THE EFFECTS OF HIGHWAYS ON ELK HABITAT IN THE WESTERN UNITED STATES AND PROPOSED MITIGATION STRATEGIES

Bill Ruediger, Wildlife Biologist, Wildlife Consulting Resources (Retired USDA Forest Service), 1216 Creek Crossing, Missoula, MT 59802

Ken Wall and Robin Wall, Geodata Services, Inc., 104 South Ave. E., Missoula, MT 59801

The project's purpose was to assess the effects of highways in the Western United States on elk (*Cervus elaphus*) and elk habitat. Elk are an important wildlife resource in the Western United States and have significant social and economic values. Elk also are a focal species for most western state wildlife agencies and land management agencies. The authors quantified the existing direct and indirect effects pf highways on elk habitat on a state-by-state basis and propose mitigation measures based on the impacts. The results will have widespread implications to state wildlife agencies, land management agencies, transportation agencies, conservation groups and the general population that is concerned about elk conservation. The authors also quantified elk mortality on highways and provide recommendations to mitigate elk mortality, habitat loss and improve highway safety for motorists. The project was supported by the USDA Forest Service and Rocky Mountain Elk Foundation.