

Session 10: Brian Wickham Young Persons Exchange Program (BWYPEX) "Beef on Dairy, Sensors in Welfare Monitoring; ExtraMir, Sustainability Traits"

S10.O-02

BEEF FROM DAIRY: THE ROLE OF GENETIC IMPROVEMENT IN CREATING GREATER INTEGRATION BETWEEN OUR DAIRY AND BEEF INDUSTRIES.

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Recent rapid adoption of female dairy sexed semen and improvements to cow reproductive performance has seen a dramatic increase in the use of beef genetics in the dairy herds around the world. The resulting dairy-beef cross calf has potential to perform better within the beef supply chain than a purebred dairy animal and therefore be a more valuable animal. However, to be accepted by the wider beef supply chain it likely needs to perform comparably to a conventional beef animal. Currently reported performance of dairy-cross calves is quite variable. There are a number of challenges to successful beef from dairy integration which span genetics, nutrition and management of the animal. In addition, there are wider industry challenges to successful beef from dairy integration including; majority of countries operating separate beef and dairy genetic evaluations, willingness and openness of dairy farmers and other stakeholders to change, infrastructure gaps for rearing these animals, legislative restrictions and fair distribution of any economic benefit of rearing these calves.

As part of the Brian Wickham Young Person's Exchange Program an international study tour was undertaken across the United States, Sweden, Australia, Ireland, Italy and the United Kingdom from March to May 2023 alongside a literature review to explore the role of genetic improvement in creating greater integration between the dairy and beef industries. The project has captured global trends in use of dairy sexed semen and beef genetics in the dairy herd, identified existing tools supporting use of beef genetics in the dairy herd, identified data gaps and developed case studies of successful beef on dairy integration. Key questions considered throughout the project included: How are dairy farmers making beef genetic selection and mating decisions? What attributes do calf rearers, finishers, feedlots and processors want in their dairy-beef calves? Is there alignment between stakeholders? Are the desired attributes being recorded? Thematic analysis of interviews, surveys and case studies will seek to identify key requirements for successful beef from dairy integration, the role of genetic tools in supporting beef from dairy integration and opportunities for new tool/trait development. Recommendations for ICAR and its members including how ICAR can help promote greater dairy beef integration within their respective countries will be made.