Temporal Partitioning of the Sympatric Large Terrestrial Mammals in Utilizing the Natural Saltlicks at a Commercial Forest Reserve of Northern Borneo

ABSTRACT

A sign of temporal partitioning is detected between the Sambar Deer (Rusa unicolor), Bornean Orangutan (Pongo pygmaeus morio), Bearded Pig (Sus barbatus), and Banteng (Bos javanicus), when using the natural saltlicks at Segaliud-Lokan Forest Reserve in Sabah, Borneo, although the effects of habitat conditions and interspecific competition on the given matter remain uncertain for now. A camera trapping survey was conducted in this study, to examine the variability in both the diel activity patterns and visitation frequencies of the four sympatric species across four local saltlicks. The diel activity patterns of these four sympatric species were shaped by the habitat conditions, which resulted in a distinct temporal partitioning, unlike the interspecific competition that only contributed to a minor temporal partitioning, between certain two sympatric species using a specific saltlick. Their visitation frequencies were associated with their respective adopted diel activity patterns and levels of lick dependency for regular mineral intake, hence confirming their variation across different saltlicks and times of the day. Further research is required in the future to scientifically validate the given matter.