

Dr. Melissa Morgan

Associate Professor,

University of Kentucky M-G College of Agriculture Food and Environment

NON-COMPETITIVE DIVISION

LADDER: A Low-Tech Game-Based Exercise to Strengthen Community

Disaster Preparedness for Animals

Disasters increasingly threaten animal and human safety, yet animals are often excluded from emergency plans. Non-traditional stakeholders-such as Cooperative Extension, livestock producers, veterinarians, and animal control personnel-offer untapped expertise to support preparedness. To address gaps in animal-inclusive planning cost-effectively and engagingly, we developed LADDER (Local Approach to Discussion-Based Disaster Exercises and Readiness), a low-tech, multi-user board game. LADDER fosters whole-community engagement in discussion-based exercises to improve disaster readiness: a five-step process guided by design, testing, and implementation. Readability analysis ensured materials were accessible (= 9th-grade level), and feedback from multiple focus groups (n=8) led to refinement. After the exercise, participants completed an Exercise Evaluation and Participant Feedback form. LADDER offers emergency management an innovative 'exercise-in-a-box' to build community resilience through interactive preparedness activities. Evaluation results showed that 100% of workshop participants agreed that incorporating animal issues enhanced disaster preparedness. Specifically, 76.5% strongly agreed, and 23.5% agreed the exercise included the right stakeholders; 64.7% strongly agreed, 35.3% agreed it improved community

capabilities, and over 90% strongly agreed or agreed it enhanced their ability to address animal issues and identify key partners for future response efforts.

Presentation Theme: Emergency Management Exercises.

Collaborators, Advisor(s) and Department(s) that assisted with this research: Andrea Higdon, Meghan Wulster-Radcliffe, Sara Green, Roberta Dwyer, Kandice Williams.