



SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

GRADUATE EXIT SEMINAR

ASHLYN HALSETH

Exploring the host and parasite relationship: sarcoptic mange infestations in an urban coyote population



Sarcoptic mange, caused by the obligatory ectoparasite, *Sarcoptes scabiei var canis*, poses significant threats to canid populations, as it results in high levels of morbidity and mortality. Despite its impact, the disease dynamics and individual risk of infestation for coyotes (*Canis latrans*) in urban environments remain understudied. As human density within urban spaces continues to rise globally, understanding how disease dynamics within coyote populations is crucial for both wildlife conservation and public health. The Cook County Coyote Project, spanning from 2000 to 2023, has been examining sarcoptic mange infestations among radio-collared coyotes within the Chicago metropolitan area. In this study, we aim to (1) determine prevalence rates, identify causes of mortality, and elucidate general disease dynamics of sarcoptic mange and (2) identify specific covariates that influence an individual's likelihood of infestation within the Chicago coyote population. By achieving these objectives, our research will contribute to illuminating the complex host-parasite dynamic of sarcoptic mange and coyotes in an understudied region of the coyote's North American range.

Advisor: Dr. Stanley Gehrt

Thursday, March 21, 2024
9:00 A.M.

Location: Kottman Hall 370

Join the seminar via Zoom:

<https://osu.zoom.us/j/95951530452?pwd=UnEwTnBoVVYvVFJraTVCd0RPcIF4Zz09>

Meeting ID: 959 5153 0452

Password: coyotes

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