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# Winter Abundance and Habitat Preference of Red-Tailed Hawks (*Buteo jamaicensis*) in Northeastern and Central Illinois

Anna Groves

*Illinois Wesleyan University*

Given Harper, Faculty Advisor

*Illinois Wesleyan University*

Angelo Capparella, Faculty Advisor

*Illinois State University*

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Poster Presentation P20

**WINTER ABUNDANCE AND HABITAT PREFERENCE OF RED-TAILED HAWKS  
(*BUTEO JAMAICENSIS*) IN NORTHEASTERN AND CENTRAL ILLINOIS**

Anna Groves and Given Harper\*<sup>1</sup> and Angelo Capparella\*<sup>2</sup>

<sup>1</sup>Biology Department, Illinois Wesleyan University

<sup>2</sup>Department of Biological Sciences, Illinois State University

Though the red-tailed hawk (*Buteo jamaicensis*) is a common raptor found across the United States, no comprehensive study has examined its winter abundance and habitat preference in Illinois since 1960. Winter abundance was determined using five years of winter raptor automobile survey results from northeastern and central Illinois. Red-tails were least abundant in December and most abundant in February [December:  $11.2 \pm 8.3$  ( $\bar{x} + SD$ ) hawks/survey, January:  $11.7 \pm 8.7$ , February:  $14.5 \pm 9.3$ , March:  $12.4 \pm 10.6$ ], which may be due to the presence/absence of migrant birds. Red-tail abundance was highest in 2008-2009 and lowest in 2005-2006 (2004-2005:  $10.4 \pm 7.9$  hawks/survey; 2005-2006:  $9.6 \pm 7.0$  hawks; 2006-2007:  $12.2 \pm 9.1$ ; 2007-2008:  $13.1 \pm 10.5$ ; 2008-2009:  $17.5 \pm 10.5$ ). Adults were observed nearly 10 times more frequently ( $8.6 \pm 7.5$  adults/survey) than immatures ( $0.9 \pm 1.5$  immatures/survey). Habitat preference will be examined based on the hawk distribution patterns along the 50-mile survey routes and analyzed using ArcGIS software and the 2001 National Land Cover Dataset.