Estimating Cougar Population Abundance in Northeast Oregon

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ABSTRACT Cougars (*Puma concolor*) are wide-ranging, long-lived, and very secretive. Like other large carnivores, obtaining reliable estimates of cougar population densities is difficult. As part of a large study on factors influencing calf recruitment of Rocky Mountain elk (*Cervus elaphus*), we estimated population densities of cougars, thus far over a 6-year period in 2 study areas of northeast Oregon. To determine population densities we used a capture-recapture (Lincoln-Petersen) estimator and a reconstructed population method at three different spatial scales. These results were compared to minimum population estimates of all adult (male and female) and subadult female cougars derived from radiocollaring individuals in each study area. We discuss the challenges of estimating population densities of cougars, reliability of different approaches, and management implications of our findings.