ARPHA Conference Abstracts 5: e84657
doi: 10.3897/aca.5.e84657

Conference Abstract

Road mortality in Hazel Dormice *(Muscardinus avellanarius)*: first evidences for this species and implications for road mortality research

Eliana Sevianu[‡], Ionela Rădac[§], Ioan Alexandru Rădac[|], Cristian Valeriu Maloș[‡], Viorel Dumitru Gavril[¶], Tiberiu Rudolf Hartel[‡]

‡ Babeș Bolyai University, Faculty of Environmental Science and Engineering, Cluj-Napoca, Romania
§ National Museum of Banat, Timișoara, Romania
| West University of Timișoara, Timișoara, Romania
¶ Institute of Biology, Romanian Academy, Bucharest, Romania

Corresponding author: Eliana Sevianu (eliana.sevianu@ubbcluj.ro)

Received: 31 Mar 2022 | Published: 15 Apr 2022

Citation: Sevianu E, Rădac I, Rădac IA, Maloș CV, Gavril VD, Hartel TR (2022) Road mortality in Hazel Dormice *(Muscardinus avellanarius)*: first evidences for this species and implications for road mortality research. ARPHA Conference Abstracts 5: e84657. https://doi.org/10.3897/aca.5.e84657

Abstract

Roads are considered major movement barriers for the Hazel Dormouse, a strictly arboreal mammal. Recent evidence shows that they inhabit roadside habitats and can safely cross roads, but no evidence of road mortality has been documented so far. In our study we investigate the occurrence of safe road crossings and roadkills using direct observation during optimal activity of Hazel Dormice, by surveying 35 km of national and local roads transects in Romania. The transect crossed a representative landscape with forests, pastures, arable land and small villages. We encountered Hazel Dormice on roads on 21 occasions, out of which 10 were roadkills, 8 were safe crossings and 3 were individuals standing by the side of the road. Our study gives direct evidence that safe crossings do occur, but also documents road mortality in this species for the first time. We explored the habitat context around the roads to understand the determinants of road crossings. We found that woody and shrubby vegetation elements in the vicinity of the roads are important, especially in arable dominated landscapes. Factors influencing road crossing behaviour and the ways mortality impacts the dormouse population are still largely unknown. Understanding these can improve mitigation actions.

Keywords

protected species, small mammal, road ecology

Presenting author

Eliana Sevianu

Presented at

Oral presentation at the 11th International Dormice Conference (May 9-13, 2022)