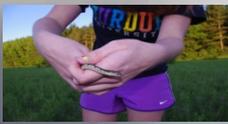


Snake Stake-Out

Kettle Moraine High School
A Documented Survey



Abstract: Wisconsin houses about 22 different snake species. While some are rare, others are abundant and aid in the demographic control of insects and rodents. Snakes are reptiles; vertebrates unable to regulate their body temperature or “cold blooded”. Snakes hibernate in the winter below the frost line. These creatures feed on various species: toads, lizards, salamanders, worms, insects, small mammals, and more. Some snakes have specialized diets and eat crayfish, fish, and occasionally other snakes. Springtime is the mating season for snakes, in addition to the majority of their prey’s mating seasons. Using this knowledge, combined with our understanding of snakes, we determined springtime would be the best time to conduct our experiment. The goal of our endeavor was to set snake traps in various local wetlands, document our findings, and evaluate the species and quantity of snakes found in that given area. Our student team created a set of data with the aid of our mentors. They faced wood rot, rain, and potential snake bites. Although none of the snakes indigenous to Wisconsin constrict their prey, they can bite, namely the two rattlesnakes that find their homes in these areas. Looking at statistics, bees and wasps claim more lives than poisonous snakes. With this in mind, our team collected data fearlessly. This has been an important study due to the possible sighting of the four endangered species of snakes in Wisconsin and the compilation of habitats found most suitable for certain species of snakes. We believe this experiment will result in a necessary understanding of the snakes native to our region.

Method: Students began their survey by selecting accessible trapping sites. The traps were four by four wooden boards placed in dry areas so as to attract snakes with heat, darkness, and shelter. In a typical survey trial, students would first record the day’s weather, temperature and precipitation levels. It was reported that between 5 and 8pm were the best times for evaluation due to the fact that the cooler the atmospheric air, the warmer it would be in the small indentation under the boards. Snakes are slower in the later hours of the day due to the need for sleep and if any prey were consumed earlier in the day, the digestive tract of a snake requires a lot of energy and thus slows their physical activity. This would make a specimen easier to catch from under the boards for evaluation. Once a snake is caught with care, students take a picture of the top, belly, and head. Afterwards, they are released. Maintenance of the board traps required students to rake out earth from under the boards in order to maintain an arid state. If board traps were damaged by water, wind, etc., this would be reported and then replaced. Board traps could be laid out over many acres. After data was collected, it was turned in as collaborative evidence by each student member.

Site Locations:

Data:

Date	Temperature (degrees F)	Boards 1 through 5	
SITE			Nelson West
28-May	73	2-1 garter snake, 3-1 garter snake	
SITE			Nelson Mill Pond
9-May	40	4-found 3 garter snakes	
13-May	60	4-2 garters, 5-2 garters	
21-May	70	4-1 garter, 5-unknown (black and red)	
SITE			HWT 83
9-May	40	2-1 garter	
17-May	60	1- 1 garter, 5-1 brown, 2 unknown	

Background Information:

Snake Species Found:
Brown Snake

Native to North America, these snakes are most commonly found in the U.S. and in Mexico. They are brown or brick red in color, and can be marked with a large stripe down their spine. They have black spotted markings and their underside is either light brown, yellow or red. These snakes rarely grow beyond 12 inches in length. A brown snake’s diet consists of a variety of small insects, invertebrates, amphibians, and other small animals. For defense, the snake flattens their body and excretes a scent from anal glands.

Garter Snake

This snake is found in North America. It has a brown or green body, with yellow or white stripes. Their average length is 22 inches, but can grow up to 54 inches. Garter snakes eat insects, amphibians, and small animals. Their saliva can be toxic to amphibians and other prey. They also release a foul smell from anal glands.

West Nelson-Dousman Leah

Mill Pond Nelson Dousman Jordan

Frog Hollow Delafield Matt

Highway 83-Delafield Lauren

Acknowledgements: We appreciate the help of Jason Dare, our contact and scientist, and Stephan Plum, our mentor. We also would like to acknowledge any personal property contributed in the duration of this experiment.

