Male baboons found to engage in feticide

January 18 2017, by Bob Yirka

Some baboon males are prone to commit domestic violence when forced to move into a group with few fertile females, researchers find. Credit: Photo by Catherine Markham, Stony Brook University

(Phys.org)—A team of researchers from several institutions in the U.S., some with ties to the Institute of Primate Research, National Museums

of Kenya, has found that male baboons in the wild at times engage in feticide. In their paper published in the journal *Proceedings of the Royal Society B*, the researchers describe their observations and offer some theories on why they believe it occurs.

Infanticide has been documented in a variety of species, including lions, rodents, whales, and many types of primates, including humans. The general consensus in the scientific community is that the behavior occurs because it makes the mother more available to the male that does the killing. Less common is feticide, where a male causes harm to a pregnant female that results in the death of the fetus. In this new effort, the researchers report on the first-ever evidence of feticide in baboons.

Prior research has shown that baboons engage in infanticide, but until now, it was not known that sometimes males also engage in feticide. In studying baboons in the Amboseli basin in Kenya the researchers report that they observed a number of feticide episodes by males that were new to a group. They note also that such attacks often left the mother dead as well, thus defeating the purpose of the attack. They report that causing a mother to abort a fetus reduced both pregnancy and lactation times, making the females more readily available for mating if they managed to survive the attack. They noted also that in cases when the female did survive, it was often the case that she would mate with her attacker.

The researchers report that such attacks happened more often during periods of scarce resources; when new males managed to achieve high status quickly; when there were a lot of infants in a group; or if the males remained with a new group for more than three months. The team notes that it was obviously much more difficult to spot feticide than infanticide—they had to change their study habits to follow females after intercourse for a period of time to note changes in physiology or behavior that likely signaled a pregnancy and then to watch for episodes of violence against them and what followed afterwards.

More information: Matthew N. Zipple et al. Conditional fetal and infant killing by male baboons, *Proceedings of the Royal Society B: Biological Sciences* (2017). DOI: 10.1098/rspb.2016.2561

Abstract

Sexually selected feticide—the death of infants in utero as a result of male behaviour—has only rarely been described or analysed, although it is presumed to be favoured by the same selective pressures that favour sexually selected infanticide. To test this hypothesis, we measured the frequency of feticide and infanticide by male baboons of the Amboseli basin in Kenya, and examined which characteristics of a male and his environment made him more likely to commit feticide and/or infanticide. We found a dramatic increase in fetal and infant death rates, but no increase in death rates of 1- to 2-year-old individuals, following the immigration of males who stood to benefit from feticide and infanticide. Specifically, fetal and infant death rates were highest following immigrations in which: (i) the immigrant male rapidly attained high rank, (ii) that male remained consistently resident in the group for at least three months, (iii) food availability and social group range overlap was relatively low and (iv) relatively many pregnant females and/or dependent infants were present. Together, these results provide strong evidence for the existence of both sexually selected feticide and infanticide in our population, and they indicate that feticide and infanticide are conditional male behavioural strategies employed under particular circumstances.

Press release

© 2017 Phys.org

Citation: Male baboons found to engage in feticide (2017, January 18) retrieved 9 April 2024 from https://phys.org/news/2017-01-male-baboons-engage-feticide.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.