Urban coyotes’ adaptations, effects on landscapes, and interactions with other wildlife

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October 13th, 2016
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- Work with the Cook County Coyote Project and Max McGraw Wildlife Foundation
- B.S. in Wildlife Science from Colorado State University
- Focus on behavior and genetics of coyotes
Our Background

- **Research**, education, and outreach with our various partners
- Coy project started in 2000
- Need for understanding how coyotes work and how to live with them
- Scientific research - not agenda oriented
Dr. Stan Gehrt - Lead Principle Investigator
Shane McKenzie - Associate Research Scientist
Hance Ellington - Post doc
Andy Burmesch
Justin Fowler
Abby-Gayle Prieur
Lauren Ross
Katie Robertson (grad)
Many more techs....
What animals have we researched?
Agenda

- Background
- What we have learned
- Species Interactions
- Current projects
- Human Safety
Research topics

- Basic ecology
  - diet, social structure, etc
- Habitat/use of landscape
- Urban Living
- Disease
- Species Interactions
- Behavior and genetics
Capturing coyotes and raccons
Coyotes are individuals

- Generalist species
- Varying preferences
  - diets
  - habitats
  - behaviors
When do you see coyotes?

- Elusive
- Move at night—become more nocturnal in urban areas
Coyotes are very territorial
- Will not let other packs or coyotes in the area

Highly structured pack system
- Impose “rules”

Food determines where coyotes live and where they explore
What do coyotes eat?
Mesopredator Release Hypothesis

Intermediate-sized prey species are preferentially selected

Large and small prey species are preferentially selected
Indirect Landscape Effects

- Ecosystem balance
- Apex predator in some systems
- “Top down” vs “bottom up” control
Will they eat my pets?

- Main diet is natural – generalist
  - prey
  - berries
  - roadkill

- Some eat anthropogenic food resources

- Small dogs or cats could be harmed but are generally avoided due to fear of humans - even when unattended

- If near a forest preserve, should be more wary
Disease

Life Cycle

**Raccoon Roundworm Life Cycle**

- Larvae migrate into organs approximately 3 to 4 weeks
- Second Stage Larva Infective
- Ingestion by intermediate host: humans, birds, and animals such as squirrels & rabbits
- Eggs develop into adult worms in raccoon
- CNS Disease

The Gable
Top mortality factors

- Being hit by cars is #1
- Mange or mange-related exposure
Behavior: Why do we care?

- Human-wildlife interactions
- How do people affect coyotes?
- What causes problems?
  - Situation?
  - Environment?
  - Genetics?
- How can we mitigate conflict?
What can cause conflict?

- Food (intentionally or unintentionally) from humans
- Losing fear of humans
- Pets approaching coyotes
- Disease
- Unattended or loose running pets
- Presence of pups
How do I prevent an attack?

- Coyotes do not usually attack or approach humans
  - Most are fearful or avoid people
- Haze- make loud noises, get big, throw objects near animal
  - Good for them, good for you
- Never approach animals
- NO FEEDING
  - Fed coyote can = dead coyote
- Keep your dog on a leash
- Is it pupping season? (late April-June)
  - Stay away from possible den sites
Conservation

- Learn to coexist with wildlife
- Fear of humans good
- Haze nuisance animals
- No feeding!
- Remove attractants
- Plant native flowers 😊

HELP INCREASE THE NUMBER OF BEES BY PLANTING ONE OF THESE POLLINATOR FRIENDLY FLOWERS

Here are some plants that can be grown in most areas of the U.S., although it's ideal to plant native plants.

- Lavender (Lavandula spp.)
- Rosemary (Rosemarinus officinalis)
- Sage (Salvia spp.)
- Coneflower (Echinacea spp.)
- Sunflower (Helianthus spp.)
- Redbud (Cercis spp.)
- Catnip (Nepeta spp.)
- Penstemon (Penstemon spp.)

- Lamb's ears (Stachys spp.)
- Verbena (Verbena spp.)
- Bells of Phacelia (Phacelia spp.)
- Aster (Aster spp.)
- Black-eyed Susan (Rudbeckia spp.)
- Oregano (Origanum spp.)
- Yarrow (Achillea millefolium)

Plant list sourced by: Lynn Hasselberger, Green Diva and Founder of myEARTH360.com
Partners and Funding

- www.urbancoyoteresearch.com for more information
- Cook County Forest Preserve District
  - Chris Anchor
- Cook County Animal Control
  - Dr. Donna Alexander
- University of Loyola Hospital-Comparative Medicine
  - Dr. Jean Dubach
- The Ohio State University
- Max McGraw Wildlife Foundation