Traceability and the Real World: Wrap Up

Traceability & the Real World Interactive Workshop
April 12, 2018

hosted by NIAA National Institute for Animal Agriculture

NIAA Annual Meeting 2018
Denver, CO

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Bowling Green, KY
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National Livestock Producers Association
Chairman, Nat’l Institute for Animal Agriculture

Summary comments at ID/INFO EXPO 2006 regarding NAIS

Industry must remain:
1. Focused on the fact that NAIS is an animal health tool
2. Realistic about expectations and abilities as system evolves
3. Actively engaged in positive dialogue to maintain progress
Traceability Feasibility Study
Necessary Tenets

- Industry driven
- Managed by entity(s) serving both public and private interests
- Maintains data privacy
- Equitable to all industry sectors
- Compatible with common industry practices
- Operates at speed of commerce
- Credible in domestic AND int’l markets

Comprehensive Feasibility Study: U.S. Beef Cattle Identification and Traceability Systems Evaluation of Opportunities, Obstacles and Incentives Across the U.S. Beef Industry Value Chain
Critical Mass

Theoretical Efficiency of Voluntary Beef Industry Traceability Adoption Levels

- Insufficient Adoption
- Nationally Significant & Economically Efficient
- Economically Inefficient

Percent of Operators Adopting Traceability vs. Share of U.S. Beef that is Traceable
Distribution of Cow/Calf Producer Attitudes
Beef Industry Traceability (% Respondents)
Adapted from World Perspectives (2018)

- **Firm Opposition**: 10
- **Resignation to the Inevitable**: 10
- **Cautious Support**: 65
- **Wholesale Support**: 15
Strength of Support / Opposition to Traceability Animal ID System: Animals ID’d at Ranch of Origin (% Respondents)
Adapted from World Perspectives (2018)
Traceability: Right and Reasonable?  
(Beef Industry Case Study)  
(A Tale of Two Bridges)

ID INFO  
EXPO 2007  

August 30, 2007  
Kansas City, KS
New Opportunities Mandate New Thinking
Possibly the most significant change in stakeholder opinion since the establishment of the current ADT framework in 2013 is an increase in support for EID for cattle.
Strength of Support / Opposition to Traceability Animal ID System: 
RFID/ Electronic Tags (% Respondents)
Adapted from World Perspectives (2018)
Technology Evolving

AGTECH: 70+ TECHNOLOGY COMPANIES CHANGING THE FARM

FARM MANAGEMENT SOFTWARE
- scoutpro
- Granular
- Agworld
- AgSotions
- CropX
- trecker.com
- Piktrace
- FarmLogs
- AgriWebb
- OnFarm

PRECISION AGRICULTURE AND PREDICTIVE ANALYTICS
- Strider
- adapt-N
- agrilyst
- farmers
- MyAgData.com
- bovcontrol
- CropZilla
- prospera
- aWhere

MARKETPLACES
- AgroStar
- Agronomic
- EM3
- Yagro
- Aggrigator

ROBOTICS AND DRONES
- MAVRX
- FarmBot
- Airwood
- Blue River
- SkySquirrel
- Skycision
- Raptor
- Terravision
- Reisson

ANIMAL DATA
- AAD
- Farmnote
- stellops
- Mastiline
- TL Biolabs
- Connecterra

SMART IRRIGATION
- HydroBio
- HORTAU
- Sprinkl
- HydroPoint
- SMART FARM
- PoWeWorx
- cropX
- AquaSpy
- EDYN

SENSORS
- Pycno
- Spensa
- Amber
- Grownetics
- Centaur
- Slantrange
- Flux
- SEMION
- Farmersedge
- ARABLE

NEXT GEN FARMS
- FREIGHT FARMS
- BRIGHT FARMS
- AeroFarms
- Gotham
- Freshly
- Sense Farms

Herding Cats
The Challenge

Survey says beef producers give cautious support to traceability

About 80% of beef producers support beef traceability. But most of them do so cautiously.

“...there is a difference between honest critics who recognize what is wrong, and defeatists who refuse to see that anything is right.”
New Thinking: “Breaking The Cake of Custom”

One of the greatest pains to human nature is the pain of a new idea. It...makes you think that after all, your favorite notions may be wrong, your firmest beliefs ill-founded

Walter Bagehot, *Physics and Politics*, c. 1872

(Discussing rapid advancements within 19th century and ensuing political conflict)
Going Forward

• **Cost (direct)**
  • May vary depending on herd size
  • Smaller producers face higher per-head costs
    • Economies of scale

(Versus)

• **Cost (opportunity)**
  • Exports worth ~$300 / head
    • USMEF: vulnerable to unforeseen developments – U.S. @ competitive disadvantage
  • Commerce continuity

• Domestic confidence!
Defining Law Enforcement’s Role in Protecting American Agriculture from Agroterrorism

Knowles et al., 2005
CHALLENGE

House Cmte on Homeland Security Emergency Preparedness, Response, and Communications

Feb 26, 2016 Hearing:
Examine risk of terrorist attack or natural disruption of the U.S. agriculture sector

Q. Are the public and private sectors prepared to respond to these threats?

Key vulnerabilities:
1. Insufficient quantity of Foot and Mouth Disease (FMD) vaccine
2. Gaps in US Biosecurity
3. Need more robust scrutiny of imports
4. Absence of traceability
5. Resource constraints
6. Gaps in early detection
7. Data sharing for regulated diseases
The most dangerous situations arise when the threat is ambiguous. This leads managers to ignore or discount the risk and take a wait-and-see attitude. Such an approach can be catastrophic.”


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**IN THE LEAD**

By CAROL HYMOWITZ

Recent News Events Should Have Executives Reviewing Priorities

August 27, 2007; Page B1

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**Make Supply Management A Top Priority**

- Don’t Wait For A Crisis

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Be Proactive: Shift Happens!
Challenging? You Bet!!!

Eads Bridge Firsts:
- Bridge across the Mississippi
- Ribbed steel arch spans
- Using cantilever supports exclusively

“It was said at the time that the genius did not exist in the country capable of erecting such a structure.”
If a [company or industry] is to meet the challenges of a changing world, it must be prepared to change everything about itself except its basic beliefs...

The only sacred cow in an organization should be its basic philosophy of doing business.
To thrive in a fast-moving world means embracing transformation as it occurs.

Beef Biz, CALF News, December, 2012