

Human Influence on Wildlife Behavior

Alex Brooks, Austin Bissell, Brooke Ventura, Jonathan Borsellino, Layne Sigmon
Department of Biology, Radford University

Introduction

The goal of the study was to find how humans influence the wildlife at Wildwood Park, specifically along the trails. Wildwood Park is a greenway in the city of Radford with 50 acres of forest, marshes, and meadows located in the foothills of the Blue Ridge Mountains. The area is used for hiking and biking, and requires minimal maintenance and influence by the city of Radford.

Wildwood Park

There were two separate trails used for the research, one located on the west side of the park along Connelly's Run, a local stream, and one located deeper into the forest on the east side.



Questions & Hypothesis

- How often are the camera locations visited by wildlife versus humans?
- What wildlife species frequent trails with more human activity? What wildlife species frequent trails with less human activity?

If there is a high level of human activity on a trail, then less wildlife will use the trail.

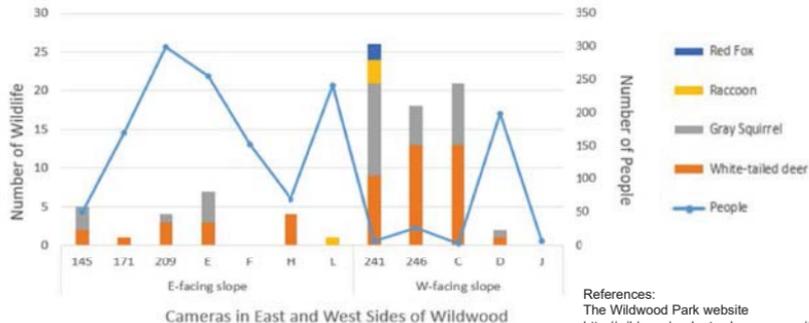
Research Methods

Our class setup twelve motion sensed Simmons Whitetail Trail camera stations throughout the park, placed no more than 15 meters away from the trail. Seven of the cameras were set up on the east-facing side of the park while the other five were set up on the west-facing side.

The cameras were placed thigh-high, or about 3 feet, which is a recommended height for capturing small mammals. We used no lures, left the habitat as it was, and only removed brushwood growth when needed so it would not set off the cameras motion detectors. This ensured a captured image of only wildlife and humans passing by.

The cameras operated from 10/4/2018 until 10/25/2018 and were active 24 hours a day. After collecting the cameras, we were able to start logging data.

We calculated slope steepness, elevation, distance to trails and stream, coverage of tree canopy, conifers, ground, and shrubs, and average tree diameter.



References:
The Wildwood Park website
<http://wildwoodpark.atwebpages.com/>