# Hixon Center for Urban Sustainability

**CASE STUDY** 

# **Protecting Urban Mammals**

# **Green City**

## **Climate Issue: Habitat Loss**

- As the world urbanizes, natural areas for wildlife habitat are in decline
- With intentional planning, cities can support wildlife conservation through the provision of greenspaces, streets trees and greenways
- This planning is especially important for urban mammals, who play a vital role in sustaining balanced ecosystems in cities by dispersing speeds, consuming smaller "pests" like insects and rodents and promoting biodiversity.

By investing in greenspaces, cities can help conserve urban mammals, improve biodiversity and support overall ecosystem services.







# **Protecting Urban Mammals**

Animals like squirrels, raccoons, coyotes and white-tailed deer face unique challenges in cities because they travel on land and require larger areas to live. These areas that are often disrupted by infrastructure such as roads and buildings.

Cities can support mammal conservation by improving the **quantity, quality and connectedness** of greenspaces. Doing so reduces habitat fragmentation for urban mammals.

# **New Haven: An Urban Mammal Inventory**

An important first step in urban mammal conservation is to understand what animals exist in your city. Researchers in New Haven used wildlife cameras to learn what types of mammals are in the city and where they are found. The results:

- identified the landscape characteristics of areas where different mammals live
- highlighted areas where mammal populations are struggling
- helped prioritize which habitats need to be restored and protected.

## **IN A NUTSHELL**

- Habitat loss from urbanization poses a risk to urban mammal populations
- Urban mammals provide important services, including managing pest populations and enhancing overall biodiversity
- Cities can invest in greenspaces to help conserve urban mammal populations
- Wildlife camera surveys help cities understand what mammals live where, and which habitats to prioritize for protection.

## WHAT CAN YOUR CITY DO?

#### **Build an Urban Mammal Inventory**

**CONDUCT** a wildlife survey to assess the mammal community, set conservation goals and measure progress

**ENGAGE** residents in installing wildlife cameras and sorting photographs using online citizen science platforms like Zooniverse

**UTILIZE** existing protocols like The Urban Wildlife Information Network to compare results with other cities.

#### **Improve and Increase Habitat**

**IDENTIFY** corridors to connect habitat and protect the movement of mammals, via greenways or wildlife crossings

**PROMOTE** diverse vegetation and trees to increase habitat resilience against blights and environmental change

**INCREASE** overall city greenness through efforts like planting street trees and establishing public parks and gardens.

To find out more information on this case study, contact Elizabeth Nowlin at elizabeth.nowlin@yale.edu. This research was supported by a Hixon Fellowship.