

SMALL MAMMAL POPULATIONS ON RECLAIMED STRIP-MINED AREAS IN FREESTONE COUNTY, TEXAS

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The Composition and structure of small mammal communities was examined at four areas on and around a strip-mine in Freestone County, Texas. Monthly live-trapping over a one year period was conducted on three reclaimed and one control area. Seven species (Reithrodontomys fulvescens, R. humulis, R. montanus, Peromyscus maniculatus, Baiomys taylori, Sigmodon hispidus and Mus musculus) were caught. Peromyscus maniculatus was the earliest invader on the recently reclaimed area when vegetative cover was sparse, but as vegetative cover became more abundant Sigmodon hispidus emerged as the dominant species. S. hispidus was the only small mammal present on the reclaimed area utilized for seasonal grazing. Species diversity was highest at the control area. Mean total small mammal biomass was greatest at the recently reclaimed area. The recently reclaimed and the seasonally grazed pasture areas were the most alike in terms of species similarity. Vegetative cover, method of reclamation, and the subsequent use of the reclaimed lands seem to influence the structure and composition of small mammal communities.

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