

SHORT COMMUNICATIONS

**NEST REUSE BY EASTERN KINGBIRDS: ADAPTIVE BEHAVIOR OR  
ECOLOGICAL CONSTRAINT?**

LUCAS J. REDMOND<sup>1</sup>, MICHAEL T. MURPHY, AND AMY C. DOLAN

*Department of Biology, Portland State University, P.O. Box 751, Portland, OR 97201*

Manuscript received 23 February 2006; accepted 28 December 2006.

<sup>1</sup> E-mail: [luk916@hotmail.com](mailto:luk916@hotmail.com)

*Abstract.* The reuse of old nests by open-cup nesting passerines is a seemingly rare but potentially adaptive behavior if, as a consequence, females begin to breed earlier, lay larger clutches, or fledge more young. We report an unusually high rate of nest reuse (~10% of 341 nests) for Eastern Kingbirds (*Tyrannus tyrannus*) breeding at Malheur National Wildlife Refuge, Oregon. We found no difference in availability of nesting habitat or food abundance in territories in which nests were and were not reused. We also found no support for the hypotheses that kingbirds benefited from nest reuse by breeding earlier, laying larger clutches, or fledging more young, and, contrary to expectations, females that reused nests laid significantly smaller eggs than females who built their own nests. Nest reuse was independent of age: a roughly equal number of females for which we had multiple years of data both reused nests and built new nests, but at different points in their lives. Competition for nest sites seems high at Malheur National Wildlife Refuge because many open-cup nesting species utilize similar nest sites in the limited zone of riparian vegetation. A shortage of high-quality nest sites, coupled with interspecific competition, may underlie the high frequency of nest reuse in this kingbird population.

*Key words:* clutch size, egg mass, interspecific competition, nest reuse, timing of breeding, *Tyrannus tyrannus*.