Kochert, M.N., K. Steenhof, L.B. Carpenter, and J. M. Marzluff. 1999. Effects of fire on Golden Eagle territory occupancy and reproductive success. Journal of Wildlife Management 63:773-780.

Abstract: We examined effects of fire on golden eagle (*Aquila chrysaetos*) territory occupancy and reproductive success in southwestern Idaho because wildfires since 1980 have resulted in large-scale losses of shrub habitat in the Snake River Plain. Success (percentage of pairs that raised young) at burned territories declined after major fires ($P = 0.004$). Pairs in burned areas that could expand into adjacent vacant territories were as successful as pairs in unburned territories and more successful than pairs in burned territories that could not expand. Success at extensively burned territories was lowest 4-6 years after burning but increased 4-5 years later. The incidence and extent of fires did not help predict territories that would have low occupancy and success rates in postburn years. The presence of a vacant neighboring territory and the amount of agriculture and proportion of shrubs within 3 km of the nesting centroid best predicted probability of territory occupancy. Nesting success during preburn years best predicted the probability of a territory being successful in postburn years. Burned territories with high success rates during preburn years continued to have high success rates during postburn years, and those with low success in preburn years continued to be less successful after burning. In areas where much shrub habitat has been lost to fire, management for golden eagles should include active fire suppression and rehabilitation of burned areas.