

# Breaking the Rules: Feeding the Wildlife Edition

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# Introduction

- Question: How many insects will respond to different foods and what insects will respond?
- Hypothesis: The most sugary and fragrant fruits and vegetables will attract the most insects, ie. oranges and apples.
- We did not have enough prior research or knowledge to predict which specific insects would prefer each food.

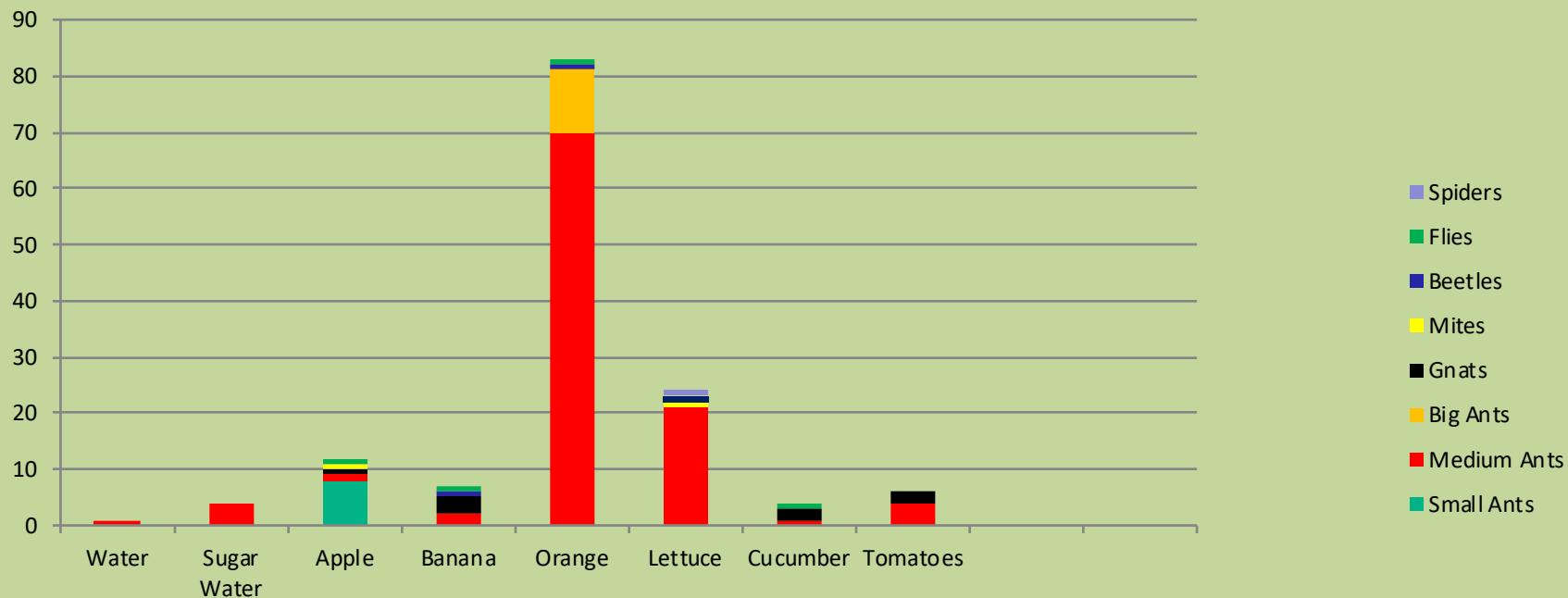


# Methods

- First, we cut up the fruits and veggies and arranged them on individual paper plates.
- Then, on two more plates, we poured small amounts of water and added sugar to one of them.
- We set them a few feet apart and proceeded to check on them periodically over the span of an hour.
- When the trial was finished, we either ate the remaining food or threw them away inside.

# Results

- Our data suggests that our hypothesis was correct.



# Results

- Simpson's Diversity Index!
- $D = (n/N)^2$

Most to Least Diverse
Orange
Lettuce
Tomato
Apple
Banana
Cucumber
Water / Sugar Water

Most to Least Insect Count
Orange
Lettuce
Apple
Banana
Tomato
Cucumber
Sugar Water
Water

# Conclusion

- The oranges collected the most insects and had the greatest diversity.
- Our hypothesis was correct that the insects would be attracted to the fruit/veggies that contained the most sugar and were the most fragrant, a.k.a the organges.

# Discussion

- A surprising discovery was that the lettuce attracted the second greatest number of insects and had the second greatest diversity.
- Even foods without a smell can attract many insects similar to more fragrant and sugary foods, like apples and oranges.
- If we could do this again we would place plates farther apart, check the plates at more exact times, and stay farther back.

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GREAT SMOKY  
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**THANK YOU!!!**