The Beef Cattle Research Council 2013 Annual Report

The Beef Cattle Research Council (BCRC) is Canada’s industry-led funding agency for beef research. Its mandate is to determine research and development priorities for the Canadian beef cattle industry and to administer National Check-off funds allocated to research. The BCRC is led by a committee of beef producers who proportionally represent each province’s research allocation of the National Check-off.

On average nationally, the BCRC receives approximately 15% of the National Check-off, and plays a key role in leveraging additional revenue for beef cattle research. Recognizing this, the Council works to ensure the highest return on investment possible for industry contributions to research through ongoing consultation with other provincial and national funding organizations.

Investments in beef research have several benefits, including an improved ability to meet increasing global food demand. For Canadian beef cattle producers, every check-off dollar invested in national research programs delivers an average return of $46 in producer benefits. Advancements in the industry also positively impact the nation’s economy.

Beef Cattle Industry Science Cluster (Growing Forward)

The Beef Cattle Industry Science Cluster was a four year initiative focused on advancing research of priority through the collaboration of Canada’s main public and industry beef research funder. Research funding was allocated for the period between April 1, 2009 and March 31, 2013. Industry and government funding commitments through the Cluster totaled approximately $10.5 million directed to 32 research activities that involved 51 lead researchers at seven federal sites and five universities in six provinces, in addition to several provincial government institutions and industry facilities.

The Cluster resulted in several notable successes and laid a solid foundation to build upon in the second Beef Science Cluster. Some of the highlights include:

- Canada’s third Beef Quality Audit quantified the degree to which animal management has improved through the prevalence of horns (58% reduction), brands (82% reduction) and bruises (31% reduction) compared to 1999 levels. These also indicate quantifiable improvements in animal welfare through less frequent use of painful practices and widespread adoption of improved facility design, animal handling and transportation practices. Liver discounts were identified as a significant opportunity for improvement. Consumer ratings of the flavor, juiciness and tenderness showed an 8-12% improvement since 1999.
• A study of food safety practices in commercial beef processing facilities found that large, modern beef processing facilities equipped with a full battery of food safety interventions can produce dressed carcasses with as few as 4 viable *E. coli* organisms per carcass; smaller plants with fewer interventions were able to produce dressed carcasses with as few as 40 viable *E. coli* per carcass. This suggests that efforts to avoid food safety related recalls are best focused on ensuring that personal equipment (hands, gloves and knives) and conveyor belts and other plant equipment are regularly and thoroughly cleaned and dried. This research also contributed to AAFC hiring a food safety scientist, ensuring AAFC’s continued involvement in applied food safety research.

• Research found that 99.9% of prions can be destroyed after 28 days of composting in beef manure. These results can inform efforts to relieve some of the regulatory burden pertaining to on-farm deadstock disposal under the Enhanced Feed Ban, particularly the prohibition on between-farm movement of composted manure containing SRM.

• An examination of how the nutritional value of DDGS for feedlot cattle varies with grain type, processing, and facility have helped feedlots to appropriately price these alternative feeds relative to traditional feed grains, based on their effects on animal backgrounding and finishing performance, carcass value, beef quality and manure nutrient levels.

• A new sainfoin variety was developed at AAFC Lethbridge. “Mountainview” sainfoin has the potential to compete well and persist in alfalfa-containing pastures, leading to improved soil fertility, forage productivity and animal performance while minimizing the risk of bloat.

• Diagnostic tests and testing strategies for vibrio and trichomoniasis were developed that reduce testing costs and time, with improved specificity and sensitivity.

• Considerable success was achieved in improving communication and coordination among the numerous beef research funding organizations to improve efficiencies.

**Beef Cattle Industry Science Cluster (Growing Forward 2)**

On August 20, 2012, it was announced that joint industry and government commitments to the second Cluster total $20 million, including $14 million in funding from Agriculture and Agri-Food Canada (AAFC) and $5 million in funding from the research allocation of the National Check-off and provincial beef industry groups. In addition, direct investments were made by provincial governments. Funding will be directed to 26 activities to be completed by March 31, 2018.
Research Performance Reporting & Evaluation
Evaluating and communicating the short- and long-term returns from research will demonstrate the value of the research allocation of the National Check-off, as well as encourage continued and enhanced government investments in research programs, facilities and expertise. This will also help refine industry’s research planning and prioritization and technology transfer efforts.

The BCRC has partnered with Canfax Research Services to develop and implement an economic assessment tool that will aid in assessing the economic returns to beef research in Canada, developing BCRC research priorities, and tracking the economic benefits of BCRC funded research. Results are expected in 2013/14.

National Research Funding Inventory
In support of the National Beef Research Strategy, which was released in 2012 and available on www.beefresearch.ca, the BCRC is currently collecting and analyzing data voluntarily submitted by other beef research funding agencies. This database will allow funding agencies to better communicate about funding decisions and will enhance collaboration to prevent unnecessary overfunding in certain areas or unintentional neglect of long-term funding to critical research priorities.

Technology Transfer & Knowledge Dissemination
The BCRC continues to advance the implementation of its Knowledge Dissemination and Technology Transfer Strategy, which is focused on converting applied research into effective tools that drive industry competitiveness.

A new extension website, www.beefresearch.ca, provides access to general information on research topics, fact sheets on in-progress and completed projects, and blog articles that help producers make informed decisions on implementing innovation into their production practices. The website also delivers BCRC-produced videos, webinars and other extension tools. During the second Cluster, cost-of-production decision making tools will be created, the website will be expanded to include fact sheets from other beef research funding organizations, and a gre

Communications from the BCRC can also be found through the CCA’s Action News, provincial cattle organizations’ newsletters, email updates and magazines, and through a regular research column that appears in Canadian Cattlemen magazine.

Verified Beef Production™ program
In addition to sponsoring research and technology development, the BCRC oversees and supports the beef industry’s on-farm food safety program, Verified Beef Production™ (VBP). This provides a practical
means for efficient administration and access to development and implementation resources for the program. It also provides an appropriate forum for policy development to then be taken forward to the CCA Board. Learn more at www.verifiedbeef.org.

**For More Information**

To learn more about BCRC initiatives and take advantage of our extension resources, visit our website at www.beefresearch.ca and join our mailing list at www.beefresearch.ca/blog/subscribe