Live Trapping of *Lynx rufus* in Suburban West Reno

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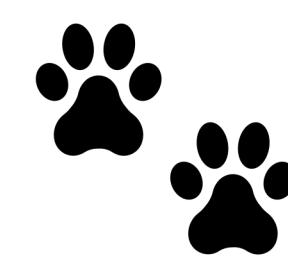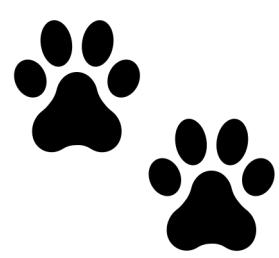
Overview

After two years of camera trapping, we documented the presence of bobcats in the West Reno area, yet little is still known about how they use this environment. To better understand movement patterns, diet, and seasonal use of this habitat, we live trapped bobcats. We caught a female and fitted her with a GPS collar.

To date, the bobcat uses the suburban environment at night and dens in a more wildlife area during the day. To our knowledge, this is the first GPS collared bobcat in Northern Nevada and the first study investigating how these species utilize this environment. The proposed research project will provide insight into the health of this local population and provide information to state agencies that manage this population.

Introduction

Bobcats (*Lynx rufus*) have adapted to a variety of environments, including the urban/suburban environment. With increasing human use of the landscape, research on population health and persistence is especially important in this species. Bobcats are understudied in Nevada, and even less is known about their use of the urban environment. The objective of this research was to understand the use of the suburban environment by bobcats. We set up live traps in Dec 2021 with the main goal of fitting GPS collars to trapped individuals in order to track movement patterns and observe what areas of the urban environments are being utilized. We are also collecting data on age, sex, weight, and disease presence in order to better understand the health of this population.

Methods

- Wire cage traps set and opened Dec 11, 2021.
- Traps were placed on the properties of volunteers' homes where camera trapping for bobcats has been successful
- Visual attractants in traps included feathers, foil, and printed out images of prey
- Scent lures included bobcat gland, skunk oil, and beaver gland (only one is used at a time).
- Traps were checked weekly and re-baited
- Trap sensors (Kiwis) set at each trap and alerted if trap had movement.
- GPS collars: #G5-2A from Advanced Telemetry Systems programmed to give 6 GPS points per day (2,6,10 am & pm).


Results

- Since Dec 2021, nontarget species caught were cottontails, raccoons, and squirrels. They were immediately released.
- On 4/7/22, a female bobcat (aged 4 years old), was trapped in northwest Reno.
- She was sedated by a vet, fitted with a GPS collar, ear tagged, weighed at 20.8 lbs, and had blood drawn. Vitals were taken every 5 min.
- She was monitored for 30 min after the procedure and released once she was alert.
- GPS data collection began immediately and within 24 hours GPS points were being downloaded (Fig 1).
- Location data showed the female stayed close to the trapping location (Fig 1).
- She had since moved to a more wildlife area to rest during the day and appears to travel to housing areas at night.

Fig 1. GPS points from collared female
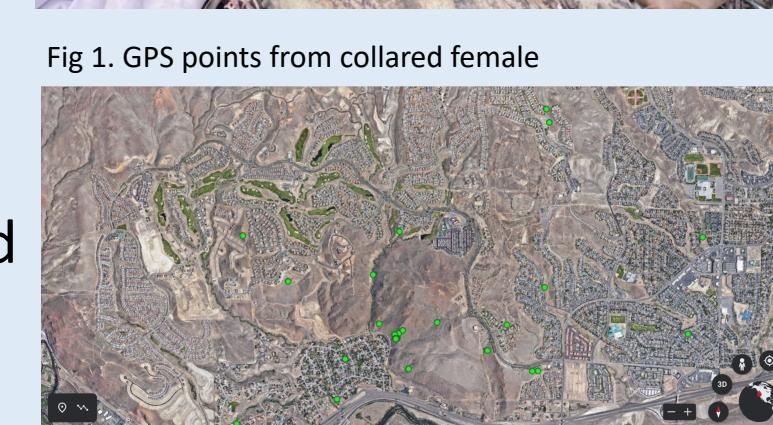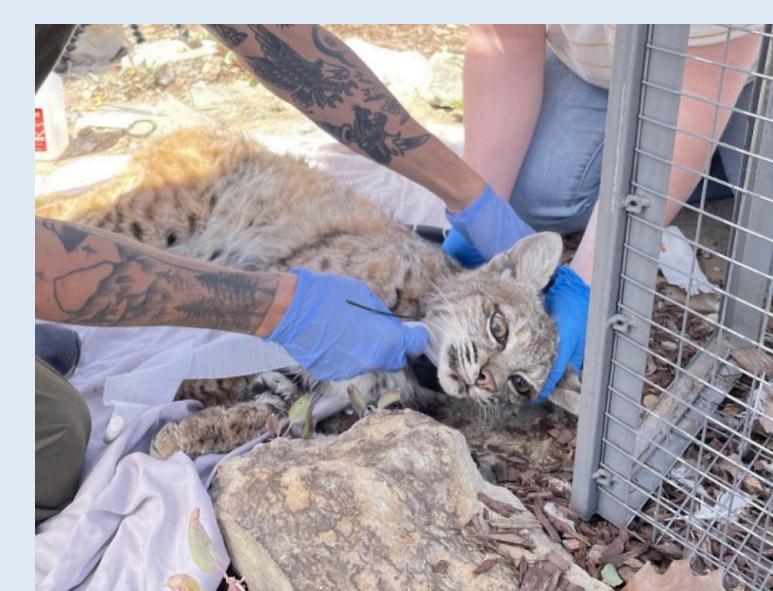
Conclusion

The objective of this research is to better understand movement patterns and the use of the urban environment by bobcats. Increased urbanization can create a challenge for some species, yet these elusive predators are potentially thriving in the suburban environment. While the data obtained thus far are minimal, as this female is the only collared bobcat of the project, and it was trapped recently, we plan to trap and collar more individuals over the next year. With the use of GPS collar data, we will be able to have a better understanding of the areas in which bobcats are frequently located, what time of day they are pushing into urban areas, and possible den locations that could be integrated into urban environments. Knowledge of the presence and habitat use of bobcats in suburban areas is important, as to avoid interaction and possible conflict and to better understand the health of the population.