

ABSTRACT

Though retaliatory lion (*Panthera leo*) killing as a result of livestock predation in the Maasai group ranches between the Tsavo NPs and Amboseli is remarkably high, other wildlife species are known to kill livestock. Surprisingly, lions suffer the most from retaliatory killing by the Maasai community for killing livestock. The extent of livestock predation by lions in comparison to other species is unknown. This study was carried out in the Olgulului group ranch (OGR) located adjacent to Amboseli National Park in June 2009. The cost of livestock killed by each of these species including lion, hyena (*Crocuta crocuta*), cheetah (*Acynonyx jubatus*), leopard (*Panthera pardus*), olive baboon (*Papio cynocephalus*), black-backed jackal (*Canis mesomelas*), and African elephant (*Loxodonta africana*) was analyzed. Questionnaires, focus group discussions, and key informant interviews with officials from OGR, Kenya Wildlife Service (KWS), and compensation scheme organizations were the methods used to collect information. Cluster and systematic sampling techniques were used to select a sample of 199 respondents from OGR. Lions were blamed for 40.5% (US\$ 374,603) of the value of livestock lost to wildlife. The costs of livestock lost to hyenas and lions were not significantly different ($q = 0.24$, $p = 0.968$). Although hyenas killed more livestock compared to lions, the economic damage between the two was not significantly different because lions attacked cattle which had high economic value. Conservation of lions will be increasingly difficult if the current levels of predation are not reduced to economically and socially acceptable levels.