

Burrowing owl population assessment in eastern Colorado



Sarah Albright

Department of Fish, Wildlife, and Conservation Biology,
Colorado State University

Burrowing owl (*Athene cunicularia*) populations have been declining in regions across the Great Plains due to nesting habitat loss and degradation. This decline has been closely linked to declines in black-tailed prairie dogs (*Cynomys ludovicianus*), which provide important nesting habitat for burrowing owls and other grassland birds. I examined the effect of black-tailed prairie dog colony attributes on burrowing owl occupancy, density, and productivity. I investigated how prairie dog colony size, activity level, and vegetation characteristics influenced these population parameters on 175 survey plots throughout eastern Colorado during 2022 and 2023. Burrowing owl occupancy and adult density were higher in southern CO compared to northern CO. Prairie dog activity level had a strong positive effect on adult owl density and the probability that a plot was occupied with successful reproduction. Colony size and vegetation characteristics were generally not helpful predictors of burrowing owl population parameters. This two-year study provides an updated status assessment of burrowing owl populations across the black-tailed prairie dog range in Colorado and highlights the importance of active colonies, regardless of size.

Join us at 3pm

May 3, 2024
Wagar Building 133

Host
Dr. Bill Kendall



Colorado State University