

Abstract

Vulture population declines have been noted in West and Southern Africa, but have not been assessed in East Africa. Roadside transects conducted in 1976 and 1988 were compared with surveys done from 2003–2005 in and around Masai Mara National Reserve, Kenya. Staggering declines in abundance were found for seven of eight scavenging raptors surveyed. No Egyptian vultures were seen during recent transects. We compared trends between the ungulate migration and non-migration season among three land use types (reserve, buffer, and grazed) and among the species surveyed to establish the causes of declines in scavenging raptors. Large declines during the ungulate migratory period suggest that most scavenging raptor species are declining well beyond the area of study. For all species, except Hooded vultures, substantial declines outside of the reserve indicate an important role of land use change in causing observed declines. In addition, significant declines of populations of Gyps species in the reserve itself, especially during the migration season, provide evidence that human activities occurring in other parts of the species' range such as poisoning of carcasses may be causing their decline. Declines found in this study suggest that at a minimum African white-backed, Rüppell's, and Hooded vultures should be relisted as Vulnerable. Management actions that limit land use change around the reserve combined with a nationwide ban on carbamate pesticides will be important for conserving keystone members of the scavenging guild. Future research should further examine possible causes of these declines and quantify the effect of reduced scavenging raptor abundance on scavenging efficiency. HIV transmission.