

Diversity of Wildlife at Wildwood Park and Selu Conservancy

Daneka Fowler, Nicolas Loudermilk, Kristin Ransome, Hannah Roberts, Dominique Scott, & Taylor Vance
Department of Biology, Radford University

Introduction

- Wildlife camera trapping is a method of taking snapshots of wildlife that comes within range of the camera (Hance, 2011).
- Wildwood Park is about 54 acres and Selu Conservancy is around 380 acres. Connelly's Stream runs through Wildwood and Selu lies along the Little River.
- We set up wildlife cameras to capture photos of wildlife along trails in Wildwood, and we looked at photos collected from Selu in spring 2018.

Methods

- 12 Infrared-triggered trap cameras were set up at Wildwood Park- 3 in wetlands and 9 in forest with 3 on animal trails.
- Pictures taken in 5-second intervals
- Cameras set ~23 inches (knee-height) and towards trails since it acts like a natural funnel
- Vegetation near the camera was removed.
- Research time was 21 days (October 4, 2018 to October 25, 2018)
- We recorded habitat type; distance from a trail; slope steepness; conifer, shrub, and ground cover percentages; average tree diameter; and percent canopy cover.
- Selu wildlife photos that were gathered during the spring semester of 2018 was used.
- At Selu Conservancy, 6 camera traps were used- 2 in wetlands, 2 in fields, and 2 in forest
- We recorded the habitat, temperatures, number of wildlife, presence of offspring, and type of wildlife species from Selu photos.

Research Questions & Predictions

- Does animal diversity differ between Wildwood Park and Selu Conservancy?
- Do some species prefer natural wildlife trails while others frequent human-made trails?

We predict that Selu Conservancy will have a far greater diversity than Wildwood Park and that human-made trails will have more animal diversity

Figure 1

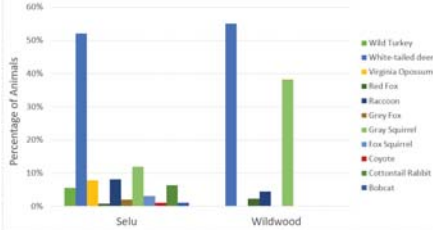
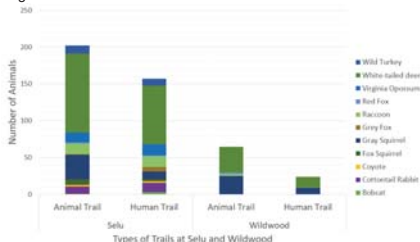


Figure 2



Wildwood Park Photos



Most wildlife caught on the cameras were deer and squirrel. However, most of the images were people and pets.

Conclusion

Figure 1

- As we predicted, Selu Conservancy had a greater diversity in animals than Wildwood Park.
- The most common species in both locations was the white-tailed deer. At Wildwood Park, Grey squirrels were very common also, while Selu Conservancy had many more species present in higher densities.

Figure 2

- Human-made trails were not used as often as we predicted where animal-made trails were used more in both locations.
- This could be caused by large Human activity of those trails but more studies are needed

References

Kelly, M. J., & Holub, E. L. (2008). Camera trapping of carnivores: trap success among camera types and across species, and habitat selection by species, on Salt Pond Mountain, Giles County, Virginia. *Northeastern naturalist*, 15(2), 249-262.