Electronic Identification Boluses

What is an Electronic Identification Bolus?

An electronic identification bolus is a plastic or ceramic capsule that contains a radio frequency transmitter. The transmitter contains a unique number that identifies the animal and its origination. The transmitter may be scanned when an animal moves to another location, such as to a feed yard or harvesting facility. The movement can be recorded electronically and stored on a computer database. The bolus is orally administered to livestock and is retained in the forestomach.

Is it Safe for Animals?

- No negative health effects in lambs or cattle
- Does not affect rate of gain or fattening performance
- No harmful effects on the wall of the stomach, where the bolus is retained.

Does it Work?

- The bolus has been tested in both cattle and sheep.
- Five superior boluses, manufactured by major animal identification organizations, are retained 100% of the time.
- The conventional ear tagging method is retained less than 90% of the time.

Why Use the Electronic Identification Bolus?

When mad cow disease was discovered in the United States, it was important to trace the animal’s movement and determine how many animals had potentially been exposed to the disease. This traceback process took 44 to 74 days to complete. The U.S. export market was crippled for months and the meat industry suffered.

A new program, the National Animal Identification System (NAIS), was developed by the USDA to register every premise that houses livestock and to identify all livestock animals. The system relies on electronic identification of animals. The identification methods are still being researched and implemented, but the bolus is demonstrating to be a viable solution. Its 100% retention rate is far superior to conventional methods.

NAIS sets a 48-hour traceback goal. Colorado State University researchers built a model of the traceback system that reflected that state’s cattle inventory. The model completed traceback in 215 seconds.

The electronic identification bolus can play a very important role in safeguarding America’s meat and livestock industry. A study of a bovine tuberculosis outbreak concluded that...
accurate and accessible recordkeeping of individually identified animals is the most important factor in completed a successful traceback. Animal health issues have a great impact on the export markets and the United States’ economy. The electronic identification bolus, as part of the National Animal Identification System, could preserve the integrity and trust of the United States’ livestock industry.

References


