**Evaluating the Effect of Sensory Misinformation on Mesocarnivore Foraging Activity (Poster)

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The variable effectiveness and ethical concerns of using predator removal to support ground- nesting birds have motivated increased interest in less-invasive alternatives for predator management. One promising avenue is the manipulation of predator foraging habits by using misleading sensory information (e.g., sense of taste, smell). To assess the potential utility of thisstyle of technique for reducing predation on game birds, we evaluated the response of mesocarnivores (e.g., badgers, coyotes, raccoons, and red foxes) to repeated exposure to galliform odors in a northern mixed-grass prairie ecosystem in north-central Montana, during May–July 2024. We quantified the response of mesopredators to 4 treatment types: 1) domestic chicken preen-oil, 2) domestic turkey preen-oil, 3) a commercial trapping lure, and 4) unscented petroleum jelly as a control odor. Odor treatments were monitored using motion- activated camera-traps at 669 sites (72–264 sites per odor type), for a total of 4,625 trap-days. We hypothesized that bird odor treatments would be more attractive to predators than commercial or control treatments, and that mesocarnivores would become habituated to the odors and show decreasing interest during the study period. We found that the mesocarnivore response to odor treatments was similar between types and did not wane during the study. Theproportion of mesocarnivore detections per trap-day (0.033) may not have been high enough to influence foraging behavior. Overall, the response to odor treatments and the lack of habituation effect suggest that this style of predator manipulation may not be effective in this ecosystem.