Knight, R.L. and J.Y. Kawashima. 1993. Responses of Raven and Red-Tailed Hawk Populations on Linear Right-Of-Ways. Journal of Wildlife Management 7:266-271.

Abstract: Linear right-of-ways are ubiquitous in the United States and may alter vertebrate populations, yet they remain little studied. We examined the relationship between these areas and common raven (*Corvus corax*) and red-tailed hawk (*Buteo jamaicensis*) populations in the Mojave Desert of California by flying helicopter transects along paved highways, transmission powerlines, and control areas (i.e., no highways nor powerlines within 3.2 km). Ravens were equally ($P > 0.10$) common along highway and powerline transects, but were more ($P < 0.02$) abundant along these transects than along controls. Raven nests were more ($P < 0.0001$) abundant along powerlines than along either highways or controls. Red-tailed hawks and their nests were more ($P < 0.0001$) abundant along powerlines than along either highway or control transects. Neither species used potential nest or perch sites in proportion to their availability. Ravens used power poles as nest sites more ($P < 0.001$) than expected based on availability, but not ($P > 0.10$) as perch sites. Red-tailed hawks used power poles for both nesting and perching more ($P < 0.001$) than expected based on availability. Our data suggest that ravens are more abundant along highways because of automobile-generated carrion, whereas both ravens and red-tailed hawks are more common along powerlines because of the presence of superior perch and nest sites. We recommend that land managers evaluate possible changes in vertebrate populations and community-level interactions when assessing the effects of future linear right-of-way projects.