

Hens change sex behaviour to outfox males

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Hens choose to mate in the morning to avoid sexual harassment from gangs of cockerels later in the day.
Credit: Pizzari/Løvlie

Hens solicit sex in the morning in male-dominated groups of chickens to avoid an evening of sexual harassment from amorous cockerels, according to new research.

The study, undertaken by Dr Tommaso Pizzari of the Department of Zoology and Dr Hanne Løvlie of the University of Stockholm, found that in female-dominated groups hens looked to mate with cockerels in the evening when both sexes are at their most fertile.

However, in groups where there were a higher proportion of males, hens chose to mate with desired males in the morning and then avoid males in the evening. This enabled them to mate without suffering sexual harassment from gangs of cockerels. It is the first study of its kind to demonstrate that female birds change their sexual behaviour in this way.

The scientists studied a population of free-ranging feral chickens at the Tovetorp research station in Sweden because, while used to humans, these fowl behave much like wild birds. By splitting the population up into groups with differing ratios of male to female birds the researchers were able to observe how sexual behaviour changed as the groups went from being dominated by females (a

minimum ratio of two males to eight females) to being dominated by males (a maximum ratio of six males to four females).

‘What we found was that females were exposed to more intense sexual harassment in groups with more males,’ said Dr Tommaso Pizzari of the Department of Zoology at Oxford University, ‘in these groups females solicit sex early in the morning and avoid males in the evening. This ‘plasticity’ in sexual behaviour may enable females to reduce the cost of mating while maintaining some control over paternity.’

Most research on sexual conflict ignores the fact that the fitness pay-offs of mating may change drastically over a short timescale, for example over a day. This new study provides evidence that mating strategies can affect behaviour at a daily level and could shed new light on the evolutionary ‘battle of the sexes’.

A report on the research is published in the journal *The American Naturalist*.

Source: University of Oxford

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