

FEMALE BABOONS ADOPT A MATE STRATEGY OF OESTRUS ASYNCHRONY IN GOMBE

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Within groups of females, menses or oestrus can occur synchronously, asynchronously, or randomly. Whether oestrus is synchronous or asynchronous raises an important question on the evolution of female strategy: do females compete with each other for desirable males or do they share a “good male”? Examining the discrepancies in the first day of menses or oestrus, previous studies have reported that menses or estrous are synchronized (humans, some primates, rodents, lions and marsupials) and not is synchronized (ring-tailed lemurs and chimpanzees). However, the factors affecting synchrony and its relationship with evolution are not understood. It is an important point to clarify synchrony (or asynchrony) as a population characteristic to think about a general mate strategy in animals.

In this study, we employed an oestrus synchrony index and a randomization procedure to analyze long-term observations of female baboons (*Papio anubis*) oestrus cycles at the Gombe Stream National Park, Tanzania. Our results revealed that three of four groups of female baboons avoided synchronizing their oestrus periods. Moreover, our study by meta-analyses showed that asynchrony of oestrus was an inherent characteristic of Gombe baboons.

Keywords: timing of oestrus, female competition, good male, anubis baboons