

Producing Profits with RFID



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Radio Frequency Identification Systems

RFID technology will be a key part of the Canadian traceability program. In addition to making national traceability work, it also offers potential benefits for lamb producers. Lamb industry stakeholders, from producers to government, are collaborating in the Alberta Lamb Traceability Pilot project (LTP) to find practical benefits from new RFID technology on Alberta sheep farms.

Electronic systems – the sum of many parts

Flock managers focus on profitability and productivity. Faced with growing production costs LTP project co-operators have been learning to use the electronic equipment that will be part of the modern shepherd's toolkit.

Technology will change how Alberta sheep operations are managed. The tools that make up an RFID, or electronic data management, system are:

- **Flock management software programs:** Flock management software is what makes the electronic systems work. Software is written for specific operations and to work with specific tag readers, scales and handling/drafting crates. Flock management software will not work with just any, or all, pieces of equipment.
- **Computers:** New computers have a vast capacity for speed and data storage. Seriously consider investing in a new computer that is designed to run modern software programs. Software applications are now often 'web-based' – cloud computing. Access to the internet is needed.
- **RFID tag readers:** The purpose of the tag reader is to read the electronic number inside an RFID ear tag. There are many readers on the market and all of them read tags. However, not all offer benefits for flock management or traceability, and many were never designed to work within an electronic system. Handheld data recorders read tags, run software for adding data, and must link to compatible software programs on a computer to operate. Newer stick or wand readers may be designed to wirelessly upload data into specific software programs but their ability to record more than numbers is limited. Consider 'after sales' support as well as price when shopping for new equipment.
- **RFID ear tags:** RFID tags make it possible for the entire lamb supply chains to track animal identity without the problem of manually reading numbers and transferring them to paper forms. Two types of RFID tags are approved under the Canadian Sheep Identification Program.
- **Supplemental equipment:** These are the extra components that complete an electronic system: weigh scales, panel readers, handling / sorting crates and gates. Supplemental equipment simplifies handling procedures such as tagging and recording, weighing, condition scoring, treating and sorting sheep.

Your partners in building better lambs



Electronic data management systems ... putting all the parts together

All you will need to meet Canadian Sheep Identification Program (CSIP) and traceability requirements is an RFID tag on every sheep that leaves your farm and a record of it. Using RFID tags as part of a complete data management system can help you improve flock productivity and provide a return on your investment. Look at how you manage your flock and then find a system that will help you meet those needs.

- It's tempting to buy the cheapest model. Price has little relationship to management value. A cheaper tag reader that sits on a shelf isn't a good investment. Talk to producers who are using tag readers to help you choose one that works for your management.
- Components (tag readers, scales, software, etc.) from different manufacturers are often incompatible. That means they can't work together, making them at the very least frustrating, and at worst useless.
- Purchasing equipment of different brands from different suppliers makes fixing problems nearly impossible. Which company is responsible when your system doesn't start up or work for you?

Electronic equipment evaluations ... the "Top Performers"

For a system to benefit flock managers all the pieces of equipment - tag readers, software, scales, handling / sorting crates - must work together to:

- Collect data quickly and accurately.
- Move data back and forth easily.
- Generate reports for use in analysis and decision-making.
- Provide auditable data to meet the requirements of national traceability. That means unique animal identification, premises identification and the ability to track animal movements.

There is limited expertise with technology and even less technology support (repairs and maintenance) in rural Alberta so electronic equipment has to work well on farms for farmers. The LTP project and its cooperating producers worked with and evaluated assorted equipment. Equipment found to be reliable, practical to use on farm, and easy for non-technical people to learn was rated as a "Top Performer".

Technology is changing fast. Equipment and software will evolve as more flock managers use the technology. The LTP project is now focusing on using new electronic tools and data management systems to build the basis for Precision Flock Management (PFM). Flock managers who learn how to use RFID technology and data management systems will have new tools to manage costs and to improve flock production.



For more information on 2011 Top Performers and electronic systems to help you make your operation more profitable and efficient, go to: www.sheepcentral.ca