

DISTRIBUTION OF SWIFT FOX IN THE PROPOSED VALLEY COUNTY WIND ENERGY PROJECT AREA IN NORTHEAST MONTANA

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The initial stage of developing mitigation measures to minimize the impacts of energy development to wildlife is determining their distribution and abundance within the project area. We conducted a swift fox mark-recapture survey in the proposed Valley County Wind Energy Project (VCWEP) and surrounding area located approximately 30 miles north-northwest of Glasgow, Montana. Previous surveys have shown that swift fox have expanded into north-central Montana from Canada following reintroductions in southern Alberta and Saskatchewan. However, the extent of swift fox distribution within the proposed VCWEP and surrounding area was unknown. In 2005 and 2006, we systematically trapped 6 townships using Tomahawk live traps. We captured 4 swift fox in 2005 (2 adult males, 1 adult female, and 1 juvenile female) and 32 swift fox in 2006 (9 adult males, 10 adult females, 8 juvenile males, and 4 juvenile females) with capture rates of 1.3 percent and 14.5 percent, respectively. Within the VCWEP wind turbine footprint, we captured two swift fox in 2005 and six swift fox in 2006. This study determined that swift fox occupy the proposed VCWEP and surrounding area and provided information to aid the development of mitigation measures. The difference in capture rates between the two study years emphasizes the importance of multiple years of predevelopment data.