

CONDOS FOR CATS: Partners Improving Relationships with Wildlife in Urban Communities



Ground-level Feral Cat Feeding



Coyote Attracted and Feeding



"Now, where's that kitty..."

Project Partners:

- Narragansett Bay Coyote Study (NBCS): The Conservation Agency and RI Natural History Survey, Numi Mitchell, Ph.D., Lead Scientist, and David Gregg, Ph.D., Project Director
- East Providence High School, Joel Swan, Head of Science Department
- PawsWatch, Chairman of the Board of Directors, Gil Fletcher
- East Providence Animal Control, Officer Will Muggle
- CoyoteSmarts, Jo Yellis, Project Coordinator

EXECUTIVE SUMMARY:

The partners in the Narragansett Bay Coyote Study (NBCS) along with faculty and students from East Providence High School, East Providence Police, and the advocacy group PawsWatch (pawswatch.org) seek a \$9,000 grant of financial support from ExxonMobil for a project they have developed to reduce unhealthy interactions among humans, native wildlife, and feral cats in the city of East Providence, the broader environs of the ExxonMobil East Providence Terminal.

NBCS is tasked to perform a series of experiments over a five-year period designed to manage coyotes humanely. The goal is to test our well supported theory that permanent removal of food resources will drop coyote population density: food subsidies from humans both attract coyotes and fuel exceptional growth in their populations. Coyotes can be heavily food subsidized in urban settings like East Providence, causing increased coyote traffic in neighborhoods, disease transmission, pet predation, and increased human/coyote interactions.

Tracking coyotes in East Providence with the help of staff at the ExxonMobil Terminal in 2019-2020 led us to an extremely significant food subsidy for coyotes on Waterfront Drive: a large TNR (Trap-Neuter-Release) colony of feral cats living around 4-6 wooden shelters. Here, large amounts of cat food are regularly placed on the ground by PawsWatch volunteers. The cats are forced to compete for the food with coyotes (also raccoons, skunks, and opossums) also attracted by the resource. When the feeders don't come in time the coyotes can eat the cats.

Here we propose to reduce community impacts from the dysfunctional nexus of people, cats, coyotes, and other wildlife, at the Waterfront Drive colony. Working together, East Providence Students, PawsWatch, NBCS staff, supported by other project partners, will design feeding systems that will effectively remove the attraction and access to food for coyotes, and other opportunists, while providing a safe, centralized area for the cats to live. The technology we plan to use in East Providence will increase the efficacy of TNR efforts and our joint project will provide a template for communities throughout RI currently experiencing wildlife impacts from feral cat colonies.

DETAILS: Pursuant to a contract from Rhode Island Department of Environmental Management (DEM) and the U.S. Fish & Wildlife Service, The Narragansett Bay Coyote Study is tasked to perform a series of experiments over a five-year period designed to manage coyotes humanely. The goal is to test whether issues with coyotes can be solved by finding and removing potential food sources that both attract them and fuel exceptional growth in their populations. Our theory is that permanent removal of food resources will drop coyote population density (for a number of reasons having to do with the biology of the coyote). We have accumulated evidence indicating we are correct.

Most of our experiments are being conducted in rural settings on farms where it is relatively simple to put a GPS collar on a coyote and see what it does: 1) when there is a pile of edible farm waste present (turkey parts at thanksgiving, for example), vs. 2) after these food-waste piles are cleaned up. There are usually just one or two piles, and the farmer often has heavy equipment to bury the waste out of reach. The coyotes that were, at first, congregating densely at a sumptuous pile of turkey feet, after removal, spread out and forage far and wide. They defend this new larger territory, functionally lowering coyote density (coyotes per square inch).

In urban settings, however, removing food resources that are subsidizing coyotes is generally more complicated. A coyote with a GPS collar will often point us to garbage cans, picnic areas, restaurant dumpsters, or decks where people feed their pets outside. All of these sources will cause coyotes to

Ground feeding at Waterfront Drive cat shelter



forage in town. Where in rural settings coyotes tend to be skittery, because they are hunted, in urban settings coyotes can become bold. This, when attractive foods are found in communities and the coyotes learn to associate the reward of food with non-threatening people. They become habituated, and no longer run away. They may even approach people and pets, hoping for a handout or easy meal.

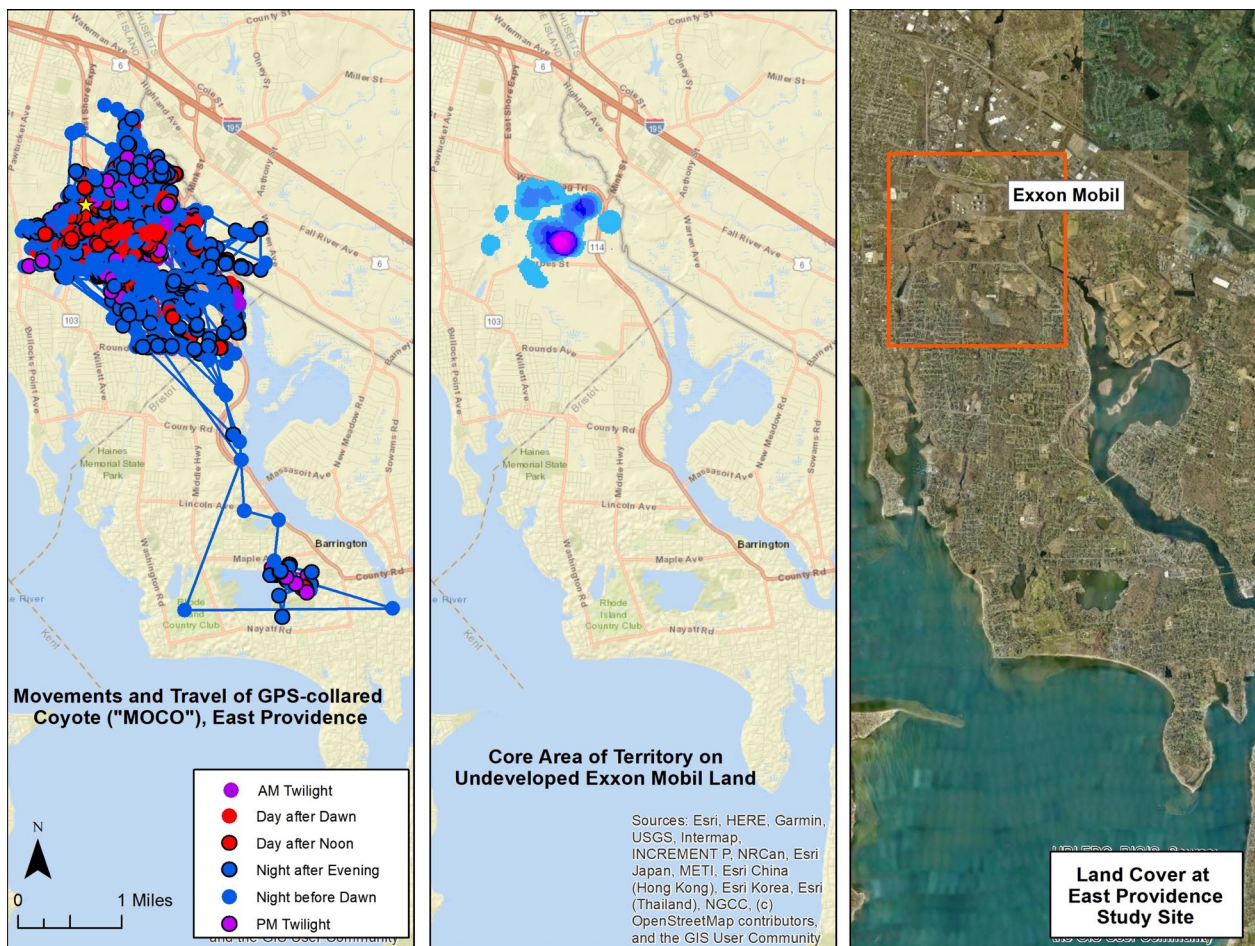
Stopping these small food subsidies is harder because they can be ephemeral, numerous within one coyote's territory and, to succeed, every person/institution has to be convinced to clean up (not easy unless there is a committed police department with a "no wildlife-feeding" ordinance). The typical challenges we face running our experiments in urban settings explains why we are submitting this proposal "Condos for Cats."

Tracking coyotes in East Providence in 2019-2020, with the assistance of ExxonMobil staff, we became aware of a single extremely significant food subsidy for coyotes on Waterfront Drive: a large TNR (Trap-Neuter-Release) colony of feral cats living around 4-6

wooden shelters (photo above). The cat food is placed in brimming bowls on the ground and the cats then compete for the food with local wildlife: coyotes, skunks, raccoons, and opossums. When the feeders don't come in time the coyotes can eat the cats.

Here we propose to reduce community impacts from the dysfunctional nexus of people, cats, coyotes, and other wildlife at the Waterfront Drive colony. To do this we plan to run our experiment in collaboration with 6 community-based RI organizations: East Providence Police/Animal Control, PawsWatch Volunteers led by Gil Fletcher, East Providence High School Science Department, CoyoteSmarts, The Conservation Agency, and The RI Natural History Survey. Data will be compared with those from unsubsidized coyotes living almost entirely in the natural areas of the ExxonMobil Terminal land (figure below).

2019-2020 Data from GPS-collared coyote 45012 (aka Moco) captured on the ExxonMobil property



This East Providence project should provide a template for communities throughout RI where feral cat colonies occur, and uninformed but well-intentioned tenders, create a chain of impacts to communities. Students, who observe first-hand the improvements made to the welfare of animals and residents in communities with properly-managed cat colonies, will create presentations and videos to be shared with other Rhode Island schools and organizations. PawsWatch volunteers managing the colony will be able, for the first time, to catch and sterilize all colony cats. They will also learn how to manage cat colonies humanely, reducing coyote predation and disease transfer, by using elevated shelters and

feeding them within. The PawsWatch volunteers will be able to transfer this knowledge to other cat-colony keepers around the State.

This project will serve as a model for communities but also an experimental trial for the larger DEM/USFWS humane coyote-management study. This fact will allow the staff of the Narragansett Bay Coyote Study to provide their time as a match. Along with our community grant request to East Providence ExxonMobil, we are asking RI Foundation for a matching Community Grant for aspects that fall outside the scope of the USFWS/DEM project.

PROJECT PLAN:

1. Video monitoring: Video cameras will be used to access cat and wildlife traffic (including coyotes) at the Waterfront Drive colony site to tell us when and where to trap.
2. Coyote trapping and collaring: Humane coyote traps will be set near the colony. Trap closure is weight based so cats will not be caught. GPS collar one to two coyotes.
3. Coyote tracking before food elevation: Coyotes movement paths will recorded using GPS locations transmitted by satellite to NBCS and mapped using specialized software. Food at the cat colony will be on the ground as per normal, accessible and attractive to wildlife during this period.
4. Food hotspot location: Weekly NBCS staff will examine any activity hotspots revealed by the GPS data analysis and will visit these areas looking for possible food resources. Data will be shared with Joel Swan's East Providence High School biology class and the cat advocacy group PawsWatch.
5. Building Condos for Cats: After approximately 6 months, we will have an idea of areas the coyotes sleep in, forage in, and defend (their territory). Swan's students will modify the ground-level cat shelters into "Condos for Cats:" enclosed structures raised about 5 ft high on unclimbable stilt legs, having steps, or platforms, about 3 feet apart that only cats can jump between to reach a narrow door. This will permit cats but not coyotes, raccoons, skunks, or opossums to enter.
6. Feeding cats while removing food for coyotes: Thereafter, any residents who are feeding cats will feed them INSIDE the condos, NOT on the ground. Separation of cats and these scavenger/predator species will help prevent the transfer of rabies virus by saliva in bowls as well as other transmissible diseases (e.g., PARVO, distemper, feline leukemia, and some parasites).
7. Trap-door capture for cat TNR (Trap-Neuter-Release): The most significant shortcoming with the TNR strategy for colony reduction is being unable to neuter 100% of the cats; some learn to avoid standard traps. In this collaborative project, real time imagery from the colony captured for the science will be combined with an internet addressable cat trap to improve PawsWatch's progress towards their 100% neutering goal. When PawsWatch volunteers observe remaining unneutered cats entering a shelter to feed, the doors can be remotely dropped. According to their protocol, animals are then transferred to cages and transported for surgery at RI Community Spay/Neuter Clinic in Warwick. All neutered colony cats are released at the colony after a suitable recovery period. If properly managed, a TNR colony declines over time without the need to euthanize any cats.
8. Coyote tracking after food elevated: As before coyote food "removal," coyote movement paths will be followed using GPS locations transmitted by satellite to NBCS and shared with students and PawsWatch.

9. We see what happens: Theoretically coyote hotspot activity at the colony will reduce significantly as coyotes spend less time there, likely as well in the urban areas they travel through surrounding it. Either they will find another subsidy or have to go make an “honest living” in other natural habitat nearby. People, cats, and pets should start seeing less coyote traffic and will find themselves safely coexisting with coyotes.

COMMUNITY BENEFITS:

A small amount of support from ExxonMobil will allow these benefits:

- Students, who observe firsthand the improvements made to the welfare of animals and residents in communities with properly-managed cat colonies, will create presentations and videos to be shared with other Rhode Island schools and organizations.
- PawsWatch volunteers managing the colony will be able, for the first time, to catch and sterilize all colony cats. They will also learn how to manage cat colonies humanely, reducing coyote predation and disease transfer by using elevated shelters and feeding stations. The PawsWatch volunteers will be able to transfer this knowledge to other cat-colony keepers around the State.
- Residents advocating for green space in the city will have concrete data on the wildlife benefits as well as the management responsibilities of vegetated urban open space.
- Through working together with an important corporate citizen, ExxonMobil, a community dialog will take place about the relationship of people and animals in an increasingly developed world.

BUDGET:

We are asking ExxonMobil for a grant of \$9,000 to fund three satellite tracking collars and a receiver needed to track two coyotes, materials to build the Cat Condos, a software license for the students to view and analyze incoming data. The staff of the NBCS project partners will provide their time, mileage, cameras, traps, wireless connections, and all other supplies as a match through the existing DEM/USFWS grant and other support. Along with ExxonMobil, we are asking the Rhode Island Foundation, other local businesses, and private donors for additional financial assistance.

| ITEM | COST |
|---|-----------------|
| Telonics Iridium/GPS tracking collars (3) | \$ 6,795 |
| Telonics data receiver and cables | \$ 1,400 |
| ArcGIS seat license | \$ 100 |
| Materials/supplies (lumber, fasteners, flashing, paint, etc.) | \$ 705 |
| TOTAL REQUEST | \$ 9,000 |

CONCLUSION:

Some people feed colonies of feral cats, some put food out for coyotes, and some advocate for urban nature preserves, and all are expressing a common concern for animal welfare; but unfortunately, in Rhode Island’s denser, urban/suburban neighborhoods, these people are often working at cross-purposed through a lack of understanding. This encourages bad outcomes for the very animals they are trying to help as well as amplifies serious health risks for fellow human residents. East Providence is a particularly trenchant example now as existing green space butts close against dense suburban/urban housing leading to frequent interaction, including feeding and threatening encounters, and the proposed development of Metacomet Country Club has neighbors talking about the value of having

nearby open space. This project is uniquely positioned to leverage an existing grant with a small amount of additional support from ExxonMobil to create a civic conversation and grow our understanding of each other and the world around us.