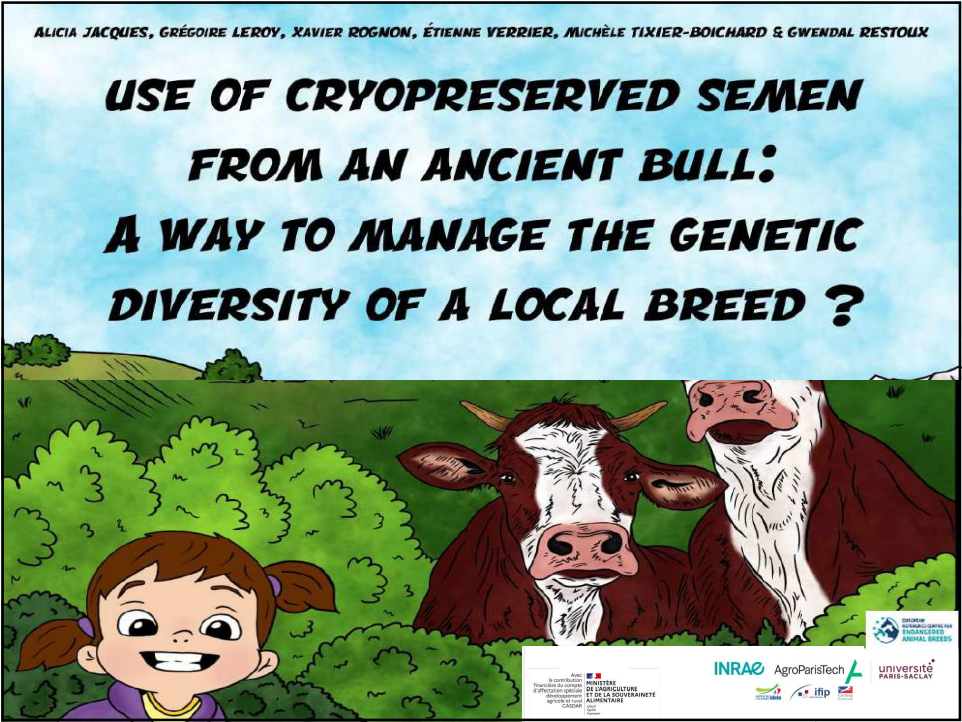
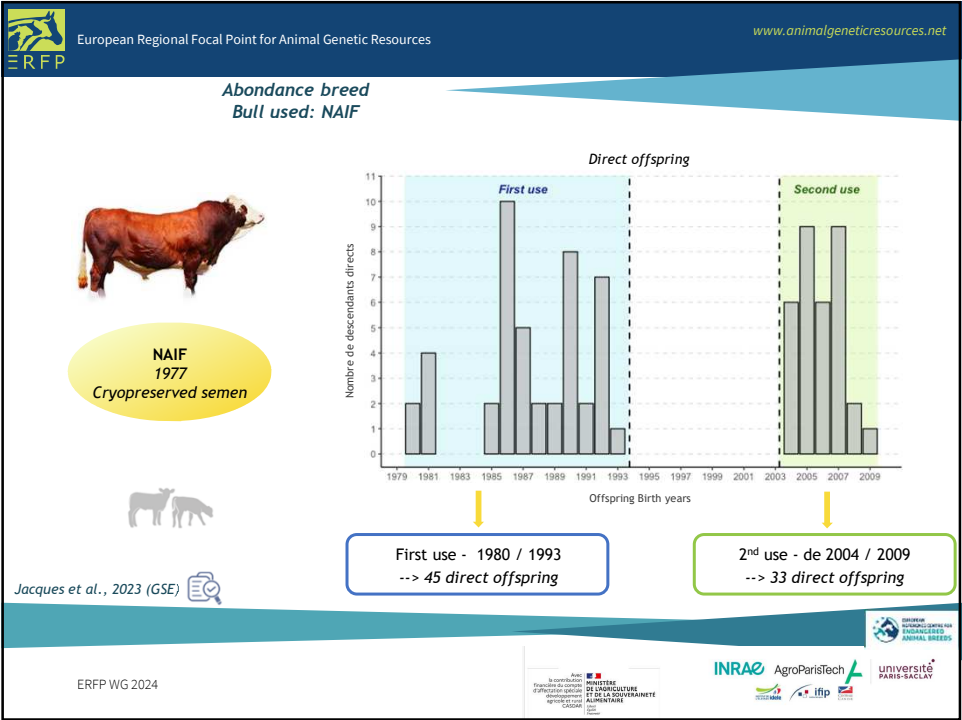
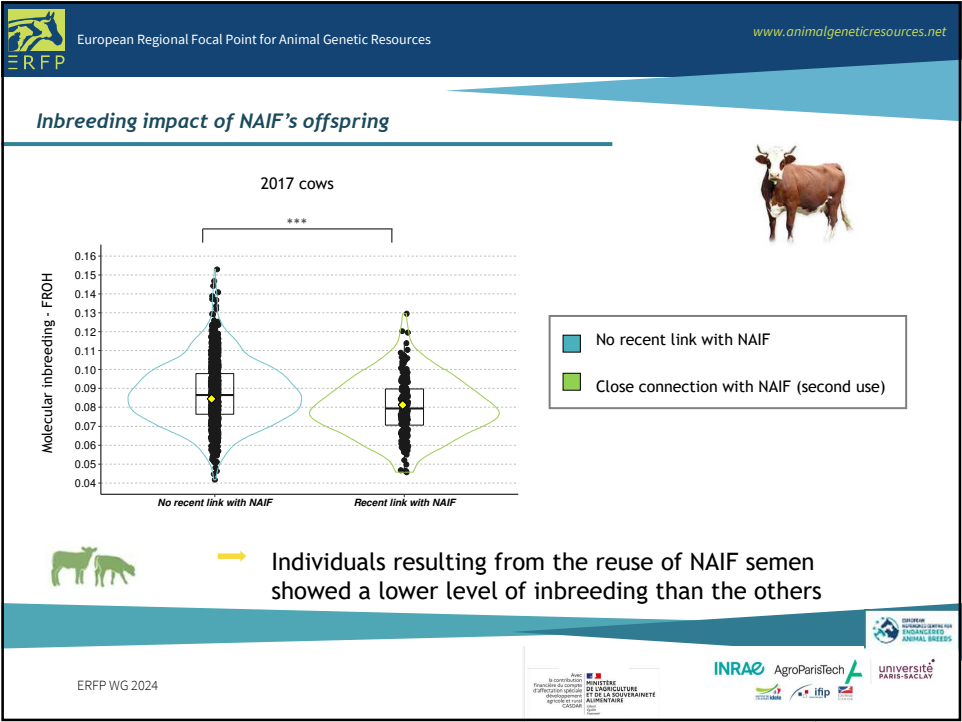




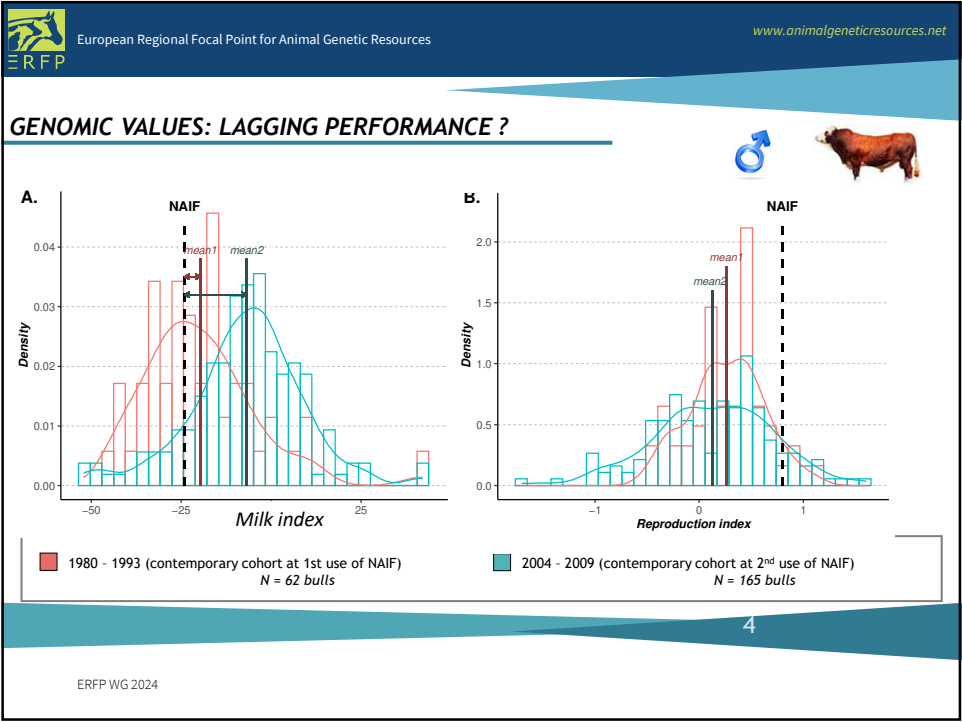
1



2



3



4



European Regional Focal Point for Animal Genetic Resources

www.animalgeneticresources.net

LIONEL,
I WAS WONDERING,
HOW DID YOU MANAGE
TO COMPENSATE FOR
NAIF'S WEAK MILK
PERFORMANCE ?

WE HAD TO BE VERY CAREFUL WITH
THE FEMALES CHOSEN FOR THE
INSEMINATIONS WITH NAIF'S SEMEN.
USING ONLY VERY GOOD DAIRY COWS.
THE IDEA WAS TO COMPENSATE FOR
NAIF'S GAP WITH THE FEMALES !

WHILE IN ITS FIRST
USE, IT WAS USED
WITH RATHER
ORDINARY FEMALES.

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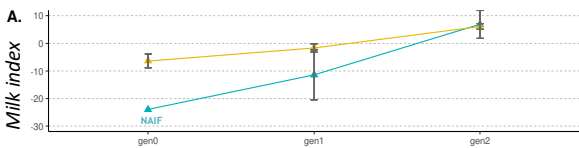


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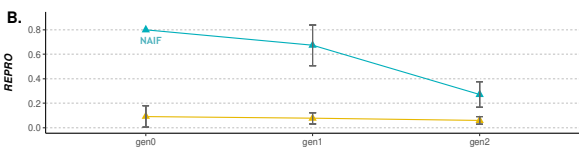
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CLOSING THE PERFORMANCE GAP?

A.



B.



gen0 : NAIF or bulls used at the same time as its 2nd use
N = 1 / 155 individuals

gen1 : Direct gen0 sons
N = 15 / 461 individuals

gen2 : Gen0 great-sons
N = 25 528 individuals

Standard deviation of genetic values estimated in gen1:

Family	Milk index
NAIF	17.86
Other	13.81

 → The gap in production performance has been absorbed in **two generations**

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6



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TAKE-HOME MESSAGE

☒ **Success in reintroducing genetic diversity to the Abondance breed thanks to old cryopreserved semen**



→ Determining success factors:

- Genetic originality and judicious mating
- Large number of available doses
- Bull with a wide heterozygosity level => wide panel of offspring to choose from.



NAIF (1977)

CHIC-BOY (2007)

LACLUSAZ (2015)

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<https://doi.org/10.5281/zenodo.8369756>