

Keep It Simple, Eh?

Knowing how and why the Canadians launched their national livestock ID program will help U.S. producers better understand and prepare for the inevitable implementation of their own ID program.

Story & photo by Ed Haag

Ray Kroc, founder of McDonald's, the world's largest purveyor of retail beef patties, could well have been thinking of the Canadian cattle identification (ID) system when he coined his now famous KISS phrase — Keep it simple, stupid.

"We started with a very basic system," says Julie Stitt, executive director of the Canadian Cattle Identification Agency (CCIA). "Animals are tagged when they leave the farm and are read when they die or are exported."

Canada's mandatory cattle ID program was fully implemented July 1, 2002. By that fall it was reported that the program had achieved 92%-95% compliance.

To date the CCIA, in partnership with the Canadian Food Inspection Agency (CFIA), operating under the ID regulations within the Federal Health of Animals Act, has achieved 98%-100% compliance nationally.

John Lawrence, one of three educators from the Iowa Beef Center (IBC) at Iowa State University (ISU) who traveled to Canada in spring 2003 to observe, firsthand, the implementation of the ID program, saw broad acceptance of the program by the time he and his colleagues arrived.

"It was a simple, low-cost system that proved quite successful for what they wanted to accomplish," he says.

Stitt attributes the success of the program to several factors, including industry participation from the outset, open community dialogue, a robust educational component and a practical set of attainable goals.

"If we would have done more than what we were doing there is no chance we would have got it off the ground," she says. "We felt we had to learn to walk before we ran."

The objective of the initial implementation was to set in place a basic system that responded to 90% of CCIA's total long-term cattle tracking goals. Rather than being an end in itself, the ID program's 2002 rollout served as a base for building a truly comprehensive system.

"Now that we have attained 90% of our goals, we are gradually working on reaching the other 10%," Stitt says confidently.

In retrospect this incremental approach served two purposes, Stitt says. It allowed beef producers time to develop an understanding of the importance and economic potential of having a national ID system in place and, simultaneously, provided the CCIA's staff with the time needed to develop the technical expertise and infrastructure required to properly run a comprehensive system.

Where's the beef?

While computer-based reader tags are a relatively new phenomena to Canadian beef producers, identifying individual animals has been part of their industry since the 1920s when cattle were identified with metal ear tags. Each tag had a unique ID number that was recorded with Canada's Department of Agriculture — the

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CCIA Approved RFID tags



Allflex FDX



Allflex HDX



Destron



Reyflex



Y-Tex



Zee-tag

** Picture shown above does not reflect actual tag size **

► Canadians approved several styles of RFID tags.

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predecessor to Agriculture Canada.

In 1952 the tag program played a key role in containing an outbreak of foot-and-mouth disease (FMD) in the province of Saskatchewan. More recently, a successor ID program was used as an effective tool to end bovine brucellosis (Bang's disease) and tuberculosis (TB) in the country.

By 1985, with the virtual eradication of brucellosis and tuberculosis throughout the country, Canada's mandatory herd traceback program was discontinued.

"In just a short period of time we lost most of our ability to trace animals back to herds of origin," Stitt says. "The number of tagged cows dropped from around 90% to just 10%."

At the same time, events were occurring in other parts of the world that posed a potential threat to Canada's thriving billion-dollar-a-year beef export market.

"We were seeing outbreaks of foot-and-mouth disease and BSE (bovine spongiform encephalopathy) in Europe," Stitt says. "Without an effective traceback system to contain an outbreak similar to what occurred in Europe and Britain, our entire beef industry was at risk."

Industry takes lead

While Canada's farmers and ranchers are known for their tenacity and independence, they also have a well-deserved reputation for being market-savvy innovators who know when change is required to protect their industry.

A classic example of this occurred in 1970 when it was determined by food researchers that erucic acid, resident in rapeseed oil, caused necrotic lesions in the hearts of laboratory rats. While the rest of the agricultural world waited for the other shoe to drop, Canadian farmers — who were, at that point, the world's largest producers of rapeseed oil — mobilized and within three years had replaced more than 95% of their rapeseed oil crop with highly marketable low-erucic canola.

Seeing an equally serious agricultural challenge on their horizon, beef industry leaders from across the country collaborated to author a business plan that later served as a template for Canada's mandatory national ID program.

"We presented that plan to the Canadian Cattlemen's Association, and it was unanimously accepted by every province by the fall of 1997," Stitt says. "In March of 1998

we incorporated the Canadian Cattle Identification Agency, a separate nonprofit industry agency."

Since its inception, CCIA's board of directors has seen representation from all sectors of the cattle industry, including national and provincial producer organizations, veterinary associations, processing and marketing entities as well as ex officio government agencies associated with animal agriculture.

For Stitt, the beef industry's leadership role in CCIA not only aided in establishing and sustaining a solid support base in much of the agricultural community, but also helped promote a decidedly pragmatic approach to implementing its mandate.

"It was understood by all that the program would not impede commerce," she says, adding that the system was specifically designed not to put a financial or logistical burden on the producer.

A modest proposal

In order to keep the initial tag cost low to the producers, Stitt and her colleagues at the CCIA decided to start their program using dangle tags, each one imprinted with its own unique bar code.

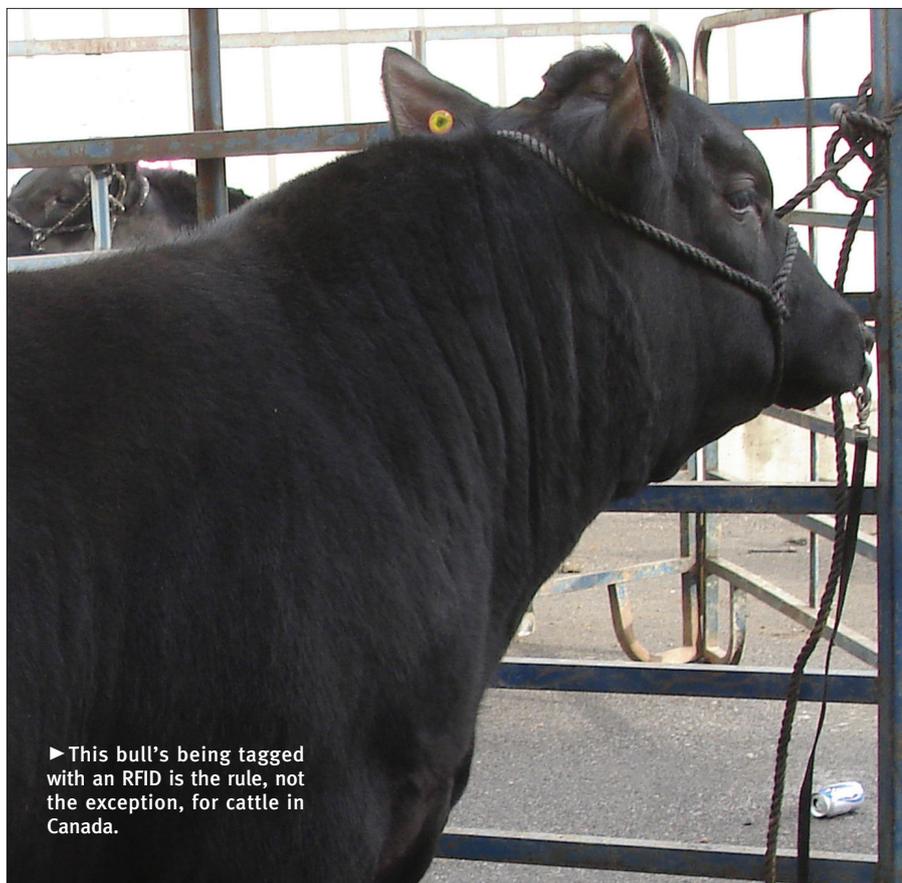
"While radio frequency ID (RFID) tags offered options, such as allowing the reading of tags at a distance, their cost of \$7-\$10 per tag made them prohibitive when compared with the price paid for custom-manufactured bar code tags," Stitt says.

Because user convenience played an important part in winning program acceptance from the agricultural community, CCIA staff made sure that tags were widely distributed, with more than 1,500 authorized dealers across the country selling the bar code tags for around \$1 a piece.

At the time of sale, the livestock producer provided his name, telephone number, address and postal code, which were entered into a national database as the contact information associated with the newly purchased tag. The customer was also assigned a personal identification number (PIN), which he would have the option of using to speed up any future tag purchases.

Animals are tagged before or when they leave the herd of origin, and the tag number is tracked up to the point of carcass inspection or export.

While the CCIA was responsible for administering the new ID program, the CFIA handled enforcement. Penalties for



► This bull's being tagged with an RFID is the rule, not the exception, for cattle in Canada.

noncompliance ranged from \$500 to \$4,000.

After observing the Canadian ID system in operation roughly one year after its implementation, Lawrence came to the conclusion that the efforts of the leadership at CCIA to make their program as user-friendly as possible had been successful.

“The producer didn’t have to do anything but tag animals,” he says. “And the cost wasn’t prohibitive — somewhere around \$1 a tag.”

Dan Loy, another ISU animal scientist who had the opportunity to observe the workings of the Canadian ID system firsthand, agrees with Lawrence. “They are tracking the tag and not the animal,” Loy says. “That makes it simple and gives the ID people the ability to trace that calf back to its original owner.”

He adds that with those limited objectives the Canadians could avoid the layers of complexity required to put a system in place that tracked every animal movement.

Stitt notes that the experts from CFIA — the enforcers of federal agricultural regulations — were in agreement that while the national cattle ID program didn’t offer the total comprehensive solution, it went a long way to providing the kind of infrastructure needed to deal with a communicable disease outbreak.

“They told us that 90% of any traceback is being able to get back to the herd of origin,” Stitt says. “Our program was already able to do that.”

Selling the program

In spite of industry’s lead in developing Canada’s new mandatory cattle ID, acceptance of the program was far from universal in the initial stages. Stitt recalls a tumultuous 36 months leading up to implementation. “We had a three-year communications strategy where we met with thousands of producer groups across Canada explaining why the beef industry needed this program,” she says.

Exacerbating the situation was the fact that at the same time the CCIA was rolling out its industry-led program, the federal government was imposing extremely unpopular gun-control measures on its gun owners, many of whom lived in rural Canada.

“People who opposed our program were comparing it to the government-led gun-control program,” Stitt says. “It was unfair, but it happened.”

Resistance to the program was particularly fierce from the auction market and sale barn sector. “We had thousands of people turn up at those meetings saying they were going to stop the program,” she recalls, noting that with up to 4,000 transactions a day taking place at these locations, it was understandable that those involved in the process would be concerned about their ability to comply with the new ID regulations.

Reasons for objections ranged from liability and privacy issues to the cost of tagging animals. “Very quickly after they saw why we were doing it, that we had no intention of disrupting commerce, and it wasn’t a big imposition, the general attitude would change,” Stitt says. “Ultimately, when it was initiated in 2001, we already had over 70% compliance.”

Work in progress

Fortunately for Stitt and her colleagues at the CCIA, there were sectors of the industry that not only felt comfortable with their ID system but actually welcomed it. “Feedlots were quite supportive of the program from the beginning,” Stitt says. “Most were already individually processing their animals, so they were familiar with the value-added benefits of tracking specific cattle.”

As a feedlot specialist, Loy was impressed by how quickly that sector had incorporated the national ID into their management system. “When cattle come in they are immediately scanned for their official CCIA tag,” he says. “That is then correlated with the feedlot tracking system.”

Loy notes that this allows the feedlot to take advantage of the fact that every animal was already part of a universal ID system and to use that system as a management tool to cross-reference and track their own health records and performance data.

Stitt points out that a recent upgrade in her organization’s program from bar code tags to button-type RFID tags should provide all industry sectors with an even more powerful tracking tool.

“Now they can use the CCIA RFID tag by putting a panel reader on their chute, scanning all the animals coming in, and this allows them to track information using the unique CCIA number on the chip,” she says, adding that it is just one more step in developing Canada’s comprehensive industry-based traceability system.

