

Predator communities are of the highest level of importance to the life histories of various species and ecosystem health, while invasive species historically can collapse entire populations. Even in their native habitats, mesocarnivores such as the Red fox (*Vulpes vulpes*), Common raccoon (*Procyon lotor*) and Striped skunk (*Mephitis mephitis*), already pose an immediate threat to resident species. Anthropogenically altered habitats open the establishment for range expansion to these alien mesocarnivores and create a negative impact within the ecosystem through competition, direct and indirect predation. The current gap in knowledge on the invasion of mesocarnivores in the sagebrush steppe, has led to the following research questions (1) what is the distribution of mammalian predators in the region; and (2) what is the abundance of these potential predators in the region? We deployed 81 cameras within the Powder River Basin in northeastern Wyoming, which totaled 9095 trapping nights over a 4-month span. Preliminary results confirm a presence and suggest the introgressions of invading, previously non-resident, mesocarnivores within the region and show a positive correlation to the presence of anthropogenic water bodies. As we see an influx in non-resident mesocarnivores, we predict the consequences for resident flora and fauna adapting to these invasive species to follow the negative historical outcomes. Our work is ongoing and expanding into the following season, and our aim is to help guide reclamation efforts and provide aid to the threatened resident species in the region.