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Companion and Wild Animals

Analysis of Canid Mortality on Highways - Partial Data.

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This study verifies the impact of road kills, resulting from the advancement of highways and roads on the lives of domestic animals, focusing on canines, found on roads and highways in the Agreste Meridional of Pernambuco. Despite being of utmost importance to society, highways and roads present various problems for wildlife, such as animal fatalities due to collisions, habitat fragmentation, obstruction of animal pathways, and population isolation. Additionally, highway construction can lead to changes in animal behavior, alterations in the environment, modifications to the food chain, increased wildfires, and direct impacts of fauna with vehicles. The data collected in this study were obtained through photographic and video records of domestic animals found dead, providing records of the number of individuals hit and the species to which they belong, whether wild or domestic. For this analysis, only domestic dogs (*Canis lupus familiaris*) are being considered, which are being recorded due to collisions occurring on BR-423, in two segments from Garanhuns to Lajedo and to Iati. The research has been ongoing since October 2023, with monthly collections taking place in the morning. For monitoring and data collection, the research is supported by official vehicles from UFAPE and materials from the institution, specifically from the Laboratory of Zoology Studies – LABEZoo-UFAPE. The records were made from photos and videos, feeding the database of the Road Ecology Study of the region. During collection, most of the animals hit on the highways were removed from the site to prevent further collisions, due to scavenging species. So far, data analysis reveals a higher incidence of canid deaths in the section of BR-423 from Garanhuns to Lajedo, with a total of 10 domestic dogs hit. In the other studied section of BR-423, from Garanhuns towards Iati, only three dogs were recorded as hit. This study highlights the need to balance the importance of highways for human society with the need to protect animal life. In summary, it provides valuable information about the mortality of domestic canids on the highways of the Southern Agreste region of Pernambuco and emphasizes the need for actions to minimize this problem. The continuous collection and analysis of this data are essential to better understand the extent of the problem and develop effective strategies to reduce animal mortality on roads, thereby ensuring harmonious coexistence between human progress and the preservation of animal life.

Keywords: Collisions, domestic dogs, *Canis lupus familiaris*, road ecology.

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