

Where the Snakes Settle: Testing Microhabitat Preferences in Coverboard Designs.

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Introduction

This research lays the foundation for future studies, potentially revolutionizing how we monitor and conserve snake populations in diverse habitats.

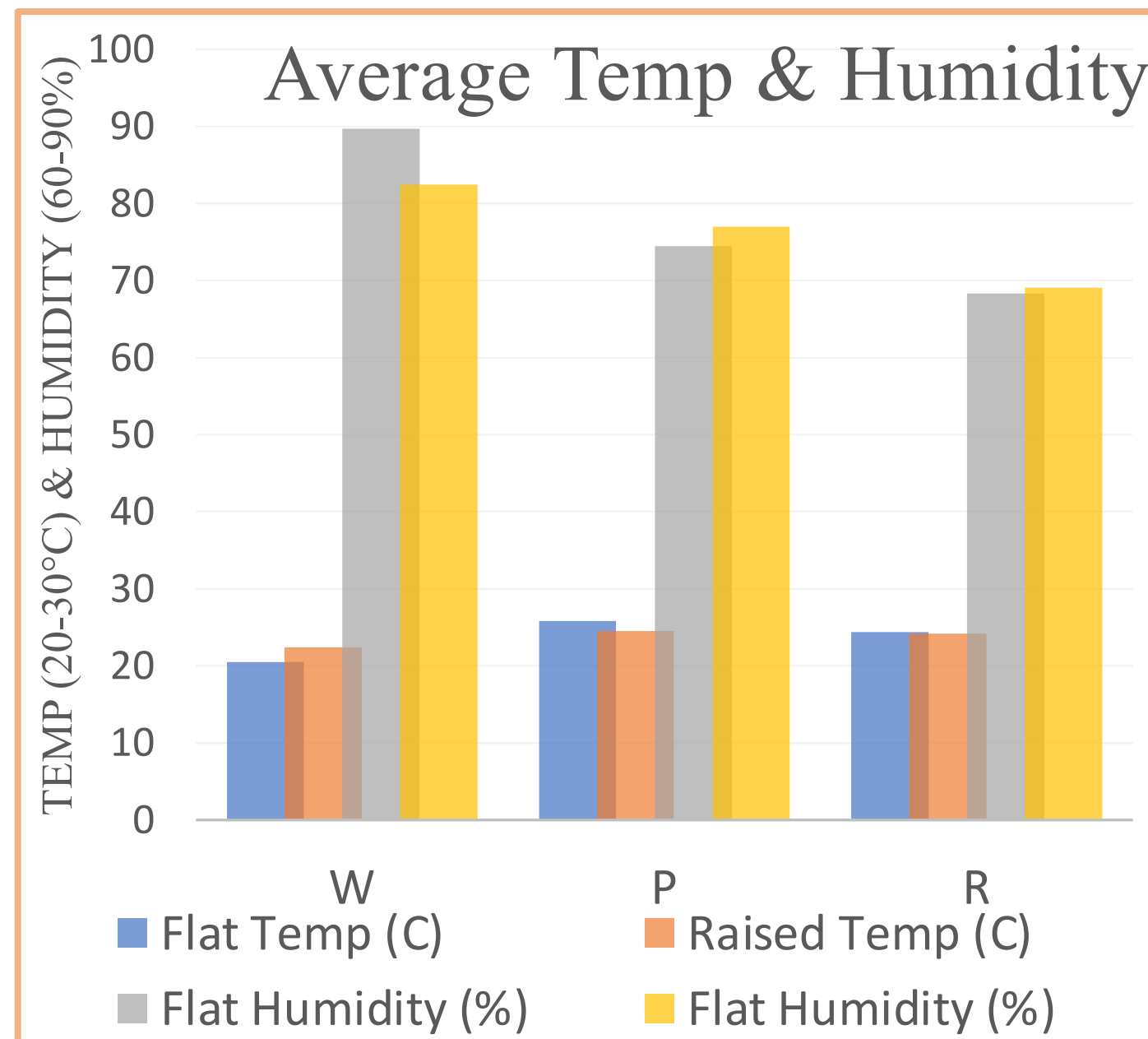


The map above shows the coverboard layout across the Cedar Point Biological Station in Keith County, NE.

Results

There were seven total captures and two sheds. Two (2) *Pituophis catenifer*, 1 *Thamnophis sirtalis*, 3 *Coluber constrictors* (& shed), and 1 *Crotalus viridis* (& shed).

All captured snakes were found under boards with a significant lifted space underneath. Additionally, several *Sceloporus consobrinus* and 1 *Terrapene ornata* were sighted under the lifted.



Methodology

Thirty-six (36) coverboards (1.5cm²) were arranged in three linear transects across different habitats: Short grass prairie / heavy forested ravine, and rocky outcrop upland. Half of these coverboards were lifted 2.5cm above ground.

The coverboard arrays were established in the previous winter months.

Five (5) boards in each array were equipped with a Kestrel drop.

Discussion

The data we have indicates that snakes native to our site prefer boards with a significantly raised space beneath. The locations with preexisting natural cover had the lowest catch rate. Each transect had species unique to the area found, such as: *P. catenifer* and *C. viridis* in rocky outcrop, which also had the highest capture rate, tied with the short grass prairie, which had *C. constrictor*.

The temperature and humidity were not significantly different between the two board types.

Future Implications & Research Goals

We plan to continue gathering data next summer to investigate our hypothesis that lifted cover boards will result in higher capture rates. Individuals that we caught suggested that they have preferences for microhabitats. By refining coverboard methodologies, our study aims to contribute to conservation efforts, offering a non-invasive, cost-effective tool for monitoring vulnerable snake populations.

Acknowledgements & References

