Whitetail Deer: Their College Diet and Activity Rates

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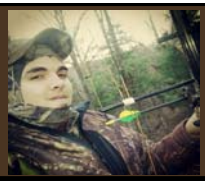

Introduction

•Penn State Wilkes-Barre campus is known for being a nature campus, located by fields and woods all around.

•What many of the students and faculty do not realize is that we're not alone on campus. When students think of Penn State and animals the one that always comes up is squirrels, that is why I decided to put trail cameras up along campus to show that when we're not paying attention we have a healthy whitetail deer population thriving on campus that are extremely active, along with some other animals you might not expect.

•I hypothesized that the deer observed would show to be most active first thing in the morning and right before dark when the campus is mainly absent of people. I also predicted that the results would show that the deer on campus prefer to be behind the cafeteria and will favor corn more than cane or artificial corn.

Methods

•Three locations were determined on campus to place trail cameras to record both deer activity rates and test three different types of deer bait and which one seems to be more liked by the deer.

•The places that I decided to place the cameras are shown in figure 1 below, behind the cafeteria, the dorms, and behind the library.

•The cameras were left out in the field for a week capturing anything that walked by them.

•Actual corn feed was placed behind the cafeteria, cane was placed behind the dorms, and an artificial corn with syrup was placed behind the library. Deer are known to travel vast distances in search of food, so if the deer wanted one of the three options more it would not be a far travel for them to say the least[1].

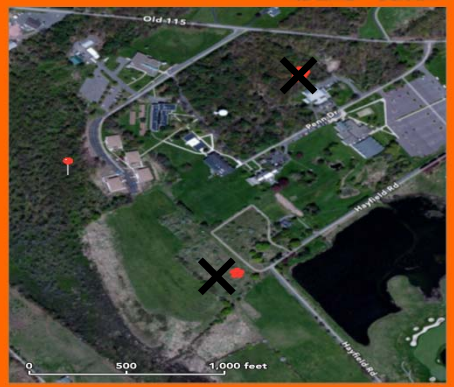

Fig 1: Locations of Cameras on Campus: Above are the three exact locations the cameras were placed on campus

Results

Deer activity rates on campus are highest between 12 and 3 p.m. and deer prefer corn behind the cafeteria over any other feed or area.

After observing the photos taken from all three cameras and counting the amount of deer on each one (Fig 4 & 5), I divided a twenty four hour day into increments of three hours and measured the number of deer seen during these time frames too come up with the bar graph (Fig 2). The bar graph represents how many deer were active at specific time intervals. From this information I was able to come up with the line graph (fig 3) below which shows how many deer were observed in each of the three areas and what kind of feed was placed in each area.

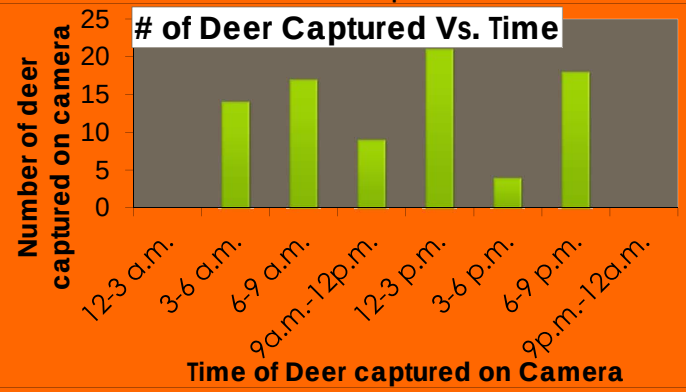

Fig 2: A bar graph that shows how many deer were active at which Time during the week period

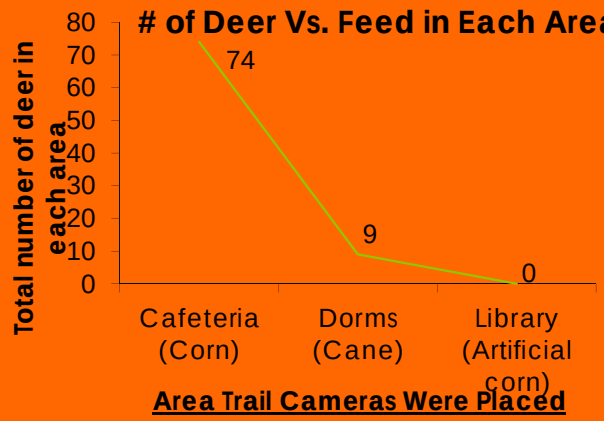

Fig 3: A line graph showing exactly how many deer were observed in Each area and what they were feeding on

Discussion

•The results of this study clearly reveal that the deer on campus are most active during the period of 12 p.m. to 3 p.m. It also shows that the deer are also very active right before dark and first thing in the morning as predicted. It was also revealed that the deer greatly prefer to be behind the cafeteria eating corn than any other place on campus with cane or artificial corn. It was determined that there was no deer activity behind the library because of the presence of coyotes (Fig 6) also[2].

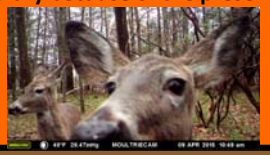

Fig 4: What is this thing? This picture shows two deer behind the cafeteria checking the camera out.

Future Directions

Experiment Extension; Cycling Feed

• An additional experiment that would prove to be beneficial is too do the same experiment but extend it to a three week experiment where each week you move the feed to a different spot. As in put the corn behind the library, the cane behind the cafeteria, and the artificial corn behind the dorms to see if it changes the number of deer at each location.

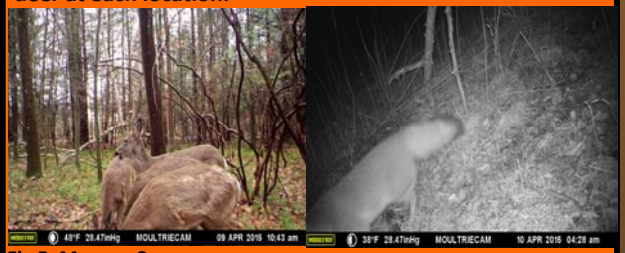

Fig 5: Mmmm Corn:
A picture of 4 deer behind the cafeteria feeding on the corn on a Friday while we were all sitting in class.

Fig 6: Where's all the Deer at?
A picture that was deemed to be a coyote, a possible reason why there were no deer behind the library but some argue it could be a fox…. What do you think?

Acknowledgments:

[1] Humphrey, Stephen R., and Bonnie Bell. "The Key Deer Population Is Declining." *Wildlife Society Bulletin* 14.3 (1986): 261-65. Web. 1 Apr. 2015.

[2] Kilgo, John C., H. Scott Ray, Charles Ruth, and Karl V. Miller. "Can Coyotes Affect Deer Populations in Southeastern North America?" *Journal of Wildlife Management* 74.5 (2010): 929-33. Web. 3 Apr. 2015.