



SD ANIMAL INDUSTRY BOARD

411 South Fort Street
Pierre, South Dakota 57501-4503
Phone: (605) 773-3321
Fax: (605) 773-5459

Where are we with official identification of cattle in South Dakota?

Dusty Oedekoven, DVM
State Veterinarian and Executive Secretary
South Dakota Animal Industry Board

I like to regularly acquaint my animal health colleagues in other states with the fact that South Dakota is the state with the highest ratio of cattle to people. The practical implication of this otherwise trivial tidbit is that small changes affecting the day to day operations of the cattle industry will have an impact on most of the folks who live here. For example, the April announcement by USDA's Animal and Plant Health Inspection Service (APHIS) that "metal tags" will be phased out as an approved method of official identification in cattle by 2023, has a lot of ranchers concerned about technology, cost, and data, among other things. How did we get here and why is this happening? I don't presume to win over anyone who is staunchly opposed to changes in official identification of cattle, but I'll offer my perspective here.

The South Dakota Animal Industry Board (AIB) has the responsibility of implementing animal health programs in South Dakota, including programs for traceability of livestock. Historically, the Board has worked on behalf of the livestock industries of the state to control and eradicate diseases in cooperation with USDA APHIS and other state and federal agencies. As an example, the state achieved "Class Free" status in the Cooperative Brucellosis Eradication Program in 2000. This was a significant milestone for the state's cattle industry, as it gave the "all clear" signal to other states that the industry was ready to move cattle in interstate commerce without costly and time-consuming market testing of every animal prior to movement. Achieving class free status was no small task! All adult breeding cattle were tested prior to sale, and each cow was officially identified by a metal tag so that an official record could be made in a database. Wisely, the Board discontinued the test requirement, but maintained a useful component of the Brucellosis eradication program: the requirement for all adult cattle to be identified as they change ownership. The most widely adopted official identification used for this purpose in South Dakota today are the orange and silver metal tags, which have been distributed by APHIS at no cost to accredited veterinarians to be applied and recorded when animals change ownership, move interstate, or are tested for a regulated disease.

In 2013, APHIS adopted the federal Animal Disease Traceability (ADT) rule requiring all cattle over 18 months of age to have an official identification tag, which must be listed on Certificates of Veterinary Inspection (CVIs) when they are transported interstate. The CVIs are forwarded by the

issuing veterinarian to the state veterinarian's office to be reviewed for accuracy, shared with the state veterinarian in the state of destination, and filed as can best be accomplished to facilitate traceback of animals if needed. CVIs and animal identification information is specifically protected by rule under public records disclosure laws. ADT fit well with ongoing practices in South Dakota and harmonized the recording of official identification in state animal health offices across the country.

To recap what I've just said, **we currently have a mandatory cattle identification program for adult cattle that change ownership or move interstate, using the official metal tags distributed by USDA, and the information is kept in a state database and is protected from public disclosure.** This may come as a surprise to some folks, but it is standard operating procedure at every auction market across the state. If you sell adult cattle, they will have an identification number associated with your name before it leaves the sale so that, in the event of an animal health event, appropriate traceback of that animal can be made and the economic impact of that event can be limited as much as possible. And someone, either the buyer or the seller, is already paying for that tag to be read at the market.

ID works! Since 2017, six different strains of bovine tuberculosis have been identified in cattle that were found by federal meat inspectors to be infected with the disease. In those instances where official identification was collected along with the sample, animal health officials searched the database and market records, and were able to find herds that were affected, as well as animals that had been associated with the affected cattle. Throughout those findings, USDA has allowed SD to retain "TB free" status, allowing the movement of cattle out of the state without a costly skin test for tb, and the economic impact to the cattle herds in South Dakota were minimized.

As noted earlier, APHIS published in April 2019 a "Factsheet: Advancing Animal Disease Traceability: A Plan to Achieve Electronic Identification in Cattle and Bison." (<https://www.aphis.usda.gov/traceability/downloads/plan-to-achieve-eid-factsheet.pdf>) What the plan amounts to is swapping the metal tags for electronic tags by 2023. Electronic identification (EID) tags are also known as Radio-Frequency Identification (RFID). These "read only" tags carry a chip that sends a number to an electronic reader when the reader is in range. The reader can then upload that number to a computer, smartphone or other device, facilitating accurate and electronic transfer of the information that is already being collected now. The tag has no capacity to store information other than a number. They are not GPS-enabled and can therefore share no location information with the fabled black helicopters.

APHIS' plan for implementing RFID in cattle is not a new rule, and it does not change the scope of the 2013 ADT rule. No additional data will be collected by APHIS or the AIB, and there are no additional classes of cattle to which the ADT rule applies (ie: does not apply to beef feeder cattle). What the plan does is outline a timeline by which the agency will no longer distribute, and eventually will not approve of, metal tags as a form of official identification. And that will be a small, but significant change for the way South Dakota ranchers are now complying with state and federal animal identification regulations.

The plan states that after January 1, 2021, metal tags can no longer be placed as official identification in cattle. And by January 1, 2023, metal tags will not be recognized as official identification at all, meaning that RFID tags will have to be put in eligible cattle moving interstate.

There is a lot of work to do in SD to be ready to meet these timelines. At this time not many livestock auction markets are equipped with electronic readers necessary to efficiently read the 15-digit RFID numbers, which are also printed visually on the outside of the small button tags. In addition, there is confusion about which RFID technology should be used. Low frequency RFID has been in use for many years and most of the tags approved by APHIS for official use in cattle are low frequency. But high frequency tags, which allow for electronic reading from a greater distance, appears to be a promising emerging technology. Unfortunately, a reader that will read both low and high frequency chips does not exist. APHIS isn't saying which frequency should be used, instead leaving it for the "industry to determine" which will work best. It appears that, for the moment, low frequency tags will be more widely accepted until the newer high frequency tags are more widely recognized.

Who will pay for the official RFID tags? No smoke and mirrors here folks: it'll be the cattle industry participants, who are also benefitting from the traceability information that is available to animal health officials. If you sell breeding cows or cull cows to be moved out of state, they must now have a tag to do so. Either you or the buyer are paying the cost to place and/or record the number on a CVI. That likely won't change when RFID tags replace metal tags. APHIS has discussed a cost-share program, but I imagine those funds won't be sufficient to help everyone equally, and won't be around for long, so it may be advisable to pencil it in as a cost of doing business. States and federal dollars are used to support the infrastructure for databases, data entry and of course, using the information to follow-up on disease issues that are important to the economic viability of the animal agriculture industry.

South Dakota has not been a change-leader in animal identification, probably because existing tools have worked well in official disease control programs, and perhaps due to the frugal nature of our citizens and state government. But now that the writing is on the wall (or USDA Factsheet?), I think it's time to recognize that the swap from metal to RFID tags is a relatively simple concept; we're already tagging cattle and recording tag numbers in a database. The new technology will take some work to implement, but it appears that it may be time for the change to happen.

More information about animal identification in South Dakota can be found at www.aib.sd.gov.