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Ask the expert

Q&JA

Q Why are the males of most animal species better looking than their female counterparts? And why isn't this the case with humans?

A In many animal species, the males indeed have more ornaments. This can come, for example, in the form of exquisite colours (many birds and insects), horns (mammals and insects) and eye-stalks (many flies). One should also think about "songs" and elaborate behaviours as ornaments.

The ultimate reason is that males and females do not mate indiscriminately. Mates are chosen very carefully and, in most species, females choose males and not vice versa.

In order to be chosen, males have to display ornaments. There are now many studies demonstrating that females that choose "pretty" males gain advantages and therefore leave more offspring. Sometimes it is direct benefits (for example, choosing a male weaver bird that is good at building a nest). In other cases, it is genetic benefits. After all, the genes of a male that successfully displays elaborate ornaments are unlikely to be defective.

However, this does not explain why it is usually the females who choose. In order to understand this, we need to consider which sex invests more into offspring.

Males and females contribute the same amount of genetic material, but the females of most animal species make other larger contributions. For instance, egg cells are larger than sperm cells and females are more likely to invest time and other resources into bringing up offspring. Because females invest more, they also have a stronger incentive to be choosy.

The relationship between choosiness and investment becomes clear when we look at some animal species where the males rear the offspring and therefore invest more than the females. In these species, females fight with other females over access to males (moorhens, jacana birds) and it is often the females that are more ornamented than males (such as in pipefishes).

In humans, both parents invest heavily, and for long periods in their offspring. Therefore, both sexes are very "choosy" and have lengthy periods of courtship before choosing a long-term partner.

However, the choice criteria differ between men and women. Some of the criteria are physical attributes that we refer to when we talk about "beauty" in our species.

In the past, these criteria were more important for men choosing women than vice versa. This is likely due to different roles in child rearing, with men traditionally being more important for providing food for the family.

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