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Temporal Trends in Mammalian Roadkill Abundance in Central Georgia

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Temporal Trends in Mammalian Roadkill Abundance in Central Georgia

Mitigating wildlife-vehicle collisions requires knowledge of spatiotemporal trends which can be revealed using roadkill data analysis. When examining seasonal roadkill abundance, the trends could be explained by seasonal changes in animal behavior, interactions between taxa, and relative species abundance. Furthermore, roadkill seasonality can be influenced by driver visibility due to changing day lengths. The current study documents the temporal distribution of mammalian roadkill from 2012 to 2022 on a 12.2 mile section of Highway 212 in Putnam County and Baldwin County, GA. In this driving survey, roadkill were recorded to the nearest tenth of a mile using vehicle odometer readings. One thousand nine-hundred and ten roadkilled mammals representing 21 species were documented. The four most abundant species were *Didelphis virginiana* (Virginia Opossum), *Odocoileus virginianus* (White-tailed Deer), *Dasypus novemcinctus* (Nine-banded Armadillo), and *Sciurus carolinensis* (Gray Squirrel). Combined, these species account for 81% of the observed roadkill. The 10-year monthly average of mammalian roadkill shows seasonality with peaks during May and October. Temporal trends in the abundance of mammalian roadkill are likely heavily influenced by the breeding season and natal dispersal of medium and large mammals such as opossums and white-tailed deer.