

ABSTRACTS FOR *CONDOR* 103(2) MAY 2001

FEATURE ARTICLES

FACTORS INFLUENCING PAIR TERRITORIALITY IN THE JUNIPER TITMOUSE¹

BETH J. CHRISTMAN²

Department of Ecology and Evolutionary Biology, Corson Hall, Cornell University, Ithaca, NY 14853

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²Present address: 807 Blanchard Way, Sunnyvale, CA 94087, e-mail:

bjc14@cornell.edu

Abstract. Pair territoriality outside of the breeding season is a relatively uncommon pattern of social organization in the Paridae (tits, titmice, and chickadees). Within the territorial parids, pair territoriality appears to be the derived state. Because of this, it is possible to address the question: What favors the evolution of this social system? I assessed factors that may be responsible for inducing pair territoriality in Juniper Titmice (*Baeolophus ridgwayi*), focusing largely on foraging behavior and predation risk. I found that the diet of Juniper Titmice is distinctive as compared to other tits, with large seeds (juniper and pinyon pine) and acorns making up most of the winter diet instead of arthropods. Time budgets reflected that a large proportion of time is spent handling food. Space use was strongly skewed toward locations that should be relatively safe from predators, both because food is located in such sites and because titmice transport seeds to sheltered sites for processing. Seeds decreased significantly in abundance through the course of the winter. Comparisons with group-living tit species that forage largely on arthropods show differences in time and space use. I conclude that the suite of behaviors associated with foraging on large seeds has shifted the cost-to-benefit ratio of group living for Juniper Titmice relative to other tits.

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