

Northern White Rhino Embryos Created

Efforts to bring the Northern White rhinoceros from the brink of extinction moved a step further with the successful creation of embryos of the subspecies by scientists in Italy.

The in-vitro creation of northern white rhino embryos was achieved at Avantea Laboratories in Cremona, where Cesare Galli and his team matured and fertilised eggs collected on August 22 from Najin and Fatu, the two females living at Ol Pejeta Conservancy in Kenya, with sperm from males Suni and Saut.

"We brought ten oocytes back from Kenya, five from each female. After incubation seven matured and were suitable for fertilisation (four from Fatu and three from Najin)," said Galli. "Fatu's eggs were injected with Suni's sperm while Najin's eggs were injected with Saut's sperm using a procedure called

ICSI (Intra Cytoplasm Sperm Injection). Saut's semen was of really poor quality and we had to thaw additional samples to find viable sperms for ICSI.

"After 10 days of incubation, two of Fatu's eggs developed into viable embryos that were cryopreserved for future transfer. Najin's eggs did not make it to a viable embryo despite the fact that one egg initiated segmentation."

The procedure was made possible by a previous milestone achieved at Ol Pejeta three weeks earlier. Scientists were able to collect oocytes (immature eggs) from both Najin and Fatu for the first time. The successful egg collection was a joint effort by the Leibniz Institute for Zoo and Wildlife Research (Leibniz-IZW), Avantea, Dvůr Králové Zoo, Ol Pejeta Conservancy and the Kenya Wildlife Service (KWS).

Najin and Fatu, the only two remaining female Northern White rhino in the world, graze in the paddock at the Ol Pejeta conservancy in Nanyuki, Nairobi.

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Number of the only surviving white rhinoceros found at the Ol Pejeta Conservancy in Laikipia, Kenya.

45
The age of the last male northern white rhinoceros which died in 2018 at the Ol Pejeta Conservancy in Laikipia, Kenya.

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