

Wolff, J.O., T. Fox, R.R. Skillen, and G. Wang. 1999. The effects of supplemental perch sites on avian predation and demography of vole populations. *Canadian Journal of Zoology* 77:535-541.

Abstract: We erected supplemental perches to evaluate their effectiveness in attracting perching raptors and to determine if an increase in raptor visitation could affect vole demography. Our model experimental system consisted of six 0.2-ha enclosures containing gray-tailed vole, *Microtus canicaudus*. The availability of supplemental perch sites had no effect on northern harriers, *Circus cyaneus*, but resulted in an 11-fold increase in visitation by American kestrels, *Falco sparverius*. This increased predation pressure did not affect vole population size, growth rate, or adult survival. However, juvenile recruitment and the proportion of reproductive females were lower in treatment sites than in control sites. Male voles had smaller home ranges and were less active than expected, which may have been an avoidance response to predation risk. High densities of voles, adequate cover in treatment sites, and good foraging areas with less cover in surrounding habitat may have negated the effects of the availability of supplemental perch sites. We conclude that adding perches can increase raptor visitation substantially but may have little effect on high-density vole populations.