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## Managing for Today's Cattle Market and Beyond

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# *Cattle Identification – The Canadian Experience*

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Canadian experience with new trace back requirements in the beef and dairy industry is just beginning. Canadian beef and dairy producers are implementing a national identification ear-tag program capable of tracing animals from the retail sector back to the original cowherd. The mandatory cattle identification program will be in place on January 1, 2001. Processing plants will be required to read tags and maintain trace back of the carcass as of July 1, 2001. Monetary penalties for non-compliance with the cattle identification program will be imposed on July 1, 2002 (CCIA, 2000a).

Cattle identification is expected to give the beef meat industry the ability to trace meat back (often referred to as traceback) through the market channels from beef and dairy animals to the original farm or ranch of origin. This will be accomplished through a cattle-tagging program. Various bar coded tags have been tested and recommended by the Canadian Cattle Identification Agency (CCIA), a new agency developed to implement the identification program. Producer industry organizations such as the Canadian Cattle Association and the provincial cattle associations have been actively involved in leading the development of this program. While individual cattle producers have expressed reservations about the program, their elected representatives on their provincial associations have supported mandatory cattle identification.

Food safety is the key reason given for implementing a cattle identification program. The Canadian beef industry depends extensively on export markets and exports over \$2 billion (Cdn) annually. International markets, in particular the United States are major destinations for Canadian beef and cattle. Consumers in Canada are concerned about food safety. Identification will provide the industry with the ability to respond quickly to any disease or health problems that could impact on the viability of the industry. The program is designed to assure consumers and importers of Canadian beef that the beef is safe and that any problems can be quickly traced back to the source (Glen, 2000).

### **Background**

Cattle identification is not new in Canada (CCIA 2000b). Starting in the 1920s, all cattle were identified with a metal ear tag that provided a unique identification number. Agriculture Canada, a federal government department, managed the program. This program was instrumental in containing an outbreak of Foot-and-Mouth diseases in the province of Saskatchewan in 1952. However during this outbreak, Canadians were unable to export cattle and this had a devastating impact on price and the cattle industry. This earlier identification program was also used to eradicate Bovine Brucellosis and Tuberculosis. With the

eradication of these diseases from the Canadian herd mandatory trace back was discontinued in 1985 and the ability to trace back dropped from 95% of all cattle to 10% of all cattle.

Concerns about the ability of the Canadian beef and dairy industry to manage outbreaks of disease surfaced again in 1993. Canada's only case of Bovine Spongiform Encephalopathy, (BSE or "mad cow disease") was diagnosed in a single cow imported from the United Kingdom (CCIA 2000c). All offspring from the cow, herd mates of the cow and other cattle imported from the UK were destroyed. Even with these actions, several international customers halted imports or were prepared to halt imports. The single infected cow was a purebred and this provided the industry with detailed records of the movement of the cow and offspring. In short, the system was able to "trace back" and "trace forward" the animals that had been in contact with this cow and the offspring from this cow. If this cow had been a "commercial" cow, the industry would have experienced much greater difficulty in tracing the cows contacts and offspring. This episode, along with further observations on the devastating impact of BSE on the UK beef industry lead to industry action to reintroduce trace back into the beef and dairy herds. Food safety, preservation of export markets and industry reputation for quality were the important drivers for developing a new trace back program.

### ***Identity Preservation Program***

Two types of cattle identification present today are source and process verification. Process verification has been the most prevalent means of tracking animal movement, and usually begins with the aggregation of calves into feedyards. Identification at this stage is largely a means for sorting out animal health and feed management protocols. Processors and retailers view this as an essential component for managing the processes and treatments of beef cattle. With the degree of cattle aggregation (co-mingling) present in the feedlot sector, process verification does not allow for complete trace back of meat.

Source verification is central to the cattle identification issue. Identifying beef animals at the source facilitates the tracking of product movement from the point of origin – the ranch or cowherd – to

the end product. Source verification ties in nicely with the birth-to-retail (or conception-to-consumer) concept of value chains, a likely trend in the meat industry in the future. Capturing the value from this information is one of the topics discussed in the article entitled, "Industry Opportunities and Issues for Value Based Marketing", a part of this information series.

The Canadian Cattle Identification Agency (CCIA) is an industry-led, nonprofit organization charged with the task of creating a cattle identification trace back program for Canada. This is a source verification program. Producer associations, industry and government have shared start-up costs for the CCIA. A database to track the herd of origin of tags is being developed with enforcement of the program falling under the jurisdiction of the Canadian Food Inspection Agency (CFIA), an agency of the federal government. A number of tags were tested and those recommended are expected to have been retained at least 95% of the time. Each tag is barcoded with the herd of origin. Selected electronic tags have also been approved.

The online database managed by CCIA will receive and store the tag numbers and corresponding producer information. When final information is received from the processor about the demise of the animal, the number will be retired. In the event that there is a problem, then the CFIA, will be provided with information on the herd of origin of the animal and the movement history of the animal will be traced back through market channels to the herd of origin.

### ***Producer Issues***

Negative reaction by producers to mandatory cattle identification has focused on liability issues, the cost of tagging animals, need for national identification system, and the lack of opportunity for debate. Some industry producers perceive a herd-of-origin trace back system as unduly targeting the cowherd as the source of food safety liability issues, which may or may not be within their control. The CFIA already has the ability to trace diseases back to the source, just that more herds need to be tested and it is much more difficult to accomplish. National identification would speed up the process, be less intrusive on producers and will be more reliable.

For now, the ability to pass on the costs of a tagging program seems limited for producers. That is, the producer is bearing most of the cost of the tagging program and there is an ongoing debate about who should pay to implement the program. Processors also have invested significant resources in verifying identification tags. Weighing these producer costs against the benefits of maintaining a world-class high health beef production system has led the industry organizations in Alberta, Saskatchewan, Manitoba and Ontario as well as the national cattle organization to strongly support mandatory cattle identification. The goal of the CCIA is to keep tagging costs under a dollar per head.

Producers have also raised the issue of the lack of debate over a “mandatory” program. Concerns over confidentiality and operational guidelines have been identified. The industry response is that elected representatives of industry have supported this initiative. CCIA is providing assurances about the confidentiality of the database of tag numbers and related producers. Only when a problem is identified will the CFIA have access to the specific cattle data.

The need for national identification has also been called into question given that the majority of live cattle and beef exports are destined for United States, which currently has no national cattle identification system. However, the USDA Animal and Plant Health Inspection Services has served notice that they would like to have a national identification program in place within three years (CCIA 2000d). Canada also exports beef to Asian markets where food safety is also an issue.

### *Alberta Perspective*

Alberta is the largest beef Province in Canada and relies heavily on export markets. Cow-calf producers in Alberta, who represent over 40% of the Canadian beef cowherd, will pay the largest share of the cattle identification costs, the cost of ID tags and any processing overhead. Presently CFIA will bear the cost of policing the program.

A 1998 survey of cow-calf producers in Alberta indicated that of 1709 cow-calf producers that responded, 1475 were already engaged in some form of a tagging program for their herds (AAFRD, 1998). The cattle identification program will be an extension or possible replacement of

their current tagging program. Additionally the same survey found that up to 875 of the surveyed producers would be interested in receiving carcass data on their animals. The potential exists in the future to extend the information gathering on the trace back to provide this information back to the cow-calf producer. However the initial intent and abilities of the program being implemented on January 1, 2001 does not include gathering carcass information for transmittal to the cow-calf producer.

### *Summary*

Export markets are key to the growth of the Canadian beef cattle industry. Domestic and international consumer confidence in the safety of beef products is vital. Individual animal identification has been identified by the beef and dairy industry as an integral part of providing the means for timely and effective response to food safety issues and preserving Canada's current health status. Starting in 2001, the beef and dairy industry in Canada will be implementing their cattle identification program. The problems of implementing this program and industry compliance will become more evident as the program develops. The potential two-way information flow that may develop in the future may represent a significant opportunity for identifying and meeting consumer needs and sharing the value created.

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