

With controlled animal feeding: Roads Traversing Protected Areas do not affect feeding and foraging behaviour of yellow baboon

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Abstract

The Tanzania-Zambia (TANZAM) Highway traversing Mikumi National Park (MINAPA) has been a concern for wildlife managers since it was first paved in 1973-74. After its upgrade in 1989-90, researchers have documented increasing traffic resulting in considerable animal injuries and mortalities. Yellow baboons in MINAPA are known to use the road as their bridge to and from foraging areas, therefore in addition to the risk of mortality; road use could potentially have significant influence on their feeding behaviour. However, knowledge on the influences of the TANZAM highway in the feeding behaviour of the baboons is sparse. Using focal animal sampling techniques, we collected data on feeding and foraging behaviour of two habituated troops of yellow baboons to examine to what extent the TANZAM highway is important in their feeding and foraging behaviour. Results showed that in relation to habitat availability, visitation to habitat types reflect actual habitat choice of baboons. In general, baboons less frequently visit and spent less time in the highway compared to natural habitats. Whenever they were on the highway, adult females and subadult males engage more into feeding, resting and socializing, while adult males were more vigilant. The major dietary compositions were fruits, seeds, leaves, sap and invertebrates, almost exclusively collected from natural habitats, foods from the highway were opportunistically consumed. This study provides empirical evidence and concludes that yellow baboons do not directly depend on the highway for food, rather they use the TANZAM highway as normal part of their home range. The TANZAM highway is used because it improves visibility and reduces the perceived predation risk compared to natural habitats. However, its location near sleeping sites may have significant impact on baboons' activity budget. With these findings, we recommend strict implementation of rules against park littering and animal feeding in protected areas traversed by highways.

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