

# Australian Livestock ID Systems: What Can We Learn?

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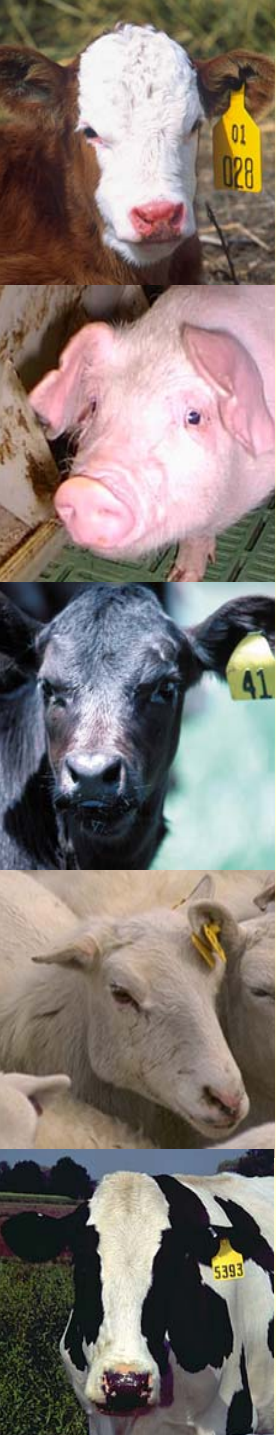
# Introduction and Overview

- International meat market changes
  - Animal traceability emergence
- Why study Australia's National Livestock Identification System (NLIS)?
- What we learned from examining the Australian system
- What are the implications for U.S. producers?



# Changing International Meat Market

- What is animal traceability?
- Economic incentives of traceability:
  - Animal health
  - Food safety concerns
    - Satisfying both foreign AND domestic consumers
  - Verifying credence attributes
  - Properly assign liability
  - Improving management





# Australian Experience

- Objectives of the trip
- When, where, and who of our trip



# Australia's Beef Industry

- One of the World's largest beef exporters
  - Australia exports > 65% of their production, vs. U.S., which exports <15% of production
- Around 60% of Australian cattle are “grass-fed”
- Around 80% of Australian “grain-fed” cattle are fed for less than 130 days
  - Primary market for “grain-fed” Aussie beef is Japan
- Feedlot sector is much smaller and average operation size is much larger than in the U.S.
- Total cattle herd is ¼ size of U.S. herd

Source: Meat and Livestock Australia (MLA), 2006



# Get to know *your burger better*

Helping you discover what ingredients make your burger taste so good is important to us. What's more, with our new nutrition information panels, the facts are now plain to see.



**Our beef** is 100% Australian Export quality. The only thing we add is salt and pepper, just before serving.



**Our eggs** are farm fresh grade A quality. We crack them moments before cooking.



**Our tomatoes** from Aussie farmers are delivered to our stores and sliced fresh, not frozen.

As an industry first, we're leading the way by providing easier access to **nutrition information**.

Look out for nutrition information panels that are rolling out across our packaging over the coming months.

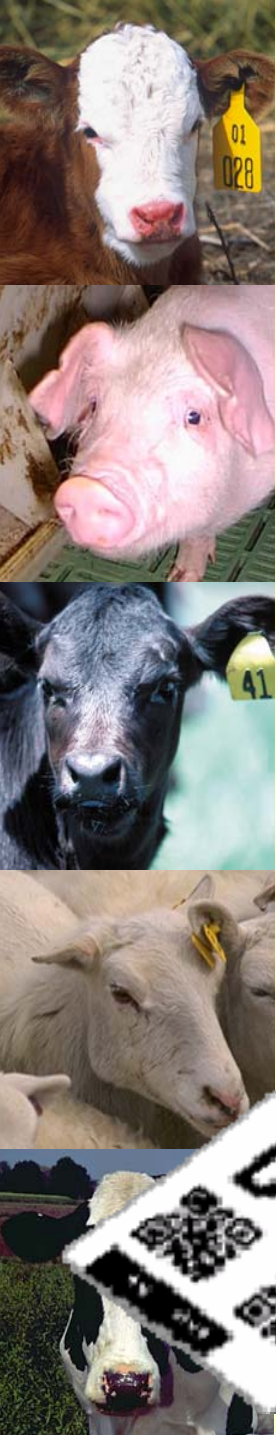




# History of Australian Animal ID

- Tail tags:
  - Use began in late 1960s;
  - Used to eradicate brucellosis & tuberculosis
  - Unique only to a pen of cattle
  - Limited traceback ability
- National Vender Declaration
  - Use began in 1996
  - Issue related to Endosulfan in cotton production
  - Producer assurance form
  - Paper-based system
  - Unique only to a pen of cattle





# Australian Tail Tag:





# National Vendor Declaration - Cattle

Ninth Edition from 1 August 2012

## part A

Read carefully the Explanatory Notes before completing the Declaration.  
Please print clearly. This form cannot be used where eligibility for the EU market is required.

Trading as (vendor) \_\_\_\_\_ Phone \_\_\_\_\_

Address \_\_\_\_\_

No. of Cattle: Male  Female  Total

Property Identification Code (PIC)/Tail Tag number applying to this consignment

Do the cattle in this consignment carry NLIS devices? ☐ Yes ☐ No  Ear  Rumen

Way Bill/Travel Permit No. (if applicable)

Destination: \_\_\_\_\_ Place of Loading: \_\_\_\_\_

Dispatch Date: \_\_\_\_\_ Dispatch Time: \_\_\_\_\_ (am/pm)

## part B

1 Have any of the cattle in this consignment ever in their lives been treated with an hormonal growth promotant (HGP)? (Use a second NVD for mixed consignments)

☐ Yes ☐ No ☐ Don't know

2 Have these cattle been raised consistent with the rules of an independently audited QA program on the property, the PIC of which is shown above?

☐ Yes ☐ No

Name of program \_\_\_\_\_ Accreditation No. \_\_\_\_\_

3 Were all of the cattle bred and raised on the vendor's property?

☐ Yes ☐ No ☐ Don't know. If No, how long ago were the cattle obtained or purchased? (If purchased at different times, tick the box corresponding to the time of the most recent purchase)

A ☐ Less than 2 months B ☐ 2-6 months C ☐ 6-12 months D ☐ More than 12 months

4 Have any of these cattle been fed by-product stockfeeds in the past 60 days?

☐ Yes ☐ No ☐ Don't know. If Yes, attach a list of the by-product stockfeeds, date when last fed, a copy of an analyst's report if available.

5 In the past 6 months have any of these cattle been on a property listed on the ERP database or placed under grazing restrictions because of chemical residue?

☐ Yes ☐ No ☐ Don't know. If Yes, give details \_\_\_\_\_

If Yes, and an analyst's report or letter of clearance from state authority is available, attach a copy.

PLEASE ENSURE EVERY SECTION IS FULLY COMPLETED

6 Are any of the cattle in this consignment still within a Withholding Period or Export Slaughter Interval following treatment with any veterinary drug of chemical?

☐ Yes ☐ No ☐ Don't know

If Yes, list details in the following space provided (Record additional details in question 9)

Chemical Product	Treatment date	WHP	ESI (if set)
_____	_____	_____	_____

7 In the past 60 days, have any of these cattle grazed or been fed any pasture, crop, stubble, grain or fodder treated with an agricultural chemical in the 60 days prior to harvest or grazing and:

a) at the time of harvest or first grazing, the Grazing/Fodder WHP stated on the product label had not expired or

b) the agricultural chemical had no Grazing/Fodder WHP stated on the label?

☐ Yes ☐ No ☐ Don't know

Where the answer is Yes provide details of

Product	Date applied	Grazing WHP	Date first fed or grazed	Date feeding/ grazing ceased
_____	_____	_____	_____	_____

8 In the past 42 days, have any of these cattle been held on any property where, in the past 10 weeks: a) endosulfan has been applied; or b) part of the property was included in an endosulfan down-wind no-spray zone with the written permission of the land owner or manager (See Explanatory Notes)

☐ Yes ☐ No ☐ Don't know Date sprayed \_\_\_\_/\_\_\_\_/\_\_\_\_

9 Additional information: see additional information requirements in Explanatory Notes for completing this form.

\_\_\_\_\_

As the vendor or person responsible for the husbandry of the cattle in this consignment, I declare that all the information stated in this Declaration is true and correct, that I have read and understood the Explanatory Notes and that while under my control, the cattle covered by this declaration were not fed animal material, including meat or bone meal, in breach of State or Territory legislation.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

(Only the vendor or the person responsible for the husbandry of the cattle, whose name appears above, may make a second or sign this declaration)

part C Agent's Declaration for Cattle Sold at Auction

In the case of cattle sold at auction, this declaration is to be retained by the selling agent for a minimum of two (2) years. A copy is to be made available to any buyer of the consignment or part of the consignment on request.

Vendor Code  Agent's Code

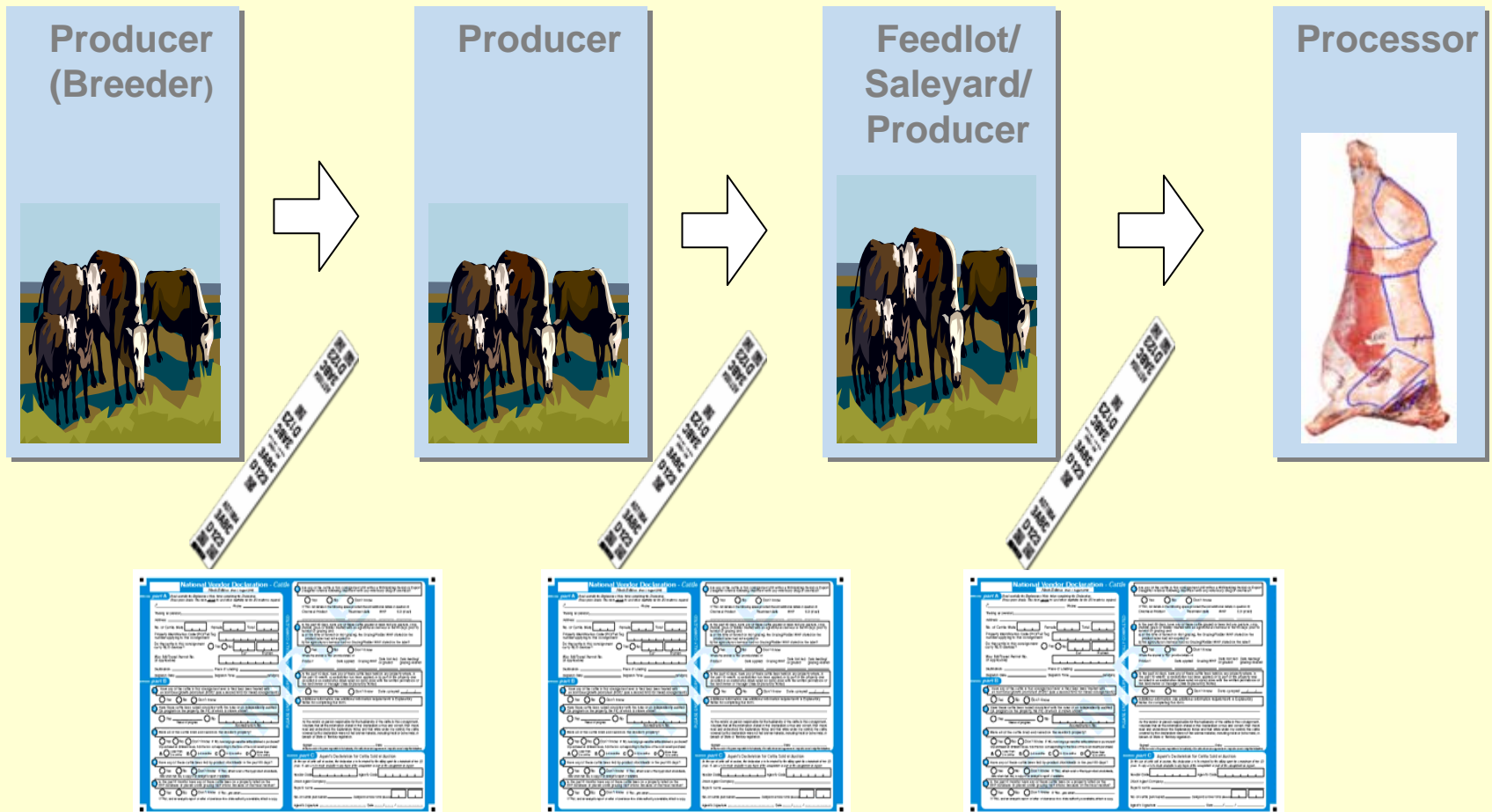
Stock Agent Company \_\_\_\_\_

Buyer's name \_\_\_\_\_

No. of cattle purchased \_\_\_\_\_ Saleyard arrival time (hh:mm)  :

Agent's Signature \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

# Current traceability in Australia



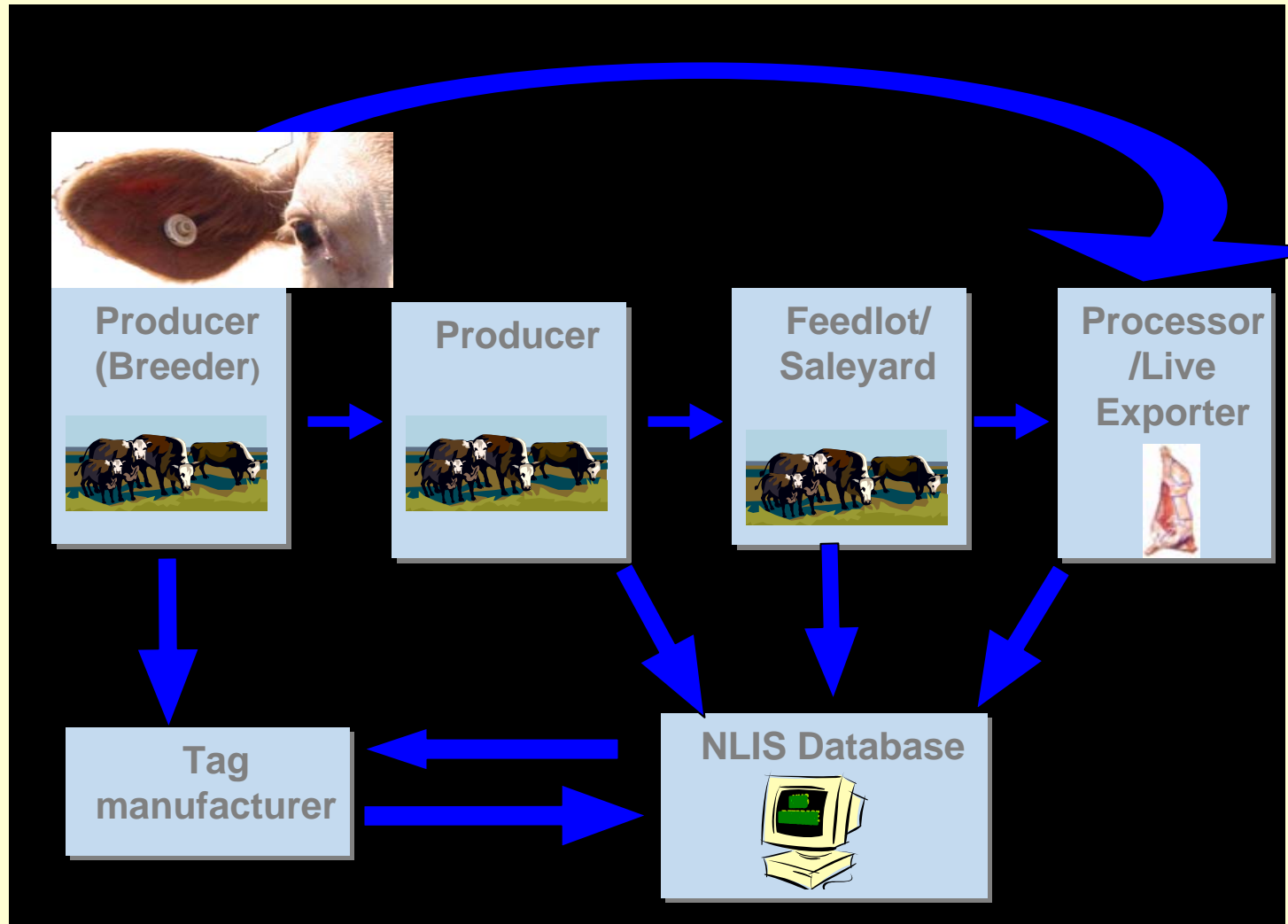


# Current Australian Individual ID

- National Livestock Identification System
  - Whole-of-life individual ID system
  - Uses RFID technology
  - Database of animal movements
  - Implemented in phases by states
  - Compatible with other services
    - Meat traceability
    - Intensive on-farm management



# How NLIS works



# Current Australian Individual ID

- NLIS Implementation
  - Various state schedules
  - First tag newborn calves
  - 1 yr later mandate reading RFID tags
- Benefits of NLIS:
  - Advanced management capabilities
  - International trade
  - Food safety reassurance
  - Meat traceability and niche market development







Pictures (clock-wise from the top):

- 1) Feedlot receiving new placements, incorporating NAIS tags
- 2) CPU operator reads barcodes classifying animal (e.g., sex, age, breed) for on-farm system
- 3) Picture of protected CPU setup at chute





Pictures (clock-wise from the top):  
1) Hand held reader being used at chute  
in Australian pasture  
2) Portable CPU operation being setup near  
a panel reader (attached to a chute) in pasture



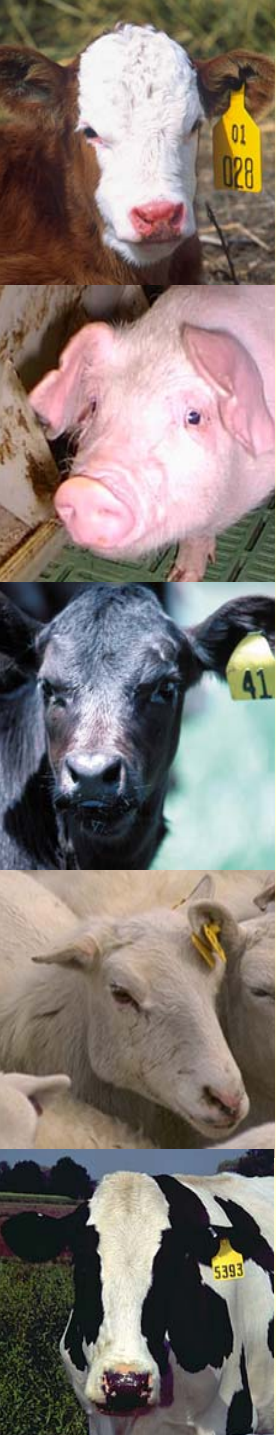
# Summary of Australian NLIS Findings

- Over 30 yrs of animal traceability
  - Producer acceptance
  - Producer knowledge
  - Industry is ahead of many exporting competitors
  - Maintained international market access
- Individual ID beginning in 2005



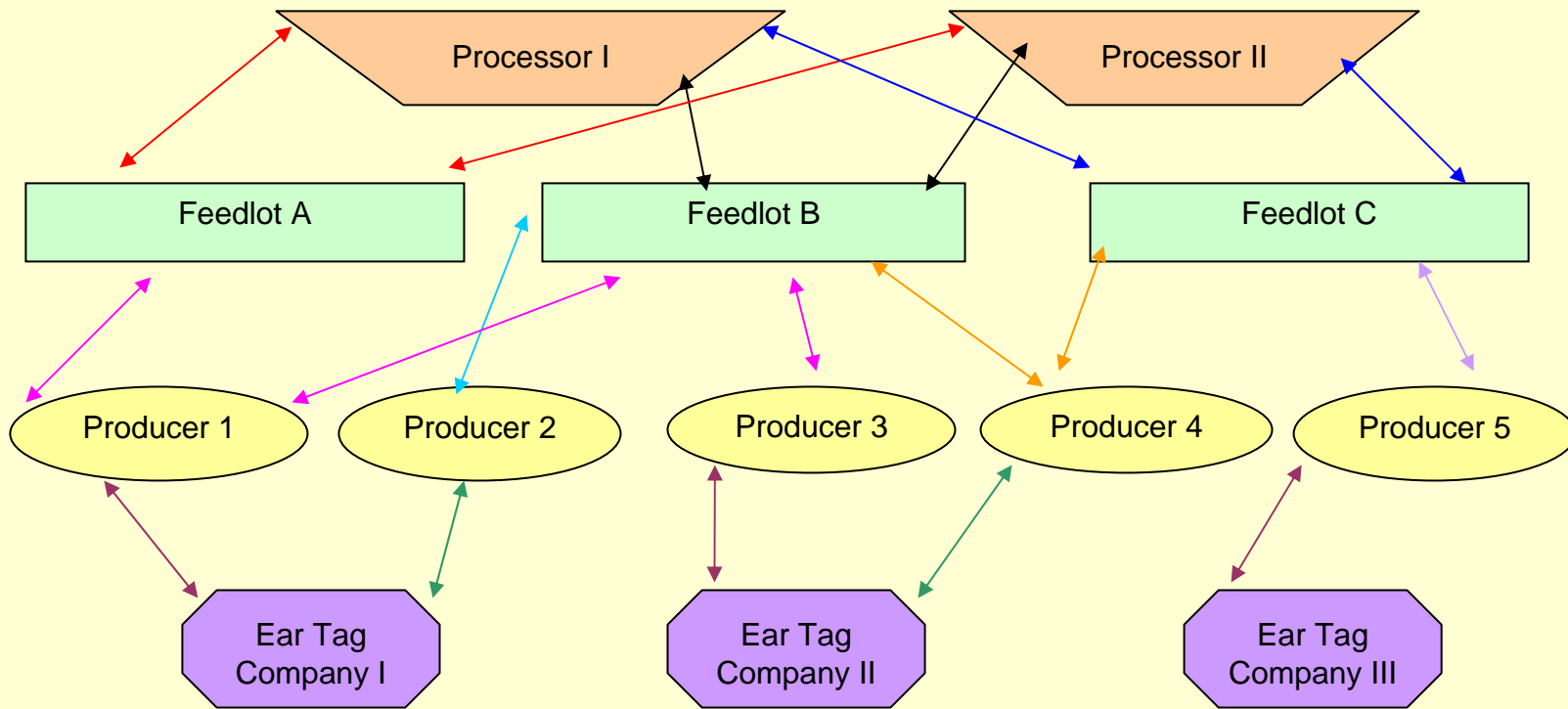
# Implications for U.S.

- General U.S. Beef Industry Implications:
  - International meat market changes
- U.S. Traceability Implications:
  - Keep it simple
  - Education/technical support
  - Initial gov't funding/assistance
  - Avoid regionality issues
  - Meat traceability ability
  - Producer verification documents





# Multiple Tracking Systems Overview



Each different colored line represents a different traceability system being used at that level of the supply chain. Prior to making any “trace-back” the systems used by the processor must be identified. Then, the animal being traced has to be found within those systems, thus identifying the source of the animal (feedlot). Once the feedlot is identified, all systems used by that feedlot are investigated until the animal’s ID is once again referenced identifying the producer. This is obviously more complicated than the Australian system where only one “system” is used.