



More meat on the bone when selecting beef bulls to cross with dairy cows

Background:

~ 57% self sufficiency of beef in Sweden ~ 60% calves are born in dairy herds

~ 24% inseminations with beef breed on dairy 2023/2024

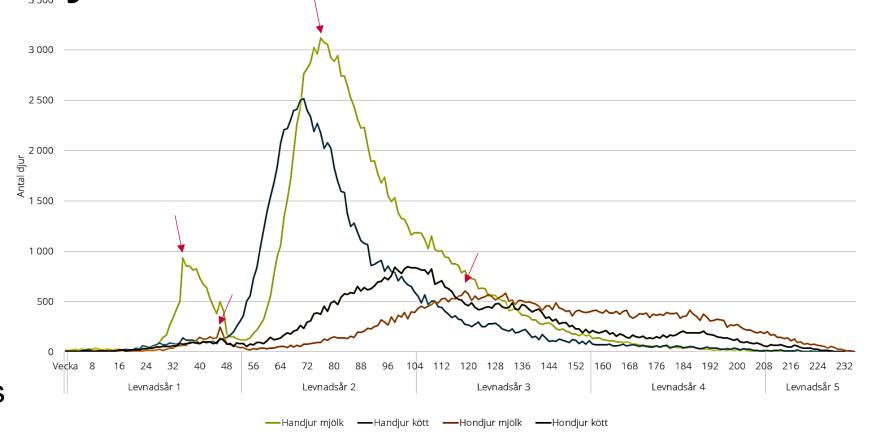


Figure 2.9. Slaughtered cattle born 2017, age in weeks when slaughtered shown for different sexes and production type of the

herd where they were born (Swedish board of agriculture, 2022).



More meat on the bone – Study 1

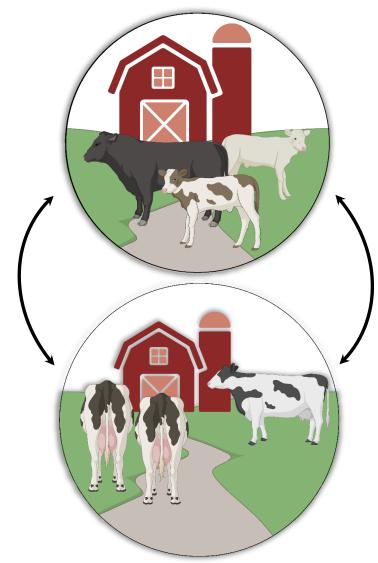
- Investigate farmers' views on the use of beef bull semen or Beef-Dairy (BxD) crosses and how that affects production systems, breeding and management strategies used
- Statistically describe and define Swedish production systems for BxD crosses
- Calculate new economic weights for updated breeding indexes, Nordic Beef on Dairy Index (NBDI)
- Investigate how well suited todays breeding index NBDI, the purebred beef breed indexes (AIX) and the production system adapted indexes are in relation to the crossbreed progenies performance





Interview study: Farmers' views on production systems, management and breeding strategies for beef on dairy cattle crosses in Sweden

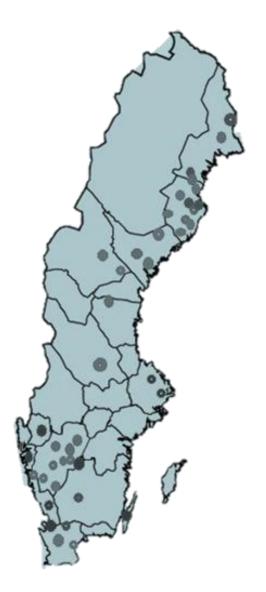
- Farmers in Sweden producing
 - Dairy
 - Dairy and beef
 - Beef
- Qualitative semi-structured interviews
 - Views, farm background
 - Thematic data analysis
 - Inductive approach





Farms of interest

- Farm suggestions found through contact with people with good local knowledge
- Selection criteria, 42 farms suggested
 - Farm located in Sweden
 - Farms distributed all over Sweden
 - Dairy: Interest in crossbreeding. Uses or have been using beef x dairy crossing.
 - Beef: Uses or have been using beef x dairy crosses in production





Farms included in study Preliminary results

21 farms interviewed

Dairy herds

Systems: Loose-housing with

AMS or milking parlor

Milking cows: 72-330

Milk production:

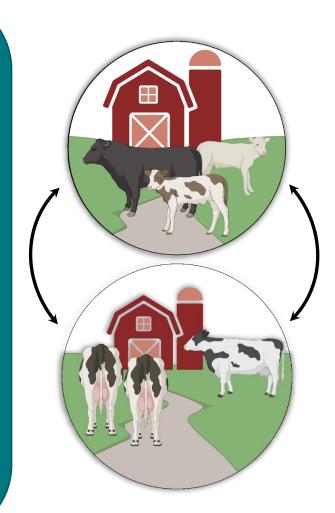
10 000-14 600 kg ECM/year

Beef semen: ~5-75%

Sex-sorted semen: ~5-100%

Dairy breeds: Swedish Red,

Holstein, "ProCross"



Beef herds

Systems: Loose-housing indoor or indoor combined with pasture Slaughtered cattle: ~ 36-1200 Age at slaughter: ~8-30 months Heifers and/or Steers wanted: ~0-100%

Dairy breeds: Swedish Red,

Holstein, "ProCross",





BxD calves' role in production systems today

BxD increases, positive for management

- BxD crosses easier to work with
- Grouping easier

Bulls are central, but steers and heifers matter as well

- Bulls fast turnover
- Heifers,
 steers –
 needed for
 pasture
 management

Experienced challenges with BxD calfs

 Often sold early from dairy farm

Experienced opportunities with BxD calfs

- Resource efficiency
- Easy handled and robust calf
- Increased profitability



Preliminary results

Easy calving, growth, health, feed conversion and temperament

On-farm BxD semen usage

Breed choice needs to be balanced

Highly valued **BxD** traits

Safe cow

Cow health

Breed variation

- Calf health
- Farm management and resources

- Easy, calm, productive and healthy calves

Planning of dairy production

- Securing recruitment availability
- Interest in purebred animals

BxD calf supply and demand

- Collaboration to solve problems
- Dairy and beef producers value each other
- Pricing



Take home message from interview study

- Generally positive attitude to BxD
- If beef producers could choose → BxD crosses over purebred dairy
- Barriers for BxD
 - Cow centered view, safe for the cow?
 - Recruitment planning
- Drivers for BxD
 - Collaboration, In between farm deals
 - Easier sold calf
 - Easy handled and robust calf
 - Resource efficiency
- New traits for cross-breeding index?
 - Temperament, more health traits, feed-conversion





More meat on the bone – Study 2

- Investigate farmers' views on the use of beef bull semen or Beef-Dairy (BxD) crosses and how that affects production systems, breeding and management strategies used
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More meat on the bone – Study 3

- Investigate farmers' views on the use of beef bull semen or Beef-Dairy (BxD) crosses and how that affects production systems, breeding and management strategies used
- Statistically escribe and define Swedish production systems for BxD crosses
- Calculate new economic weights for an updated crossbreeding index, Nordic Beef on Dairy Index (NBDI)
- Investigate how well suited todays breeding index NBDI, the purebred beef breed indexes (AIX) and the production system adapted indexes are in relation to the crossbreed progenies performance





Thank you!

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