

****A Bit of a Brome Problem - Proposed Work Investigating Interactions Between Declining Grassland Songbird Demographics and Invasive Plants in Central Montana**

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Grassland birds are the fastest-declining avian guild in North America, having declined by over 50% since 1970 (Rosenburg et al. 2019, Sauer et al. 2017). Among this guild are Chestnut-collared and Thick-billed Longspur (CCLO and TBLO hereafter), two species of grassland songbird that have experienced long-term population declines of 87% and 94% respectively since 1970 (Sauer et al. 2017). A primary driver of this decline is habitat degradation (Somershoe 2018) through mechanisms like fragmentation of existing grassland, unsustainable grazing practices, and the spread of invasive plants such as Smooth Brome and Kentucky Bluegrass. To better understand these declines and develop effective conservation strategies, research is needed to understand how current landscape attributes, such as invasive plants, are impacting demographics of these two longspur species. We propose a study in central Montana, a relatively understudied area in the CCLO and TBLO breeding ranges, to investigate how invasive plant abundance affects longspur demographics (abundance and nesting metrics). This work will be conducted over the next two years in Wheatland and Golden Valley Counties, MT. Our goal is to determine the tolerance CCLO and TBLO have to exotic plants on their breeding grounds and identify landscape attributes that maximize longspur abundance. These findings will help prioritize conservation actions in the region aimed at supporting these imperiled species.