

SHEEP INDUSTRY TO TEST RFID SYSTEMS FOR IMMEDIATE RELEASE

February 2009 – Guelph, Ontario – A traceability research project gets underway this summer that will test complete RFID (radio frequency identification) systems on sheep farms across the country.

To keep in step with key trends in national and global markets the Canadian Sheep Federation is considering a target date of January 1, 2012 for mandatory RFID.

Canadian sheep producers, provincial and national sheep organizations are discussing how to best capture the benefits to sheep producers from electronic flock management systems. The use of RFID technology in Quebec, on Ontario farms and in the Lakeland Carcass Sire Project showed promise with time and labour savings and with improved accuracy and efficiency in record keeping. Farm co-operators are seeing even greater management potential with the systems being tested in the Alberta Lamb Traceability Pilot project. Those results will be available this coming year with a final report to be released March 31, 2010.

“We are looking to provide more resources and tools for the Canadian sheep producer. Improving access to technology may improve the speed at which animals can be processed and reduce losses due to human error but it has not been tested or documented in Canadian agriculture or specifically on farm” says CSF chair Dwane Morvik, “By studying the impact of installing fully electronic systems for animal identification and record keeping at the farm level, producers participating will be able to critique and use the systems to gain first-hand experience so that they might provide educated opinions to the board and other producers. The study should also determine how the industry may return greater financial incentives from buyers and management benefits for the lamb producer.”

RFID goes far beyond the ear tag; electronic systems are used in virtually every industry for database management or electronic inventory control. Electronic livestock production systems are newer, but have the potential to benefit the entire supply chain from producer to consumer. The Canadian sheep industry will play a part in the technological revolution of food production.

Backgrounder to CSF Mandatory RFID News Release

- The Canadian Sheep Federation (CSF) represents all Canadian sheep producers in setting national policy for the sheep industry. It works closely and cooperatively with all levels of government and industry related organizations, both domestic and foreign, to further the viability, expansion and prosperity of the Canadian sheep industry. The Canadian Sheep Federation (CSF) has a strong mandate to support and further the viability, expansion and prosperity of the Canadian sheep industry
- Administered by the Canadian Sheep Federation (CSF), the Canadian Sheep Identification Program (CSIP) was launched on January 1, 2004. The program was designed to address producer concerns about sheep health and meet consumer expectations for quality assurance and food safety. In addition, the program was designed to be affordable, simple, practical and reliable
- The CSF is committed to ensuring that the CSIP evolves with the changing needs of producers and the industry. One aspect of animal management is the development of genetic resource database and record keeping in the sheep industry to allow producers to improve the genetics of their flock through selective breeding. Carcass grading reports are also a valuable tool that should be developed and this trial will be able to connect these details to the producer
- Documented information as to which ID and management system is best suited to satisfying sheep producers needs, the industry as a whole – present and future, and/or which will meet the needs of our customers for traceability, animal health and food safety has not been explored. This project will examine one potential option which is the use of radio frequency identification (RFID) systems. These systems, which incorporate RFID tags, readers and computer software, collect and combine animal identification information with other recorded attributes. These systems are being presented by some as the best available option however direct industry specific research is needed to determine this for certain.
- “We are looking to provide more resources and tools for the Canadian sheep producer. Improving access to technology may improve the speed at which animals can be processed and reduce losses due to human error but it has not been tested or documented in Canadian agriculture or specifically on farm” says CSF chair Dwane Morvik, “By studying the impact of installing fully electronic systems for animal identification and record keeping at the farm level, producers participating will be able to critique and use the systems to gain first-hand experience so that they might provide educated opinions to the board and other producers. The study should also determine how the industry may return greater financial incentives from buyers and management benefits for the lamb producer.”
- In 2005 a questionnaire was circulated to Canadian sheep producers asking for comments on the CSIP system. At that time while there was support for the program there were many comments that noted problems or potential problems with the program

- The program will probably not be good enough to meet requirements in five years
 - It takes too long to trace an animal
 - Dissatisfaction with the current tags (hard to read, infected ears)
 - No assurance that the animal identification stays with the carcass
 - Believe that all provinces should have the same identification system
 - The program is too labour intensive too the larger flocks
- When asked what they wanted to get out of national identification system, the top responses from the industry were:
 - a) For tags to contribute to sheep management decisions; as long as an RFID system is relatively inexpensive and user friendly (e.g., genetic improvement)
 - (i) *This is the whole premise for the CSF project - to investigate and determine feasibility*
 - b) Traceability for “gate to plate” marketing
 - (i) *This will be part of the whole system analysis that the project looks at*
 - c) Minimum paper work to meet export obligations
 - (i) *Electronic record-keeping means less “paper-work” and more automatic/automated transfer is possible*
 - d) Government support and promotion of the program
 - (i) *Application to Growing Forward will be made to support this program*
- Experience has been gained over the past six (6) years from observation and participation in the ovine program at Agri-Traçabilité Québec, QC which employs RFID tags exclusively
- Alberta agriculture provided funding and expertise to establish the Lakeland Carcass Sire Project and the Lamb Traceability Project (LTP). The Lakeland project was to identify the terminal sire breeds that produce the highest value lambs for the premium lamb market, including farm direct markets and the index-pricing grid at Sunterra Meats, Innisfail. The LTP arose in an attempt to develop an animal identification and tracking system for the lamb supply chain. Its goals are:
 - To identify and track lambs from birth to processor
 - To demonstrate benefits of linking producer and processor (carcass feedback)
 - To improve supply chain management (focus on a target market and its criteria for lamb)
 - To use new technology on-farm to determine if it is practical and if there is management benefits to balance the costs (in dollars, training, time).
- The Alberta LTP and LCSP projects produced excellent results which are being analysed and will be reported on shortly. These projects demonstrated that the use of RFID systems including tags, readers and software, can facilitate faster and more detailed flock management than traditional tagging methods under certain conditions

- Radio Frequency Identification goes far beyond the visual ear tag. It refers to an entire system which includes an identifier (tag), RFID reader and computer software. The combination of these items allows the user to quickly identify and record the tag information, in the case of animal tags – an identification number. This can then be associated through the computer software to other animal attributes (genetics/breeding info, carcass grading, lambing performance etc.)
- Current identifiers and program provide the absolute basics for animal identification; tracking is difficult and involves significant manual labour to capture animals and read tag numbers, which in the event of an animal disease is too time consuming. Producers attempting to use these as management tags require excessive handling of the animals causing stress to both the animal and the producer, feedback from the auction, slaughter/grading facility is not possible. Use of RFID technology allows for rapid and timely response to animal disease emergencies with little manual labour or opportunity for error recording. This also allows for rapid processing of animals on farm reducing handling stresses to animals and producer; electronic tags can be read at auctions, slaughter and processing facilities to create records of sale and carcass grading information which can then be provided back to producers for flock management and/or as proof of sale data.
- The Canadian sheep industry has great potential for growth and expansion. As Canada's population continues to grow the influences of immigration, diversification and an increased awareness of the consumer are all working to increase the demand for lamb as a protein source. This increase has, in fact, far out grown the production of Canadian lamb to the point where our producers are supplying only 50% of the domestic market for lamb. This leaves the remainder to be supplied from our overseas competitors (New Zealand, Australia). Improving on Canadian production methods and increasing efficiencies could allow for increases in available Canadian lamb for capturing domestic market. Use of RFID systems can reportedly do these things, but we were require direct experience to justify these claims