

# Do Wildlife Avoid Periods of Human Activity?

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## What is Wildlife Camera Trapping?

- Wildlife camera traps use an infrared and motion sensor that takes snapshots of animals when triggered by their movement.
- Camera trapping allows researchers to discover new animal species and track species movements and behaviors.
- This type of trapping doesn't involve capture, instead, it allows the animals to stay in their natural habitat (Kelley and Holub 2008).

## Camera Set-Up

- Twelve infrared motion sensor Simmons Whitetail Trail Camera traps were set up at Wildwood Park. Photos collected 04 October to 25 October 2018 (twenty-two days).
- At Wildwood Park five cameras on W-facing slope and seven cameras on E-facing slope. Three cameras in the wetland habitat and nine cameras in the forest habitat.
- Eighteen camera traps set up at Selu Conservancy 01 February to 11 April 2018.
- Cameras placed near an already made trail.
- For stability the cameras were parallel to the ground and placed against a tree that is at least six inches in diameter. The cameras were placed at knee height (2 ½ feet high)
- We removed small plants that would obstruct the camera sensor and cause false pictures
- Environmental data was collected including: distance from the dirt trail, paved trail, and stream, slope steepness, elevation, and average tree diameter and canopy cover.

## Research Questions & Predictions

- Do wildlife species shift the timing of their activity when humans are present?
- How do these shifts in activity compare between Selu Conservancy and Wildwood Park?
- We predict that animal species shift their timing of activity from day to night due to human activity and there are less shifts in animal activity at Selu Conservancy than Wildwood Park.

## Study Sites

- Wildwood Park is 50 acres of natural forests and wetlands in Radford, Virginia (37.14°N, 80.57°W).
- Selu Conservancy 380 acres of natural forests, wetlands, and fields in Montgomery County, Virginia, near the Little River (37.09°N, 80.56°W).

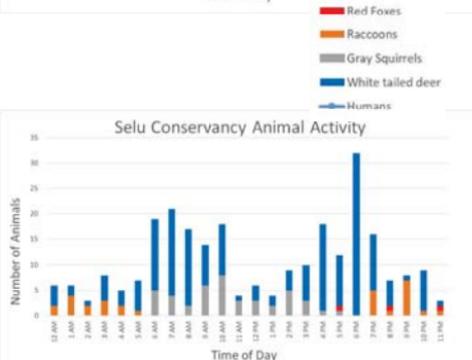
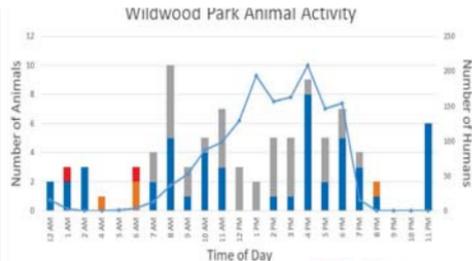


## Results & Conclusion

- At Wildwood Park, most human activity occurred 10AM to 6PM. White tailed deer were active through the day and gray squirrels were active mid-day. Red foxes and raccoons were active in the early morning and late night when humans were not present.
- At Selu Conservancy there were no humans present. There were similar trends between white tailed deer and gray squirrels. There were more raccoons active early morning and late night. Less gray squirrels were active during the day.

## Conclusion Cont.

- One noticeable difference is at 11PM at Wildwood Park there were more white tailed deer active than at Selu Conservancy.



Reference: Kelly, M., Holub, E., 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. Southeastern Naturalist 15(2):249-262