Abstract

Models of sexual selection emphasize that variations in sexual ornamentations have important fitness consequences. For example, males with low parasite loads are thought to be more capable of producing substantial ornamentations than males with high loads. Consequently, males with high parasite loads are unable to allocate sufficient energy to sexual displays relative to uninfected males and thus are not chosen by females. One ornamental trait likely to be affected by parasitic infections is carotenoid-based plumage coloration. I investigated whether plumage coloration in male House Finches *(Carpodacus mexicanus)* is affected by the presence of avian pox, a viral infection characterized by wartlike lesions. The hue, intensity, and tone of male plumage coloration were quantified. In addition, I also compared the body mass, the length of the longest rectrice, the length of the longest primary, the bill length, and fat measures of infected versus uninfected birds. A total of 175 birds were captured at four sites in northern Utah. Of those captured, 20% had pox-like symptoms. Infected birds were significantly lighter than uninfected birds. Infected birds were also caught more frequently at an urban residential setting than at rural areas. Results indicate that infected males had significantly lower plumage scores and a significantly lower body mass relative to the uninfected males.