

SEASONAL EFFECTS OF FARMER-MANAGED LIVESTOCK GRAZING EXCLUSIONS ON BIRD COMMUNITIES IN BURKINA FASO

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Study description

Livestock grazing and deforestation are major drivers of land degradation across the Sahel, threatening biodiversity and rural livelihoods. We assessed whether small-scale (3ha) farmer-managed livestock grazing exclusions (areas protected from grazing that allow natural vegetation regeneration) benefit bird communities in Burkina Faso. Using Passive Acoustic Monitoring across dry and wet seasons, we found higher bird species richness and occurrence inside grazing exclusions than in surrounding grazed areas. Positive effects were strongest during the dry season, suggesting that regenerating vegetation provides important refuges when resources are scarce. While some open-habitat specialists avoided these denser restored habitats, woodland-associated, insectivorous, frugivorous, and migratory birds benefited from these small-scale restoration efforts.

Marcacci, G. 2026. Seasonal Effects of Farmer-Managed Livestock Grazing Exclusions on Bird Communities in Burkina Faso. *Bull Ecol Soc Am* 107(2):e70079. <https://doi.org/10.1002/bes2.70079>



Photo 1. A donkey stands beside a grazing exclusion where vegetation has naturally recovered, contrasting with the surrounding degraded landscape. This simple restoration measure creates habitat and resources for a diverse community of birds. The scene illustrates the ecological changes examined in our study on grazing exclusion and biodiversity recovery. Photo credit: Gabriel Marcacci.

This photograph illustrates the article “Seasonal effects of farmer-managed livestock grazing exclusions on bird communities in Burkina Faso” by Ian Quintas, Gabriel Marcacci, Ambroise N. Zongo, Pius Korner, Alexandra Kuttnig, Reto Spaar, Bakary Diakité, Franziska Kaguembèga-Müller, and Alain Jacot published in *Ecological Applications*. <https://doi.org/10.1002/eap.70160>.