

Road Kill at the Leslie Street Spit

Assessing the road mortality patterns in Toronto's urban wilderness

The presence of roads is a necessary component of urban life, but the manner in which the urban road network affects the surrounding natural environment—and, more specifically, the urban wildlife—is not often considered. The danger posed to wildlife in urban environments by means of vehicle-related fatalities is prevalent, even in areas of urban wilderness such as the Leslie Street Spit (the Spit) in Toronto, Ontario. The rate at which some species are killed on urban roads can be catastrophic to the population and possibly lead to extirpation. The goal of this study is to identify patterns of road mortality and, ultimately, to contribute data for effective mitigation strategies to reduce the instances of road kill at the Spit. The study area was divided into four sections and, from May to August 2011, the location and species of road kill found were recorded and mapped. The total count of road mortalities was 96, with snakes accounting for 71%, followed by birds (18%), amphibians (7%), and mammals (4%). The two sections of the study area with the highest vehicle traffic accounted for the majority (61%) of road mortalities. Temporal differences by taxonomic group were observed; for example, the mortality of snakes peaked in June, and that of birds in July and August. Overall, the results show that snakes are disproportionately affected by the presence of vehicles on the roads at Toronto's Leslie Street Spit and that the areas of increased traffic are also areas of increased mortality for the wildlife in this urban wilderness area.