

Effects of Oil and Gas Development on Grassland Birds

GL 09-9165-50

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Grassland bird populations have declined significantly over the past century, largely due to anthropogenic habitat loss and degradation. It is estimated that approximate 20% of original native grassland remains in Canada. The quantity and quality of remaining grassland is threatened by habitat loss and degradation through cultivation, urban expansion, industrial development, exotic species invasion, woody vegetation encroachment, and inappropriate management practices. The amount of oil and gas development in south-western Saskatchewan and south-eastern Alberta has increased dramatically over the past 15 years, but its impact on grassland species is poorly understood. Our project will determine the extent to which oil and gas development influences density and reproductive success of grassland songbirds in south-west SK and south-east AB. We will quantify density and reproductive success of grassland songbirds listed by the Committee On the Status of Endangered Wildlife In Canada (COSEWIC) in areas with high levels of disturbance (increased number of oil and gas wells,

pipelines, roads, trails, and exotic grass species) and areas with low, to no levels of disturbance. Additionally, we will determine whether noise from compressor stations affect the singing behaviour and song characteristics of Sprague's Pipit and Chestnut-collared Longspur.

Policy Issue

Biodiversity: Species conservation, migratory birds

Knowledge Gap

Setback distances, sensory disturbance

2011 Final Report