Coyotes in North Carolina

*History, Distribution, and Status*
North American Coyote Distribution: Prior to European Settlement
North American Coyote Distribution: Current
Coyotes in North Carolina
Description

Typically 25-40 pounds

Variation in color
NC Coyotes: Prior to 1983

• 1938: Gaston
• 1947: Swain
• 1955: Johnston
• 1970: Wake
• 1977: Surry
• 1978: Surry
Coyotes Spread across the Southeast

- Louisiana: late 1940s
- Arkansas: 1960s
- East of the Mississippi River
  - 1970s through 1980s
  - Expedited by merging local populations from coyotes released to chase with hounds
Coyotes in NC: Post-1983

• Collection of reliable reports & specimens helped track coyotes in North Carolina
• Populations first established in eastern part of state obviously from illegal translocations
• 1988–1990: First natural migration into western counties
• After 1996: All populations merged together
Coyote Occurrences
1983 – 1985
Coyote Occurrences
1988
Coyote Occurrences
1990
Coyote Occurrences
1996
Adaptability

• Habitat
• Food Habits
• Behavior
## Diet estimates of coyotes

<table>
<thead>
<tr>
<th>Albermarle Peninsula Diets <em>(scats)</em></th>
<th>Fort Bragg Diets <em>(scats)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diet Item</strong></td>
<td><strong>Percent Occurrence</strong></td>
</tr>
<tr>
<td>Small rodents</td>
<td>32.7%</td>
</tr>
<tr>
<td>Rabbits</td>
<td>29.7%</td>
</tr>
<tr>
<td>White-tailed deer</td>
<td>24.8%</td>
</tr>
<tr>
<td>Other mammals</td>
<td>7.9%</td>
</tr>
<tr>
<td>Vegetation</td>
<td>3.0%</td>
</tr>
<tr>
<td>Other</td>
<td>2.0%</td>
</tr>
</tbody>
</table>
Coyote Dispersal

30819 - Female, Subadult
Coyotes in Urban Areas
Adaptability to Mortality

1. Vehicle  
2. Disease  
3. Harvest

Litter sizes  
Pup survival rates  
# yearlings breeding

Increased competition  

Low Mortality  

Decreased competition  

High Mortality  

Litter sizes  
Pup survival rates  
# yearlings breeding
Coyote Interactions in NC
Coyote-Wildlife Interactions

• Impacts are likely to be minimal to beneficial overall
• Ecological Role
Coyote-Wildlife Interactions

• Coyotes may have impacts if prey populations are low due to other factors
  • Unlikely as coyotes switch to whatever is most abundant
    • This seems to hold true for deer
• Red foxes are probably the only species that could be adversely impacted by coyotes
Coyote-Human Interactions

• Various concerns associated with coyotes:
  • Diseases
  • Depredation
  • Human Safety
Rabies
(1990-2015)

- Racoon, 7150
- Skunk, 1569
- Fox, 1251
- Cat, 416
- Dog, 128
- Bat, 626
- Other, 208

OTHER (208)
- 64-Cow
- 58- Bobcat
- 34-Equine
- 14-Coyote
- 10-Goat
- 9-Groundhog
- 6-Beaver
- 4-Deer
- 3-Rabbit
- 3-Opossum
- 1-Ferret
- 1-Otter
Urban Coyote-Human Interactions

• Conflicts:
  • Attracted to unsecure food
    • Pets
    • Pet food
    • Bird seed
    • Garbage
  • Begin to associate humans with food

• Will adapt to living among people where they are not harassed
  • Attacks are rare; no unprovoked attacks in NC
Rural Coyote-Human Interactions

• Depredation a concern with livestock
• Predation (all species) accounts for:
  • 39% of all sheep and goat losses (nationally)
  • 5.5% of all cattle losses (nationally)
Rural Coyote-Human Interactions

- Livestock Damage:
  - Pre-2000: Dogs blamed
  - Post-2000: Coyotes blamed
  - Reality: Both responsible
  - Not all coyotes kill livestock

- Unconfined & unprotected livestock vulnerable
- Husbandry practices important
Tools for Preventing/Resolving Conflicts

Non-lethal:
1. Education
2. Tolerance
3. Modifying Human Behavior
   - Removal of attractant
   - Leashing dogs
   - Cats indoor
   - Husbandry practices

Lethal
Eradication?

• To cause and maintain population decline:
  • Remove 70% annually
  • Coyotes will return

Not possible or needed
Bounties

• They don’t work
• Target <5% of coyote population
• Paying people who are already catching coyotes
• Rampant fraud
  • Coyotes “grow wheels” (out-of-state & out-of-county)
  • Can buy parts/pieces online
• Cost 10s of thousands
• Don’t target the problem animals
  • Many states have tried, all have failed
Managing Coyotes is Important

- Must use integrated approach
- Population management ≠ damage management

You can help us document coyote trends!
Hunter, Trapper, and Hunter Observation surveys