

Marzluff, J.M., S.T. Knick, M.S. Vekasy, L.S. Schueck, and T.J. Zarriello. 1997. Spatial use and habitat selection of golden eagles in southwestern Idaho. *Auk* 114:673-687.

Abstract: We measured spatial use and habitat selection of radio-tagged Golden Eagles (*Aquila chrysaetos*) at eight to nine territories each year from 1992 to 1994 in the Snake River Birds of Prey National Conservation Area. Use of space did not vary between years or sexes, but did vary among seasons (home ranges and travel distances were larger during the non-breeding than during the breeding season) and among individuals. Home ranges were large, ranging from 190 to 8,330 ha during the breeding season and from 1,370 to 170,000 ha out-side of the breeding season, but activity was concentrated in small core areas of 30 to 1,535 ha and 485 to 6,380 ha during the breeding and nonbreeding seasons, respectively. Eagles selected shrub habitats and avoided disturbed areas, grasslands, and agriculture. This resulted in selection for habitat likely to contain their principal prey, black-tailed jackrabbits (*Lepus californicus*). Individuals with home ranges in extensive shrubland (n = 3) did not select for shrubs in the placement of their core areas or foraging points, but individuals in highly fragmented or dispersed shrublands (n = 5) concentrated their activities and foraged preferentially in jackrabbit habitats (i.e. areas with abundant and large shrub patches). As home ranges expanded outside of the breeding season, individuals selected jackrabbit habitats within their range. Shrubland fragmentation should be minimized so that remaining shrub patches are large enough to support jackrabbits.