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Abstracts

FEATURE ARTICLES

PATTERNS OF SEX RATIO VARIATION IN HOUSE SPARROWS

DAVID F. WESTNEAT[1,3], IAN R. K. STEWART[2,4], EMILY HALPIN WOESTE[1,5], JOHNNY GIPSON[1,6], LATIFAT ABDULKADIR[1,7] AND JOSEPH P. POSTON[1,8]
[1]*Center for Ecology, Evolution, and Behavior, T. H. Morgan School of Biological Sciences, 101 Morgan Building, University of Kentucky, Lexington, KY 40506-0225*
[2]*Department of Zoology, University of Leicester, University Road, Leicester, LE1 7RH, UK*
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[3]E-mail: biodfw@uky.edu
[4]Present address: Center for Ecology, Evolution, and Behavior, T. H. Morgan School of Biological Sciences, 101 Morgan Building, University of Kentucky, Lexington, KY 40506-0225.
[5]Present address: 750 Shaker Dr. #317, Lexington, KY 40504.
[6]Present address: 698 Vicksburg Estates Rd., Benton, KY 42025.
[7]Present address: 79 Flint River Rd. #10-B, Riverdale, GA 30274.
[8]Present address: Department of Biology, Catawba College, 2300 West Innes Street, Salisbury, NC 28144-2488.

Abstract. PCR amplification of a sex-linked gene was used to assay the sex ratio of nestling House Sparrows (*Passer domesticus*) from five consecutive breeding seasons. We tested several predictions from sex ratio theory, including that at the population level, sparrows should produce a 1:1 sex ratio. Of 1162 nestlings, 53% were male, which is not significantly different from 50%. We did find a significant skew toward males in two of the five years, and significant heterogeneity in sex ratio among seasons. There was no evidence that brood sex ratios were skewed from a binomial distribution, despite a modest excess of all male broods. We found that male nestlings weighed significantly more (0.5 g) than their female siblings. We tested the possibility that females produce males when conditions are good. Sex ratio was not associated with nest attempt, despite some evidence that conditions varied seasonally. Clutch size was negatively associated with date of first egg, but neither nestling weight nor sex ratio showed any correlation with date. We also tested an array of female characteristics; sex ratio was not associated with female body size, condition, or age. Females that hatched a larger proportion of eggs produced more males, a consistent pattern in all five seasons. However, the female's mate's characteristics (size, condition, age, or size of throat patch) did not influence sex ratio. These data contribute to a growing number of studies that provide an inconsistent picture of sex ratio variation in birds.

Key words: *birds, CHD gene, conditional strategy, sex allocation, sexual selection.*