

FEATURE ARTICLES

**COMMON RAVEN JUVENILE SURVIVAL IN A HUMAN-AUGMENTED
LANDSCAPE**

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Abstract. Anthropogenic resource subsidies have contributed to the dramatic increase in the abundance of Common Ravens (*Corvus corax*) in the western Mojave Desert, California, during the past 30 years. To better understand the effects of these subsidies on raven demography, we examined whether survival to juvenile departure from the natal territory could be predicted by a set of environmental and morphological variables, such as nest proximity to anthropogenic resources and juvenile condition. We captured 240 juvenile ravens over 2 years and marked them prior to fledging. Nest proximity to anthropogenic resources and earlier fledging dates significantly predicted raven juvenile survival to departure from the natal territory. The best-fitting mark-recapture models predicted postdeparture survival as a function of time since fledging, nest proximity to anthropogenic resources, and year hatched. The positive effect of nest proximity to anthropogenic resources influenced postdeparture survival for at least 9 months after fledging, as revealed by the mark-recapture analysis. Annual survival was 47% for first-year, 81% for second-year, and 83% for third-year birds. Our results support the hypothesis that anthropogenic resources contribute to increasing raven numbers via increased juvenile survival to departure as well as increased postdeparture survival. We expect raven numbers to grow in concert with the growing human presence in the Mojave Desert unless raven access to anthropogenic resources is diminished.

Key words: Common Raven, *Corvus corax*, dispersal, juvenile dispersal, juvenile survival, juvenile survivorship, mark-recapture.