

ABSTRACTS FOR ISSUE 103(1) FEBRUARY 2001

FEATURE ARTICLES

MALE BADGE SIZE PREDICTS DOMINANCE AGAINST FEMALES IN HOUSE SPARROWS¹

ANDRÁS LIKER²

Behavioural Biology Research Group, Department of Ecology, Szent István University, Pf. 2, H-1400, Budapest, Hungary

ZOLTÁN BARTA³

Behavioural Ecology Research Group, Department of Evolutionary Zoology and Human Biology, University of Debrecen, Pf. 3, H-4010 Debrecen, Hungary

¹Received 9 March 2000. Accepted 11 September 2000.

²E-mail: aliker@univet.hu

³Present address: Centre for Behavioural Biology, School of Mathematics, University of Bristol, Bristol, BS8 1UG, UK.

Abstract. We investigated dominance relationships and the use of male badge size as a status signal in a mixed-sex flock of House Sparrows (*Passer domesticus*). Specifically, we tested whether females differ from males in their fighting behavior or dominance status, and whether badge size predicts dominance and fighting success of males in male-female fights. We found that both sexes were involved frequently in aggressive encounters, and the mean dominance rank of males did not differ from the mean rank of females. Badge size was the only significant predictor of the dominance rank of males, and was a good predictor of their aggressiveness measured as the proportion of fights initiated. On the other hand, female dominance rank was correlated with body weight. In male-female fights, both the proportion of female-initiated aggressive interactions and the proportion of fights won by females decreased with increasing size of the opponent's badge. Large-badged males dominated more females in dyadic interactions than smaller-badged males. These correlational results suggest that male badge size may be used as a signal of dominance status between male and female House Sparrows in winter flocks.

[Back to Table of Contents](#)