



# THE BEST OF THE BALDY:

## Developing selection tools for commercial replacement females

Breed associations have been working on developing and refining genetic selection tools for purebred cattle for decades, but the work is starting to branch out to further benefit the commercial sector that offers the market for purebred genetics.

The Canadian Hereford Association and Canadian Angus Association have been collaborating on the Heifer Select project to develop genomic evaluations for replacement heifer selection in the commercial herd. Financial support for the Heifer Select project is distributed by Results Driven Agriculture Research (RDAR), with funding from the governments of Canada and Alberta through the Sustainable Canadian Agriculture Partnership (Sustainable CAP). “Commercial producers get to make their bull buying decisions based on the availability of a lot of information (breeder, pedigree, performance, EPDs and genomics),” says CAA Director of Science and Technology Kajal Latimer. “When they go to address the second part of their breeding program, there’s not a lot of information on that commercial female that’s currently available.”

Working with commercial producers, the team is collecting data on commercial progeny from parents in the CHA and CAA databases, including performance data and

genotypes. Producers involved in the project retain ownership of their fed calves so that carcass data can be collected as well.

Leveraging the existing data in the CHA and CAA databases with the added commercial data, the project will generate a set of genetic evaluation tools (GEPDs) for commercial females. By incorporating commercial animals into the data set, the tools will be accurate enough to make noticeable genetic impact in the commercial herd. In essence, commercial producers will have access to the same suite of GEPDs that purebred breeders currently do to select commercial replacement females.

To develop the tools, the CHA and CAA are working with AbacusBio, an organization that specializes in developing genetic selection tools. The team is prioritizing making the tools as practical and useful as possible, focusing on the traits that matter most to a commercial producer choosing replacement females.

This project allows breed associations to offer direct value to the commercial sector. “To me, the Heifer Select project is part of our Better Your Beef strategy,” says CHA Executive Director Michael Latimer. “It’s how we’re going to connect the seedstock sector with

the commercial sector in meaningful ways, and we’re really going to reinvent how breed associations interact with the commercial sector.”

“As breed associations, we need to do a better job of connecting with and providing services to our customers, the commercial sector of our industry,” says Kajal. “CAA has one of the largest tag programs globally, and we’ve spent a lot of time growing the value that commercial producers can get from their feeder calves. We want to have just as much effort go into what we can provide for them in terms of tools and services on the breeding side of things as well.”

Creating a partnership between two breed associations to create something of value for the commercial sector parallels what the commercial industry already loves about the partnership between Angus and Hereford. “We know from generations of anecdotal evidence that producers love the baldy,” says Michael. “This project helps to validate the value in that cross, because there haven’t been the tools or data in the past to do it.”

Plus, as Kajal points out, this project will create the foundation for one unified system for commercial producers. While leveraging the commercial database TELUS Agriculture

already has in place in Herdtrax for this project, the CHA and CAA are developing Hereford X and AngusWORKS. These systems are a digital herd management program to track all of a producer's management data in one place, including feeding, breeding, animal health, performance data, and more.

While producers can choose which system they use, both Hereford X and AngusWORKS use the same interface, and producers can enter all of their cattle, regardless of breed and including commercial cattle, into one system. Plus, it can be used offline from a phone or tablet while working chute side.

"Commercial producers usually don't have just one breed," says Kajal, "and one of the pain points is learning all these different systems. Since we're also working with TELUS Agriculture on Hereford X and Angus Works, which are the same core system, we're allowing these producers to keep all of their data and all of their tools together in one place."

While the Heifer Select project is focused on offering tangible value to commercial producers, there is value in the result for purebred breeders as well. "It contributes to customer retention," says Kajal. "We hear from large commercial producers asking what does the breed association do for me? It makes us more relevant to a huge part of the beef industry."

Michael adds that the project "helps create confidence for the purebred genetics working in a commercial setting." When the data and selection tools show improved results from the purebred genetics breeders are offering, commercial producers will keep coming back.

Beyond offering added value to a breed for commercial customers, the project also offers a way for breed associations to diversify their revenue at a time when the national cowherd is declining. Traditionally, association revenue has relied on purebred cattle registrations, transfers, and breeder memberships but offering different services to producers across the beef industry will offer a different source of income.

The success of this project relies heavily upon the involvement of the time and effort of the producers collecting the data. "We have had great response from producers to participate in this project," says Libby Laycraft, who is the project lead from the CHA. "They're helping us collect a lot of data and also testing our digital herd management tool, Hereford X."

Producers who are interested in participating in the project with data on their 2024 and 2025 calf crops are encouraged to reach out to Kajal (klatimer@cdnangus.ca) or Libby (libby@hereford.ca). While these producers do need to retain ownership of their feeder calves, they will receive access to Hereford X or Angus Works at no cost, as well as genotyping (which includes parentage verification and preliminary genomic predictions for growth, production, and carcass quality traits) of their entire calf crop for no cost.

Offering these benefits to participating producers is a result of the generous funding provided by RDAR through Sustainable CAP. As Kajal explains, "the process of applying for the funding really helps validate that what we're doing is right. It gives me confidence that our scientific plan is correct and robust, and because it's reviewed by a board of industry stakeholders, there's validation that they saw a need for this."

Once the project has successfully generated a set of tools comparable to what purebred breeders can currently access, the doors are wide open for future expansion on the project. "The list of tools we can explore long term is endless," says Kajal.

"When we get these systems in place we can use these foundational pieces to expand beyond this set of tools," says Michael. "We can start addressing other issues of relevance to the entire beef industry, whether it's environmental impacts or other things that we can hardly fathom tackling right now."

The CHA and CAA are looking forward to seeing practical tools land in the hands of commercial producers as a result of the Heifer Select project.

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