



Overcoming RFID Ear Tag Readability Challenges

Traceability is generally defined as the ability to follow the movement of an animal or food product through specified stages of production, processing and distribution. In the case of feeder cattle, feedlots contribute to overall beef cattle traceability by tracking the movement of all cattle entering their facilities. This is accomplished by electronically reading the unique Canadian Cattle Identification Agency (CCIA) approved Radio Frequency Identification (RFID) ear tag attached to each animal entering the feedlot, and reporting this “move-in” event into the CCIA database, also known as the Canadian Livestock Tracking System (CLTS).

While CCIA-approved RFID ear tags provide a technical solution for efficiently tracking animal movement, there are occasions when these tags do not perform as expected. This factsheet provides some practical advice on how to manage common challenges and where to go for additional assistance.

Challenges and Solutions

Missing RFID tags

Although all cattle are required to be tagged with a CCIA-approved RFID ear tag prior to leaving their farm of origin, the reality is that some cattle arrive at feedlots without one. This presents a challenge, as feedlots that feed 1,000 or more head annually are required to report the “move-in” of each animal entering the feedlot within seven days.

Solution

Any animal that arrives at a feedlot untagged must be re-tagged with a CCIA-approved RFID ear tag and have its RFID tag number reported to the CLTS within seven days.

There are two events to report in this case. First, the feedlot operator should use the “Replace” feature on the CLTS to report that the animal has been re-tagged by someone not associated with its herd of origin. Second is the “move-in” of the animal into the feedlot. This is accomplished using the “Move-In” feature on the CLTS.

Please note that feedlot operators are also required to re-tag any animals that have lost their RFID tags while within the feedlot. Because feedlots are typically not the animal’s farm of origin, feedlots cannot age verify cattle when re-tagging. In this case, unless the new RFID tag can be cross-referenced with the animal’s original RFID tag, no birth date can be assigned to that animal. As a result, its “age verified” status and birth date information becomes lost.

Best practice

A common practice amongst feedlots is the use of management tags. In this instance, be sure to correlate each animal’s RFID tag number with its management ear tag number within the on-site record-keeping system. That way, if the animal loses its RFID tag and needs to be re-tagged, you can use its management tag to cross-reference its original RFID tag with its replacement tag. This ensures that the birth date linked to the animal’s original RFID tag is brought forward to its new tag.



Unreadable “Dud” RFID tags

Some RFID tags may have damaged components due to manufacturing defects or mishandling, leaving the tag electronically unreadable. Since all feeder cattle arriving at a feedlot must have their RFID tag numbers reported to the CLTS within seven days as part of Alberta’s animal movement tracking requirements, feedlot operators need to find a way to capture each animal’s unique RFID tag number.

Solution

If a RFID tag will not read electronically, try the following:

- It may be an issue with the RFID reader, and not the ear tag. Check to make sure the RFID reader is set to read both half duplex (HDX) and full duplex (FDX) RFID ear tags, as some readers default to only one tag type
- If these steps do not work, place the animal in a squeeze and manually read the RFID tag number
- If an approved RFID tag is not functioning, another tag should be applied to the animal and cross-referenced in the CLTS to the original number. Do not remove the original, defective approved CCIA RFID tag.

Unreadable RFID tags due to poor tag placement

When placed incorrectly within an animal’s ear, a RFID ear tag may not read efficiently, even though it is electronically functional. For example, if incorrectly attached to the very top edge of an animal’s ear, a RFID tag tends to hang sideways as the ear droops down. If this happens, RFID panel readers will likely not be able to read the tag as the animal runs by.

Solution

If a RFID tag is still functional, but does not read efficiently due to poor tag placement, try the following:

- Split off the animal and use a hand-held reader to read the RFID tag number electronically, or
- Catch the animal in a squeeze and manually read the RFID ear tag number.
- Do not place additional RFID tags on the animal or remove its existing RFID tag, even if the tag is not positioned optimally within the animal’s ear.

Where to go for assistance?

For general inquiries regarding the use of either hand-held or panel RFID tag readers, or to submit tag related complaints, please contact your local CCIA Mobile Field Representative (MFR). They are available at auction markets on sale days or accessible through local ARD Field Offices and the Ag-Info Centre at 310-FARM (3276). MRFs are also available to provide free-of-charge on-site advice and technical assistance regarding RFID readers and ‘move-in’ reporting to the CLTS.

CCIA: 1-877-909-2333 or www.canadaid.com
Alberta Agriculture and Rural Development:
310-FARM (3276) or www.agriculture.alberta.ca

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