

# **TRANSITIONING TO ELECTRONIC ID: PATHWAYS & OBSTACLES FOR THE US SHEEP INDUSTRY**

Cindy Wolf

# APHIS Seizes Nearly a Ton of Illegal Animal Products from China Found in New York City

Published: Jan 13, 2022

Print



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Washington, D.C. – January 13, 2022 – During the past three months, from October to December, the Animal and Plant Health Inspection Service's (APHIS) Smuggling Interdiction and Trade Compliance (SITC) program seized and destroyed more than 1,900 pounds of prohibited pork, poultry, and ruminant products from New York City-area retailers. These items were sourced from China, lacked required import permits and health certificates, and therefore are considered a risk of introducing invasive plant and animal pests and diseases into the United States. SITC anti-smuggling efforts prevent the establishment of invasive plant and animal pests and diseases, while maintaining the safety of our ecosystems and natural resources. The recent efforts to safeguard American agriculture represent a continued collaboration between APHIS, USDA Food Safety and Inspection Service, U.S. Customs and Border Protection, and local New York City officials.

APHIS is concerned about these prohibited products because China is a country affected by African swine fever (ASF), Classical swine fever, Newcastle disease, Foot-and-mouth disease, highly pathogenic avian influenza and swine vesicular disease. ASF is of particular concern because the highly contagious and deadly viral disease that affects both domestic and feral swine of all ages has recently spread throughout China and Asia, as well as within parts of the European Union. Most recently, ASF was confirmed in pigs in the Dominican Republic and Haiti.

U.S. Customs had a beef with a passenger who flew into JFK airport with illegal food from China, authorities said Thursday.



U. S. Customs and Border Protection seized more than 20 lbs. of pork and and edible bird's nests from a passenger who came in from China. (U. S. Customs and Border Protection)



Why do we need a path forward ?

Will we see a Foreign Animal Disease (FAD) in the US in our lifetime?



ASI assembled a team of knowledgeable subject matter experts from the sheep & goat industries to examine what might be needed for the industry to move to EID use in real-time ADT. The group “met” via zoom meetings for past 2 years.

Their purpose:

- To evaluate USDA repeated indications that they plan to adopt **a real time animal traceability system for use in economically significant animal disease outbreaks**; the following sentence appears on the USDA Sheep and Goat identification page:
  - “APHIS is working with sheep and goat organizations to develop a plan for transitioning toward electronic identification to improve our nation’s ability to quickly trace exposed and diseased animals in the event of an outbreak. “
- To address the concern that absent an industry plan the USDA may at some future time impose a “one-size-fits-all” plan of their own.

## Purpose of the EID Working Group

- Chairs:
  - Jim Logan, DVM – WY State Veterinarian; Chair, ASI Animal Health Cmte.
  - Cindy Wolf, DVM – Univ. of MN College of Vet. Med, Ret.; Chair, ASI. Animal Health Cmte
- Members:
  - Pierce Bennett – Livestock Marketing Association
  - Benny Cox – Sheep & Goat Sales Manager for Producers Livestock Auction; Past President, ASI
  - Anita Dahnke – Exec. Dir., AGF
  - Mike Fletcher – Shearwell Electronic ID Industry Representative
  - Travis Hoffman – NDSU Sheep & Goat Extension
  - Brandon Manning – Allflex Electronic ID Industry Representative
  - Jimmy Parker – Sheep producer; Past Chair, ASI PERC Council
  - Dan Persons – Shearwell Electronic ID Industry Representative
  - Reid Redden, PhD – Texas A&M AgriLife Sheep and Goat Extension
  - Stan Potratz – Premier1 Electronic ID Industry Representative
  - Joan Rowe, DVM – ADGA, Professor, Pop. Health & Reproduction, UC Davis
  - Susan Schoenian, DVM – Western MD Sheep & Goat Program/Research & Education Ctr.
  - Stacey Schwabenlander, DVM – MN Board of Animal Health, Traceability Sr. Staff Veterinarian
  - Lisa Shepard – ADGA
  - ASI Staff: Amy Hendrickson & Erica Sanko
- External Subject Matter Experts:
  - Dr. Diane Sutton – USDA APHIS
  - Dr. Stephanie Brault – USDA APHIS

## Members of the EID Working Group

## Current ID and Traceability in Sheep

- The US Sheep Industry has served as a leader in Animal ID and Traceability.
- The scrapie visual tag/ID system has been very successful in helping to eradicate Scrapie from the US.
- Unfortunately, the system used for Scrapie is not capable of providing real time traceability **necessary** in the event of a rapidly spreading disease such as Foot and Mouth Disease (FMD), Rift Valley Fever or Peste des petits ruminants (PPR).
- Real time traceability is essential to ensure continuity of business for sheep producers. LF-RFID tags are currently the best option for sheep industry. Other small ruminants may benefit from flexibility in EID choice.



Enables quick and effective response to FAD



Best bet for quickest return to business for producers and supporting businesses



Tackle this challenge of designing and executing an ADT system that relies on EID by:

1. getting industry buy-in,
2. collaborative development and
3. efficacy testing via pilot projects & regional implementation



Both sheep and goat industries have been developing a plan and embarked on pilot projects specific to auction markets

Anticipate future  
use of  
Electronic ID (EID)  
in Animal Disease  
Traceability (ADT)

# How Could EID Help?

There are benefits that EID offers that Visual Tags do not.

For Disease Traceability

- 1) Tags can be read much more quickly and easily. EID reading is labor-saving!
- 2) Accurate Data, human error is greatly reduced.
- 3) Rapid transmission of data.
- 4) Sanitary - not necessary to touch the animal to read the tag, reducing risk of mechanical transmission of pathogens.

The SOONER animals are traced, the SOONER Animal Health Officials can make decisions.  
Remember, Goal is Continuity of Business. - We want producers to be able to go back to producing.



# Shearwell Data

Animal Identification  
& Management Systems

## Welcome to Shearwell USA

Working to help the livestock farmer

### USDA approves Shearwell SET tag!

The USDA has approved the Shearwell SET tag for its National Scrapie Eradication Program. This tag, with its 99.5% retention rate, is now approved as an official tag for use with sheep, goats, deer, elk, alpacas and llamas.

Now farmers in the US can also benefit from our SET tags, the best-selling sheep tags in Britain and Canada.

These are available as official USDA tags in yellow, white, green, spearmint, orange, pink, purple, brown, grey, black and red. Management tags can be any of these colors with the additional option of blue.



### Available Colors



Applicator Order  
Form

Allflex



Available Electronic ID Tags in  
US suitable for sheep & goats

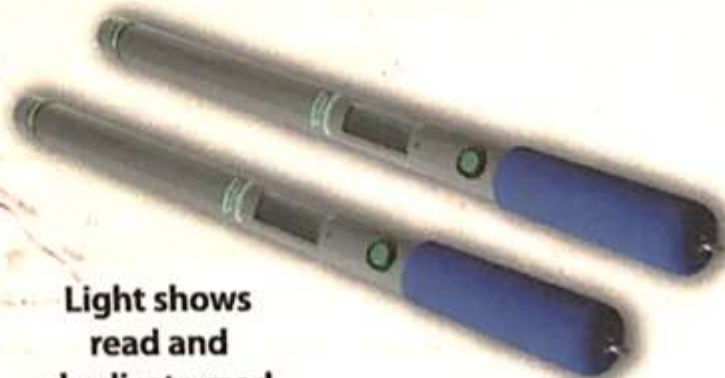
Not all are currently  
approved as official USDA  
tags, yet.



Premier1Supplies

# Makes light work of Reading & Recording

Shearwell's Stick Reader (wand) comes complete with everything you'll need to record, store and forward your animal IDs



Light shows  
read and  
duplicate read

- Rugged, and built for a hard day's work.
- Easy, single-button operation with a back lit display
- Read range of up to 20cm
- Store up to 16,000 tag numbers into up to 26 groups
- Read all EID (RFID) devices available for livestock – both HDX and FDX
- Simply point and scan – the reader will capture and store the tag number
- Data can be transferred from the stick by Bluetooth to a PC, a Mac, a Mobile Printer or to our apps (available for Apple and Android devices)



\* Apple and iPhone are trademarks of Apple Inc. Android is a trademarks of Google Inc.

mersey, TA24 7AS

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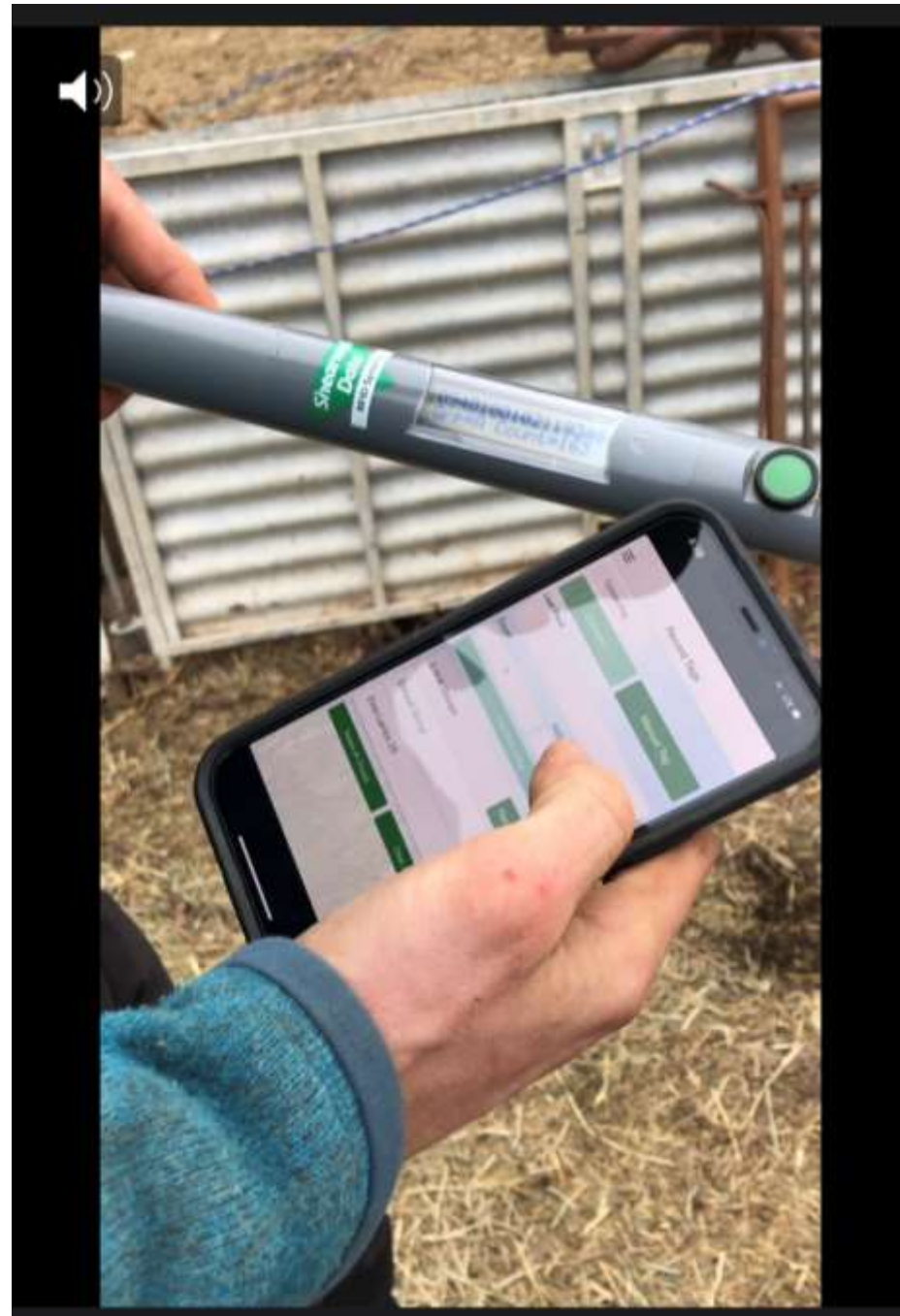
**OUTSIDE UK** Please see side panel



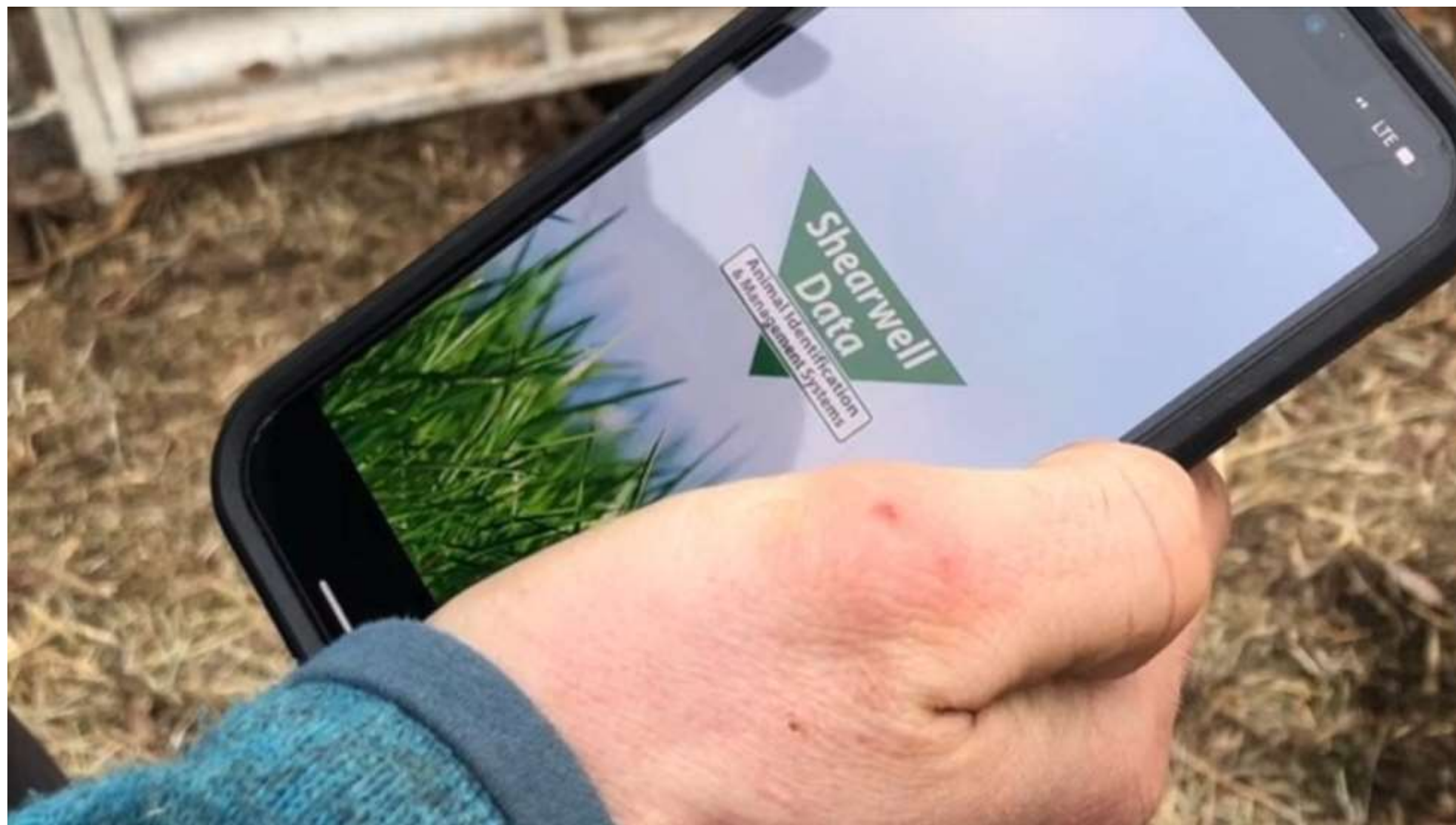
Scanning with EID  
Wand = capturing  
the Official ID



Wand reader  
captures the EID  
numbers rapidly  
and using an APP  
can send to  
wherever you'd  
like







List downloaded  
from wand chute  
side

Group: Flock Inventory Mar 21

940100102120041.0

940100102120077.0

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940100102120012.0

840003001424643.0

940100102120067.0

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940100102120066.0

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940100102117047.0



- Rapidly read EID with wand or panel when sheep leave or come to our farm/ranch and eventually markets could be our industry's guardian in the face of today's numerous threats

# Will Producers Voluntarily Transition to EID?

Possibly, yes. Transition will take time.

- Most Trading Partners have Mandatory ID, most use EID.
- At ASI 2021 Convention, a Panel of Producers concluded that despite learning curve and some management changes, the time savings and the data collected/used improved their operation.
- Emerging producers are exploring and adopting the technology.



EID tags cost  
approx. \$0.90/tag,  
useful visual tags can  
be cheaper  $\geq$ \$0.80

Reader costs vary  
but they last for  
years

Producers who have implemented EID, on large or small operations have said the **time & labor savings** are a huge benefit.

Production Records where accuracy of EID can improve profit:

- Lambing records
- Weaning Weight & Age; Market Weight & Age
- Pounds of lamb weaned
- Fleece weight and micron
- Culling lists and reasons
- Death Losses & Reasons

Medical Records:

- Records for disease control
- Records of Drug Administration & Withdrawal time

Genetic Records, i.e.:

- Inverted Eyelids, Parrot Mouth, Vaginal Prolapse

## EID WG Conclusions

### **USDA Must Provide Substantial Support for Real-time Animal Traceability of Sheep & Goats in the U.S.**

- The requirements on the industry for the recording of animal movements should not be cumbersome.
- A phased-in approach to start in one state/region and make a system fully functional before all states must make the change.
- All ages and classes of sheep be identified with EID tags except for single source lots travelling directly from farm of origin to slaughter or animals hauled for other purposes under the complete control of the owner without change of ownership.
- Elevate education and outreach to producers to raise the level of understanding for and compliance with NSEP traceability and recordkeeping requirements.

# EID WG Question to wrestle with

## USDA Must Provide Substantial Support for Real-time Animal Traceability of Sheep & Goats in the U.S.

- The requirements on the industry for the recording of animal movements should not be cumbersome.
- All ages and classes of sheep be identified with EID tags except for single source lots travelling directly from farm of origin
- Q. could a pen of single source(1 ranch)lambs in feedlot that is not on birth ranch be considered one group and go to slaughter without individual ID? My answer is YES

# Significant Future Challenges

Key Point: For a Successful Transition it cannot be just producers that embrace EID, markets, feedlots, packing plants must incorporate EID into operations.

Is it time to change the regulation to requiring sheep to be tagged prior to entering commerce? What about goats?

**Government cost sharing will be needed for infrastructure development including reader installation and modifications (alleyways, pens, software) necessary to achieve day-to-day function.**

**Producer incentives such as cost sharing of EID devices will aid a transition from NSEP to ADT and effect greater levels of compliance.**



# EID WG Conclusions

Overall, the EID WG Concludes

- **Industry Should Embrace the Development of a Plan to transition to EID**
  - It would make markets more efficient, and
  - Would be safer for people and animals
  - Would better protect our industry from FAD and be more competitive

Policy Needed that to Support Transition

USDA Must Help by

- Providing Producer Assistance for Transition
- Providing Infrastructure Assistance to Markets
  - Most markets will need retrofitting to accommodate EID.
  - Without this investment, EID transition will be unsuccessful.

# Educational Outreach Campaign needed when ADT is committed to use

- Campaign best if collaborative-federal, state, industry
- Consistent message
- Convince Producers of all walks and allied businesses that FAD can happen in US
- Communicate Value of Readiness



# Survey on Sheep Identification & Animal Disease Traceability Systems Report

Compiled by the  
American Sheep Industry Association

June 1, 2021

Figure 8. Identification Methods

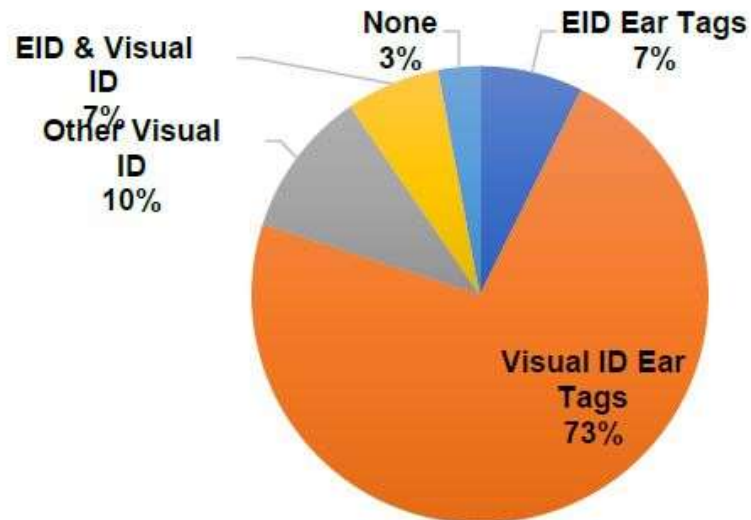
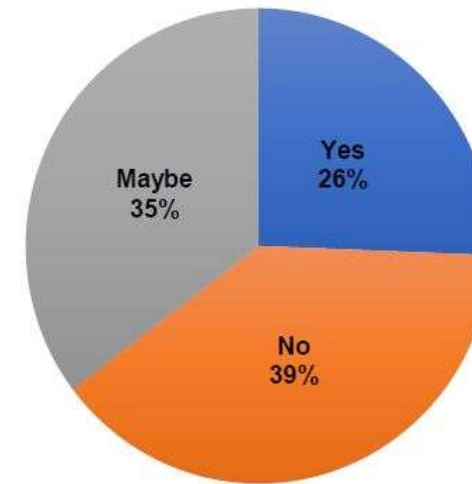


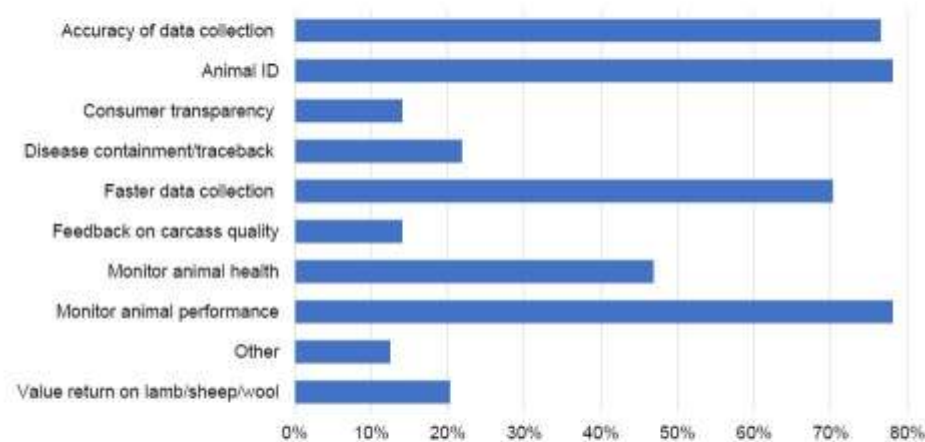
Figure 12. Measuring Willingness for a National Mandatory Electronic Animal ID Disease Traceability System



Based on 560 respondents

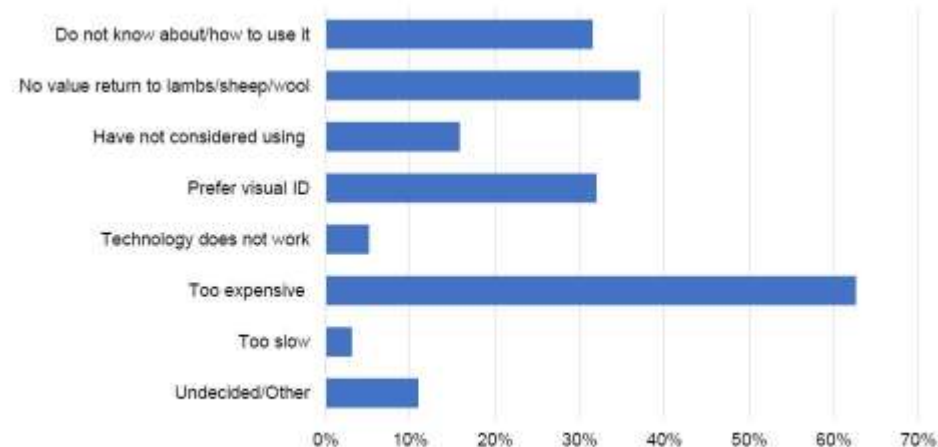
Figure 9 details the reasons why respondents currently use electronic ID in their flocks. The primary reasons for using electronic ID are the ability to identify animals and track animal performance (78 percent), accuracy of data collection (77 percent), faster collection of data (70 percent), to monitor animal health (47 percent), animal disease containment and traceback (22 percent), and because it adds value to their sheep, lambs, and/or wool (20 percent).

**Figure 9. Reasons for Using Electronic Identification**



**Figure 10. Reasons for *Not* Using Electronic Identification**

Figure 10 details the reasons why respondents do not use electronic ID. Over two-thirds stated the primary reason is expense of compared to visual ID. Other reasons include not providing value to their lambs/sheep/wool (37 percent), a preference for visual ID (32 percent), lack of familiarity with electronic ID (19 percent). Of those respondents that do not use electronic ID, 43 percent considered using electronic ID with some currently in process of transitioning to electronic ID.



**Figure 13. Measuring Willingness for a National Mandatory Electronic Animal ID Disease Traceability System by ASI Region**

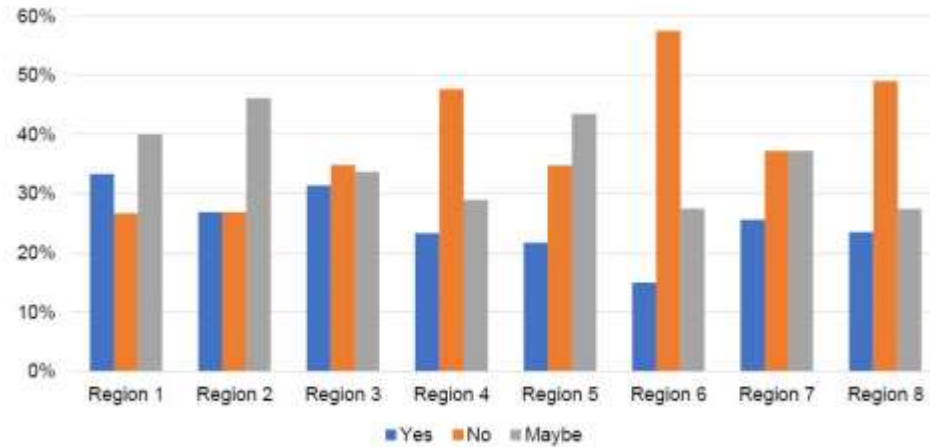
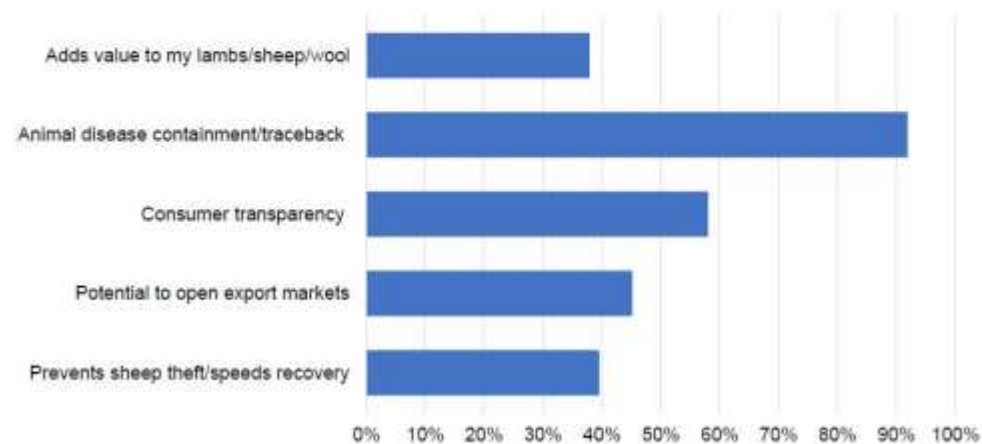


Figure 14 details the reasons why respondents support the development of a mandatory national electronic animal ID disease and traceability system. The primary reasons for supporting include animal disease containment and response, consumer transparency, and potential to open export markets for American lamb and wool.

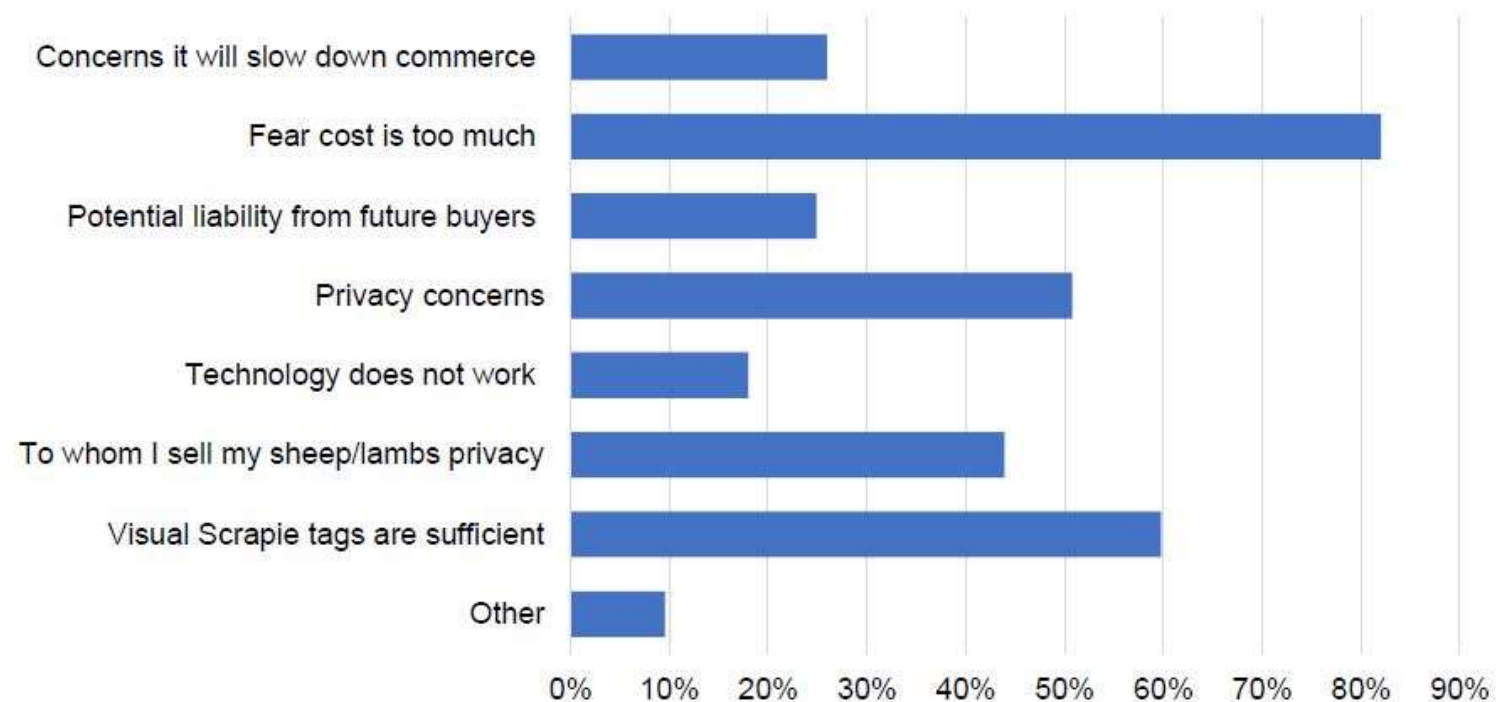
**Figure 14. Reasons for Supporting a National Mandatory Electronic Animal ID Disease Traceability System**





Respondents that are not in favor of a mandatory electronic animal ID disease traceability system cited concerns regarding the cost and who is going to pay for the program (82 percent), followed by scrapie tags being sufficient (60 percent), concerns over data confidentiality (51 percent), who they sell sheep/lambs should be private (44 percent), it will slow down commerce (26 percent), and that it will lead to potential liability from future buyers (25 percent) (Figure 15). Note that the 'Other' respondents generally were supplemented by comments regarding opposition to mandatory government programs.

**Figure 15. Reasons for Opposing a National Mandatory Electronic Animal ID Disease Traceability System**



# Auction Market Pilot Project

- ASI-managed pilot project for sheep
- Funded by USDA & ASI
- Essential partner - Delta Saleyards' owners Holly & Dan Varner
- Significant In-kind contributions by CDA, Allflex, CWGA, Etchart Livestock, ASI staff & AH co-chairs
- Goal-to determine how to make EID tags and data transmission work at the speed of commerce live in a real auction barn



# 'The Worker Bees' to date



Livestock Intelligence™

Merck Animal Health Intelligence

*Brandon Manning  
&  
Steve Gilsdorf*

*Erica Sanko & Amy Hendrickson  
at ASI*



**COLORADO**  
Department of Agriculture  
Animal Health Division

Colorado State Veterinarian's Office

*Ed Kline  
&  
Dr. Dan Love*



# Necessary Problem solving

- Have faced numerous challenges
- **First** requirement is a want-to-make-it-work attitude, i.e. being progressive
- **Second** –physical set up needs-single file sheep-sized alley which is lacking in many mixed-species auction yards, multi directional
- **Third**-placement of panel reader to read into sale ring and potentially back out

A hand-drawn diagram of a rectangular gate structure. The diagram shows a central vertical rectangle with a width of 16" and a height of 32". To the left of the rectangle is a horizontal line labeled "GATE A". Above the rectangle is a diagonal line labeled "GATE C". To the right of the rectangle is a vertical line with a horizontal dashed line labeled "20" and a vertical arrow pointing downwards. The diagram is drawn on a grid background.







# Installation of New Gates & Reader

# Necessary Problem solving

- Have faced numerous challenges
- **First** requirement is a want-to-make-it-work attitude, i.e. being progressive
- **Second** –physical set up needs-single file sheep-sized alley which is lacking in many mixed-species auction yards, multi directional
- **Third**-placement of panel reader to read into sale ring and potentially back out
- **Fourth**-will sale barn auction software jive with EID data....software and hardware updates may be required to enable data capture
- **Fifth**-Supply, labor & public health issues to execute retrofit and update



## Pilot Project Next Steps

Auction software & hardware update

EID Tag sheep at Etchart Livestock and other sale sheep

Run & read them through 'mock' auction at Delta Saleyards

Tweak system until ideal function

Goal graduate to EID use in sheep at Delta Saleyards live sheep & goat auction on a regular basis

Expected completion date-late Spring 2022





# LOOKING INTO THE FUTURE

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# Will we need to use EID?

One day...

Better to have a plan & be ready



# How to achieve Compliance

- User friendly
- Business benefits
- Animal friendly
- Flexible choices as not a one shoe fits all situations
- Design for main scenarios
- Tweak later



# Learning from other countries:

Subsidy necessary

Mandate necessary

Education necessary

Benefits: FAD preparedness, lamb meat marketing expectation & advantage, increased productivity→profitability

Use sheep-friendly tag

Recording done at movement





- Put plan on a shelf for if/when needed
- Identify components needed to execute
- Still need to work on lamb packing plant tracking and other aspects







## ACKNOWLEDGEMENT

The ASI wishes to express its appreciation to the volunteers who comprised the EID Working Group. Their dedication and willingness to consider the future needs of the sheep industry are of immense value to the industry. As was proven in the UK in 2001, a serious animal health event can happen anytime that has devastating effects on livestock agriculture. Animal disease traceability was a key factor in arresting the spread of the disease. The US sheep industry is ahead of the curve in that it already employs a disease traceability program for sheep. Transitioning to a more efficient identification system would improve traceability in the event of a major animal disease outbreak such as the UK experienced, while maintaining business and operational benefits to producers.

There is no limit to  
the Good a man can  
do if he doesn't care  
who gets the credit.

Many thanks to all of WG  
& Pilot Project members



Questions