

# IMPACTS OF BIOFUEL PRODUCTION ON GRASSLAND BIRDS IN WISCONSIN

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As interest in producing ethanol from corn as a way to achieve energy independence rises in the Midwest, there is growing concern among ecologists in Wisconsin and surrounding states that we should be cautious in our approach to the development of biofuels. Impacts on natural resources are important factors to consider in the debates over what and where different types of biofuel production should be developed. In Wisconsin, grassland conservation is important due to both the value of grasslands for a variety of native flora and fauna and the threats to these vulnerable habitats. Some of the areas with the best opportunities for managing grasslands in Wisconsin have the potential to be negatively impacted by large-scale biofuel production. This situation is the result of multiple factors: an increase in the amount of corn acres, the potential for establishment of tree plantations in former prairie landscapes, the accelerated loss of pasture habitats, and a decrease in grassland acres enrolled in the USDA Conservation Reserve Program. Grassland birds are an important conservation target due to their wide-scale population declines. Our work in Wisconsin shows that landscape composition plays a role in patterns of grassland bird occupancy. Specifically, we know that grassland bird densities decrease in landscapes dominated by row crop agriculture or high amounts of woods. Growing switchgrass or mixes of native prairie grasses and forbs for biofuels as an alternative to corn has potential for reducing impacts on natural resources in open agricultural landscapes. However, more research is needed to understand the implications of biofuel production on grassland conservation at a landscape scale.

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