**Responses of Songbird Population to Cattle Grazing Regimes in Sagebrush-Steppe of Eastern Montana

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Sagebrush-steppe ecosystems in western US are characterized as a landscape mix of sagebrush shrubs and grass vegetation. A large portion of sagebrush-steppe across the west is used for grazing of domestic livestock, primarily cattle. We compared songbird communities over four breeding seasons in eastern Montana between two grazing systems: rest-rotation and traditional grazing. Rest-rotation involves grazing areas (or pastures) at different annual seasons across years allowing pastures to be rested between the same consecutive seasons. Traditional grazing is defined as grazing a pasture repeatedly at the same annual season each year. Recently, rest-rotation has been used as a conservation management tool by the Natural Resource Conservation Service's (NRCS) Sage Grouse Initiative (SGI) program. The goal is to improve habitat for greater sage grouse (*Centrocercus urophasianus*) through livestock grazing. We explore the effects of rest-rotation compared to traditional grazing on songbird population breeding demographics: adult abundance, nest densities and nest success. Abundance is a metric often used to assess conservation actions given the ease in collecting data to estimate this parameter. However, information on how the conservation actions influences the life histories, such as nest density and nest success, that determine abundance are lacking. Our goal is to understand the relationship between patterns in abundance, nest density, and nest success and how rest-rotation grazing influences those patterns. This knowledge will provide information on how to best manage for multiple songbird species in sagebrush-steppe by determining how conservation management tool affects individual songbird populations.