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## SHORT COMMUNICATIONS

### FEMALE MATE CHOICE IN RELATION TO STRUCTURAL PLUMAGE COLORATION IN BLUE GROSBEAKS

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*Abstract.* Plumage blueness in Blue Grosbeaks (*Passerina caerulea*) is related to nutritional condition during molt, and bluer males hold larger territories with more food resources. We tested the hypothesis that females use male plumage brightness as a criterion in choosing mates. In a mate-choice aviary, we presented females with a choice between males whose feathers were either brightened with blue marker or dulled with black marker. Treatment resulted in an increase in the plumage intensity (reflectance at peak wavelength) of blue-treated males and a decrease in the intensity of black-treated males within the natural range of variation, while the wavelength of peak reflection (hue) remained unchanged. During mate-choice trials, females consistently preferred particular males, but choice was random with respect to treatment. Thus, the intensity of blue coloration of male Blue Grosbeaks appears not to function as a criterion in female mate choice.

*Keywords:* Blue Grosbeak, female choice, *Passerina caerulea*, structural color.