World Academy of Science, Engineering and Technology
International Journal of Mathematical and Computational Sciences
Vol:14, No:12, 2020

Descriptive Epidemiology of Mortality in Certain Species of Captive Deer in Pakistan

Authors : Musadiq Idris, Sajjad Ali, Syed A. Khaliq, Umer Farooq

Abstract : Postmortem record of 217 captive ungulates including Black-buck (n=31), Chinkara (n=20), Hog deer (n=116), Spotted deer (n=35), Red Deer n=(04), and Rusa deer (n=11) submitted to the Veterinary Research Institute, Lahore, Pakistan was analyzed to determine the primary cause of mortality in these animals. The submissions included temporal distribution from Government wildlife captive farms, zoo, and private ownerships, over a three year period (2007-2009). The most common cause of death was found to be trauma (20.27%), followed by parasitic diseases (15.67%), bacterial diseases (11.98%), stillbirths (9.21%), snakebites (2.76%), gut affections (2.30%), neoplasia (1.38%) and starvation (0.92%). The exact cause of death could not be determined in 77 of 217 animals. Pneumonia (8.29%) and tuberculosis (3.69%) were the most common bacterial diseases. Analyses for parasitic infestation revealed tapeworms to be highest (11.05%), followed by roundworms (8.29%) and hemoparasitism (5.07%) (babesiosis and theileriosis). The mortality rate in young ungulates was lower as compared to adults (32.26% and 67.74%). Gender wise data presented higher mortality in females (55.30%) compared to males (44.70%). In conclusion, highest mortality factor in captive ungulates was trauma, followed by parasitic and bacterial infestations/infections of tapeworms and pneumonia, respectively. Furthermore, necropsies provided substantial information on etiology of death and other related epidemiological aspects.

Keywords : age, epidemiology, gender, mortality, ungulates
Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development
Conference Location : Chicago, United States
Conference Dates : December 12-13, 2020