Producing Profits with RFID

The Lamb Traceability Project in Alberta (LTP)

What Did We Gain From the Project?

A lot has been accomplished in a few short years by a hard-working and dedicated team of partner organizations who:

- Collaborated with other Canadian sheep industry organizations to identify national requirements, share information, and to align with national traceability initiatives
- Researched RFID technology and data management systems being used in the global sheep industry to save years of trial and error efforts
- Installed and evaluated RFID equipment components to identify systems that work on Alberta co-operator farms
- Learned that mixing and matching components from different companies resulted in compatibility issues, non-functional systems, and extensive technical support requirements and challenges
- Identified a complete system from one manufacturer – RFID tags, tag reader, computer software – that was found to be superior. Identified, trialed and achieved CSIP approval of the highly effective, lower cost Shearwell RFID ear tag
- Developed RFID systems for a federal and provincial processor able to provide carcass data to producers and to enable the processor to retire tags and meet traceability requirements
- Developed a web site as a central source of information with a link to the federal lamb processor database for carcass data – *www.sheepcentral.ca*
- Financial and production data was collected from project co-operators. The Flock Snapshot was developed as a financial assessment tool to help producers collect good data enabling comparison of their operations to "benchmark" data
- Alberta Lamb Producers (ALP) collaborated with Alberta Agriculture and Rural Development (AARD) to secure Alberta Livestock and Meat Agency funding. This funding allowed the project to include 52 cooperator farms, feedlots, Hutterite colonies and agriculture colleges (2011/2012)
- ALP was also instrumental in working with AARD to secure the *Alberta Sheep Electronic Identification Incentive Program* which encourages producers to apply for an incentive payment on RFID tags purchased over the next two years

What Does the Future Hold for the Sheep Industry?

The Alberta Lamb Traceability Pilot project continues to lead the way in researching new tools, processes and systems for improving flock management in Canada. RFID systems are a practical solution to meeting regulatory requirements for traceability and are great tools for managing flocks more efficiently and profitably.

Alberta producers now have access to RFID tags and systems proven to work on farms here. They also have access to a wealth of information and growing producer experience on how to take advantage of this technology to best capture the opportunities it can provide.

Together we are building a vibrant, progressive vision of a profitable industry now and in the future.

"A flock in every field and lamb on every plate."

Traceability – What You Need to Know…

As you may know, the Canadian Sheep Identification Program (CSIP) is moving to Radio Frequency Identification (RFID) tags and technology to provide new management tools and to prepare the industry for national traceability.

What you may not know is why, when, how, and most importantly—what's in it for you. These factsheets have been created to provide producers with answers to some of your important questions. Questions like…

Why Is This Change Necessary?

Jack Hayden, Agriculture Minister, told an Oct. 2010 news conference that "Tracing food from farm to the consumer helps guarantee quality and safety." Traceability helps give consumers confidence in our industry and our products. It provides a verifiable control process that meets global standards.

Research shows that Canadians consumers are particularly concerned about the following food safety and food quality issues (Environics, 1999; McCann 2002; Ispos Reid, in Karman 2003):

- Farming practices – animal diseases; antibiotics, hormones, pesticide residue in food
- Bacterial contamination
- Food additives and preservatives
- Food freshness and nutritional value
- Proper food handling and preparation

Using traceability to actively address consumer food safety issues is one way to build confidence in Canadian lamb. Livestock traceability initiatives began in Canada in 1990 to help pinpoint and contain a potential problem before it impacts lamb consumers and our industry. BSE taught us the devastating impact a disease outbreak can have on entire industries. One of the benefits of traceability is that like insurance; we have it in place to minimize the impact of events that are beyond our control.

While it's true that our industry is seeing growth and profitability, technological advances can provide even more financial and time savings, particularly for medium to large scale operations. Every industry, business, and individual must change in order to stay vibrant and vital.

"Traceability is required if we are to stay competitive globally. It is needed to facilitate fair and efficient commerce in livestock."

Jack Hayden, Agriculture Minister

Your partners in building better lambs

Alberta Lamb Producers

Growing Forward
A federal-provincial-territorial initiative

What is Traceability Exactly?

For Canadian agriculture traceability is simply defined as the ability to track the path and history of an animal, commodity, food product or ingredient as it moves from its source to the end consumer

There are three key components important to livestock producers:

Individual Animal Identification	Unique Premises Identification	Tracking Animal Movement
CSIP Radio Frequency ID tags required	Premises Identification (PID) required in Alberta since 2009	Systems are currently being developed with input from various industry pilot projects

Together, these components will enable the Office of the Chief Provincial Veterinarian (OCPV), and the Canadian Food Inspection Agency (CFIA) to pinpoint and isolate threats to animal or human health.

Traceability is certainly not new. In pre-Roman times historical records show that animals were tattooed or branded for ownership and trade purposes. RFID is simply a much more convenient, modern day version. RFID technology makes traceability faster and easier than current paper record systems and visual ear tags.

What Opportunities Can Traceability and RFID Technology Provide?

The Canadian sheep industry has been on a collision course with extinction. Outdated production and management models haven't prepared flock managers for sustainable and profitable operations in today's competitive world of food production.

Traceability and new RFID technology will provide many benefits to producers and the industry:

- Research data and co-operator feedback, collected during the pilot project, has provided valuable business management information
- It makes the Canadian lamb industry competitive in the global marketplace which in turn supports higher domestic lamb prices
- It provides a system to quickly identify and contain animal disease outbreaks to ensure the entire industry is not damaged
- It helps us tell the 'story' of our food – allowing local consumers to connect to us and our farm
- It helps us verify the excellence in our food production system based on globally accepted standards
- It can streamline how the supply chain produces lamb

In Canada traceability will be legally mandated and compulsory for livestock producers. However, the best reason for producers to get involved is to take advantage of the many present and future opportunities traceability and technology provide.

Where Do I Go For Help & Information?

The following are a few key sites with more information on Traceability.

Alberta Lamb Traceability Project Web Site: *http://www.sheepcentral.ca/*
Traceability in Alberta: *http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/trace12895*
Alberta Lamb Traceability Project overview: *http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/sg12822*
Alberta Lamb Producers – Traceability: *http://www.ablamb.ca/programs/traceability.html*
Canadian Sheep Federation: *http://www.cansheep.ca/User/Docs/CSF%20Mandatory%20RFID%20Tags_sheep.pdf*

The Lamb Traceability Project in Alberta (LTP)

The government has invested millions into the development of a national traceability system. There are also costs to the lamb supply chain. The Alberta Lamb Traceability Pilot (LTP) project was started in 2007 by Alberta Agriculture under the Traceability Initiative. Its objective was to look for lamb supply chain benefits and potential opportunities to help offset some of the risks and costs associated with adopting the new RFID systems needed for true traceability.

Industry stakeholders have collaborated on numerous projects to find traceability benefits that can improve returns for producers here in Alberta. The findings from the LTP, and its predecessor the Lakeland Carcass Sire Project (2005-2008), contribute to our knowledge about running better sheep businesses.

What Was the Project Trying to Accomplish?

The LTP project goals were to:

- Identify technology and electronic systems that enable the lamb supply chain to comply with traceability regulations
- Locate, test, and implement RFID technology that will work on Alberta farms, feedlots, and processing plants
- Identify the costs (time and money) and benefits (management and monetary) of implementing electronic data management systems
- Communicate the lessons learned and identify potential benefits to encourage the adoption of new technology and management practices

The LTP project has been communicating preliminary results extensively to the industry through Alberta Lamb Producers' 'N'ewesletter', through the Canadian Sheep Federation's 'From the Flock' publication and through the website developed by the LTP project *www.sheepcentral.ca*.

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