

Abstract Submission Form

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Preferred presentation

Oral

Preferred session

Joint ICAR/INTERBULL Session: Data collection for Beef on Dairy

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Title of your paper

An Alternative Solution for Supporting Beef on Dairy Genetic Selection Decisions

Insert ABSTRACT text

The 2009 introduction of genomics in Canada has dramatically changed the structure and design of dairy cattle genetic selection and breeding strategies. In fact, the increased accuracy of genetic evaluations including genomics allows for improved rankings of herd mates regardless of their age. In recent years, this reality has increased the adoption of two other breeding strategies in dairy herds across Canada. Specifically, these include the use of sexed semen to breed high-ranking females, both heifers and cows, and the use of beef semen to produce crossbred calves destined for the meat sector. In Canada, the use of "Beef on Dairy" in 2023 reached ~30% in Holstein, ~40% in Ayrshire and ~25% in Jersey. In each of these dairy breeds, Angus is the dominant breed of beef semen used, surpassing 75% of all Beef on Dairy inseminations.

Lactanet is the leading provider of data collection, herd management software, dairy cattle traceability, knowledge mobilization and genetic/genomic evaluation services for the Canadian dairy industry. Its website is widely used by dairy farmers across the country with the genetics query tools attracting an average of more than 30,000 unique users every month. Since Lactanet has state-of-the art genetic and

genomic evaluation systems and delivers over 100 different traits across seven dairy cattle breeds, it assessed the business case of developing new systems related to traits of importance for selection of Beef on Dairy sires. Instead, an alternative solution was found for supporting Beef on Dairy genetic selection decisions by Canadian dairy farmers.

Angus Genetics Inc. (AGI) provides genetic evaluations of economically important traits for the Angus breed, promotes technology, and conducts research to benefit the entire beef industry. AGI is the service provider of the World Angus Evaluation based on data from United States, Canada and Australia. A collaboration agreement with AGI and the Canadian Angus Association provides Lactanet with Genomic-Enhanced Expected Progeny Differences (GE-EPDs) resulting from the World Angus Evaluation. Most importantly, the individual trait GE-EPDs related to calving ease, growth from birth through the feeding phase, height, feed intake, dressing percent, yield grade, quality grade, and muscling are combined into two selection indexes, namely Angus-On-Holstein (\$AxH) and Angus-On-Jersey (\$AxJ). With access to the World Angus Evaluation GE-EPDs for high-ranking Angus sires, Lactanet is well-positioned to provide quality genetic information for Canadian dairy farmers to make selection decisions to optimize the value of beef crossbred calves for the beef value chain.

Enter keywords

Beef on Dairy, GE-EPDs, \$AxH, \$AxJ