

MOURNING DOVE DIFFERENTIAL USE OF RECLAIMED SURFACE-MINED LANDS IN EAST-CENTRAL TEXAS

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The mourning dove (*Zeniada macroura*) is the most abundant and widespread North American game bird despite the fact that declines have been observed throughout much of the United States. The U.S. Fish and Wildlife Service's Central Management Unit has experienced a significant decline in the number of mourning doves heard during the Mourning Dove Call Count for the past 10- and 34-year periods. Land-use changes and loss of mourning dove habitat is often cited as reasons for these declines. Fourteen transects in different aged reclaimed surface-mined lands and in different land-use types were monitored during morning and evening hours monthly for 1 year to examine differential use by mourning doves. Mourning dove densities were determined for transects representing different aged reclaimed lands and land uses. Vegetation measurements including obstruction of vision, plant height, percent bare ground, and percent canopy cover of dominant grass, forb, and woody species were taken at systematically selected points along the transects in summer, fall, and spring. A Pearson's product-moment correlation and regression analysis was used to examine relationships between dove densities and vegetation measurements. Significant differences ($P < 0.05$) were found in dove densities among different aged reclaimed lands in summer, fall, and spring. Younger age classes (lands reclaimed 0-5 or 6-10 years prior to initiation of this study) and 1 of 2 controls had higher dove densities than other transects. Percent bare ground explained differences in dove densities. Plant height and obstruction of vision were negatively correlated with dove densities during spring months. Significant differences were seen in dove densities on different reclamation types. Newly reclaimed land and areas of native pasture had higher dove densities than other reclamation or vegetation types. Structural measurements explained at least part of the variation in dove densities between different reclamation types.

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