

Burmese Python Sightings and Temperature Extremes and Fluctuations

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In recent years, the invasive Burmese pythons have severely impacted the ecosystem of the Everglades, such that many mammal species have had sharp declines in population. It was hypothesized that if the temperature is compared to the distribution and number of Burmese pythons, then there will be a correlation between there being fewer Burmese pythons when the temperature is low because Burmese pythons cannot survive as well in lower temperatures. Using databases from NOAA and EDDMaps, the number of Burmese python sightings and episodes of low temperature in each county was compared. The results found that the Burmese python tended to not be sighted in areas where the temperature was unsuitable for their physiology. In addition, during the year after a cold event, the number of Burmese python sightings decreased. This is important to note when taking into account how far pythons would be able to spread, as climate change will likely lead to warmer temperatures in Florida. While further testing regarding the various limiting factors of Burmese pythons is needed, the results of this project suggest that initiatives that prevent the spread of Burmese pythons into more counties and those that try to get rid of the existing Burmese python population in southern Florida are greatly needed.

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