

Cathance River Preserve Mammal Study

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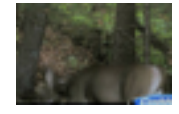



Purpose: To determine how many and what kind of mammals are seen at three habitats (flatlands, ridge, intermittent stream), using a remote camera. Also, to determine what times these mammals were seen, and how it corresponds, to whether they're a carnivore, herbivore, or omnivore.

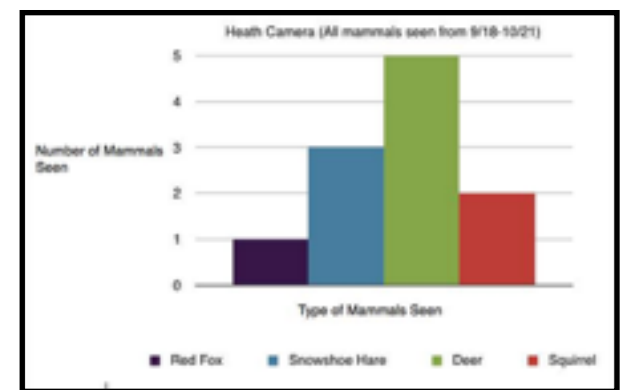
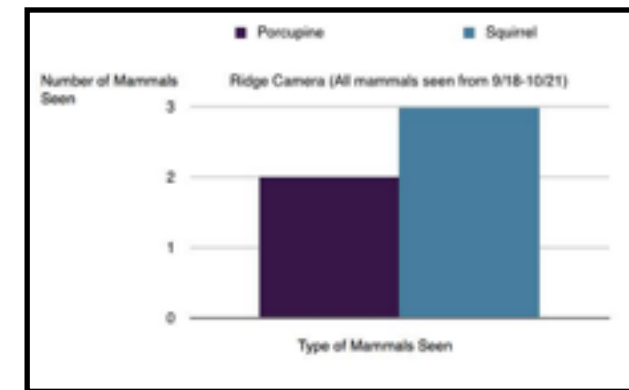
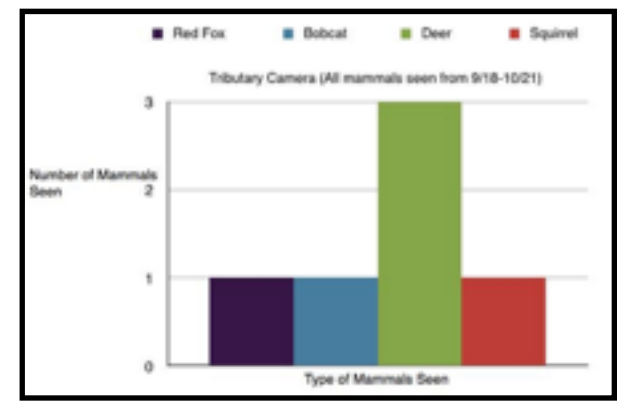
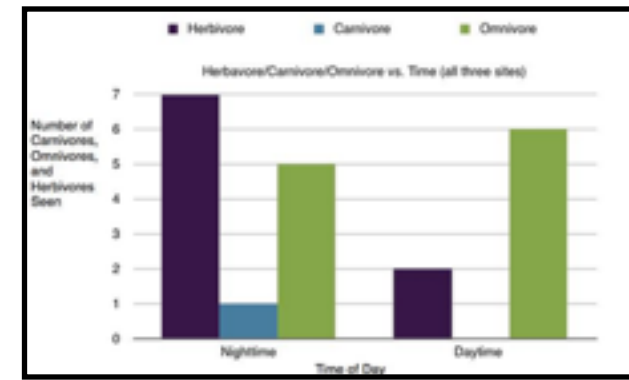
Hypothesis: If three baited remote cameras are set up, then herbivores and omnivores will be more active during daylight hours, and carnivores will be more active during nighttime hours. If cameras are set up in three different habitats, then carnivores will be more active by the heath, omnivores more active by the ridge, and herbivores more active by the intermittent stream.

Procedure:

- 1) Set up three motion sensitive cameras in the Cathance River Preserve, each in different habitats. The first camera is set up by an intermittent stream (N 44°49.674, W 68°15.058), the second on a ridge (N 43°57.500, W 69°57.098), and the third in a heath field, (N 43°57.183, W 69°57.044).
- 2) Bait each location with corn, apple slices, and tuna.
- 3) Download pictures weekly, record the time and date the picture was taken.
- 4) Determine species, then determine if the animal is a carnivore, herbivore, or omnivore.

Graphs:

Heath Camera	Ridge Camera	Tributary/intermittent Stream Camera
		
Animals Sighted	Animals Sighted	Animals Sighted
 Red Fox (Omnivore)	 Porcupine (Herbivore)	 Red Fox (Omnivore)
 Snowshoe Hare (Herbivore)	 Gray Squirrel (Omnivore)	 Bobcat! (Carnivore)
 White-Tail Deer (Herbivore)		 White-Tailed Deer (Herbivore)
 Gray Squirrel (Omnivore)		 Gray Squirrel (Omnivore)



Conclusion:

At the Heath Site: **One** fox, **three** snowshoe hares (Herbivore), **Five** white-tailed deer (Herbivore) and **two** gray squirrels (Omnivore) were seen.

At the Ridge Site: **Two** porcupines (Herbivore) were seen, and **three** Gray Squirrels (Omnivore) were seen.

At the Tributary Site: **One** red fox (Omnivore), **one** bobcat (Carnivore), **three** white-tailed deer (Herbivore), and **one** gray squirrel (Omnivore),

The hypothesis of the time of day was mostly proven incorrect because omnivores, carnivores, and herbivores were seen at each site at night. The hypothesis was mostly disproven because of the 20 herbivores and omnivores sighted in all three camera, 14 of them were sighted at night. One carnivore was sighted at night as predicted.

They hypothesis of what animals seen at each habitat was not entirely supported. There were not any carnivores photographed at the health (disproves hypothesis). At the ridge site, omnivores were most apparent, which supports the hypothesis made (3/5 photos were omnivores). The herbivores photographed at the tributary/intermittent stream camera were common (3 of 6 photos were herbivores). At the Heath, herbivores were the most common (6 of 9 photos were herbivores). Overall this partially supports the hypothesis.

Special Thanks:

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