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Amphibian habitat use and movement are understudied and, due to nationwide amphibian population decline, it is vital to understand how specific species utilize habitat. This past summer I studied the movement and habitat use of two toad species, the American Toad and the Fowler's Toad. I sought to answer the question of which land features these species prefer and use most frequently. Specifically, I focused on their use of habitat during the night compared to the day. By understanding how these species use their environment, better conservation policies will be able to be enacted. I predicted that the toads would make larger movements and use different aspects of the environment during the night than during the day.

Over the course of the summer I followed numerous toads in three sites in the Williamsburg area. In order to follow them, I first attached transmitters to the toads using silicon tubing. These transmitters allowed me to find the toads from 10-15 meters away using a harmonic direction finding device. I went out after sunset and would locate each toad at least twice a night, each time taking a GPS point and measurements of the surrounding vegetation. I was able to map these GPS points and compare them to points that were collected from their daytime locations. I also compared the vegetation measurements of the night to measurements collected from their daytime movements.

Comparing the movement and habitat use of the toads at night to day gave interesting results. Generally, the toads were more active at night and were less likely to be burrowed or hidden in coarse woody debris. The vegetation measurements showed that the toads were found more often in open areas, particularly along the paths present at every site. This study created a more complete picture of how toads utilize their habitat than previous research had shown. Important future research would look at nighttime versus daytime habitat use and movement throughout the entire year. These two toad species were at different stages of their breeding seasons, so understanding

their movements yearlong would be extremely beneficial to understanding how best to protect these species.

