

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

**Candidate:** Kimberly Todd

**Defense Date and Time:** July 1, 2024 at 11:00am

**Defense Location:** Hybrid – Exploratory Hall 3301 and virtual

**Title:** Translocating swift foxes (*Vulpes velox*): Insights on personality, stress, and success

**Thesis Director:** Dr. Elizabeth Freeman

**Committee:** Dr. David Luther, Dr. Hila Shamon, Dr. Nucharin Songsasen

**ABSTRACT**

Conservation translocations—the intentional movement of organisms from one site to another—can bolster species and ecosystem recovery but are prone to failure due to low post-release survival. More research is needed to understand how individual characteristics like behavior and physiology contribute to translocation outcomes. We investigate relationships among bold (risk-taking) personality, biomarkers of stress, post-release movement, and survival using an ongoing swift fox (*Vulpes velox*) reintroduction program as a case study. Our research is the first to incorporate stress physiology into swift fox conservation measures and can inform future translocations for other species of conservation concern.