

A herd of black and white dairy cows is grazing in a lush green field. The cows are scattered across the frame, some facing the camera and others looking away. The background shows a fence and a tree in the distance under a bright sky.

## FACTSHEET

# Profitable Dairy-Beef

September 2022

This Factsheet covers:

- the value of using top-ranked and proven beef bulls versus average genetic merit beef bulls
- the opportunity for dairy and beef farmers to work together for mutual advantage

The choice of dairy-beef calves for beef finishing has a huge impact on farm profitability. Recent farm modelling and analysis shows calves with genetic potential to grow 15% faster will increase beef finishing gross margin by 11-16% (+\$211 to +\$261 per hectare) in 2021. They will also improve the feed conversion efficiency of the beef finishing system by up to 9% thereby reducing greenhouse gas emissions per kg of product.

Procurement of profitable calves requires knowledge about the sires of the calves and the Dairy-Beef Progeny Test (DBPT) provides the necessary information. This progeny test is coordinated by B+LNZ Genetics, run in partnership with LIC with scientific leadership from Massey University. The program is run at Pāmu's Wairakei Pastoral Complex where calves in the progeny test are finished under commercial conditions with assessment of rearing, growth and carcass traits, as well as calving ease and gestation length. All these traits are important to dairy and beef farmers because when combined they advantage all participants.

The outcomes of the Dairy-Beef Progeny Test have shown that choice of a specific sire is more important than choice of breed of sire. The top 5 sires for carcass weight represent 5 different breeds with each sire being safe to use (in terms of calving ease) whilst also affording optimal profit. Over and above breed is the discovery that the top DBPT sires will generate 15% heavier carcasses and the capacity to lift beef quality by 27% compared to average industry sires.

Dairy farmers can select sires that are easy calving with appropriate gestation length to perform well, while beef farmers can exploit the huge variation in growth rate and carcass weight. Together, dairy and beef farmers can agree on high performance sires that will perform for both systems. Details about these sires can be found at [www.blznzgenetics.com/files/1655087220\\_DBPT%20Report%202022-07-June.pdf](http://www.blznzgenetics.com/files/1655087220_DBPT%20Report%202022-07-June.pdf)

The DBPT modelling results are particularly relevant to dairy farmers who will possibly be faced with a 'no bobby calf kill' policy within the next 5-10 years. In reality, if the surplus 5-day-old calf has little or no value as a beef finishing animal, then it will be heavily discounted or rejected as a finishing proposition. The value of the surplus calves can be raised significantly by dairy farmers utilising high genetic merit beef bulls over the dairy cows which are not required to generate their dairy replacements.

The farm modelling included one-winter versus two-winter beef finishing policies and the ranking of DBPT bulls did not change between these policies. A financial disadvantage of a one-winter policy was that carcass weights were lighter and fell within the 160-220kg carcass weight range when killed in the November to February period. This carcass weight range is outside of the currently accepted and targeted beef grading and associated payment schedules and therefore is not a realistic opportunity at this point in time. Nevertheless, one-winter policies were shown to occupy one-third the land area and were 14% more feed-conversion efficient than two-winter systems.



The full report 'The value of the DBPT' can be found on the B+LNZ website.

In the meantime it is anticipated that the findings detailed in this factsheet will provide:

- good reason for dairy farmers to use DBPT proven beef sires via AI, especially in relation to the potential no-bobby calf kill policy.
- a catalyst and reason for beef finishers to reconsider the opportunity to connect directly with dairy farmers and thereby enjoy the benefits of better dairy-beef genetics. A professional calf-rearer may also be part of this process.
- a good reason for beef finishers to reconsider purchasing 100kg liveweight dairy-beef weaners by adopting smart over-summer management systems with the successful outcome of 200kg+ liveweight calves before winter.

## RESOURCES

**B+LNZ Knowledge Hub** – [www.knowledgehub.co.nz](http://www.knowledgehub.co.nz)

 **Detailed report: The value of the DBPT**  
Search "The value of the DBPT".

## ACKNOWLEDGEMENTS

This factsheet was produced by Bob Thomson of AgFirst Waikato with input from Dr Rebecca Hickson, Focus Genetics. The full report had input from Sam Bunny, Pamu and Phil Weir, AgFirst Waikato.

The Dairy Beef Progeny Test is run by Beef + Lamb New Zealand Genetics in partnership with LIC.

Factsheets are made possible by sheep and beef farmer investment in the industry. Beef + Lamb New Zealand is not liable for any damage suffered as a result of reliance on the information contained in this document. Any reproduction is welcome provided you acknowledge Beef + Lamb New Zealand as the source.