

MS Thesis
Department of Environmental Science and Policy
College of Science
George Mason University

Candidate: Hannah Wood

Defense Date and Time: April 26, 2023, 3:00-5:00pm

Defense Location: Exploratory Hall 3301

Title: Mammal reactions to novel objects in their environment

Thesis Director: Dr. David Luther

Committee: Dr. Travis Gallo, Dr. Elizabeth Freeman, Dr. Cynthia Smith

ABSTRACT

The way in which mammals respond to novel objects can inform experts and managers about how urbanization is impacting species. The behaviors of three common North American mammal species with great behavioral plasticity, raccoons; red foxes; and white-tailed deer, were observed using remotely triggered wildlife cameras and novel objects. Environmental covariates, canopy cover, impervious cover, and population density correlated with particular behavioral responses to novel objects. The amount of time an individual spent within view of the camera, the number of behaviors exhibited, and the time it took an individual to novel objects and control sites were recorded and analyzed across an urban-rural gradient.