

What role can sexed semen play?

Report on 2018 Field Trial

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160 dairy herds

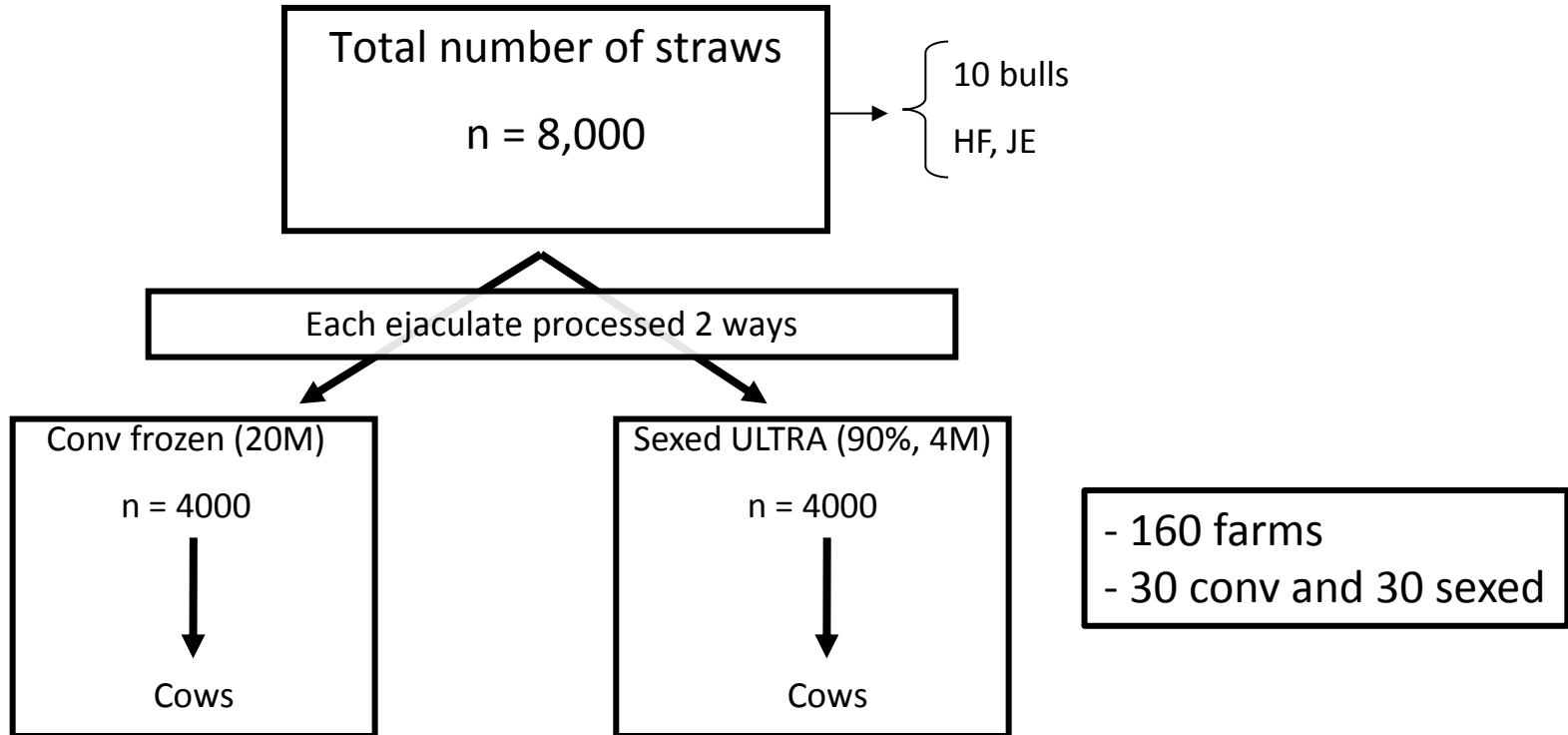
OBJECTIVE

- Assess fertility of Sexed ULTRA 4M
- Ejaculates from Irish bulls
- Lactating dairy cows

- Need to achieve 90% relative CR
 - 60% with CONV semen x 0.9 = 54% with SEXED

Dairy Trial

Dairy bulls X-sorted (90%)





- ★ 2 NCBC bulls at COGENT, UK
- ★ 2 DOVEA bulls at KI Kampen, NL

RESIDENT BULLS

- ★ 3 NCBC bulls ejaculates shipped
- ★ 3 DOVEA bulls ejaculates shipped

SHIPPED EJACULATES

COLLECT → ADD TRANSPORT MEDIA → INSULATED BOX → DUB to MAN → TAXI to COGENT

Data handling and analysis

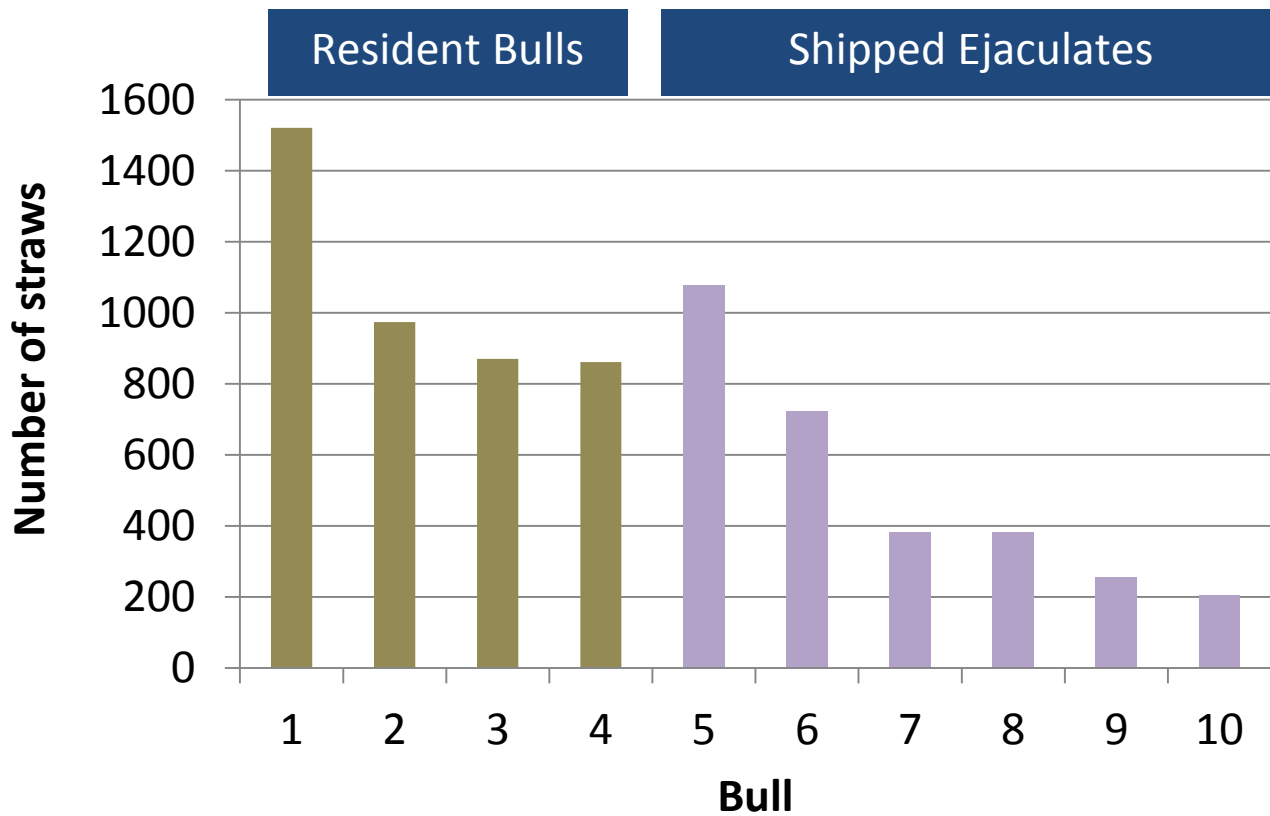
142 herds scanned

51 insems (14 to 61)

Deleted if \neq AI1

7246 records

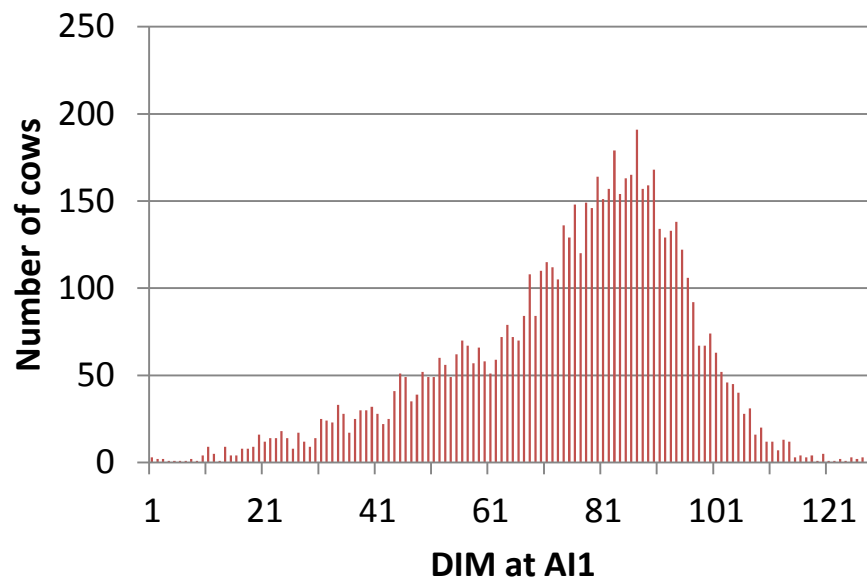
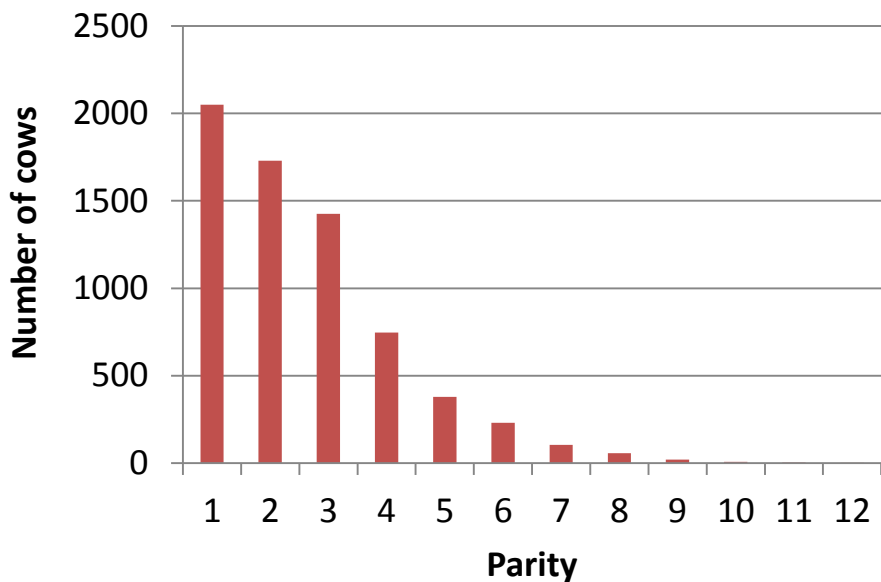




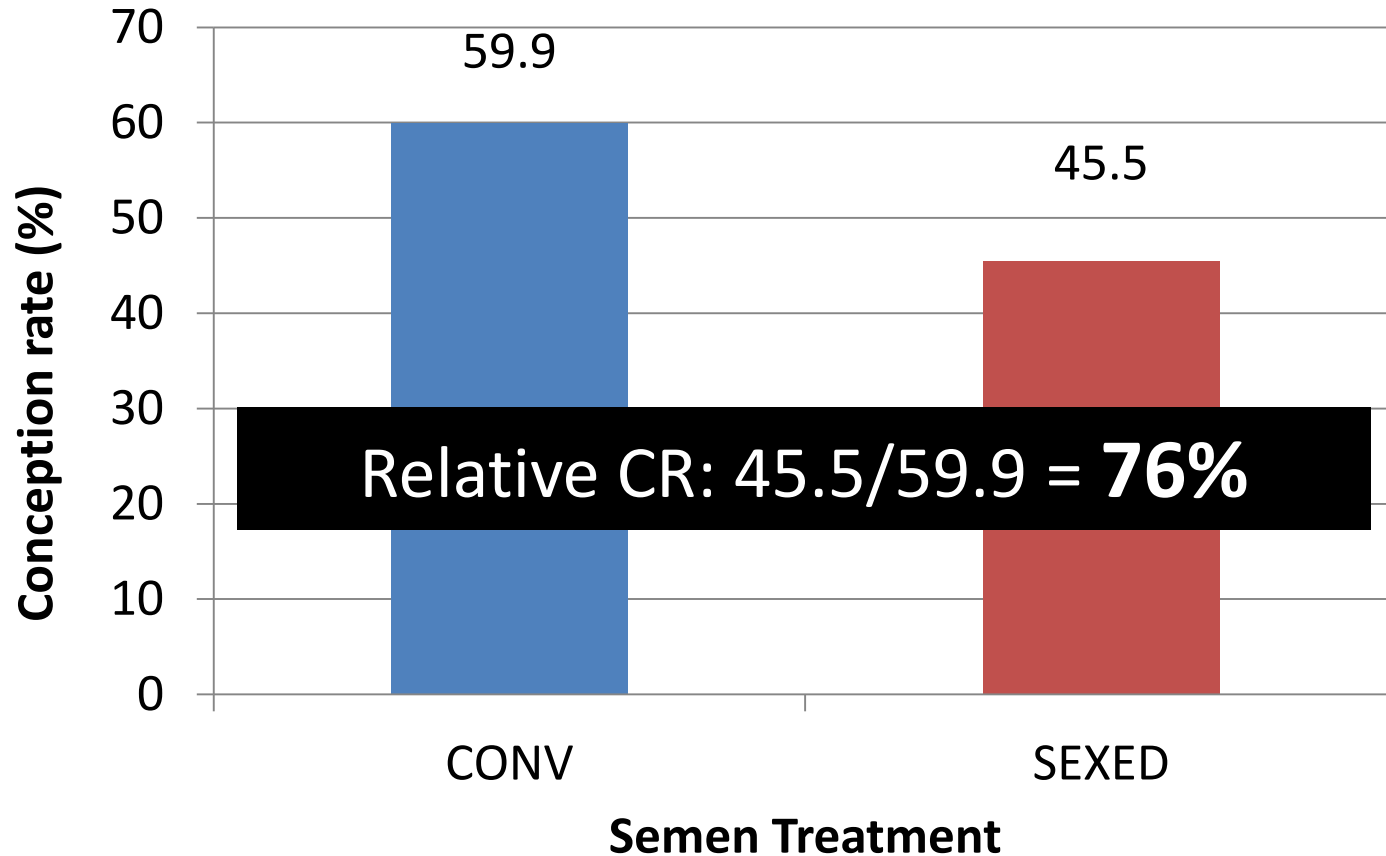
From the T&C's

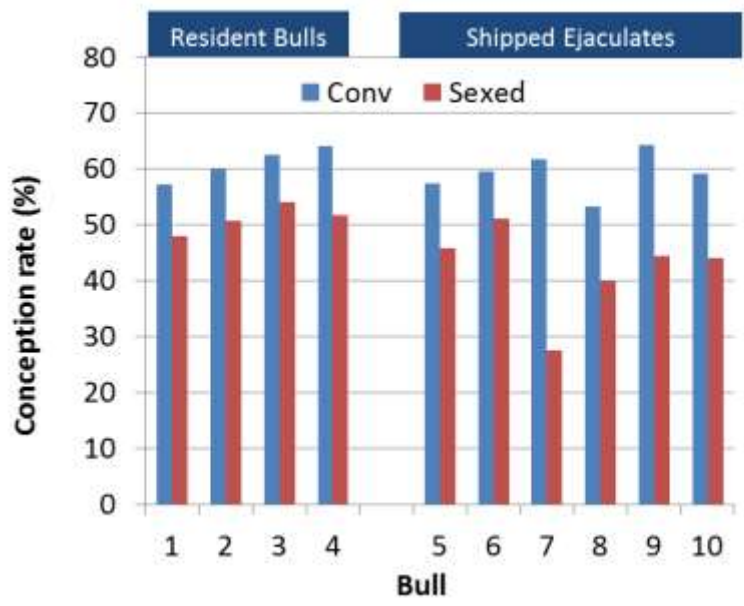
Herd-owners undertake to ensure that project semen (both sexed and conventional semen) is only used on;

- (i) younger cows (parity 1, 2 or 3);*
- (ii) cows that are ≥ 60 days calved*



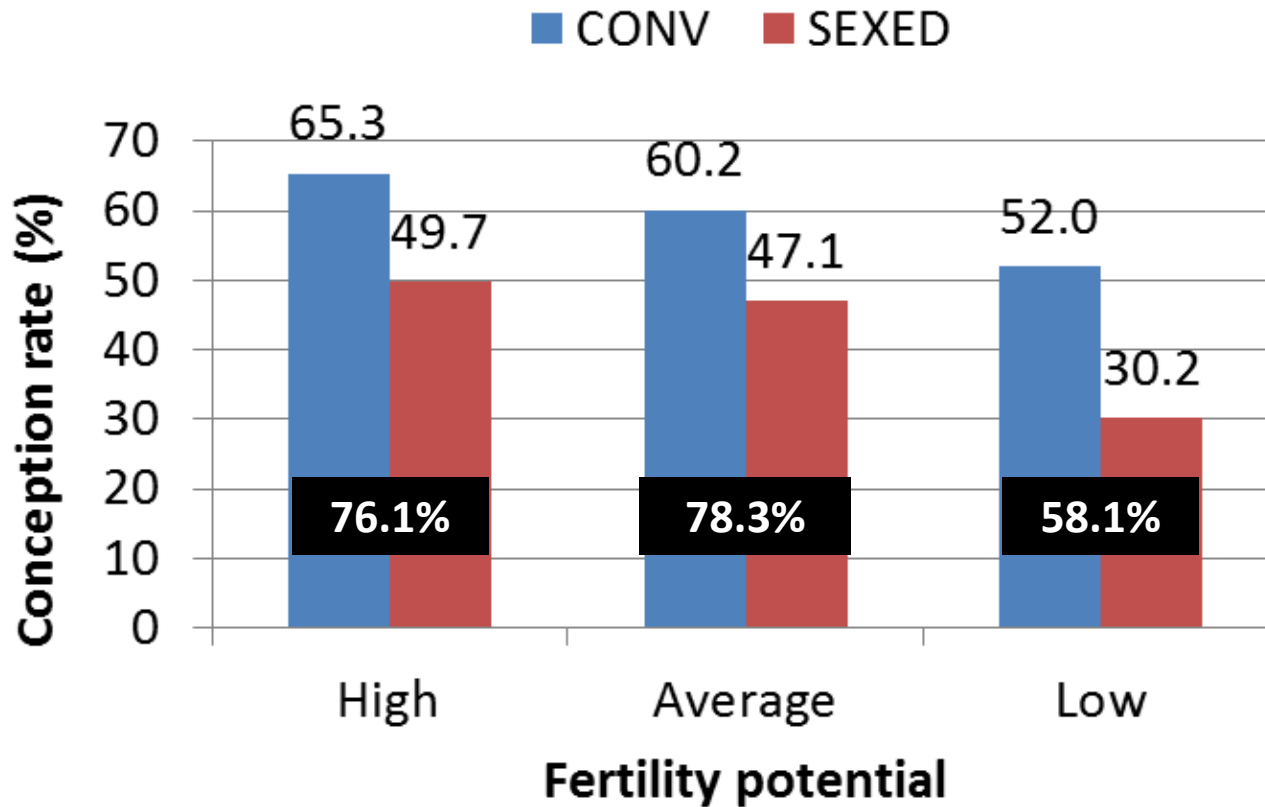
Effect of semen treatment



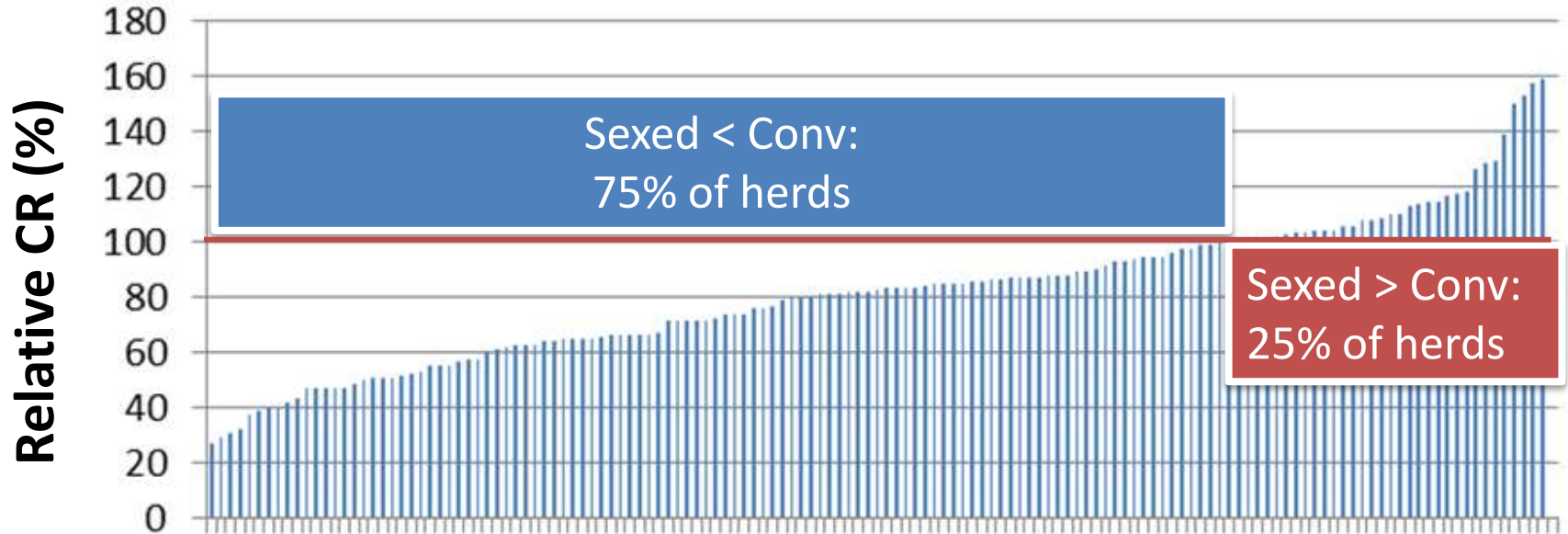


Classification of cows with greatest fertility potential

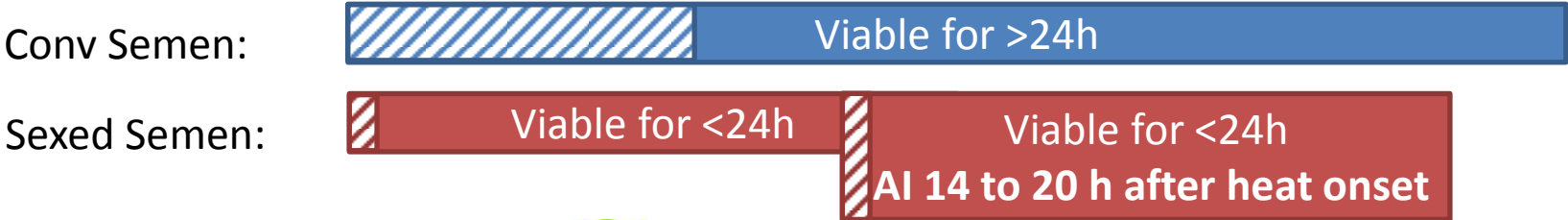
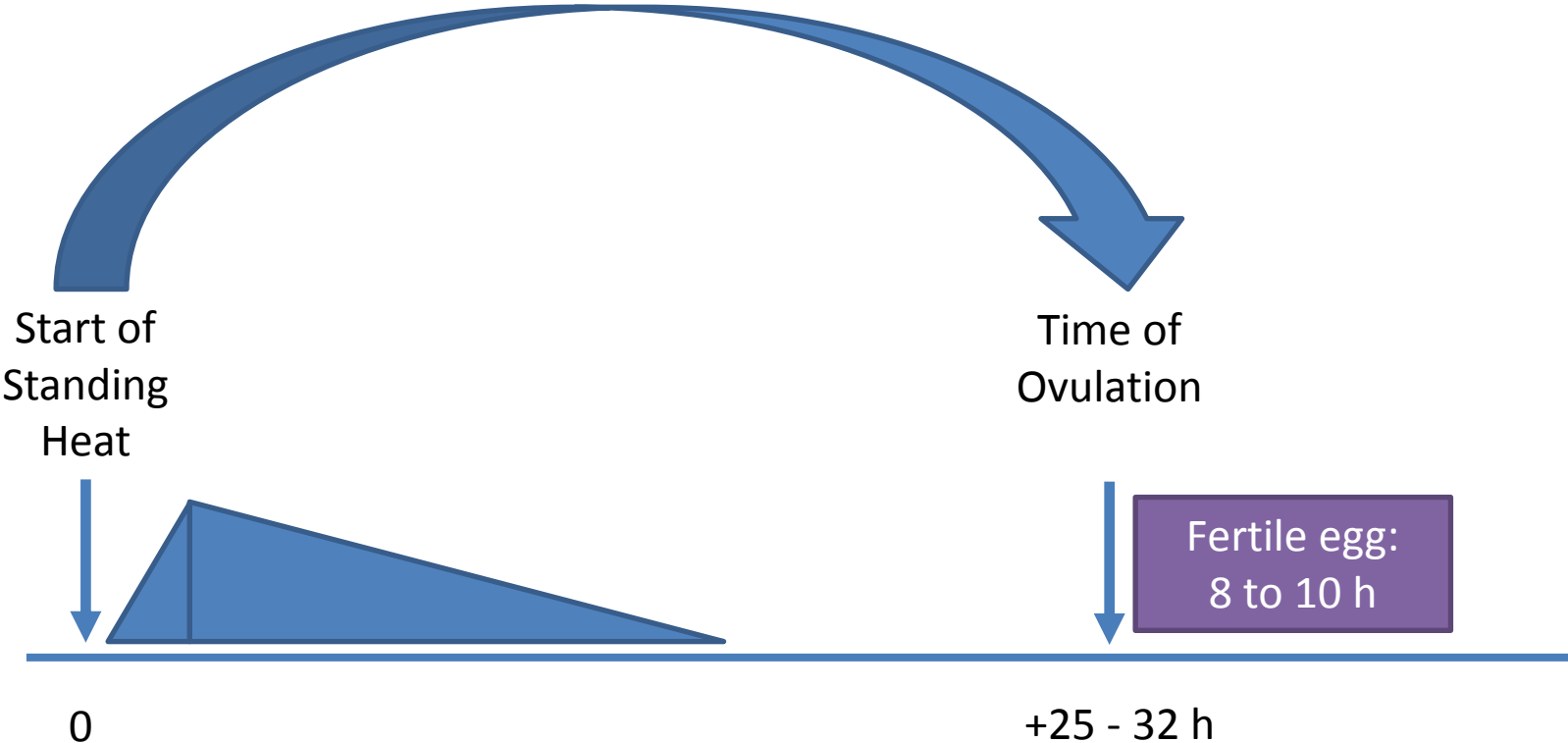
- **HIGH:** ≥ 70 DIM at AI AND parity ≤ 2 AND Fert SI >60 (n = 813).
- **LOW:** < 70 DIM at AI AND parity ≥ 3 AND Fert SI ≤ 60 (n = 718).
- **AVERAGE:** All other combinations of DIM, parity and Fert SI (n = 5715).



Herd variation in Relative CR



Heat behaviour and time of AI



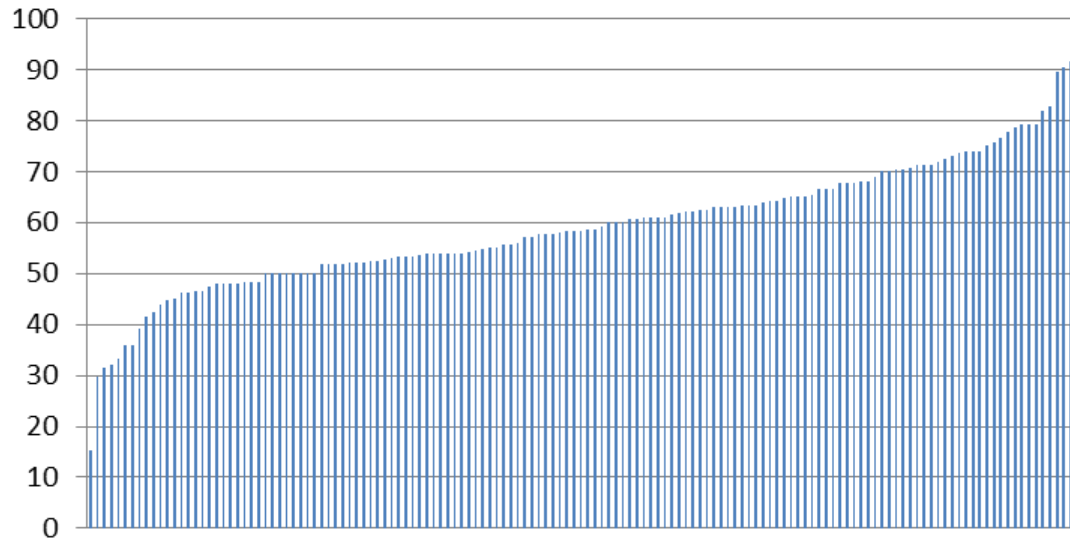
CONCLUSIONS

- SEXED ULTRA 4M ≠ 90% relative CR
- Resident bulls better than Shipped ejaculates
- Timing of AI critical
- Further research
 - Synchronisation and Timed AI
 - Activity collars to identify onset of heat

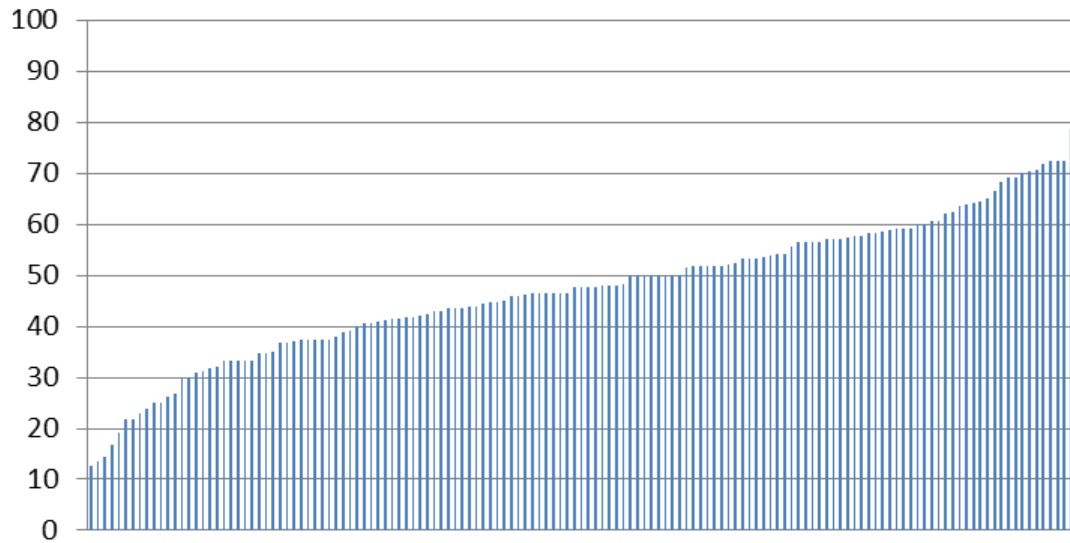
A scenic landscape featuring a stone tower on a hill, a dense forest, and a green field with cows. The tower is a dark, cylindrical structure with a crenellated top, situated on a grassy hill. The forest is a thick, vibrant green canopy of trees. The field is a lush green pasture with several black and white cows grazing. The sky is a pale blue with light, wispy clouds.

Thank You!

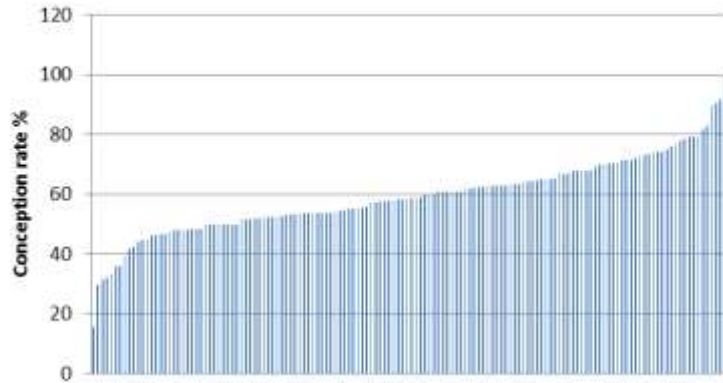
Conventional



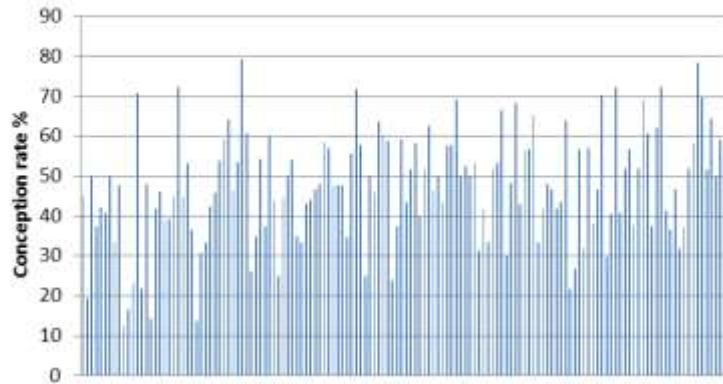
Sexed



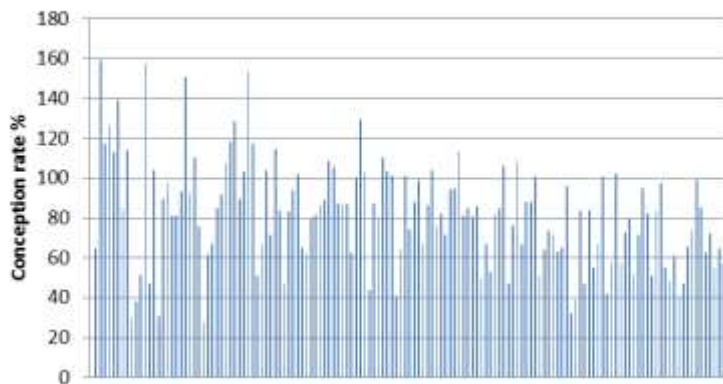
Within herd A insems (low to high)



Within herd B insems (A low to high)



Within herd Rel CR (A low to high)



Rel CR (low to high)

