

Sexually extravagant male birds age more rapidly, but try to hide it

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This photo is of a male Houbara bustard. Credit: Yves Hingrat

For male houbara bustards sexual extravagance is the key to attracting mates in some of the world's harshest desert environments. However, new research in *Ecology Letters* reveals that males who perform the most extravagant sexual displays will suffer from premature biological aging and will pass their reproductive prime years earlier than their less ostentatious rivals.

Houbara bustards, *Chlamydotis undulata*, are found across the [deserts](#) of the Southern Hemisphere, from the Persian Gulf to the [Gobi Desert](#), and for six months of the year the [males](#) spend their days in elaborate sexual displays aiming to charm passing females.

Research has demonstrated that the 'showiest' of these males produce the highest quality sperm when they mate.

However, new research reveals that this effort takes its toll. Extravagant males were found to pass their reproductive prime much sooner than their more subdued rivals and they began to produce 'burnt-out', smaller ejaculates, containing high numbers of dead and abnormal sperm.

"This is the bird equivalent of the posers who strut their stuff in bars and nightclubs every weekend," said lead author Dr Brian Preston from the University of Burgundy, France. "If the bustard is anything to go by, these same guys will be reaching for their toupees sooner than they'd like."

Dr Preston's team found that despite burning out, showy males continued their energetic sexual displays at near maximum levels.

"Male houbara bustards may help to explain how senescence, or biological aging, has evolved," concluded Preston. "Senescence is the deterioration that occurs with advancing age, yet the reason why an organism should senesce has been an evolutionary puzzle, as natural selection would be expected to 'weed-out' the genes responsible for these age-related declines."

"The bustard shows that an over-abundance of early reproductive effort comes at the cost of physiological declines later in life. This early versus late life trade-off can help explain why senescence occurs, and reveals the potential significance of sexual selection in explaining rates of aging."

Provided by Wiley

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