## Urban Coyote Research in Denver Metro Area.

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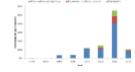
#### **NWRC Mission**

Apply scientific expertise to resolve human-wildlife conflicts while maintaining the quality of the environment shared with wildlife

#### **Denver Metro Area Coyote Study (2009-2015)**

#### **Study Objectives:**

- Spatial and Temporal Patterns in Conflict
- Human Dimensions
- Urban Coyote Ecology
  Population Size
- Urban Coyote Behavior
  - Are urban coyotes bolder/more aggressive than rural coyotes
- Urban Coyote Management
  - Role of Education
  - Role of Hazing
  - Role of Targeted Lethal Removal



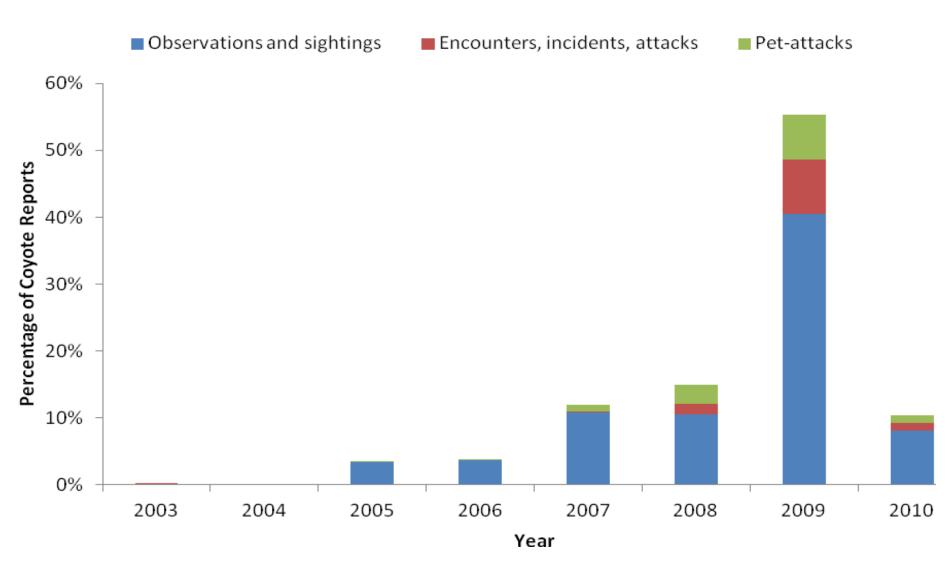








## Conflict on the Rise.... Coyote Conflict in Denver



## **Behavior of Concern:**

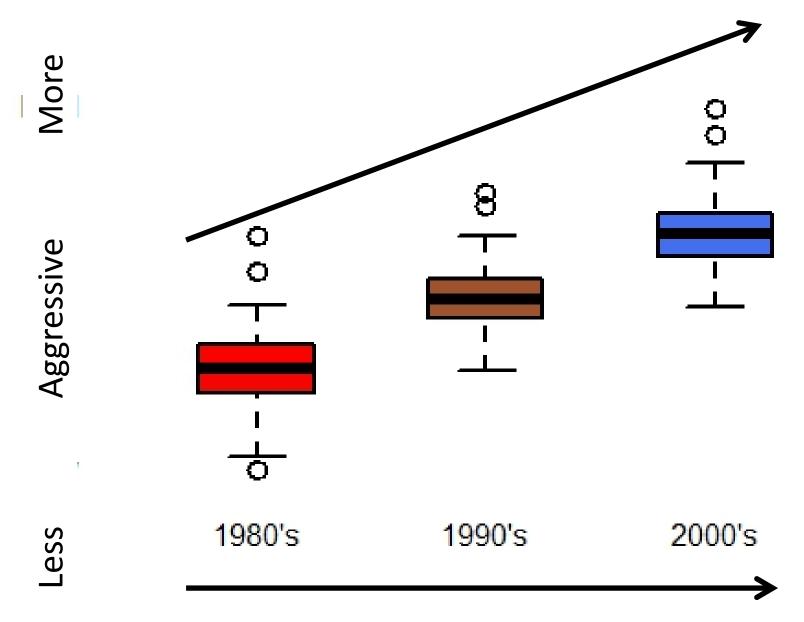
### Coyotes Attacking Pets

### Coyotes Attacking People





#### **Coyotes Developing Aggressive Behavior**



# Important Results Related to Coyote Management

- Urban coyotes are bolder than rural coyotes
- The vast majority of coyotes don't cause problems
- Hazing coyotes can help people in short-term
- Hazing coyotes probably does not change behavior or problem individuals
- Annually 1-2% of coyotes were lethally removed
- Removal of problem coyotes reduced recurrence of extreme conflict
- Education is important for long-term

# **Relevant Scientific Literature**

Breck, S.W., S.A. Poessel, P. Mahoney, and J.A. Young. 2019. The intrepid urban coyote: a comparison of bold and exploratory behavior in coyotes from urban and rural environments. Scientific Reports: <u>https://www.nature.com/articles/s41598-019-38543-5</u>

Breck, S.W., S.A. Poessel, and M.A. Bonnell. 2017. Evaluating lethal and nonlethal management options for urban coyotes. Human-Wildlife Interactions: 11:133-145.

Bonnell, M. A. and S.W. Breck. 2017. Using coyote hazing at the community level to change coyote behavior and reduce human-coyote conflict in urban environments. Human-Wildlife Interactions 11:146-155.