

SHORT COMMUNICATIONS

**RED-HEADED WOODPECKER NEST-SITE SELECTION AND REPRODUCTION IN MIXED PONDEROSA PINE AND ASPEN WOODLAND FOLLOWING FIRE**

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Manuscript received 20 September 2005; accepted 13 June 2006.

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*Abstract.* Red-headed Woodpecker (*Melanerpes erythrocephalus*) populations are declining at a continental scale, yet little is known about their nest-site selection and reproduction within burned forests. We measured reproductive parameters and nest-site characteristics at 17 Red-headed Woodpecker nests and 17 random sites between 2002 and 2004 in the Black Hills, South Dakota. The average date the first egg was laid was 17 June, and the average clutch size was  $5.4 \pm 0.4$ . The daily nest survival rate averaged 0.98 (overall nest success = 47%), and predation was the major cause of nest failure. Red-headed Woodpecker nests occurred farther from grassland edges in large diameter snags within severely burned quaking aspen (*Populus tremuloides*) stands. High-severity fire within these aspen stands resulted in a combination of snag and understory characteristics that differed from the surrounding pine forest matrix. Interactions between cover type and burn severity may have important ecological consequences for Red-headed Woodpeckers in a mixed conifer forest.

*Key words:* aspen, Black Hills, burn severity, habitat selection, *Melanerpes erythrocephalus*, *Populus tremuloides*, Red-headed Woodpecker.