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Abstracts

SHORT COMMUNICATIONS

A POSSIBLE ROLE FOR RED SQUIRRELS IN STRUCTURING BREEDING BIRD COMMUNITIES IN LODGEPOLE PINE FORESTS

ADAM M. SIEPIELSKI[1]
Department of Biology, New Mexico State University, Las Cruces, NM 88003
Manuscript received 23 November 2004; accepted 21 September 2005.
[1]Present address: Department of Zoology and Physiology, University of Wyoming, Laramie, WY 82071. E-mail: asiepiel@uwyo.edu

Abstract. Nest predation is thought to play an important role in structuring certain breeding bird communities. One potential consequence of nest predation is lower recruitment in breeding birds, which may be manifested as lower breeding bird abundance. Lodgepole pine (*Pinus contorta* ssp. *latifolia*) forests east and west of the Rocky Mountains became isolated following glacial retreat 12 000 years ago and differ in whether or not red squirrels (*Tamiasciurus hudsonicus*), which are a key nest predator, are present. Breeding bird abundance in lodgepole pine forests was compared between four ranges with red squirrels and four ranges without red squirrels. Species grouped into canopy and understory nesting guilds were, on average, two and three times more abundant, respectively, in forest ranges without red squirrels than in ranges with red squirrels; no statistically significant differences were found for midstory, ground, or cavity nesters. These results suggest that geographic variation in the presence or absence of red squirrels is likely important in structuring breeding bird communities in lodgepole pine forests across the landscape.

Key words: *bird abundance, breeding birds, community structure, nest predators,* Pinus contorta *ssp*. latifolia*, Rocky Mountains*, Tamiasciurus hudsonicus.