Biodiversity of Small Mammals at Firebase Libby

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**Abstract:**

This project aimed to evaluate the diversity and behavior of small mammal species that inhabit Firebase Libby in Callahan County, TX. This is a 160-acre property, which comprises 100 acres of wooded habitat and 60-acres of grassland. Population sizes, movements, and densities of small mammals were being monitored to better understand their behavior and the roles they play in their environment. To achieve this, we ran two trapping arrays, one in each habitat type. The arrays consisted of twenty traps and were ran in eight cardinal directions. Our findings show that wooded habitat tends to be inhabited primarily by *Peromyscus attwateri*. The grasslands are more speciose, housing five different species of mice: *Baiomys taylori, Reithrodontomys montanus, Reithrodontomys fulvescens, Sigmodon hispidus and Peromyscus leucopus*. The most dominant species in the grassland was *Baiomys taylori*. Diversity data showed that the grassland habitat was more diverse than the wooded habitat.