

Pronghorn in the Madison Valley - Research-Informed Management Actions and Community-Based Conservation

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Secretarial Order 3362 to improve habitat quality, winter range, and migration corridors for big game provided an opportunity to foster collaboration between Montana Fish, Wildlife and Parks (MTFWP) and private landowners using the best available science to manage habitat. Pronghorn may exhibit long distance migrations while being sensitive to anthropogenic barriers like fences, highlighting the need for data to inform pronghorn habitat management. From 2018 to 2021, 82 female pronghorn were fitted with GPS collars in the Madison Valley. Findings have been applied in many ways to follow the Secretarial Order. First, collar data defined a previously-unknown herd structure involving migratory and non-migratory herds. This information will refine how survey and inventory data will be collected and how harvest may be applied. Second, collar data defined corridors and natural and anthropogenic barriers. Problematic and non-problematic barriers were defined. Third, community-based enthusiasm for pronghorn grew into a collaboration between several non-governmental organizations to work together with private landowners to bring labor and resources to repair and remove fences. Fourth, agencies such as Montana Department of Transportation and Bureau of Land Management worked with MTFWP and private landowners to promote and enhance permeability of pronghorn fence crossings. Finally, findings from this research are beginning to be applied with the Madison County Planners to highlight the importance of development planning in the pronghorn migratory corridor. The numerous ways in which research data have been applied to improve management, develop communication, and facilitate collaboration among stakeholders in the Madison Valley will be discussed.