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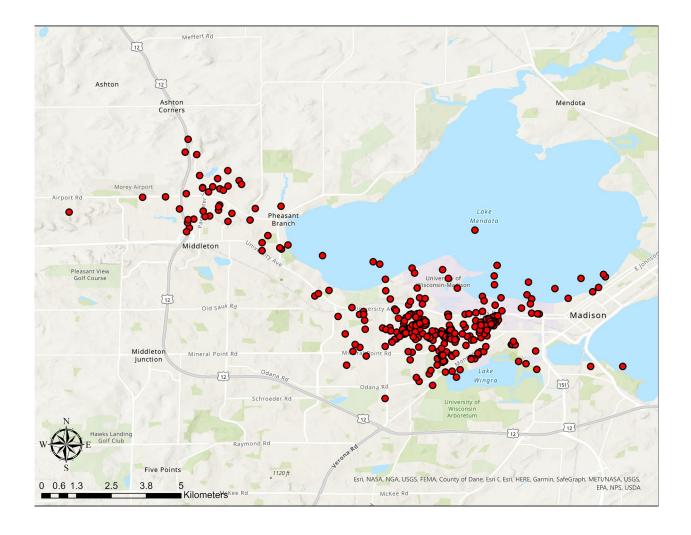
Report to the Madison Parks Commission

December 31, 2021

Thank you very much for your continued support of my urban wildlife research projects on Madison Park's properties.

We continue to live trap and radio collar coyotes and red foxes in Madison as part of our UW Urban Canid Project. The current focus of our research is to understand the mechanism(s) that allows coyotes and red foxes to co-exist in the same space and time; a relationship that seems unique to urban areas relative to rural areas. A second focus of research currently is to understand how well coyotes and red foxes cross roads. We're interested in examining if increased road densities in a coyote or red fox's home range increases the chance for that animal to get killed by a vehicle, or the more roads an animal crosses the more experience they gain and that decreases their risk of vehicle mortality.

One animal we'd like to highlight (see map below) is a red fox we live trapped and radio collared in Hoyt Park in Dec. 2020. Although this male denned under a garage in the Regent neighborhood in winter/spring 2021, it ranged across most of west Madison and into Middleton and even crossed the Beltline. This animal seemed to contradict the optimal foraging theory; a theory that an animal is going to expend the least amount of energy and risk to secure the necessary resources to survive. This red fox did not need to travel across west Madison and into Middleton to find food and other resources. As he traveled further than necessary, he exposed himself to potential additional risks like vehicle mortality. This is an example of the uniqueness of how wildlife in urban areas behave differently than wildlife in non-urban areas.



The second project I have involves placing 24 wildlife cameras along bike paths throughout Madison to understand how wildlife patterns change, if they do, with zoning and land use/cover changes along an urban to less urban gradient. One of these cameras is placed in Reindahl Park. Madison is one of 26 cities throughout North America that is part of the Urban Wildlife Information Network. This research project is temporarily suspended but I would like permission to continue placing a single camera in Reindahl Park as I plan on restarting this project in 2022.

A third project a graduate student and I started in 2021 was to survey park users in 3 conservation parks (Owen, Edna Taylor, and Olin) and 3 community parks (Elver, Olin, and Door Creek) to understand how park use may vary based on wildlife species present and a park users outdoor experience and education. We surveyed park users in all 6 parks in fall 2021 as a pilot study and would like to continue this survey research in summer 2022. We hope our results will help Madison Parks better understand how people use parks relative to wildlife present.

I'd like to request approval to continue all 3 projects in 2022. I greatly appreciate the past support and enthusiasm from Madison Parks and the Parks Commission for our projects. I

would especially like to acknowledge how helpful and responsive Paul Quinlan has been, and I am grateful for his support and assistance.

Thank you very much

David

David Drake Extension Wildlife Specialist/Professor