

Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-2/W4, 29-31, 2015
<https://doi.org/10.5194/isprsarchives-XL-2-W4-29-2015>
© Author(s) 2015. This work is distributed under
the Creative Commons Attribution 3.0 License.

[Volume XL-2/W4](#)

19 Oct 2015

ANALYZE THE IMPACT OF HABITAT PATCHES ON WILDLIFE ROAD-KILL

S. Seok and J. Lee

Dept. of Geoinformatics, The University of Seoul, 163 Seoulsiripdaero, Seoul, South Korea

Keywords: Road-kill, Correlation analysis, Habitat Patches, Hotspots

Abstract. The ecosystem fragmentation due to transportation infrastructure causes a road-kill phenomenon. When making policies for mitigating road-kill it is important to select target-species in order to enhance its efficiency. However, many wildlife crossing structures have been questioned regarding their effectiveness due to lack of considerations such as target-species selection, site selection, management, etc. The purpose of this study is to analyse the impact of habitat patches on wildlife road-kill and to suggest that spatial location of habitat patches should be considered as one of the important factors when making policies for mitigating road-kill. Habitat patches were presumed from habitat variables and a suitability index on target-species that was chosen by literature review. The road-kill hotspot was calculated using Getis-Ord G_i^* . After that, we performed a correlation analysis between G_i Z-score and the distance from habitat patches to the roads. As a result, there is a low negative correlation between two variables and it increases the G_i Z-score if the habitat patches and the roads become closer.

[Conference paper](#) (PDF, 724 KB)

Citation: Seok, S. and Lee, J.: ANALYZE THE IMPACT OF HABITAT PATCHES ON WILDLIFE ROAD-KILL, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-2/W4, 29-31, <https://doi.org/10.5194/isprsarchives-XL-2-W4-29-2015>, 2015.

[BibTeX](#) [EndNote](#) [Reference Manager](#) [XML](#)