

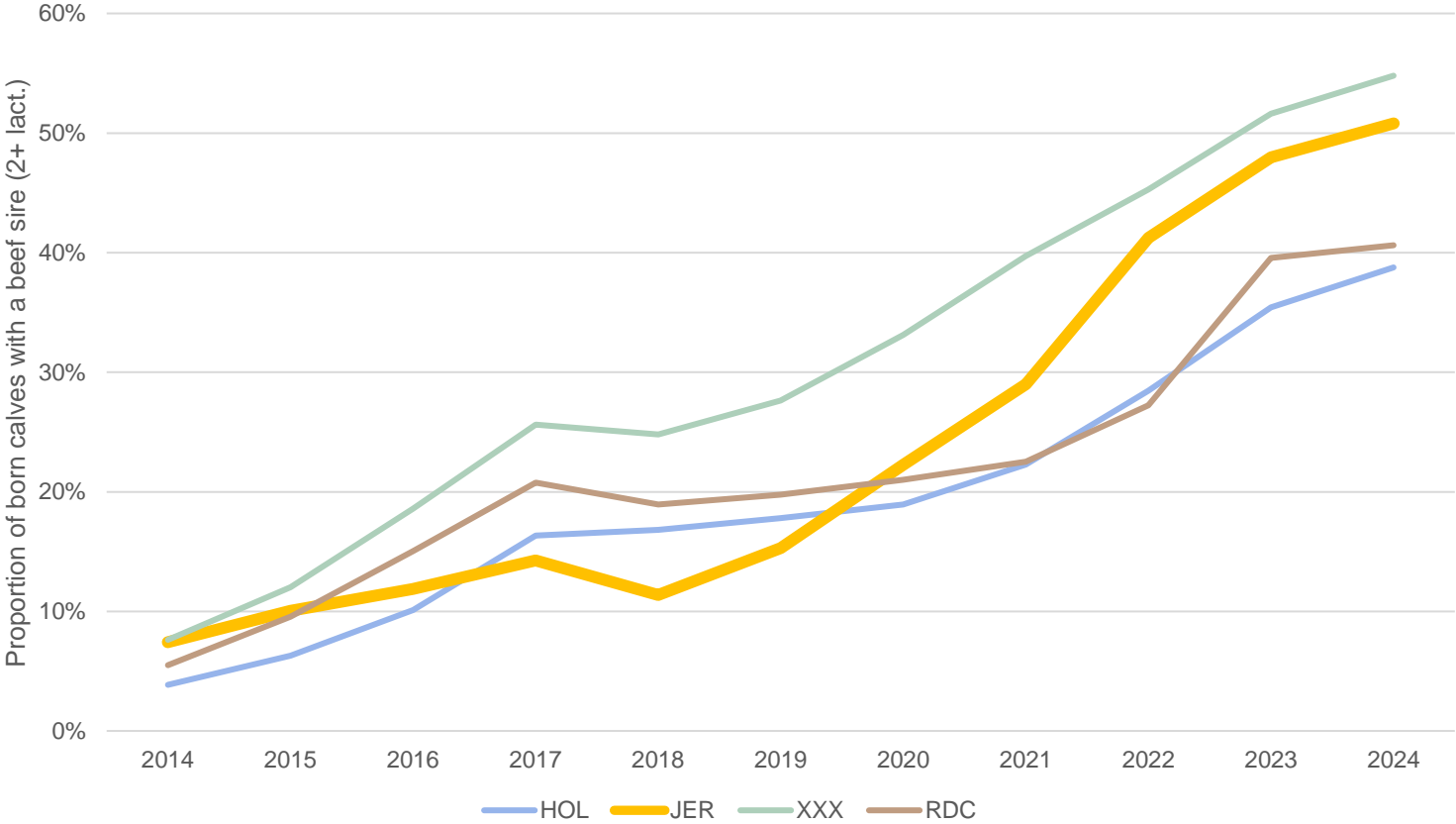


Effects on cows carrying a beef calf

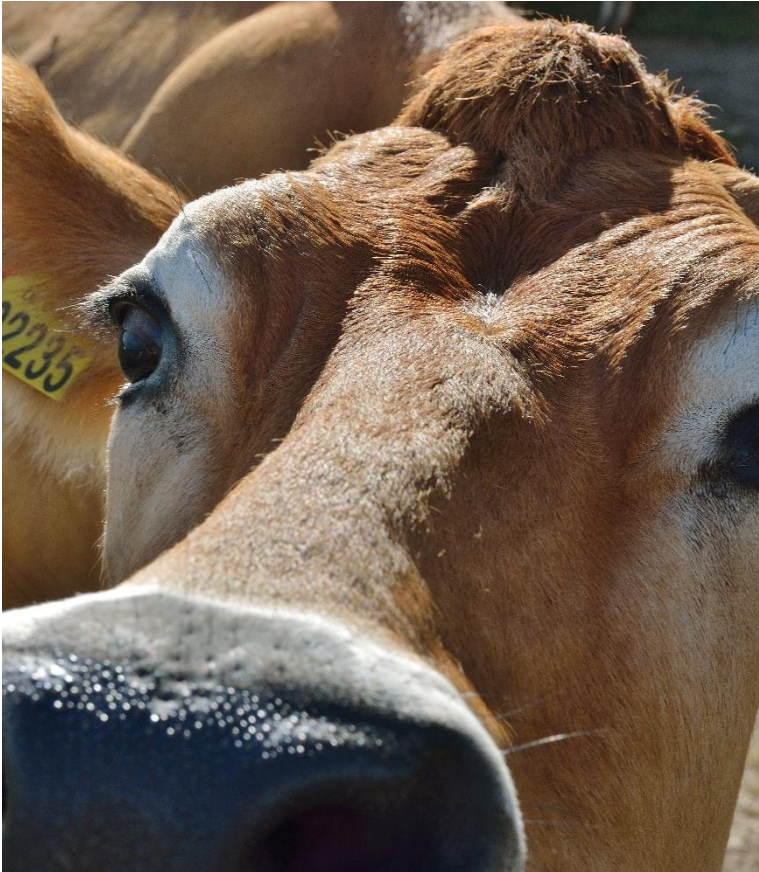
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WORLD JERSEY CONFERENCE 2024

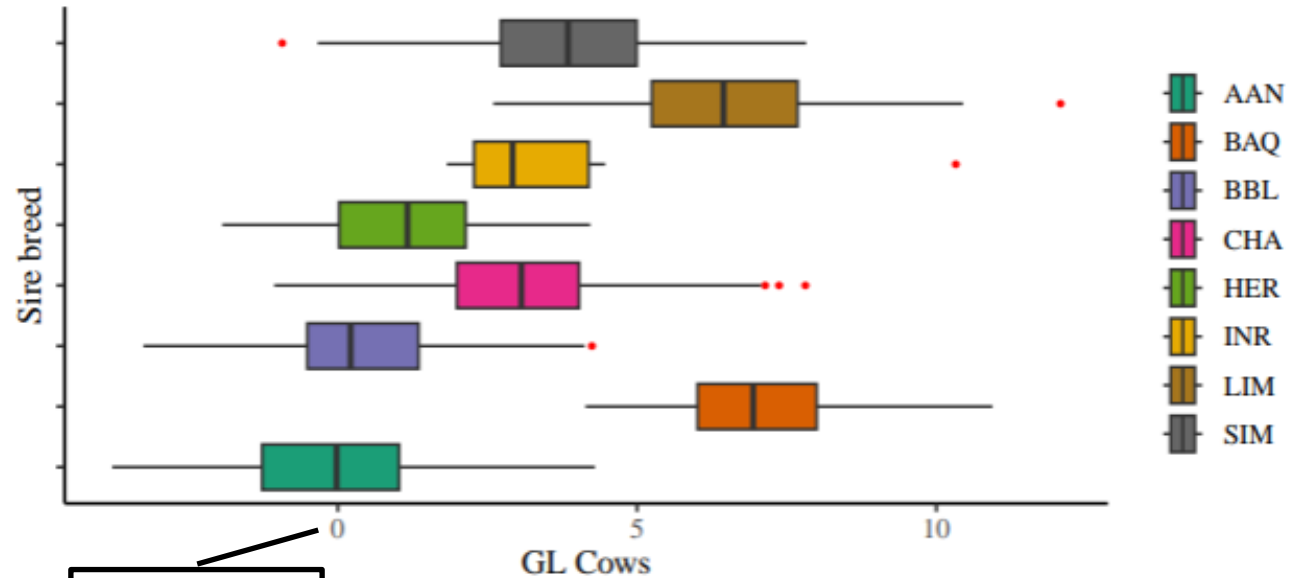
Development in the Beef on Dairy segment



Gestation length (GL)

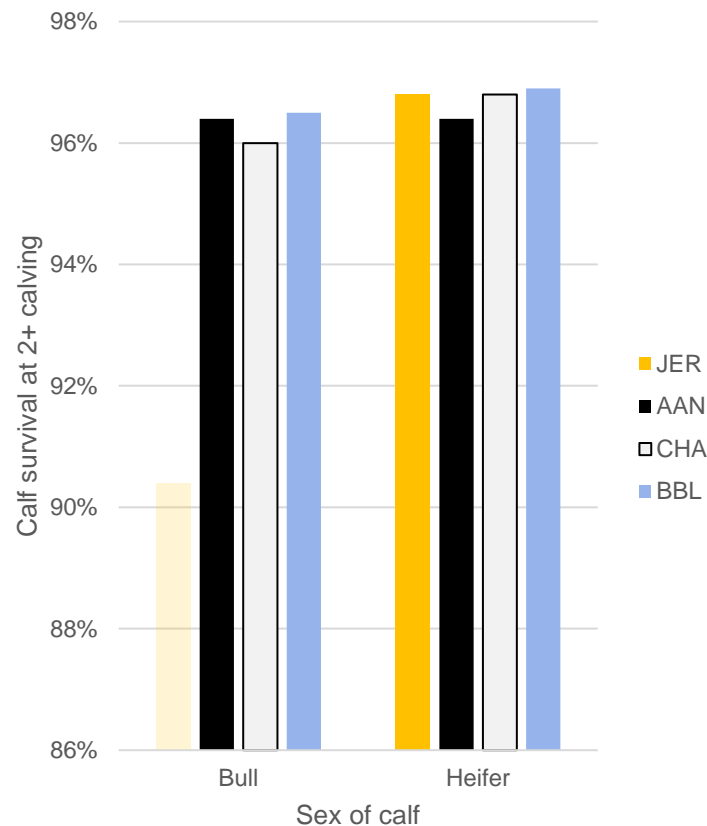


- Statistics have shown GL is close to avg. of sire and dam breed.
- Mostly calf's own genetics (direct effect) is deciding GL.
- However large difference between beef breeds



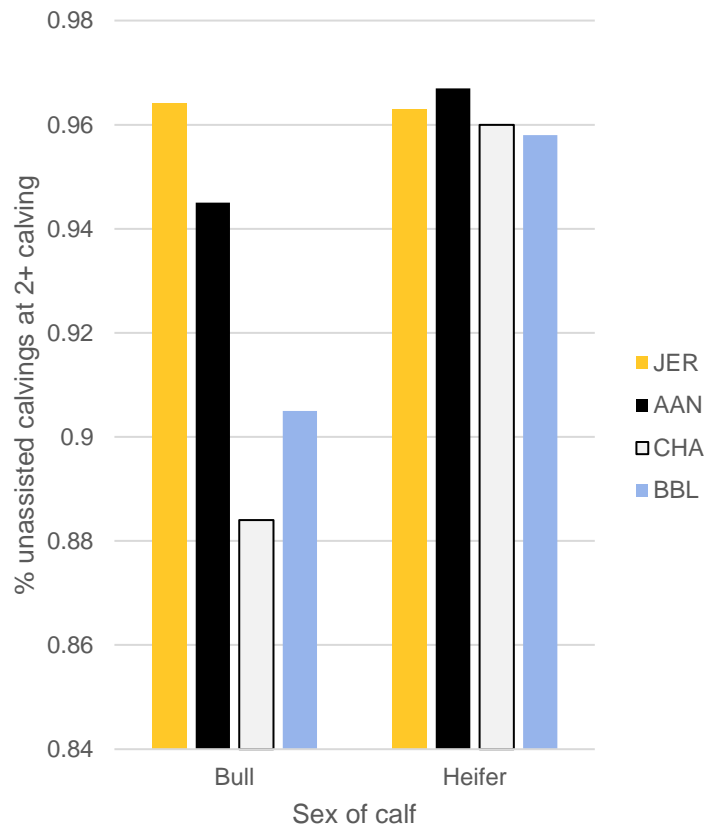
280 days

Calf survival (CS) at birth



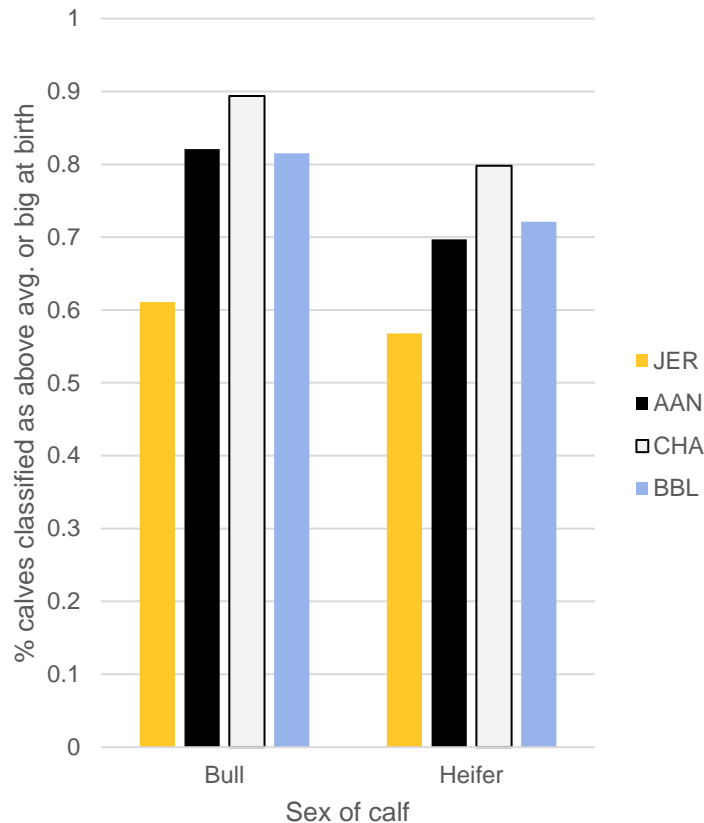
- CS at birth is shown for the last 3 years for singleton births for JER cows at 2nd or later calving.
 - CS in general slightly higher for heifer than bull calves.
 - Small differences among sire breeds.
- CS for JER bull calves is unrealistic low
- Note that herd and sire breed is often confounded so herd effects might affect results.

Calving ease (CE)



- CE is shown as unassisted calvings for the last 3 years for singleton births for JER cows at 2nd or later calving.
 - Most calvings after JER sires are unassisted.
 - If calf is a heifer CE is similar for BEEF cross to pure JER.
 - Slightly more assistance needed for bull BEEF cross.
 - Especially true for BBL and CHA but 9 out of 10 is still unassisted.
- Including easy calvings with slight assistance all categories are 96-99% easy calvings.


Calf size



- Calf size is shown as percent calves classified as above average or big at birth for the last 3 years for singleton births for JER cows at 2nd or later calving.
 - JER calves are smaller than BEEF cross calves.
 - Bull calves are bigger at birth than heifer calves.
- Only looking at calves defined as big BBL and CHA is more alike.
 - ~30% bull calves defined as big for CHA+BBL.
 - ~20% heifer calves defined as big CHA+BBL.
 - ~23% bull calves defined as big for AAN.
 - ~14% heifer calves defined as big CHA+BBL.

How does this then affect the cow?

Effect on survival until 50 DIM



| | 2nd lact, bull | 2nd lact, heifer | 3rd lact, bull | 3rd lact, heifer |
|------|----------------|------------------|----------------|------------------|
| BEEF | 98.5 | 98.4 | 96.2 | 96.3 |
| JER | 98.7 | 98.7 | 96.9 | 96.9 |

- 8,400 calvings in 2023.
 - Little but consistently advance for JER compared to BEEF.
 - Higher survival for 2nd versus 3rd lactation.
 - No effect of sex.
- NTM is higher for cows having a JER calf (+3 - +4 NTM units)
 - Perhaps also selected on phenotypic data (poor start of previous lactation etc.)

Effect on yield previous lactation

- Back in 2012 we made some of the first trials with BEEF on DAIRY in recent times.
 - Yield in lactation where cow is pregnant with BEEF-X fetus were lower before insemination → selected group of cows.
 - Corrected for early lactation yield, no effect was seen on yield traits
- Most of fetus weight gain is in the 2 last months of gestation (~60%).
 - Cow is dry when fetus grow the most.
 - Need for differentiated dry cow management?



Effect on yield next lactation (2023 data)



| Sex of calf | Lact. | Sire type | OBS | F+P | F+P prev | diff F+P |
|-------------|-------|-----------|------|-----|----------|------------|
| Bull | 2 | BEEF | 1015 | 777 | 658 | 119 |
| Bull | 2 | JER | 162 | 781 | 671 | 110 |
| Bull | 3 | BEEF | 1247 | 806 | 792 | 15 |
| Bull | 3 | JER | 120 | 820 | 809 | 11 |
| Heifer | 2 | BEEF | 329 | 739 | 643 | 96 |
| Heifer | 2 | JER | 3229 | 789 | 682 | 107 |
| Heifer | 3 | BEEF | 405 | 777 | 775 | 2 |
| Heifer | 3 | JER | 1866 | 822 | 817 | 5 |

Remember! Genetic level is higher for cows having a JER calf than a BEEF calf.

And there might even be some selection on other parameters.

Thank you for your attention!



Foto: Torben Worsøe, LandbrugsMedierne

Questions?