

# S.African lion cubs conceived artificially in world first

30 September 2018, by Susan Njanji



Conceived through artificial insemination in a world first, the two lion cubs were born on August 25

Watching the two little lion cubs boisterously play with each other at a conservation centre outside of South Africa's capital Pretoria, it's hard to see anything out of the ordinary.

But these cubs are unique.

"These are the first ever [lion](#) cubs to be born by means of [artificial insemination](#)—the first such pair anywhere in the world," announced the University of Pretoria, whose scientists are researching the reproductive system of female African lions.

The two cubs, a male and female, born on August 25 are healthy and normal, said Andre Ganswindt, the director of the University of Pretoria's mammal research institute.

His team's breakthrough came after 18 months of intensive trials.

"We collected sperm from a healthy lion," Ganswindt told AFP.

Then when the lioness' hormone levels were found

to be viable, she was inseminated artificially.

"And luckily it was successful," said Ganswindt, adding that "there were several attempts, but surprisingly it didn't take too much effort".

He said the breakthrough could be repeated, with scientists hoping the technique can be used to save other endangered big cats.

Lions are extinct in 26 African countries and numbers in the wild have plummeted 43 percent over the last two decades, with roughly only 20,000 left, according to the International Union for Conservation of Nature (IUCN), which lists the African lion as vulnerable.



Scientists hope the artificial insemination technique can be used to save other endangered big cats

"If we are not doing something about it, they will face extinction," said Ganswindt.

## 'Another tool in conservation box'

He said that rather than move the lions for breeding, the new technique would let breeders to

simply transport the sperm to receptive females, as is done with the captive elephant population in Northern America and Europe.

The findings are part of research being done by Isabel Callealta, a Spanish veterinarian and PhD student at the University of Pretoria.

Callealta personally trained the lions to lie next to a fence, where they would freely give blood samples to determine hormonal levels and assess the perfect time for insemination.

The research was carried out at the Ukutula Conservation Center, 80 kilometres (50 miles) northwest of Pretoria in South Africa's North West province.



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Imke Lueders, a scientist involved in the study, said "having the first lion cubs ever born from artificial insemination in their natural range country, and not in a zoo overseas, is an important milestone for South Africa".

"Assisted reproduction techniques are another tool in our [conservation](#) box, of course not a sole solution, but another technology that we can use to protect endangered species," she said.

Andre Mentz, a prominent lion breeder in South Africa's Free State province, described the birth of the cubs as "very revolutionary".

But animal welfare organisations are less enthused.

"The captive lion breeding industry in South Africa is exploitative and profit-driven," said Mark Jones of the Born Free Foundation.

"It generates its income through interaction activities (lion cub petting and lion walks), canned trophy hunting of lions and the lion skeleton trade, while contributing nothing to lion conservation," he added.



The world's first lion cubs born through artificial insemination, Victor and Isabel, at a conservation centre outside South African capital Pretoria

A group of 18 international and African conservation organisations wrote a letter addressed to the scientists saying they do not support the study, but did acknowledge artificial insemination could help other imperilled wild cats like the cheetah.

However, Paul Funston of wild cat conservation organisation Panthera raised fears about "anything new which gives any validity to the captive lion industry".

After all, he said, "in captivity, lions breed like

flies—most cats do".

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