Utilizing Low Frequency Tags for Flock Management and Official ID
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Benefits of Utilizing EID as a Management Tool

- Provides a 2\textsuperscript{nd} ID
- Provides a faster way to collect ID of animals being worked
- Provides an electronic version vs notebook paper
- Saves labor and time
Next Level is RFID

- RFID eliminates the need of “line of sight” reading
- Able to read through tissue
- Able to read though animal is moving and “unrestrained”
- Data collection can be fully automated
RFID – Passive vs. Active

- Passive RFID does not have an internal battery
- Active RFID are powered by a battery
Animal RFID – Low Frequency Form Factors

AIR COIL

- Air coil antennas are over molded for primarily two piece tags.

![Image of air coil antennas with labels H.D.X. and F.D.X.]

Chip & Coil size are different.
Animal RFID – Low Frequency Form Factors

AIR COIL

• Examples of Air Coil tags for small ruminants
Animal RFID – Low Frequency Form Factors

IMPLANTS

• Small Ruminant Livestock Tags –
  Implants are over molded or inserted in the male stem
Utilizing EID at the Producer level

- For producers that manage their animals individually
  - EID provides more accurate data on per ewe/lamb basis
  - Cuts labor time
  - Ties in with software /scales and other management tools to increase speed and accuracy
  - Allows ease of individual data collection for growth, wool and other traits.
Utilizing RFID for Official Tags

• In addition to all the benefits that RFID can provide as a management tool, the tags can also meet the requirements of the Scrapie Program.
How to start using RFID tags as your Scrapie Tag

• First, you must obtain a Flock ID and a National Premise Number (PIN) or Location Identification Number (LID). Get PIN/LID from your State Animal Health office, then call 866-USDA-Tag (866-873-2824) to get your Flock ID and to have PIN/LID linked to your Flock ID.

• The USDA 840 official numbers will be linked to your Flock and Premise number for traceability.

• Then you purchase the 840 Scrapie tags from an approved provider.
How to Purchase 840 Scrapie Tags/Implants

Contact an approved provider listed on the APHIS Sheep and Goat Identification web page and give the provider your Flock ID and PIN/LID.
Disclaimer

• The systems, tags and pictures being shown are examples and are not endorsed by USDA.
EID and Readers are accessories to Software

- EID and readers rely solely on the software that drives the animal management system.
- Simple spreadsheets like Windows Excel to commercially available herd software are needed to manage the animals at the ranch level.
- If EID is used as an official ID, readers are not needed at the ranch level for a producer to participate.
Hand Held Accessories
Data Collection
Low Frequency RFID can be used with different automation products.
EID can be incorporated into Handling Systems
High Flow Systems
Global Official ID / Traceability

- What Countries have Official ID Programs?
- Australia /NZ Auction Markets
- Database (the key to traceability)
- Videos
<table>
<thead>
<tr>
<th>Country or Group</th>
<th>Official ID?</th>
<th>VID</th>
<th>EID</th>
<th>Full Traceability</th>
<th>Breeding and Export</th>
<th>Notes</th>
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Software is the key to traceability

• Multiple software companies can be used but need to be accessible to all parties
• Producers and packers are the book ends, markets and other places are “sightings”
Collaboration Drives Ag Vic

https://www.youtube.com/watch?v=3GHCNcBlKdY
USA Traceability

- WLIC – [https://wiid.org/](https://wiid.org/)
- TraceFirst -[https://www.tracefirst.com/](https://www.tracefirst.com/)

IMI Global – [https://www.imiglobal.com/](https://www.imiglobal.com/)
Thank You