In promiscuous antelopes, the 'battle of the sexes' gets flipped

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In some promiscuous species, sexual conflict runs in reverse, reveals a new study published online on November 29th in *Current Biology*, a publication of Cell Press. Among African topi antelopes, females are the ones who aggressively pursue their mates, while males play hard to get.

The classical view of sexual conflict holds that males, for whom reproducing is cheap, will mate as much as possible. On the other hand, females, who must pay a heftier price, are choosier about their mating partners.

“When biologists talk about the ‘Battle of the Sexes,’ they often tacitly assume that the battle is between persistent males who always want to mate and females who don’t,” said Jakob Bro-Jørgensen of University of Jyväskylä in Finland. “However, in topi antelopes, where females are known to prefer to mate with males in the center of mating arenas, we’ve found a reversal of these stereotypic sex roles.”

Such role reversals may occur in species where females benefit from mating multiply, either because it increases their chances of conception with high-quality males or simply because it increases the probability that they conceive at all, Bro-Jørgensen added. He noted that this reversed sexual conflict might not be a rarity in the animal kingdom, as topi are “in many ways a very typical mammalian species characterized by male mate competition and female choice.”

In promiscuous species—those in which individuals mate with multiple

partners within a short time period—Bro-Jørgensen's group suspected that females might sometimes have higher optimum mating rates than their mating partners. Topi antelope offered an ideal opportunity for studying the dynamics of sex roles in promiscuous mammals, Bro-Jørgensen said, because over a month and a half, individual females become receptive to mating for roughly one day, when they mate several times with each of about four males on average. Females prefer to mate with those males who have succeeded in acquiring territories in the center of "mating arenas," known as leks. But the majority of females also mate with other males as well, resulting in intense sperm competition.

Indeed, they have now shown that aggressive female topis compete with one another for a limited supply of sperm from the most desirable members of the opposite sex, even attacking their fellow mating pairs. Meanwhile, resistant males grow choosier about their mating partners, deliberately selecting the least mated females and launching counterattacks against aggressive females with whom they've already mated.

The bottom-line of the findings, according to Bro-Jørgensen: "We should not regard coyness as the only natural female sex role just as we should not expect that it is always the natural male sex role to mindlessly accept any mating partner," he said. "Nature favors a broader range of sex roles."

Source: Cell Press