



# Amphibian and reptile road mortality in the protected area of Obedska Bara, Serbia

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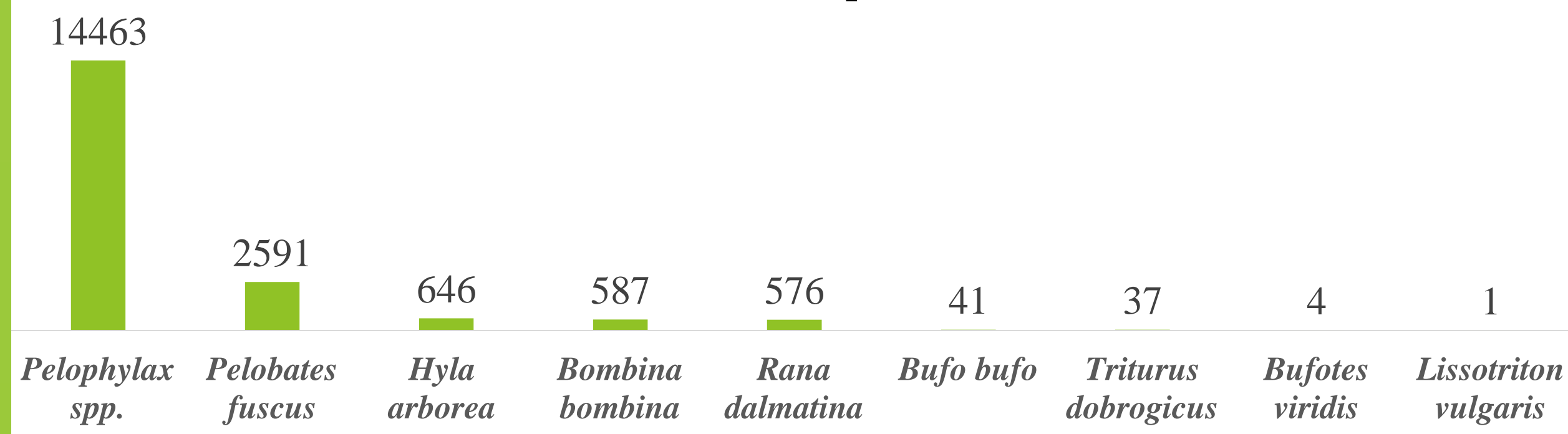
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Millions of animals are roadkilled every year. Amphibians and reptiles are among the most prone to roadkill, especially near ponds and wetlands.

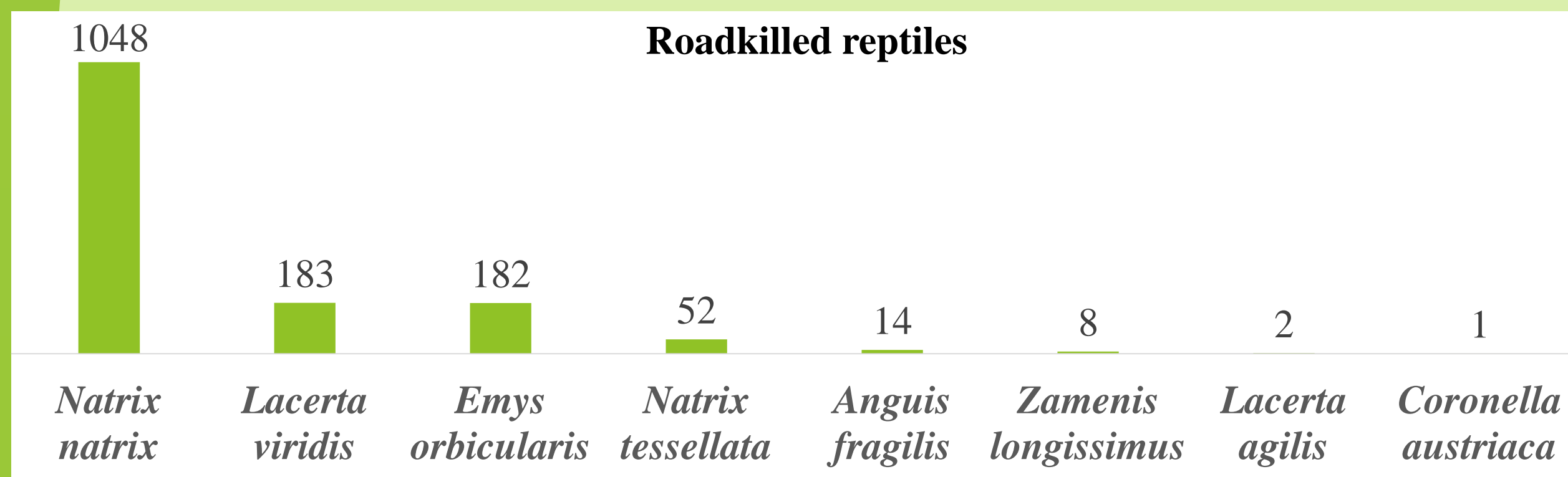
We examined the impact of traffic on amphibian and reptile populations on the edge of Special nature reserve "Obedska bara", Serbia. The aim of our study was to examine the temporal and spatial patterns of amphibian and reptile road mortality. From March to December 2018, we surveyed the road on foot for roadkills on a road section of 4.2 km, with two different habitat types (forest-pond and agricultural area-pond).



Roadkilled amphibians



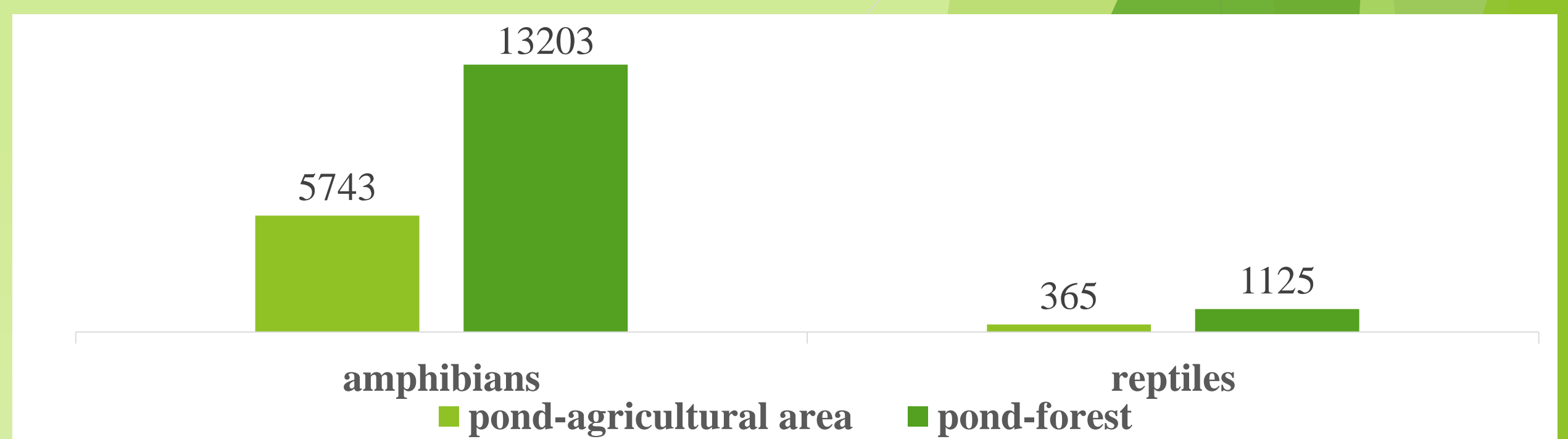
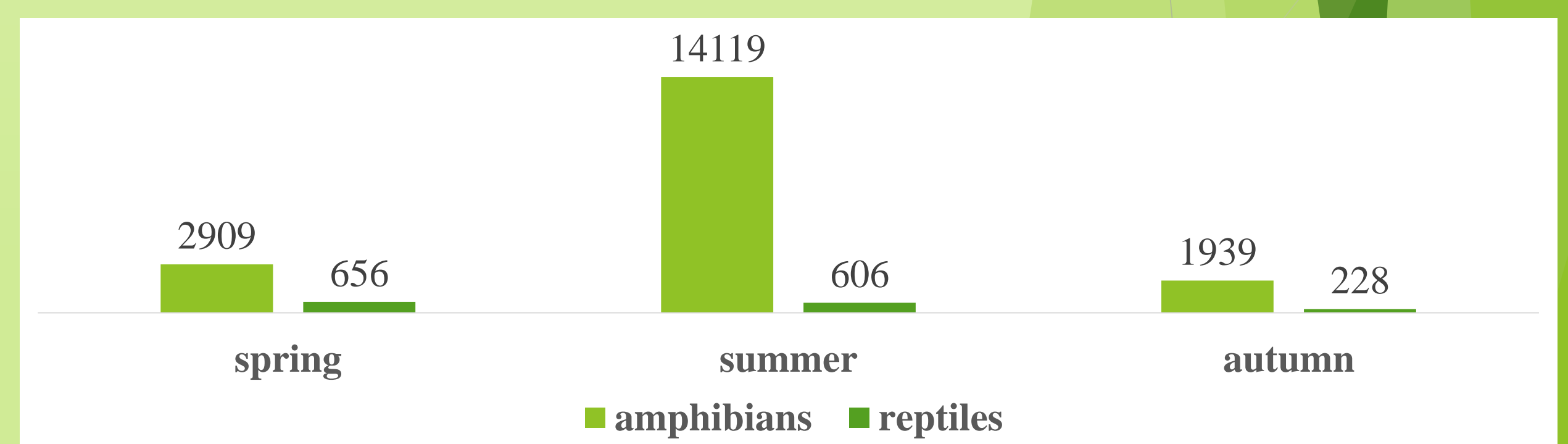
Roadkilled reptiles



Within 32 fieldwork days, we recorded 20457 roadkills (nine amphibian and eight reptile species). Amphibians (93%) were more vulnerable to traffic than reptiles (7%). Specimens of *Pelophylax esculentus* complex are the most frequently killed amphibians, followed by *Pelobates fuscus*, while specimens of *Natrix natrix* were the most frequently killed reptile species, followed by *Emys orbicularis*.

The numbers of killed amphibians and reptiles varied with the season, indicating that species do not have the same roadkill patterns among the different seasons. Amphibian roadkills were the most frequent during the summer, while reptile roadkills were the most frequent in spring and late summer.

Habitat type significantly affected the vulnerability of animals on roads. In addition to the different number of individuals killed in two different habitat types (higher in forest habitat), there was a difference in species composition.



This study indicates that detailed monitoring and actions that will mitigate road mortality are urgently needed in the Special nature reserve "Obedska bara".

