"Gheorghe Asachi" Technical University of Iasi, Romania

AN EVALUATION OF WILDLIFE-VEHICLE COLLISION PATTERN AND ASSOCIATED MITIGATION STRATEGIES IN LITHUANIA

Vytautas Oškinis[1], Gytautas Ignatavičius[1*], Valentina Vilutienė[2]

[1]*University of Vilnius, Center of Ecology and Environmental Sciences, 21/27 M.K. Ciurlionio Street, LT-03101 Vilnius, Lithuania*
[2]*The General Jonas Zemaitis Military Academy of Lithuania, 5A Silo Street, LT-10322 Vilnius, Lithuania*

Abstract

Wildlife-vehicle collisions are only a human safety problem, but road mortality can significantly impact some wildlife populations. Metal wire mesh fences are one of in most popular preventative means to reduce number of wildlife-vehicle accidents in Lithuania. The fencing of this highway started in 2006 and continued in 2008 and 2009. The aim of this presentation is to give the investigation results on the impact of wildlife-vehicle accident prevention installations, e.g. underpasses and fencing on highway Vilnius-Panevėžys traffic safety in 2002-2009. The number and spatial distribution of wildlife-vehicle accidents on highway Vilnius – Panevėžys (136 km long) were analyzed. The data on wildlife were official survey numbers from the personal scientific research, the Ministry of Environment and the Lithuanian Police Traffic Supervision Service. The investigation has shown a positive effect of fencing and wildlife underpass installation; for example, after the partial installation of fences in 2008 the number of accidents decreased in comparison with the 2002-2006 level. It was found out that wildlife-vehicle accidents were distributed nonrandomly after fencing and were associated with and close to (within 1 km) of fence ends. We conclude by recommendations for improving traffic and wildlife safety on roads in Lithuania.

Key words: fencing, highway, road-kill, traffic safety, wildlife-vehicle collisions

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* Author to whom all correspondence should be addressed: E-mail: gytisi@takas.lt