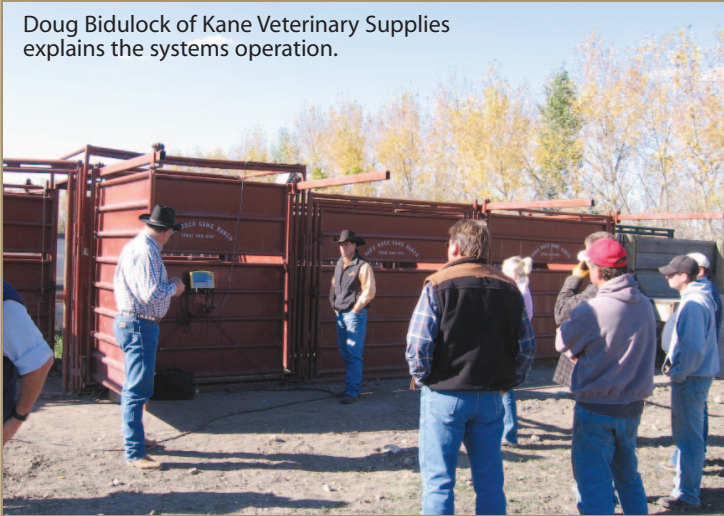


Maximizing the benefits of RFID TECHNOLOGY

Terry Kremeniuk – Executive Director CBA

Doug Bidulock of Kane Veterinary Supplies explains the systems operation.



Radio Frequency Identification (RFID) tags were introduced to the bison industry in January 2005. Dangle tags were no longer for sale by September 2005. Since the introduction of RFID tags about 80,000 have been sold to bison producers. With this critical mass of RFID tags in this relatively small industry, many producers are now evaluating opportunities to maximize the use of this technology in their operations. Producers have been inquiring about the benefits of wand readers, panel readers, wireless technology and software programs.

The Canadian Bison Association with the support of Agriculture and Agri-Food is in the process of developing a traceability strategy for the industry. As part of this process, a pilot project was initiated with the support of Kane Veterinary supplies, Allflex Canada and the Wolverine Bison Company to test the effectiveness of panel readers. A panel reader was installed at the entry of the scale box. Because of the large amount of metal, the panel reader was placed in a wooden frame to improve its effectiveness. When the bison walked into the scale box, the bison's head was close to the panel reader. The load bars and the panel reader were attached to a scale head to record the information including the RFID number and the weight of the animal.

The handling facility configuration provided flexibility to let the bison out or it could be moved into the squeeze chute if further processing was required.

A total of 38 animals were run through the chute. All the bison that had the tags were read. The information was recorded. This information was then transferred to a computer to support further management as required. Information such as date of birth could be transferred to the Canadian Cattle Identification database. If the bison are being exported, the animal identification numbers could be transferred directly to the required export documentation and printed on site and signed by the veterinarian. In addition, the infrastructure of the RFID technology can be used to support tracking of animals that are part of a value chain.

In conversation with other producers who have been acquiring the technology, there are some common threads that have been identified and include:

- RFID tag retention rate is higher than that of the dangle tags with some producers reporting 100% or near 100% retention rates while other producers reporting retention rates in the 85-90% range. The CBA is in discussion with producers and suppliers to determine what issues need to be addressed to ensure near 100% retention rates for all producers.
- The wand readers, although they make the task of identifying the animal much simpler, would be more effective with a larger read range.
- Although wireless readers provide greater flexibility, as they are not constrained by a cord, other electronics in the area could impact transmission of data.
- Whatever system a producer installs, make certain there is technical support when it is necessary.
- Don't expect the system to work flawlessly the first time you use it – these systems are not yet plug-and-play systems but after the first use with RFID numbers recorded there is a significant time saving to process bison.
- If you purchase an animal management software program, make sure you understand what information you plan to collect and how you plan to use it.

Feedback from producers suggests it is important to talk to other producers who are incorporating this technology into their management systems. The system must be configured to maximize the use of your bison handling facilities. Over the longer term these systems will make handling your bison herd less stressful, more efficient and capture information that should contribute to bison herd management.

Note: If you have used wand readers or panel readers or are actively using the Canadian Cattle Identification, website and database, please share your experiences with us. We will share this information with others so that the industry can continuously improve its tracking and tracing infrastructure.

CBA



Doug Bidulock outlines the scale-head capability to Anna Griller.