
WOLVERINE MONITORING USING INTEGRATED CAMERA TRAP STATION IN THE HELENA NATIONAL FOREST OF MONTANA (Poster)

Kalon C. Baughan*, Northern Rockies Conservation Cooperative, Helmsville, MT

This study tested non-invasive wolverine monitoring methods designed to achieve cost effective collection of robust genetic and natural history data useful for the development of management practices. Historically, wolverine monitoring has used bait stations to collect hair samples, confirm presence, and estimate population sizes. Individual wolverines, their sex and reproductive status can, however, be consistently identified in the absence of DNA samples through photo analysis. Here, Integrated Camera Trap (ICT) stations combined strategically

placed bait and motion-activated trail cameras with construction of wooden frameworks designed to encourage wolverines into upright, bipedal positions. Photographs of the unique ventral pelage markings that distinguish individual wolverines, as well as of sex organs and signs of reproduction were consistently captured throughout the term of the study. Hair samples for later DNA analysis were also collected from gun brushes located on the wooden frameworks. Between January and May 2016, eight ICT stations were deployed evenly across six contiguous cells in a 5 x 5 square mile grid system within the Helena National Forest near Lincoln, Montana. Six of the eight stations successfully attracted two wolverines who collectively made a total of 93 visits over the course of the study. The individuals were successfully identified as male wolverine M6 and female wolverine F7 from a library of photographs. The identity of these individuals was further confirmed through DNA analysis of hair samples collected during the study. In sum, this study supported the ability of ICT stations to collect reliable information on individual wolverine presence, sex, and reproductive status. They are cost-effective and can provide wildlife managers with valuable data.