

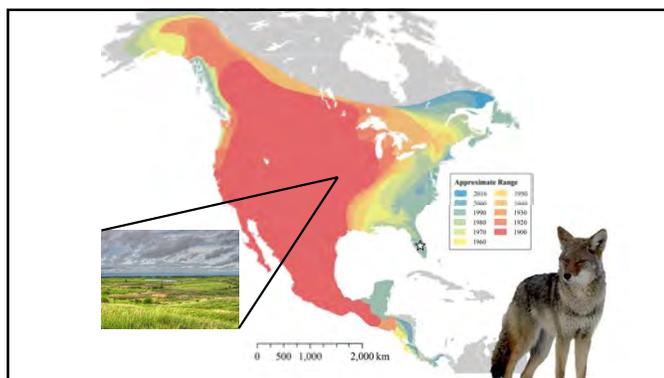
Coyote Behavior: Lessons from the city *(and the country)* and applications to the ranch

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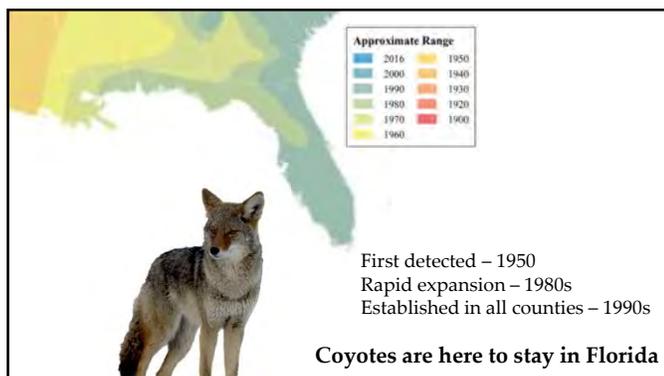


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First detected – 1950
Rapid expansion – 1980s
Established in all counties – 1990s

Coyotes are here to stay in Florida

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Coyote behavior

Landscape Scale
months and years



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Coyote behavior

Landscape Scale
months and years

Patch scale
minutes, hours, days

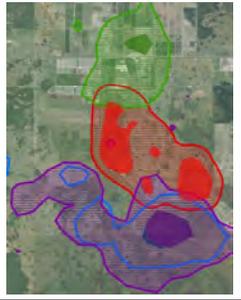


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What do we know about coyote behavior in Florida?

Ke Zhang (MSc; supervised by R. Boughton)
Ranches in south-central Florida

Home ranges were
6600 acres



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 Prefer forest, shrub/scrub and improved pastures
 Avoid wetland, dry prairies, roads

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This is valuable baseline information, but we need to know more

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What do we need to know about coyote behavior in Florida

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What do we need to know about coyote behavior in Florida

Foraging behavior

When and where does it occur?
What landscape features are most important?

What is the link between landscape, diet, and behavior?



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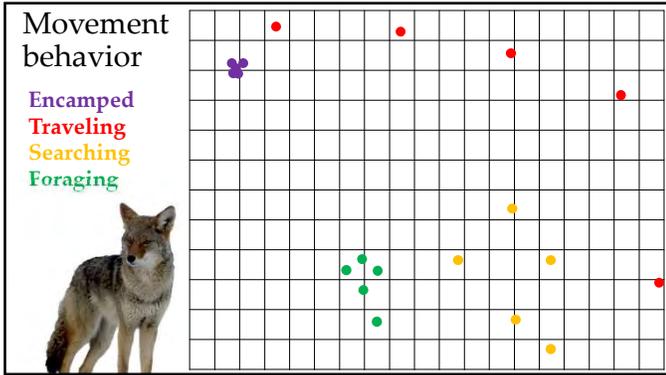
What do we need to know about coyote behavior in Florida

A better understanding of foraging behavior...

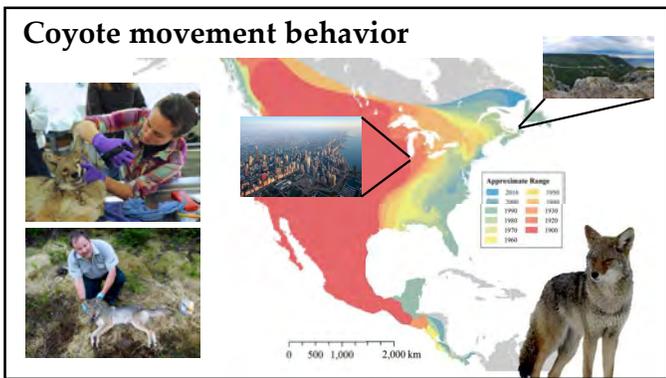
Could allow us to minimize and mitigate conflict with coyotes (human and livestock)



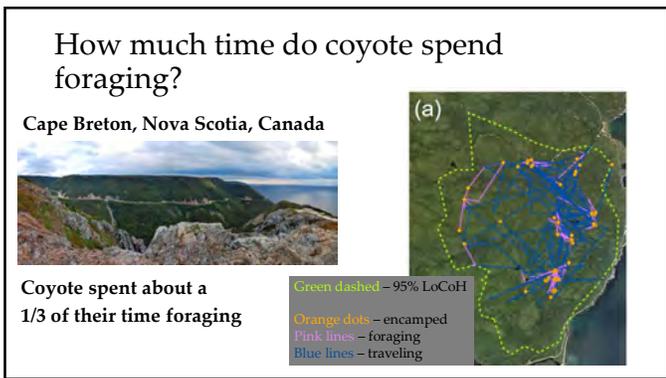
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How much time do coyote spend foraging?

Chicago, Illinois



Coyote spent about a 1/4 of their time foraging

Purple dots – encamped
Yellow lines – foraging
Orange lines – searching

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When did foraging behavior occur?

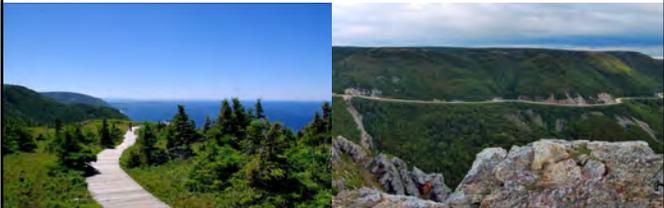
All times of day and night, but most frequently at dawn and dusk



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Where did foraging behavior occur?

It depends on time of day, except for one general rule:
"close but not too close" strategy to roads and trails



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Where did foraging behavior occur?

During the day
Prefer open areas without trees



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Where did foraging behavior occur?

During the dawn and dusk
Avoid open areas
Prefer the forest edge
Prefer landscapes with a mixture of forest, open, wetland, etc.



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Where did foraging behavior occur?

During the night
Avoid open areas

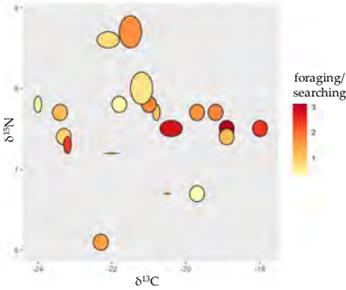


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Link between foraging behavior and diet

As coyotes consumed more human-derived food, they made

more short foraging movements and fewer long searching movements

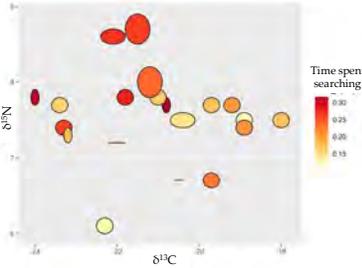



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Link between foraging behavior and diet

As coyotes consumed more protein, they made

fewer short foraging movements and more long searching movements

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What could this tell us about coyote foraging behavior in Florida

1. Spend between 25-33% of their time foraging
 - a. As human disturbance increases, spend less time foraging because they are spending more time encamped
2. All times of day but most frequently at dawn and dusk
3. Employ a close but too close strategy for roads and trails
4. Use different landscapes at different times of the day
 - a. Open landscapes and forest edges could be important
5. The landscape and diet influence foraging behavior of coyotes



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Thank you! **UF** | **IFAS Extension**
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Chris Anchor, Shane McKenzie,
Erich Muntz, Erin Koen,
Many students, technicians, and staff