

SHORT COMMUNICATIONS

NUMERICAL DISCRIMINATION BY WILD NORTHERN MOCKINGBIRDS

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Manuscript received 2 December 2005; accepted 15 July 2006.

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Abstract. Optimal foraging theory predicts that birds, when faced with alternative foraging options, will choose the one that provides the greatest rate of return. We tested if wild, free-living Northern Mockingbirds (*Mimus polyglottos*) could solve a novel foraging problem to attain food rewards with the least amount of effort. We introduced five subjects to experimental feeders in their winter territories in an urban habitat. Feeders contained different numbers of bamboo sticks at each of two ends. Birds could access a food reward (*Tenebrio* larvae) by removing all sticks from either end; therefore, the optimal choice was to remove sticks from the end with fewer sticks. Each subject was tested in repeated trials to determine if it preferentially chose the end with fewer sticks. All five birds successfully discriminated between one stick and six sticks as well as between two sticks and five sticks. However, all five birds failed to discriminate between three sticks and four sticks. Wild Northern Mockingbirds thus appear to have a limited capacity to solve novel foraging problems by minimizing the number of obstacles to be removed.

Key words: *Mimus polyglottos*, *Northern Mockingbird*, *numerical discrimination*, *optimal foraging*.