



An Ecological-Time Study of Herpetofauna at the Wilma Quinlan Preserve

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Abstract

Looking at a 5 year study worth of all herpetofauna (herps) sighted within the area known as the Quinlan Nature Preserve. This study will look into using not only observations done by student researchers at the site, but also the records of students within the herpetology class at the university, to determine two questions for this particular study. One is whether or not the efforts of preserving a natural site has increased the amount of herps there or did the population take a decline from it. The other is to see which species have been sighted in that area, whether they maybe more native species or invasive..

Introduction

In 1971, Mrs. Wilma Quinlan, would purchase the last remaining 23.76 acres of undeveloped land in New Britain. She worked tirelessly to ensure that the would be kept to preserve the natural beauty of that land and make it become the nature preserve that it is today. Ever since then, students from Delaware Valley University have been going to the site to see the impact that this preserve has done to the local herpetological life.

Acknowledgement

I would like to give a special thanks to the Wilma Quinlan Nature Preserve, for allowing all student researchers to continue to look into and preserving wild species in the preserve. I would also like to thank the Herpetology students of the past from both Fall and Spring semester classes from 2017 to 2021, without there observations this research project would have been not possible without there aid. I would also like to thank BMS, for sponsoring this student research and many more future projects to come.

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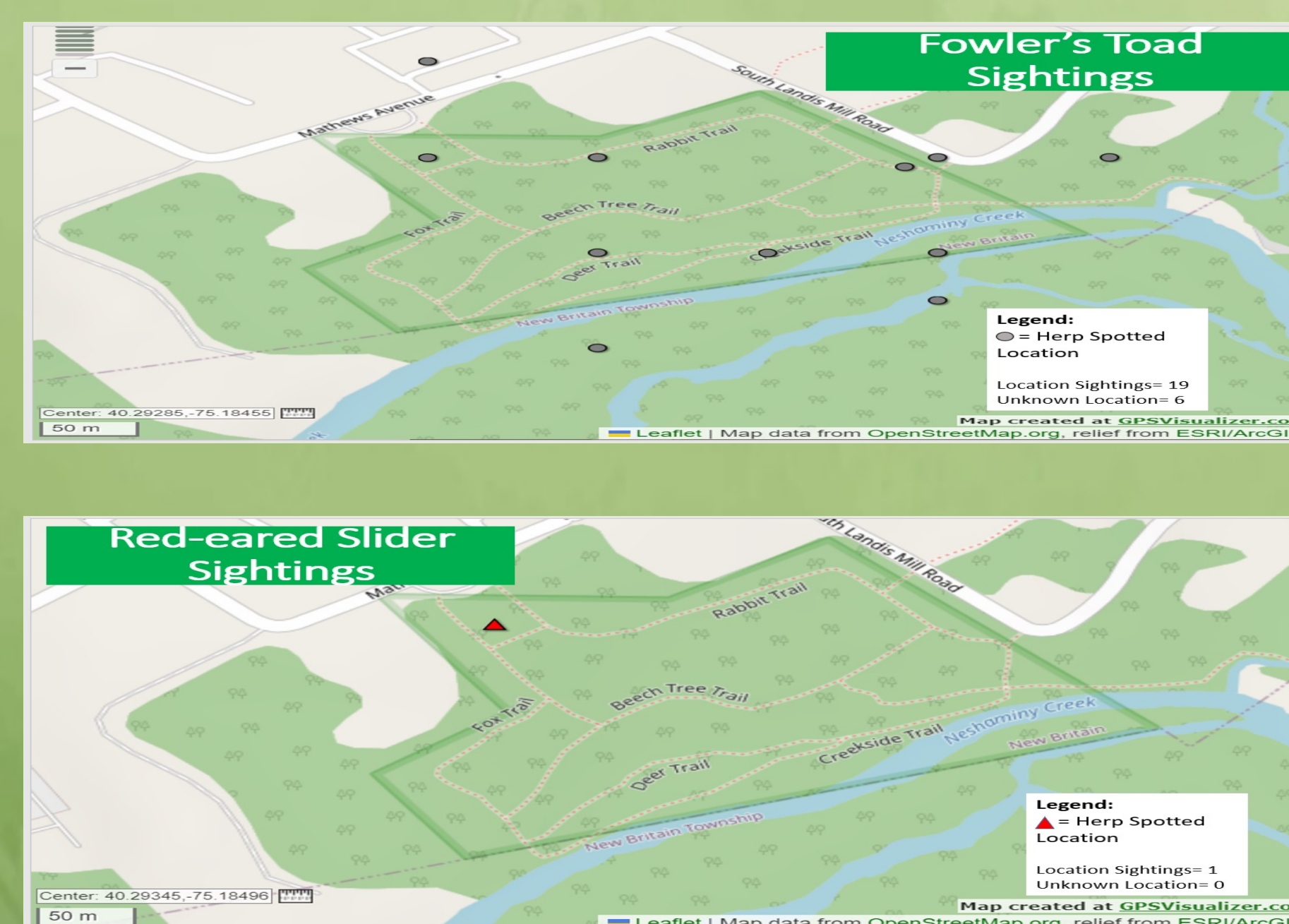
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Methods

The first and most important part of this study is to identify the different types of amphibians and reptiles identified within the state of Pennsylvania by the Pennsylvania Fish and Boat Commission. Thankfully the PA Fish and Boat has a list of there own on all the species found in the state as well as many different guide books to help in identifying the species of amphibians and reptiles found in the state. The next step is to access an achieve of data done within studbooks, which were not only done by past student researchers, but also the herpetology class. From all of these studbooks, I will be reading student observations from the years of 2017 to 2021, to determine what species were sited at Quinlan and when they were observed.

Results

Due to 35 confirmed species found within the nature preserve, the data shows that the area still has a steady line of herps from 2017 to 2021. It is worth noting that a few species were not properly located, not all years had the same amount of data, and that even an invasive species, in the Red-eared Slider, was found in the area.



Discussion

Throughout this research project, it was at times difficult to understand what any individual person saw within that moment, being that it was either too quick to identify proper, the animal was only heard not seen, and that a dead animal was too far decomposed to properly identify. At times, even reading through each studbook was difficult due to what was said in the writing and that not everyone had the same format as the next person. However, the data was still collected from these studbooks none the less.

Conclusion

Taking in part of this research project was the best way for not only people who wanted to see the number of sightings of a species in a particular area, but to also see how that area has been doing to either insuring a steady level of herps or a decline of them. From the data the students collected, there is a steady numbers of herps in that area despite the major change happening around the globe for herpetofauna. This research project also showed why looking into achieved data can assist in the conservation of all species based on where they were found in and to ensure that those areas are thoroughly protected for species to continue to stay in for many more generations.

