Feeding Free-Roaming Cats may Minimize Wildlife Impact

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Background

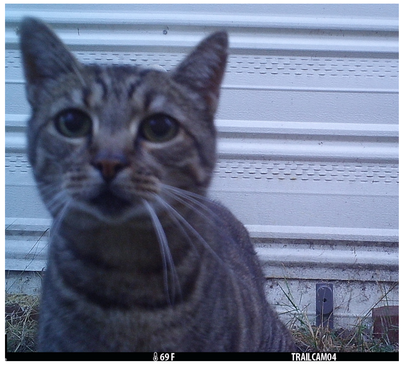
- Free-roaming cats have been shown to be prolific hunters of local wildlife in areas they inhabit and one of the biggest hazards to wildlife (Loss et al., 2013).
- The Hayden Island Cat Project attempts to manage stray/feral cats and the free-roaming cat population in general through community engagement, adoption, trap-neuter-return, and annual monitoring.
- Some community members act as cat caregivers and provide shelter, food, and water to the free-roaming cats.
- Some ecologists argue feeding cats allows them to live longer and reproduce more, increasing their impact on local wildlife (Maeda et al., 2019), (Crawford et al., 2019).

Cat type definitions:

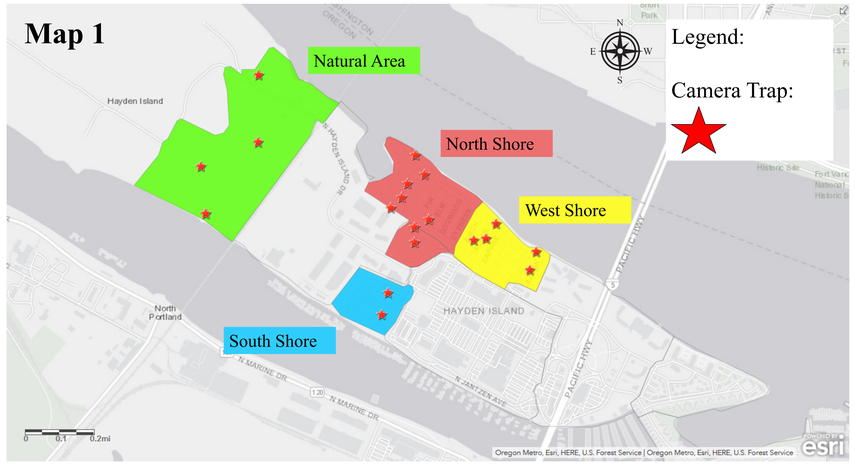
•**Feral Cat**: un-owned domestic cat that lives outdoors and avoids human contact.
•**Stray Cat**: has been socialized to people at some point, but has left or lost its domestic home.
•**Free-roaming Cat:** lives outdoors at least part of the time (includes pets, stray, feral).

Methods

- Five camera traps were placed in three different zones of the manufactured home residential community in September 2019 (Map 1)
- Four camera traps were placed in the natural area zone (Map 1)
- Each trap was set out for a week before being deployed to a new area for a total of three weeks
- All photographed cats were identified as collared (likely a pet), ear tipped (sterilized feral cat), or neither (general free-roaming cat).
- Free-roaming cat locations and feeding station coordinates were collected and provided by Portland Audubon.
- Feeding station and cat coordinates were entered into ArcGIS to create density maps.



Results



Map 1: Camera trap locations with labeled survey zones

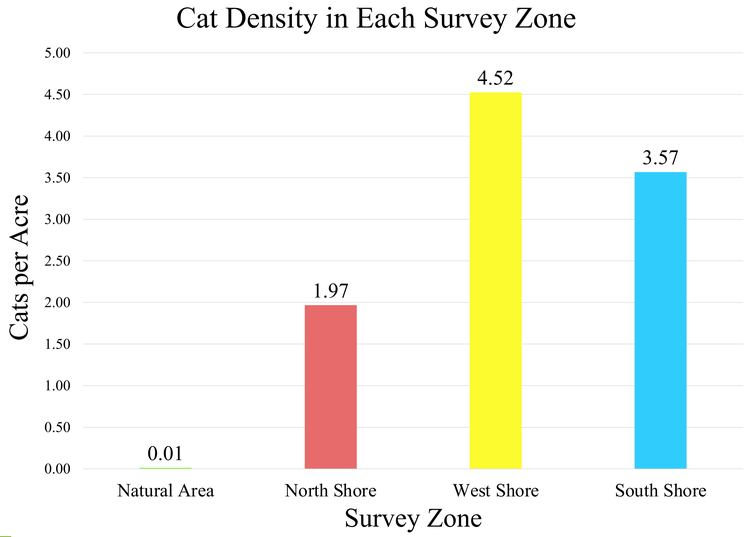


Figure 1: Density in cats per acre of each survey zone.

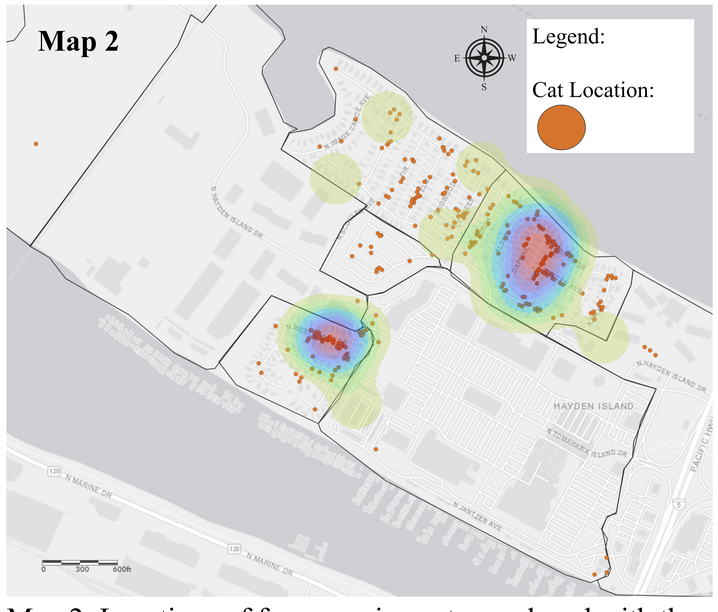
Results & Conclusions

- **Core finding:** Free-roaming cats tend to congregate near feeding stations in low wildlife value areas of Hayden Island. This could minimize cat predation on wildlife elsewhere on the island (see Map 2).
- Individual cat coordinates overlap with feeding station density (see Map 2).
- Free-roaming cat density highest in West Shore. This is where feeding station density is highest.
- Only one cat recorded in the natural area

Findings in this study are supported by previous research on the island:

- A stable isotope analysis found on average 67% of the feral/stray cat diet consisted of dry cat food provided at feeding stations (Cove et al., unpublished data 2019).
- The cat recorded in the higher wildlife value natural area was also recorded in 2018 from a prior camera trap study (Liebezeit, unpublished data 2018-19).
  - Indicates minimal cat migration to the natural area.
  - Coyotes documented in natural area. Potentially dissuading cats from entering (Gehrt et al., 2013)

(Full citations can be provided at request from the author)



Map 2: Locations of free-roaming cats overlayed with the feeding station density

Acknowledgments:

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