

Steenhof, K., M.N. Kochert, and J.A. Roppe. 1993. Nesting by Raptors and Common Ravens on Electrical Transmission Line Towers. *Journal of Wildlife Management* 57:271-281.

Abstract: Raptors and common ravens (*Corvus corax*) (hereafter called ravens) began nesting on towers along a 596-km segment of a 500-kV transmission line in southern Idaho and Oregon within 1 year of its construction. We began monitoring these nesting populations in 1981 to assess the effectiveness of artificial structures in attracting nesting raptors and to provide guidelines for enhancing raptor nesting opportunities on transmission lines. Within 10 years, 133 pairs of raptors and ravens were nesting along the 500-kV line. Rapid colonization of towers along the line probably was due to lack of other nesting substrate in the transmission line corridor, and the proximity of existing nesting populations in the nearby Snake River Canyon. Transmission towers provided both new and alternative nesting substrates. Raptors and ravens used all types of towers on the line but preferred (all $P < 0.05$) tower types and sections of towers where steel latticework was relatively dense. They tended to nest on the same or adjacent towers each year even though a low percentage of nests remained intact after the breeding season. Destruction of nests by wind was the most common cause of nest failure on transmission towers. Artificial platforms protected nests from wind damage, and hawks and eagles showed a preference for platforms. Overall nesting success of pairs on transmission towers was similar to or higher than that of pairs nesting on other substrates. Utility companies can enhance raptor nesting opportunities and minimize conflicts with power transmission by providing stable nesting substrate that is not directly above insulators. Nest site modifications either during or after line construction can attract nesting raptors and improve their nesting success.