Reed Canyon Squirrels and Foraging Behavior

Ashlee Cook

Reed College Bio342

Background

- Two dominant squirrel species in Portland, Oregon: Eastern gray squirrel (Sciurus carolinensis) and Eastern fox squirrel (Sciurus niger).
- In the colder months, squirrels exhibit what is know as "caching" behavior which is the collection and burial of food such as nuts (4).
- Is there a difference between the foraging activity of eastern gray and fox squirrels in the Reed Canyon?



Reed College Canyon (3)



Eastern Fox squirrel (2)

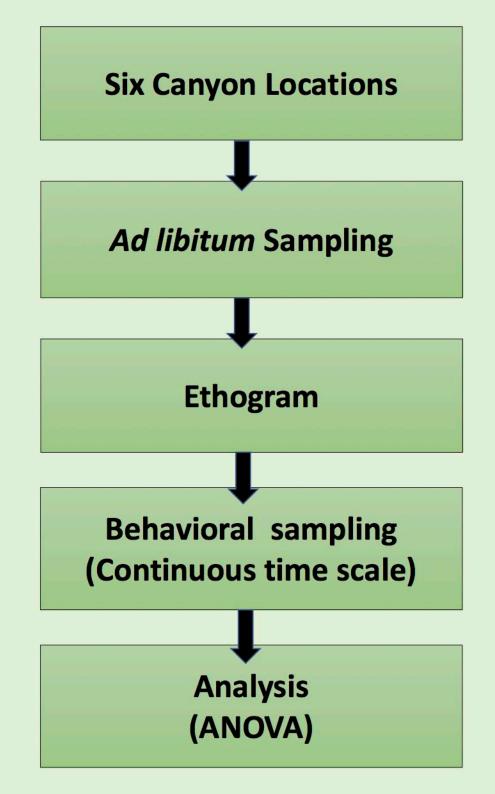


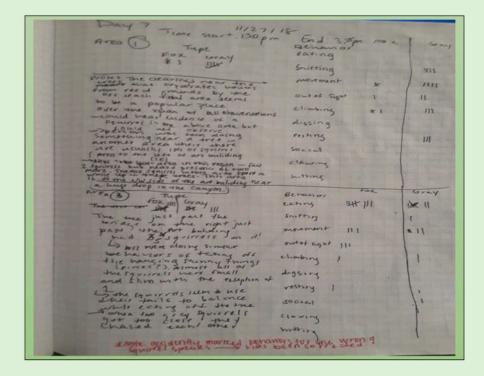
Eastern Gray squirrel (1)

Methods

ethogram	
Resting	Squeezed is making no movements for at
Climbing	Squirrel goes up the length of an object
clawing	at an object
Smitting	ground ground
movement	previous pot position with
diffigging .	squirroi vies claus repeatedly
hitting	Squirrels stakes the objects held it is its claws and makes ropeated notting motions using another object
eating	squirel pats mouth on an sood item such as nots
out of sign	annot observe squire
social	Squirrel interacts with another Kristel / animal

Ethogram used to record behavior.





Example of observation scoring.

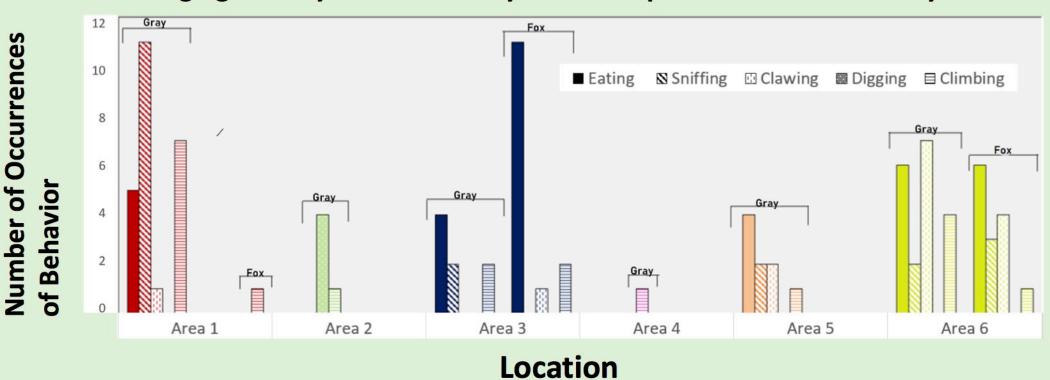
Results

- Area 2 and 4 had the least amount of activity of behaviors.
- Gray squirrels had more forging activity than Fox squirrels on average.
- on average, gray squirrels had the most eating (3.17 instances) and climbing (2.67 instances) activity.
- Fox squirrels had the fewest digging activity (0 instances) on average.



Labelled Satellite Image of the Reed College Canyon (5)

Foraging Activity of Eastern Gray and Fox Squirrels in the Reed Canyon



Conclusion and Future Directions

- While there was a trend in activity and area, there was no significant impact of location and foraging activity.
- Gray squirrels were observed more in foraging behaviors than fox squirrels, on average.

What's Next?

- Squirrels were observed doing foraging behaviors on both the ground and trees, and future research could look to see which has the greatest amount of activity.
- Comparison between eastern gray and fox squirrels from urban and rural college campuses.

References:

- (1) https://kids.nationalgeographic.com/animals/eastern-gray-squirrel/#eastern-gray-squirrel-tree.jpg
- (2) http://wildlife.ohiodnr.gov/species-and-habitats/species-guide-index/mammals/fox-squirrel
- (3) https://blogs.reed.edu/reed_canyon/page/4/
- (4) https://ssec.si.edu/stemvisions-blog/why-do-squirrels-bury-nuts-and-other-mysteries
- (5) https://satellites.pro/#45.482992,-122.634308,17

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