



Cougars are recolonizing the midwest: Analysis of cougar confirmations during 1990–2008[†]

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Abstract

Although cougars (*Puma concolor*) were extirpated from much of midwestern North America around 1900, hard evidence of cougar presence has increased and populations have become established in the upper portions of the Midwest during the past 20 years. Recent occurrences of cougars in the Midwest are likely due to dispersal of subadult cougars into the region from established western populations, and may be indicative of further recolonization and range expansion. We compiled confirmed locations of cougars (i.e., via carcasses, tracks, photos, video, and DNA evidence) collected during 1990–2008 in 14 states and provinces of midwestern North America. We separated our study area into 2 regions (east and west), calculated number and types of confirmations, and assessed trends in confirmations during the study period. We recorded 178 cougar confirmations in the Midwest and the number of confirmations increased during the study period ($r = 0.79$, $P \leq 0.001$). Confirmations by state or province ranged from 1 (Kansas, Michigan, and Ontario) to 67 (Nebraska). Carcasses were the most prevalent confirmation type ($n = 56$). Seventy-six percent of known-sex carcass confirmations were males, consistent with predominantly male-biased dispersal in cougars. More confirmations ($P = 0.05$) were recorded in the western region ($\bar{x} = 19.9 \pm 22.8/\text{yr}$) than the eastern region ($\bar{x} = 4.3 \pm 3.1/\text{yr}$). Seventy-nine percent of cougar confirmations occurred within 50 km of highly suitable habitat (i.e., forest areas with steep terrain and low road and human densities). Given the number of cougar confirmations, the increasing frequency of occurrences, and that long-distance dispersal has been documented via radiocollared individuals, our research suggests that cougars are continuing to recolonize midwestern North America. © 2012 The Wildlife Society.

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