and touch these bones with their trunks. So is it only a myth or could it be possible that

something like an elephant graveyard exists?

One possible explanation for such a phenomenon has to do with the elephants’ teeth. I am not talking about their famous tusks, for which they are poached. No, it has to do with the other teeth of the elephant, the so-called molariform teeth or molars.

African elephants only have four molars in their mouth. Those big and very structured teeth are used by the elephants for chewing. But the teeth wear off a lot, because of the tough materials, like



sticks and dry grass, they chew on. Because of this, the teeth are regrowing again. During their lifetime, elephants are having six sets of teeth.

But when the elephant becomes old, there comes the time when its last set of teeth wears off. It is possible that sometimes those old elephants are leaving the herd to search for areas with softer food. In those areas, old elephants

could accumulate and after a time they are dying there. So this could explain the formation of elephant graveyards.

In the past decades, there has been a great deal of poaching pressure on the elephants. As a consequence only man-made “elephant graveyards” have been found.

So what do you think? Do you believe that natural elephant graveyards exist?

*Annika Metz*



**Picture:**

A molariform tooth of an African Savanna Elephant (*Loxodonta africana*)

## References:

- Douglas-Hamilton, I., Barnes, R., Shoshani, H., Williams, A. C., Johnsingh, A. J. T., Beck, R., et al. (2006). Elephants. In D. W. Macdonald (Ed.), *The encyclopedia of mammals* (3rd ed.). Oxford: Oxford University Press.
- Goldenberg, S. Z., & Wittemyer, G. (2020). Elephant behavior toward the dead: A review and insights from field observations. *Primates*, 61 (1), p. 119–128.
- Johnson, O. W., & Buss, I. O. (1965). Molariform Teeth of Male African Elephants in Relation to Age, Body Dimensions, and Growth. *Journal of Mammalogy*, 46 (3), p. 373–384.
- Macdonald, D. W. (Ed.) (2006). *The encyclopedia of mammals* (3rd ed.). Oxford: Oxford University Press.
- Thouless, C. R., Dublin, H. T., Blanc, J. J., Skinner, D. P., Daniel, T. E., Taylor, R. D., et al. (2016). African Elephant Status Report 2016: An update from the African Elephant Database. *Occasional Paper Series of the IUCN Species Survival Commission*, 60.
- Zhou, X., Wang, Q., Zhang, W., Jin, Y., Wang, Z., Chai, Z., et al. (2018). Elephant poaching and the ivory trade: The impact of demand reduction and enforcement efforts by China from 2005 – 2017. *Global Ecology and Conservation*, 16.