De-notified and notified protected area: Kappathagudda Wildlife Sanctuary and its importance for the conservation of mammals in the Deccan Plateau of Karnataka, India

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The Deccan Plateau of peninsular India is a semi-arid region that falls between the Eastern and Western Ghats. The region, though unique and rich in biodiversity, has been ignored in terms of conservation and research. Many of the grasslands and scrub forests of these plains have been overexploited by mining or wind energy farms, assuming that they are just 'barren lands'. Many areas have undergone several denotifications and renotifications as Protected Areas. The Kappathagudda Wildlife Sanctuary (WLS) in Karnataka is one such area that has been overlooked by the management for a long time due to a lack of information on its biodiversity and awareness regarding its importance. We studied the presence and activity patterns of mammals using 20 camera traps for 1035 trap nights and recorded 18 species of large mammals, including three

antelopes: four-horned antelope (*Tetracerus quadricornis*), chinkara (*Gazella bennettii*), and blackbuck (*Antilope cervicapra*), along with the major carnivores of the plains: gray wolf (*Canis lupus*), striped hyaena (*Hyaena hyaena*), leopard (*Panthera pardus*), and golden jackal (*Canis aureus*). The presence of mammals was less in the areas where human activity was high. Mammals showed high adjustment by shifting their regular activity patterns to avoid humans. Records of the gray wolf and striped hyaena added conservation values to the WLS. However, the Sanctuary has experienced rapid and unsustainable habitat alteration that requires a suitable scientific management strategy.

Keywords: Human disturbance, mammals, spatial overlap, temporal segregation, wildlife sanctuary.