



Using fence modelling methods to prioritize and implement fence modification and removal across the High Divide region of Montana

A collaborative project to increase our understanding of fences for improving wildlife connectivity and land use planning



Project Summary: Over a two-year period, the National Wildlife Federation will develop a fence GIS layer for Southwest Montana. With input from wildlife professionals, natural resource managers, landowners, and collaborating organizations, this layer will help identify priority areas for fence modification and removal and inform natural resource planning and management.

Objectives: Through a diverse collaborative effort, we will build a landscape-level fence GIS layer for Beaverhead and Madison Counties. In addition, we propose to map fence structure type. This work will help prioritize fence modification and removal efforts to improve connectivity for wildlife and ecosystem processes, and inform planning and management across the High Divide region. The information developed through this project will help identify win-win solutions for landowners and wildlife in Southwest Montana and encourage strategic investment of conservation dollars.

Project Partners: The National Wildlife Federation, Northern Rockies, Prairies & Pacific Region, is leading this project, with core financial support from the National Fish and Wildlife Foundation's Sagebrush Landscapes Program. Our lead project partners are The Nature Conservancy and the University of Montana's Environmental Studies Program. Other project partners providing in-kind and financial support to achieve our objectives include:

- Centennial Valley Association
- Beaverhead Watershed Committee
- National Geographic – Beyond Yellowstone Program
- Montana Conservation Corps
- U.S. Bureau of Land Management
- U.S. Forest Service

Activities: We will continuously engage landowners to present and discuss objectives, methods, and results throughout the life of the project. A Master of Science student will collect fence location and fence type data across the two counties in the summer of 2019. In addition, he will interview wildlife and habitat professionals regarding fence rules related to land ownership and use, landcover classification, and roads. He will analytically validate how well the fence layer indicates actual fencing on the ground. Once the GIS layer is created, project partners will work with landowners to modify and/or remove at least 10 miles of fencing in high fence density areas or along fence lines that act as impediments to wildlife. The research findings and final fence layer will be made available for widespread application to assess and improve fencing for wildlife connectivity and land use planning in the High Divide region.

Contacts:

Andrew Jakes, NWF Regional Wildlife Biologist: jakesa@nwf.org; 406-541-6733

Jim Berkey, TNC High Divide Headwaters Program Director: jberkey@tnc.org; 406-370-6905

Simon Buzzard, UM Masters of Science Candidate: simon.buzzard@umconnect.umt.edu; 406-529-2409

