

Like Mother, Like Son

Thirty years ago Robert L. Trivers, an evolutionary biologist, and Dan E. Willard, a mathematician, formulated a sage hypothesis: if strong, healthy mothers tend to bear strong sons, and if those sons monopolize matings and tend to produce more young than strong daughters would, then stronger mothers should give birth to more male than female offspring. The hypothesis has proved true for certain insects and birds, but the verdict for mammals has been equivocal.

Now two zoologists, Ben C. Sheldon of the University of Oxford and Stuart A. West of the University of Edinburgh, have shown that the hypothesis holds for a large group of mammals: the ungulates (hoofed creatures such as deer and pigs). They also found that a mother's overall condition before conception can play a role in producing sons, but that the mother's social standing has a greater impact than do purely physical factors such as body weight. Motherhood is future-oriented, they argue, and social dominance is probably the better long-term indicator of a female's access to resources. The effect is mild, but dominant females do give birth to sons slightly more often than to daughters. ("Maternal dominance, maternal condition, and offspring sex ratio in ungulate mammals," *American Naturalist* 163:40–54, January 2004) —S.R.