



IUCN SSC Deer Specialist Group



Conservation Success Stories

**Assisted Reproduction:
A Conservation Tool to Save
the Endangered Pampas Deer**



Assisted Reproduction: A Conservation Tool to Save the Endangered Pampas Deer

IMPLEMENTED BY

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THREAT ADDRESSED

The Pampas Deer is a very delicate species, making it highly susceptible to capture myopathy syndrome. We successfully and safely captured five male Pampas Deer on two livestock ranches in Arerunguá.

TARGET

Capture pampas deer males to inseminate females of the captive Center. (T-010)



Collaboration and reproductive science prepare the ground for rewilding



Success category:

Increase in population viability

Success story:



REASONS FOR SUCCESS

For the first time, we are designing a specific protocol tailored to the endangered Pampas Deer. This effort represents an extraordinary example of collaboration, bringing together local ranchers, the breeding center, veterinarians, and biologists. Together, we aim to increase genetic diversity and prepare the population for future rewilding initiatives.



SUCCESS LEVEL

Successful

The Pampas Deer (*Ozotoceros bezoarticus*) is classified as Near Threatened on the IUCN Red List and now occupies only 1% of its original range in Argentina and Uruguay. It faces major challenges, including habitat loss from agricultural expansion, competition with livestock, and poaching, leading to small, isolated populations with limited genetic exchange and declining resilience.

In the 1980s, a captive population was established at the Estación de Cría de Fauna Autóctona de Piriápolis, Uruguay, with 10 individuals from the Arerunguá population. It has since grown to 160 deer, but genetic studies reveal inbreeding depression, threatening long-term viability. To counter this, a comprehensive genetic management plan was developed to introduce new diversity, improve breeding success, and ensure population stability. In polygynous species like the Pampas Deer, males introduce genetic variation, while females drive population growth. However, capturing adult wild males for translocation was unfeasible due to legal restrictions, logistical difficulties, and their poor adaptation to captivity.

A multidisciplinary team led by Dr Mauricio Duarte and Susana González coordinated the project, supported by national and international institutions. Specialists Lais Jaqueline and David Galindo managed semen collection and preparation. Each captured male was weighed, sampled (faeces, blood, ectoparasites, semen), tagged, and fitted with a GPS collar. Collected semen was preserved in liquid nitrogen for future use in assisted reproduction.

A two-phase plan guided semen collection from wild males and artificial insemination of captive females. Five males were captured on two Arerunguá ranches, and nine females underwent a non-invasive synchronisation protocol designed by Cecilia Ferrando and Luciana Diniz. Although the first year yielded no pregnancies, protocol improvements in the second year led to successful inseminations in September 2024. At the Breeding station Dr Hugo Arellano, Analía Rey and Brenda Bon give special support to this project.

The deer remain healthy, and births are expected in May 2025. Our study demonstrates that both male and female Pampas Deer can be safely handled without health issues or injuries. We are now awaiting results to confirm the success of assisted reproduction. While the outcome is still pending, our findings provide promising insights into the species' reproductive biology, paving the way for future biotechnological conservation efforts.

This project is a success story of international conservation collaboration, working to improve the genetic diversity of the captive Pampas Deer population. ■ SUSANA GONZÁLEZ

SUPPORTING DOCUMENTS

<https://www.instagram.com/susana.gonzalez/profilecard/?igsh=MWhiem51dzl4Z3NheQ>



Vulnerable Northern River Shark,
(*Glyphis garricki*)
Photo: Grant Johnson

Interviews about human wildlife
interactions with local inhabitants
Photo: Kiran Thapa Magar

Vicuña management by Cooperativa
Agroganadera de Santa Catalina and Comunidad
Aborigen Atu Shapi de Morritos.
Santa Catalina, Jujuy Province, Argentina
Photo: Yanina Arzamendia

Story photo credits

Pampas deer capture
Photo: Susana Gonzalez

Assisted reproduction
Photo: Susana Gonzalez

Team at breeding station
Photo: Susana Gonzalez

Pampas deer nursing fwan
Photo: Scott Presnell (CC BY-SA 2.0)

Cacti from genera *Copiapoa* and *Eriosyce*
confiscated in Italy and repatriated to Chile in 2021
Photo: Andrea Cattabriga

Community songbird monitoring and
protection, Indonesia
Photo: Asian Songbird Trade SG archives