

Free choice of mate may boost pandas' sex drive, study says

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Giant panda cubs playing in the panda kindergarten at the China Conservation and Research Center for the Giant Panda (CCRCGP) Bifengxia base in Sichuan, China. Credit: PDXWildlife intern Grace Russell.

Worried about the low sex drive of giant pandas in zoos, scientists have tried many things to get them in the mood—not least Viagra and "panda

porn".

When all else failed, they have often had to rely on artificial insemination to ensure the endangered black and white creatures have cubs.

On Tuesday, a study suggested the answer may be a lot simpler and, perhaps, more obvious—let the pandas choose their own mates.

"Giant pandas paired with preferred partners have significantly higher copulation and birth rates," researchers noted in the journal *Nature Communications*.

Generally, pandas in captivity are presented with a mate chosen by scientists based on the [animals'](#) "genetic profile".

The goal is to minimise inbreeding and expand the DNA pool.

But the result is often frustrating, with the animals having to be coaxed through human intervention to show even the slightest sexual interest in the mate thrust upon them.

A team from the United States and China ran a test at the China Conservation and Research Centre for the Giant Panda in Sichuan province, to see if being allowed to choose their own partner might make a difference.

Male and female pandas were housed in enclosures with animals of the opposite sex on either side. They were allowed limited physical interaction with their neighbours through cage bars.

Scientists measured the animals' "mate preference behaviour", which included different forms of playfulness and bond-forming, as well as

sexual arousal.

"Negative" interactions could include signs of aggression or a mere lack of interest.

The animals were then introduced to each other for mating—with both preferred and non-preferred partners.

"The highest reproductive performance was seen when both males and females showed mutual preference," the researchers found.

The results should come as no big surprise—ever since Charles Darwin published his theory of sexual selection in 1859, scientists have understood that [mate selection](#) is key to animal reproduction.

Conservation 'not in a test tube'

"Mate incompatibility can impede captive breeding programmes by reducing reproductive rates," wrote the study authors.

"It is therefore surprising that mate preferences have not figured more prominently in captive breeding programmes."

The findings may help China better spend its limited conservation budget, the scientists added.

"The future of conservation breeding will not take place in a [test tube](#)," they wrote.

The most cost-effective way to get captive animals to produce offspring is to breed them naturally, and "to do that requires better understanding of natural mating behaviour", they concluded.

"Mate choice has an important role to play in conservation."

The authors said their study was the first to "rigorously examine" the effects of mate preference in giant [pandas](#).

Pandas have only a brief breeding season from around March to May—and females become fertile only about two to three days a year, producing a cub approximately every 24 months.

Conservation group WWF estimates there are only around 1,600 [giant pandas](#) left in the wild in south-central China.

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