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Module 12: Urban Wildlife

Urban EcoLab

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Outline - Part I, "Urban Coyotes," Lessons 1-5

Center for Urban Resilience

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Urban EcoLab - Module 12
“Urban Wildlife”

MODULE 12 OUTLINE - PART I, “Urban Coyotes”, LESSONS 1-5

Introduction – Part I – “Urban Coyotes”

- Coyote sightings in cities have become increasingly commonplace, creating a wildlife management issue for local governments. Coyotes and humans have cohabitated for centuries, each occupying their own niche. In the last few decades, however, due to factors such as habitat loss and fragmentation, among others, more coyotes have been pushed into urban areas. With more coyotes in cities, combined with the rapid pace of urbanization, the result has been a greater number of unwelcome interactions between coyotes and humans, as well as coyotes and domestic animals.
- The goal of Part I of this Module is to provide information on the history of the coyote-human relationship, background on coyotes in myths and legends, coyote ecology and genetics, and best practices in wildlife management that might help mitigate the impact of coyotes in urban centers, so humans and coyotes can co-exist peacefully and successfully.
- A lesson within Part I will also focus primarily on a local research wildlife management case study being conducted in Long Beach, California.

Notes

- This Module is written for high school grades 9-12 but can be modified for the younger grades.
- The Module also includes adaptations for various learners including English language learners, students with special education needs, and extended learning alternatives for all groups, including gifted and talented learners.

Urban EcoLab - Module 12

“Urban Wildlife”

Educator Resource – Building Background

Part I, Lessons 1-5: “Urban Coyotes” (Funded by a Grant from the City of Long Beach)

Coyotes *Canis latrans* are one of the most adaptable meso-predators in North America. Originally a prairie species, coyotes can be found from coast to coast and they thrive in a variety of ecosystems such as forest, prairie, wetlands, desert, and urban. They have an eating palette for almost anything, from animals they have hunted and killed, to animals or food they have scavenged opportunistically. This is what makes coyotes so adaptable to and successful in urban areas.

Coyotes rely primarily on small prey animals (rodents, rabbits, squirrels) for their food, but they scavenge dead animals they may come across, such as those hit by cars. Fruit is also a big part of their diet, when it is readily available, so people are encouraged to pick up dropped fruit from fruit trees, to avoid attracting coyotes into their yards. Coyotes are also expert at scavenging food scraps at trash sites and food subsidies left out by humans for other animals, such as cat and dog food. It is best for people to pick up and take in all food after domestic animals have eaten.

The big challenge for city managers is how to control the coyote populations, so humans and coyotes can coexist peacefully and safely. With increased urbanization, interactions are on the rise between coyotes and humans as well as coyotes and domestic animals. Articles can be read in newspapers across the country, where coyote sightings have occurred, or where there have been interactions between coyotes and domestic animals as well as humans.

Many cities have wildlife management plans in place to try and mitigate these encounters. Some cities have hired outside agencies to help develop wildlife management strategies that can address the coyote problems in their cities. Communities also have some residents who hire trappers to trap and kill coyotes. However, as Stuart Ellis says in his book, [Living With Coyotes](#), “the coyote has defied all attempts to eradicate it” (Ellins 2005). In our history of cohabitation with them, people have consistently tried to eliminate them by hunting, trapping, and poisoning. Research has shown that lethal control works for individual problem coyotes, but not as a viable population control strategy (Mitchell 2016).

The solution to coyote issues in cities should be a community one, where city managers and residents can work together towards coyote mitigation strategies such as:

- keeping pets indoors when not with humans
- keeping pets on-leash when walking them
- bringing in cat and dog food after pets have eaten outside
- picking up dropped fruit from fruit trees
- putting garbage in secure barrels
- learning hazing techniques to scare off a coyote that may approach
- avoiding walking pets at dawn and dusk, when coyotes are most active

Coyotes are here to stay. Attempts to eradicate them will not succeed. Often times it is an absolute necessity to remove a coyote if it has become a ‘problem-coyote’. However, whenever a resident coyote is removed, transient or fringe coyotes will move into and take over the territory. One removed coyote usually results in two to three new coyotes, so coyote removal actually makes the problem worse. The solution should be one that works toward peaceful coexistence.

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Lessons Resources:

- All Lessons Include:
 - Lesson Plan
 - Instructional PowerPoints
 - Educator Lesson Support Materials
 - Student Handouts
- Lesson 1: Coyote Ecology & Resiliency
- Lesson 2: Coyote Population Dynamics
- Lesson 3: Coyote Traits, Adaptations, and Behavior
- Lesson 4: Canid Biodiversity
- Lesson 5: Coyote Wildlife Management (*Long Beach Case Study*)

Module Resources:

- **CA-NGSS Standards Alignment & Extended Learning Chart**
- **Lesson Adaptations & Extensions Chart**
- **Key Terms**
- **Scientific Research Topics**
- **Career Resources**
- **Binder Cover**
- **Reference Materials**
- **Reading Materials**
- **Additional Presentations**
- **Assessment**