

Chapter 54

Evolutionary Aside 54.2—Mate Choice for Birds

Researchers conducted an experiment to see if birds had latent preferences for particular stimuli using a bird common in the pet trade, the zebra finch (*Taeniopygia guttata*). To conduct the experiment, the researchers glued long feathers vertically to the tops of the heads of male birds. The result was that the males had very tall crests, completely unlike anything seen in nature. They then presented males with different colored crests to females to see if they had a preference for one color over another. Surprisingly enough, females went crazy over males with white crests, but not green or red ones. Why this might be is not at all clear; it suggests there is something in the zebra finch's neural hardwiring that for some reason finds white much more attractive than green or red. Regardless of the cause of the preference, this finding suggests that if a mutation arose that caused a male to have a white crest on his head, the mutation would bestow a great advantage and would quickly spread through the population. Perhaps there are many such latent preferences in species; preferences we might never be able to predict and that might be hard to explain. But if appropriate variation arises in a population, females may prefer it. This is a fascinating area of research that is just in its infancy, and will require coupling studies of neurophysiology and behavior to understand how and why such mate choice preferences evolve.