



08 a 12 de outubro de 2017 • UFV - VIÇOSA | MG

RELATIONSHIP BETWEEN ROAD-KILL AND LANDSCAPE CHARACTERISTICS: THE CASE OF *CERDOCYON THOUS* (LINNAEUS, 1766) (CARNIVORA: CANIDAE)

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Tema/Meio de apresentação: Biologia da Conservação/Oral

The road-ecology is an emergent area in ecology that evaluate the impacts of roads on biodiversity. One of the most studied impact is the death of wild animals by the collision with vehicles on roads. Under the perspective of landscape ecology, roads can be an aggressive matrix, causing an increase of the mortality rate and a decrease of the gene flow between populations. One of the most road-killed species on Brazil is Cerdocyon thous (the crab-eating fox), a generalist carnivore who inhabits open vegetation and forests. The aim of this work was to understand what landscape characteristics are related to the records of roadkilled C. thous. The road-kill records were provided by researchers that has been monitoring road-kill in Pantanal, Cerrado and Atlantic Forest areas. Landscape characteristics were measured using maps of vegetation cover of the Brazilian biomes made available at Brazilian Ministry of the Environment's website. Using GIS software, around each road-kill record (n=528) was generated a 4km dissolved buffer, and after, intercept them with vegetation cover map, were measured landscape characteristics. Regression models were created with road-kill rates as dependent variables and landscapes characteristics as independent variables, and after, the best model was select by Akaike Information Criteria (AIC). The best model to explain C. thous road-kill included agriculture and pasture (both positively), followed by agriculture alone (positively); and combined with native areas (negatively); and exotic forestry (positively). Thus, land use, particularly agriculture and pasture, can be relevant landscape characteristics to predict C. thous mortality on Brazil. As one of the most road-killed species and a least concerned species by IUCN red list, C. thous could be used to promote mitigation measures and conservation awareness on the Brazilian highways.

We thank FAPESP and researchers: Arnaud Desbiez, Fernando Ascensão, Janaina Casella, Carlos Henrique Freitas, Andreas Kindel and Fernanda Zimmermann Teixeira.