

Beef on Dairy Crossing

How does this benefit my farm?

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Why use Beef on Dairy Crossing?

Main goals:

- To reduce the calf surplus the dairy industry
- Increase pressure on genetic selection
- Increase the value of dairy influenced calves at the time of sale
- Increase the performance of the cattle

Which cows would I breed to beef?

Low conception rate

Low production/components

Poor conformation



Temperament issues

Low genetic merit

Multiparous cows with previous calving issues

One or more of these traits may influence your breeding decision

Performance in the Feedlot

Biggest expense in the feedlot is the price of feed and the amount of days those cattle are on feed

- Conventional dairy cattle are known for their extended time in the feed lot
- When compared to Charolais x Holstein steers, the straight dairy cattle took 32-35 days longer to reach the finishing stage
- Relative DMI remained constant between both cattle
- Crossbred steers showed to have a 0.05 – 0.10kg more gain per day



Performance on the Rail

The challenge with conventional dairy cattle is the red meat utilization from the carcass. That means:

- Lower dressing percentages
- Lower yield grades
- Lighter hot carcass weights

With using beef influence on our dairy herd we see:

- Increase in dressing percentage by 2% for same sized cattle
- Higher percentage of cattle grading 1 and 2 for yield
- Increase of hot carcass weights



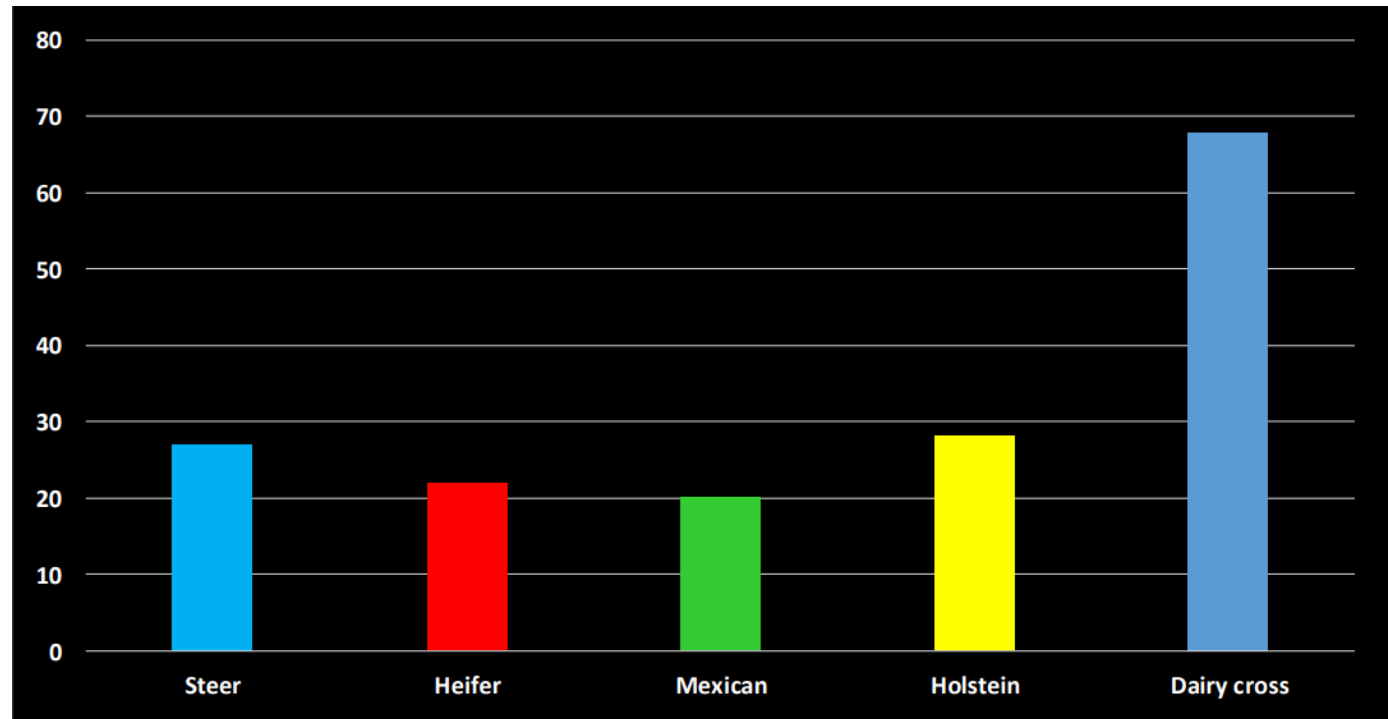
The Down Side of Beef on Dairy Cattle

Carcass Drag

- 6.3% present with straight Holsteins
- See an improvement with moderate frames but still a concern

Liver Abscesses

- Higher Rates are shown in crossbreds
- Creates high portions of waste
- No exact reason why



Lawrence, T. (2018). Carcass Observations and Considerations for Terminal Beef x Dairy Calves. In *Certified Angus Beef: Feeding Quality Forum*.

Qualities Consumers Look For

Straight-bred cattle have never been an issue for eating quality

- Dairy cattle tend to consistently rank AAA or prime
- Holstein and Holstein x Jersey crosses showed to have the highest amount of intramuscular fat and marbling
- Have no difference in tenderness and meat quality

The main issue are

- Meat shape and size
- Meat colour



Qualities Consumers Look For

MEAT SHAPE

- Conventional dairy cattle do not meet retail demand
- When compared to conventional beef, crossbred steers meet the requirements of the consumer and are able to compete on grocery shelves



Steaks taken from the 13th region of strip loins from three different cattle: [A] conventional beef, [B] crossbred beef x dairy, [C] dairy. (modified from Foraker et al., 2022)

MEAT COLOUR

- Conventional dairy cattle tend to cut darker due to higher presence of oxidative tissue lowering the pH but lose colour fast due to muscle fibre structure
- When left on a grocery shelf for 62 hours, dairy x beef steaks required 24 hr added to receive the same 20% discolouration as the dairy steak
- Breeding beef to dairy allows the meat to have longer colour retention and longer shelf life

Picking the right breed for your herd

Which breed used will be dependant on the management style of the producer and what the producers main goal is.

Traits to consider are:

- Calving Ease
- Conception Rates
- Frame Size
- Coat Colour
- Feed Efficiency/Days on Feed
- Final Carcass Weight/Dressing Percentage
- Are there Niche Markets to Consider?



Recommendations

- Treat your expendable calves like your replacement calves
- Build and maintain a relationship with your cattle buyers
- Sign up with existing programs
 - Westgen – P3
 - Select Sires - ProfitSOURCE
 - Stgenetics – Beef Add On
 - Alta Genetics – Alta Bullseye
 - ABS – InFocus Beef
 - Canadian Angus Association and Holstein Canada partnership



Opportunities for Producers

BIGGEST CHALLENGE FOR FEEDING OUT CROSS CATTLE IS MEETING THE DEMAND OF PACKERS

Small/Medium Sized Farm Options

- Sell directly to calf ranches
- Raise to weaning and sell to other dairies
- Establish a niche product (natural home raised beef/Wagyu influenced)

Larger Sized Farm Options

- Sell directly to calf ranches
- Raise to weaning and sell to other dairies
- Background/finish your own calves or from neighbouring dairies using lower quality feeds or waste from dairy herd
- Multi – farm established feedlots

ALL DEPENDANT ON YOUR FARM'S LOCATION AND OPPORTUNITY TO SELL YOUR PRODUCT

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Dr. David Christensen



Dr. Greg Penner

Thank you for
your time!

Any Questions?

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