Fluorescent Powder Tracking at Firebase Libby

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**Abstract:**

By utilizing fluorescent powder, the individuals could be tracked, and we can make predictions based on the approximation of distance traveled and the type of foliage they went through. During the current vegetation period, we were tracking five different species found in the grassland area of Firebase Libby in Callahan County, TX. We powdered a total of seven individuals. *Reithrodontomys montanus* traveled approximately 14 m. and seemed to favor the grass. The average for the three *Baiomys taylori* tracked was about 15 m traveled, and an average foliage type of favored was grass as opposed to cacti and ragweed. *Sigmodon hispidus* traveled approximately 38 m. *Reithrodontomys fulvescens* traveled approximately 18 m. These individuals also favored the grass. The mice behavior is expected as they feed primarily on grass but could have used the cactus for shelter. This tracking method is affected by weather conditions, such as rain which affects not only the efficacy of the powder but also the way the individuals are interacting with their environments.