Utilisation of gravel roads and roadside forests by the common palm civet (Paradoxurus hermaphroditus) in Sabah, Malaysia

Abstract

We compared the sighting frequencies and habitat use of a mammalian carnivore, common palm civet Paradoxurus hermaphroditus, between interior forests, and gravel roads and roadside forests by nocturnal linetransect survey, live-trapping, and radio-telemetry at Tabin Wildlife Reserve in Sabah, Malaysia. The results of line-transect survey and live-trapping demonstrated the frequent use of gravel roads and roadside forests by common palm civets. Radio-telemetry results indicate their preference for roadside forests during their active time. These results suggested their frequent use of the environments around the gravel roads. However given that they did not use roadside forests preferably at daytime, they need dense vegetation for their rest-sites as well. In light of these findings, roads and related deforestation may affect their movements and spatial distribution in a given habitat. Considering proper arrangement of gravel roads is required to minimise impacts on the local mammal communities and to conserve biodiversity.