



# RFID ON-FARM AND ADT

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# WHY GO THERE?

Faster data gathering

More accurate data

Saves Labor

Ability to intensively manage larger flocks

Follow animals through the supply chain

Disease Traceability



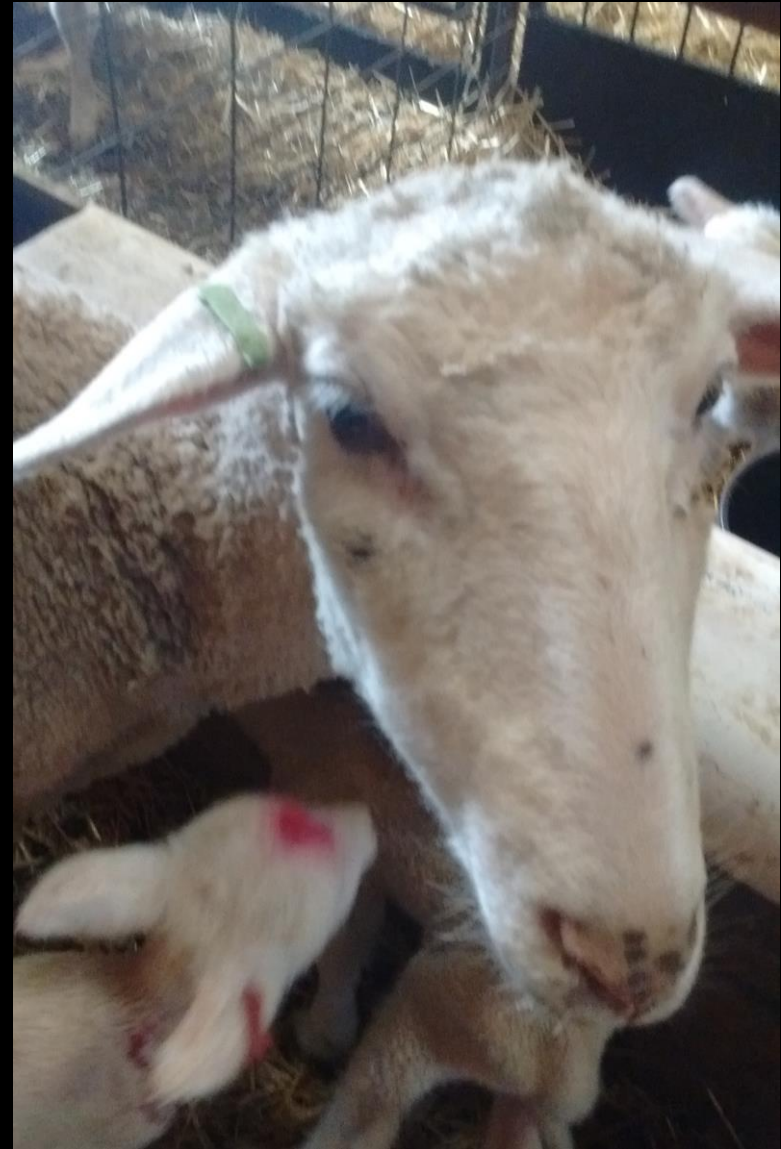
# COMPONENTS

RFID Device

Ear tag

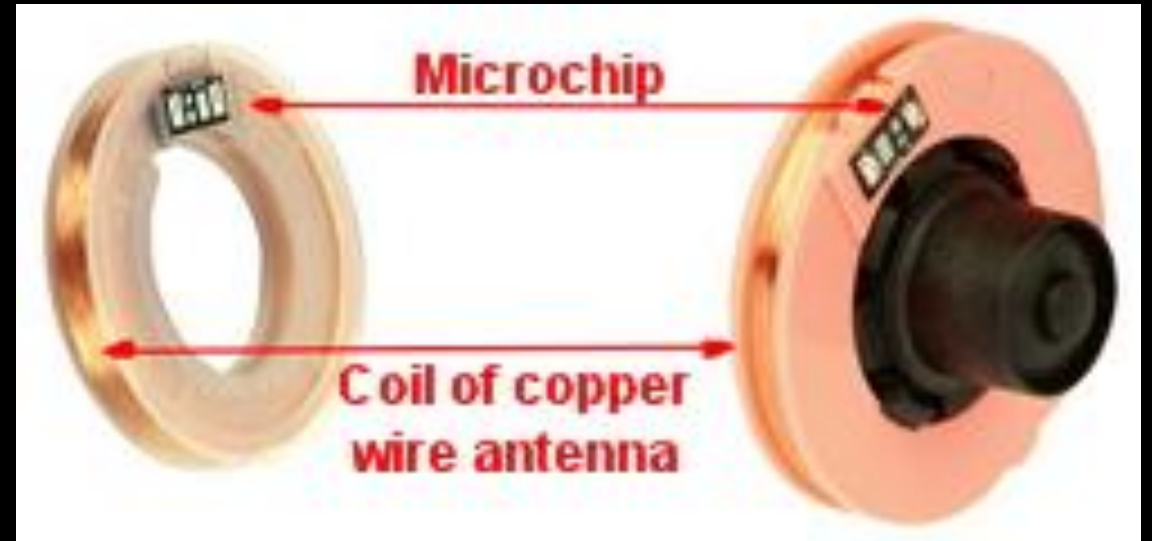
Implant

Bolus





# TAG TYPES



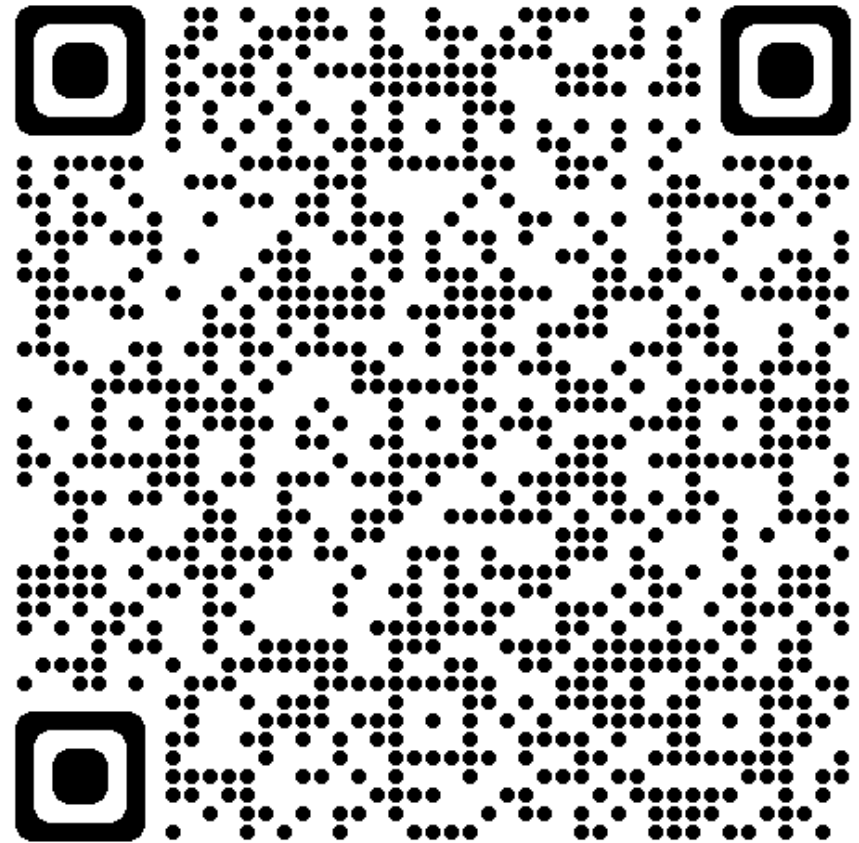
# RFID SCRAPIE APPROVED

- Also Referred to as RFID 840 tag
- Must have a Scrapie Flock Number
- Must have a National Premise Number
- The 840 Scrapie tag will have the 15 digit RFID number printed on it
- The RFID number must start with 840
- The RFID number will be linked to your Scrapie Flock Number in USDA
- Producer cannot choose what RFID numbers they get.



# PURCHASING 840 RFID TAGS

- Must order through an approved vendor
- QR to the right will lead you to the USDA
- Must supply your Scrapie Flock Number
- Must supply your national Premise Number or Location Identification Number
- The Flock Number and Premise Number must be linked together by the USDA databases – can take some time
- Several colors possible but generally not Blue
- You can call 866-873-2824 (866-USDA-TAG) to obtain identification numbers.



# COMPONENTS

- EID Readers
  - Stick Readers
  - Data loggers
  - Panel Readers





# COMPONENTS



Sorters



Panel Readers



Scales

# COMPONENTS

- **Software**
  - Can be basic to complete flock management
  - Good software makes the data collected more valuable.



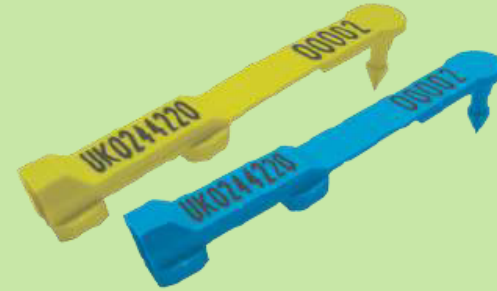


# TRANSITION OF THE UK TO EID

## EID tag introduction in the UK

### 2010

- **Breeding** stock: 1 x EID, 1 x visual
- Bolus or ear tag – vast majority ear tags
- Under 12 months – 1 x visual tag, flock mark only



### 2015

- Slaughter tags upgraded to EID (industry pressure)



Goats – can follow above or 2 visual tags (but no export)



# UK REGULATIONS

## Farm records / regulations

On farm recording:

- Tags allocated, animals bought / sold / deaths / medicine book / annual inventory. Records can be inspected at any point.

External reporting:

- Only movements need to be reported.
- Paper (20%) or online (80%)
- Individual numbers (except slaughter lambs – batch optional).
- Critical control points (markets) can do reading.

# UK MARKETS

## Livestock markets

- Two methods of reading – stick reader or race reader
- Data capture critical – not just tags but lots/buyer/seller/price/movement
- Newline Ltd supply software solutions to majority of UK markets





# UK AUCTION MARKETS

## Auction markets in the UK

### **Race Reader**

Market A : total sheep read 696,444. Sales 1,000 to 25,000 head.

Market B : total sheep read 762,527. Sales 1,000 to 39,000 head.

Market C : total sheep read 646,163. Sales 1,000 to 10,000 head.





# UK AUCTION MARKETS

## Auction markets in the UK

### Stick Reading

Market D : total sheep read 486,189. Sales from 1,000 to 11,000 head.

Market E : total sheep read 255,565. Sales from 1,000 to 6,000 head.



# CANADIAN EID TRANSITION

## Canada triggers / timeline

- 1999 – Mandatory cattle ID – barcode tags
  - 2003 – BSE -> Mandatory EID for cattle
  - 2004 – Mandatory visual sheep tags
  - 2012 – Mandatory EID for sheep (single tag)
- 
- Only country mandating EID in cattle **and** sheep (?)
  - Approach to show benefits before legislation





# CANADIAN REGULATIONS

## Current regulations

### **Canadian Sheep Identification Program**

- Canadian Cattle Identification Agency (CCIA) is administrator
- All sheep must be tagged before leaving farm of origin.
- Sheep moving onto farm, tag replacements, deaths reported.
- More recording regulations in the pipe-line.





A large flock of sheep is shown in a field. Most of the sheep are white, but one sheep in the center is black. The sheep are packed closely together, and the background is a soft-focus field.

# HOW CAN WE USE THE DATA?

- Selecting poor performing ewes
- Selecting top producing ewes for maternal line
- Monitoring death losses
- Tracking antibiotic use for natural lamb production
- Tracking daily gains in finishing lambs to determine time to market
- Assessing ram effect on finishing ADG
- Transferring data to NSIP for EBV calculations
- Selecting replacement ewe lambs
- Conducting on-farm trials

## Dam Performance Report Lambs DoB between 1/1/2016 and 12/31/2017, filtered by females, current stock, Birth Year (2014, 2013, 2012, 2011 and 2010)

Owner: Dan Persons

Holding Number: Persons

Holding Name: Rafter P Ranch

Date Printed: 3/5/2018

No. of lambs born	Avg. born/ year	Lambs weaned	Fostered		Sold and/or Slaughtered				Retained lambs		All sold/slaughtered/retained			Daily live weight gain of lambs			Number of lambs that died			
			On	Off	No.	Total Sale/ Slaughter Price (net)	Avg. Sale/ Slaughter Price (net)	Avg. days on farm	No.	Total value of lambs retained	No.	Total value	Avg. value	Birth to weaning	Weaning to sale/slaughter /retention	Birth to sale/slaughter /retention	Before tagging	Tagging to weaning	After weaning	Total
Tag: 0030142 82067																				
11	5.50	5	0	2	1	\$100.00	\$100.00	174	4	\$400.00	5	\$500.00	\$100.00	0.54	0.55	0.77	0	4	0	4
Tag: 1000 05200																				
11	5.50	5	0	4	1	\$100.00	\$100.00	1	3	\$300.00	4	\$400.00	\$100.00	0.69			2	0	1	0
Tag: 1000 03373																				
10	5.00	6	0	3	3	\$300.00	\$100.00	191	3	\$300.00	6	\$600.00	\$100.00	0.70	0.70	0.67	0	1	0	1
Tag: 0031269 58983																				
9	4.50	6	0	0	2	\$200.00	\$100.00	152	3	\$300.00	5	\$500.00	\$100.00	0.71	0.71	0.70	0	3	1	4
Tag: 1000 01022																				
9	4.50	4	0	2	2	\$200.00	\$100.00	209	2	\$200.00	4	\$400.00	\$100.00	0.60	0.60	0.59	1	2	0	0
Tag: 1000 05616																				
9	4.50	5	0	3	2	\$200.00	\$100.00	181	2	\$200.00	4	\$400.00	\$100.00	0.51	0.57	0.68	0	1	1	2
Tag: 0031269 57685																				
8	4.00	4	0	3	2	\$200.00	\$100.00	176	2	\$200.00	4	\$400.00	\$100.00	0.60	0.60	0.66	0	1	0	0
Tag: 0031269 58337																				
8	4.00	5	0	3	1	\$100.00	\$100.00	185	4	\$400.00	5	\$500.00	\$100.00	0.67	0.74	0.73	0	0	0	0
Tag: 0031269 58396																				
8	4.00	6	0	2	2	\$200.00	\$100.00	176	4	\$400.00	6	\$600.00	\$100.00	0.60	0.76	0.69	0	0	0	0
Tag: 1000 05461																				
8	4.00	6	0	1	1	\$100.00	\$100.00	220	4	\$400.00	5	\$500.00	\$100.00	0.75	0.75	0.60	0	1	1	0



**Daily Live Weight Gain Sire  
Summary for home bred stock  
filtered by Management Group (barn  
1 final)**

Owner: Dan Persons  
Holding Number: Persons  
Holding Name: Rafter P Ranch  
**Date Printed: 6/9/2017**

Sire tag number		Management Tag	Total Number of Animals	Average Days	Average DLWG
0031346	06023	6005	3	120	0.845
0031346	06079		13	121	0.832
052282	GM 1		10	122	0.798
NDS0796	0589	0589	15	121	0.792
0031269	66976	15106	12	121	0.773
MEIDL	00001		11	121	0.762
0031269	59081	6317	31	124	0.745
052282	HR		44	123	0.737
KUSS	02015		18	122	0.737
052282	SM		7	120	0.702





# COUNTING

# STOCK RECORDER WITH ANTENNA PANEL





# WEIGHING WITH ADG



# WEIGHING AND SORTING



# HOW DO YOU PAY FOR IT?

- 100 ewes X .1 lamb increase per ewe = 10 lambs per year
- 10 lambs X \$200 = \$2000
- .05 increase in ADG X 125 lbs = 12 days feed
- 12 days X \$0.30/day X 150 lambs = \$540 lamb feed savings
- Culling poor performers
- Reduce Death loss by 3%
- 150 lambs X .03 X 200 = \$900
- Market lambs at the right time
- Save labor in record keeping



