

SHORT COMMUNICATIONS

AN EXPERIMENTAL TEST OF SNAKE SKIN USE TO DETER NEST PREDATION

ELIZABETH C. MEDLIN AND THOMAS S. RISCH¹

Arkansas State University, Department of Biological Sciences, P.O. Box 599, State University, AR 72467-0599

Manuscript received 25 January 2006; accepted 27 July 2006.

¹ Corresponding author. E-mail: trisch@astate.edu

Abstract. Some bird species utilize snake skins as nesting material, possibly to decrease predation. We constructed 60 artificial nests simulating the nests of Great Crested Flycatchers (*Myiarchus crinitus*) in nest boxes to test the prediction that snake skins deter nest predators. Twenty of the boxes lacked rat snake (*Elaphe obsoleta*) skins (control), 20 had a single skin in the nest, and 20 had a skin in the nest and another displayed outside the box. Five of the control boxes were depredated (20%), while none of the experimental boxes were depredated. Our results supported our prediction that use of snake skins would deter mammalian predators, particularly the southern flying squirrel (*Glaucomys volans*). Although our results suggest a potential adaptive explanation for this behavior, our design did not allow us to address the degree of olfactory or visual detection by the squirrels, and left other potential explanations untested.

Key words: artificial nest, *Glaucomys volans*, *Great Crested Flycatcher*, *Myiarchus crinitus*, nest predation, snake skin use, southern flying squirrel.