



# ***Producers, Animals, & Consumers: Animal Welfare in U.S. Food Animal Production***

Ohio Livestock Coalition

2013 Annual Meeting and Industry Symposium

Lewis Center, OH September 6, 2013

**Glynn Tonsor**

**Dept. of Agricultural Economics, Kansas State University**

**KANSAS STATE UNIVERSITY**



# Expectations of U.S. Public

- Livestock producers are expected to “*protect and promote animal well-being*”
  - 1 of 6 *We Care* principles (Pork Industry)
- EVEN IF there are no immediately matching consumer WTP signals
- SO AW provision is “a cost of doing business”
  - Necessary to maintain “social license” and “freedom to operate”



# Current Situation

- The Center For Food Integrity (@foodintegrity) tweeted on Wed, Sep 04, 2013:

“Science tells us if we can do something.

Society tells us if we should do it.”



# Current Situation

- AW is not a top of mind issue for typical U.S. meat, milk, and egg consumers
  - supported by direct survey assessment
  - consistent with limited AW labels on retail products
- IF AW were a top priority for consumers we would likely observe:
  - more exerted consumer WTP behavior
  - increased product differentiation by suppliers
    - “textbook, free-market adjustments” would work
      - » Note there is a growing list of USDA PVPs with claims



# Current Situation

- AW impact from consumers is indirect:
  - presented attributes (or claims) regularly send cues to at least some consumers:
    - safety and quality are inferred from gestation stall use
    - “natural” triggers cues similar to “organic”
    - “Product of Mexico” vs. “Product of Canada” signals safety cues
    - meat color triggers a host of quality cues
  - consumers see AW as one of several aspects comprising the “proper way to produce meat, milk, and eggs”
  - beta-agonist use discussions are a recent example
    - within industry customers reflect indirect consumer influence



# Current Situation

- Bans pass when voted upon by residents...
  - Cage-free eggs (5% mkt share vs. 2/3 voting support)
  - “Vote-buy” disconnect not unique to AW
    - Consider calls for mandatory labeling
      - GM ingredients (Prop 37), country of origin, etc.
- “Debate” being carried out more in the media, ballots, and legislative arenas than retail shelf



# Current Situation

- Growing number of states with passed ballots or legislation restricting production practices
  - Implications for producers & government
    - “unfunded mandate”
  - Interstate commerce law quickly comes to play...
    - Some think non-ballot states are safe production havens
- Growing discussion over national standards
  - Leads to growing tension:
    - across species, within species (across states or ind. levels)



# Existing Economics Literature

- Studies limited in overall number and replication
  - Limited funding; relatively new issue; few land-grant economists focused on AW...
  - Only known meta-analysis (Lagerkvist & Hess, 2011 ERAE) based on 24 studies (only 6 in U.S.)



# Highlights of past AW Research Tonsor has been involved in...

- Public concerns are not unique to any species
- Trust in the source of AW information is key driver of ballot voting
- Residents are insensitive to timetables
- Online videos influence perceptions; not WTP



# Highlights of past AW Research

## Tonsor has been involved in...

- Public does not know about retail price impacts
- Bans are not economically needed in presence of voluntary labeling
- Media attention to AW influences meat demand
- Mandatory AW labeling has stated public support



# On-Going Research

- Vote-Buy Disconnect
  - USDA grant proposal under review (Tonsor, Lusk, Norwood, and Brooks)
- Ongoing Beef & Dairy Cattle Welfare USDA Grant (Tonsor, Wolf, Swanson, and Thomson)
  - Producer & Consumer Assessment
  - Feasibility vs. Effectiveness



# Vote-Buy Disconnect:

## Preliminary, Illustrative Assessment

- April 2013 survey of 1,950 U.S. residents
  - Cage-free egg application (purchasing & voting)
- Majority (85%) WTP premium
  - Biases abound (<5% actual market share)
- Majority (64%) WT vote for federal reg. ban
  - Consistent with ballots to-date
- *Response combinations are of main interest...*



# Vote-Buy Disconnect: Preliminary, Illustrative Assessment

- Response Combinations:
  - 9.5% NO/NO & 58.7% YES/YES
    - Conservatively can be considered “Consistent”
  - 26.2% Yes WTP/ No Ban (“Inconsistent”)
  - 5.6% No WTP/Yes Ban (“Inconsistent”)



# Vote-Buy Disconnect: Preliminary, Illustrative Assessment

**Table 1. Selection frequency of presented reasons for inconsistent responses.**

<i>Reason</i>	<i>Willing to pay premium; not supportive of ban (26.2%)</i>	<i>Not willing to pay premium; supportive of ban (5.6%)</i>
I believe food production should be influenced more by consumer purchasing patterns than legal regulations.	28%	
I do not want to restrict the production choices of egg producers.	24%	
I did not realize my two answers reflected different buying and voting behaviors.	17%	13%
I do not want to restrict the purchasing choices of other egg consumers.	15%	
Cage-free egg production should be required of producers, but cage-free eggs should not be more expensive for me to buy.		62%
I believe food production should be influenced more by legal regulations than consumer purchasing patterns.		6%
I do not mind restricting the production choices of egg producers.		3%
I do not mind restricting the purchasing choices of other egg consumers.		1%
Other, please describe:	4%	10%
I do not know	13%	5%

17



# Vote-Buy Disconnect: Preliminary, Illustrative Assessment

**Table 1. Selection frequency of presented reasons for inconsistent responses.**

<i>Reason</i>	<i>Willing to pay premium; not supportive of ban (26.2%)</i>	<i>Not willing to pay premium; supportive of ban (5.6%)</i>
I believe food production should be influenced more by consumer purchasing patterns than legal regulations.	28%	
I do not want to restrict the production choices of egg producers.	24%	
I did not realize my two answers reflected different buying and voting behaviors.	17%	13%
I do not want to restrict the purchasing choices of other egg consumers.	15%	
Cage-free egg production should be required of producers, but cage-free eggs should not be more expensive for me to buy.		62%
I believe food production should be influenced more by legal regulations than consumer purchasing patterns.		6%
I do not mind restricting the production choices of egg producers.		3%
I do not mind restricting the purchasing choices of other egg consumers.		1%
Other, please describe:	4%	10%
I do not know	13%	5%

18



# Vote-Buy Disconnect: Preliminary, Illustrative Assessment

**Table 1. Selection frequency of presented reasons for inconsistent responses.**

<i>Reason</i>	<i>Willing to pay premium; not supportive of ban (26.2%)</i>	<i>Not willing to pay premium; supportive of ban (5.6%)</i>
I believe food production should be influenced more by consumer purchasing patterns than legal regulations.	28%	
I do not want to restrict the production choices of egg producers.	24%	
I did not realize my two answers reflected different buying and voting behaviors.	17%	13%
I do not want to restrict the purchasing choices of other egg consumers.	15%	
Cage-free egg production should be required of producers, but cage-free eggs should not be more expensive for me to buy.		62%
I believe food production should be influenced more by legal regulations than consumer purchasing patterns.		6%
I do not mind restricting the production choices of egg producers.		3%
I do not mind restricting the purchasing choices of other egg consumers.		1%
Other, please describe:	4%	10%
I do not know	13%	5%

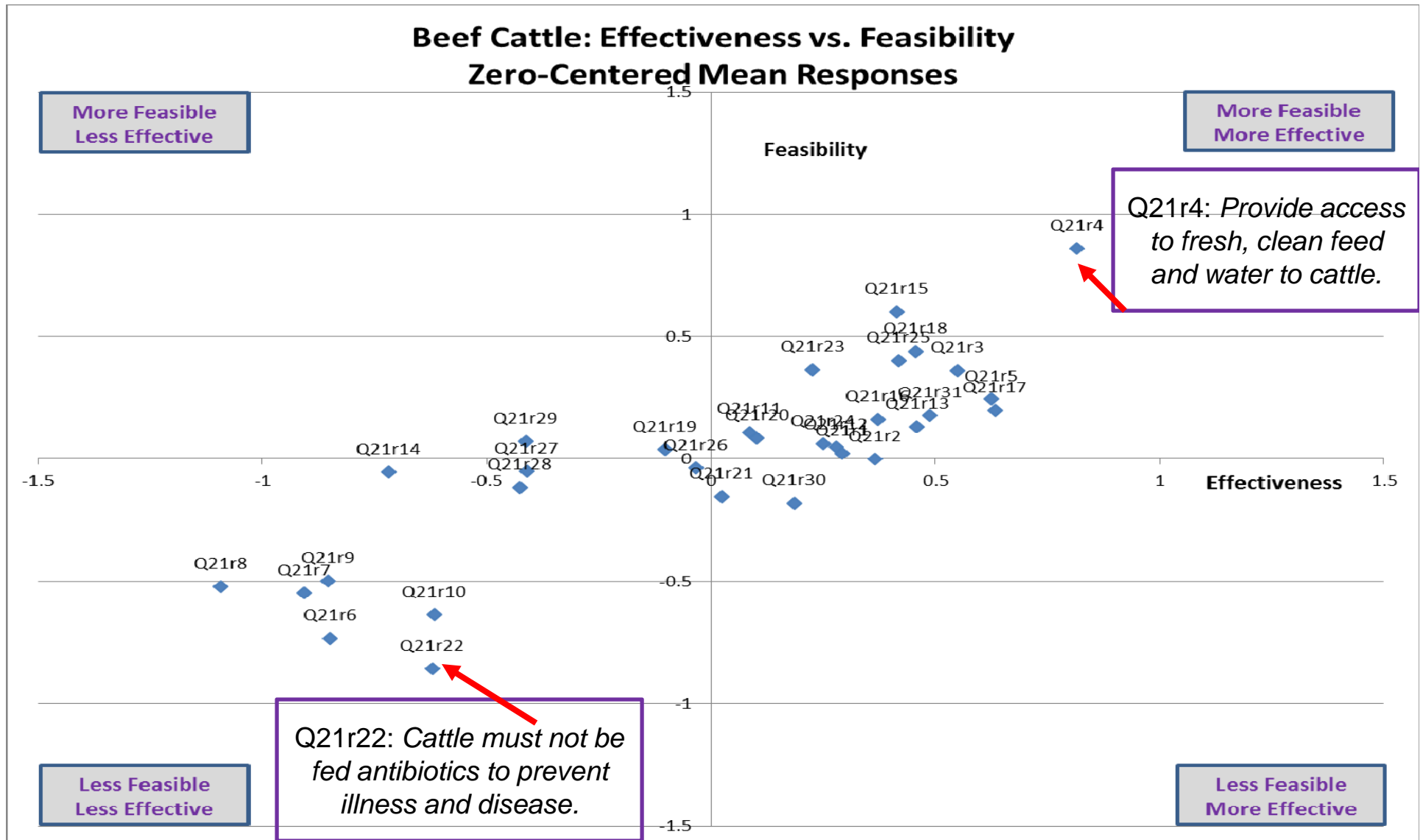


# Ongoing Beef & Dairy Cattle Welfare USDA Grant

- April 2013 survey of 1,950 U.S. residents
- “... rank how effective (feasible) each action would be to improve the welfare of beef (dairy) cattle in the U.S.”
  - Randomly assigned Likert scale questions
  - Total set of 30 actions in design including:
    - “Provide access to fresh, clean feed and water to cattle.”
    - “Cattle must not be fed antibiotics to prevent illness and disease.”



# Ongoing Beef & Dairy Cattle Welfare USDA Grant



# Ongoing Beef & Dairy Cattle Welfare USDA Grant

- Effectiveness & Feasibility: 0.84 correlation
  - Do consumers distinguish the two dimensions?
    - Is it practical to think they could or will in the future???
  - Producers will *likely* separate these dimensions



# Economic Implications of AW Situation

- “nothing happens in a silo”
- There are economic implications following almost all changes:
  - AW-based adjustments are no different



# Economic Implications of AW Situation: Livestock Producers & Industry

- “Unfunded mandate”
  - Change is required yet not immediately paid for
    - Reduces supply (e.g. contraction of industry)
- Larger average size?
  - likely an unintended consequence
- State-by-state comparative advantage changes
  - Movement in production centers over time?
    - “In-fighting” spatially within species
- Global comparative advantage changes?
  - global demand growth critical to benefit from...



# Economic Implications of AW Situation: General Public (Consumers & Citizens)

- Heterogeneity of impacts warrant noting...
  - Typical consumer
    - not WTP premium yet higher prices follow prod. costs
  - Typical resident
    - Absorbs tax implications of enforcement (opp. costs)
  - Highly concerned consumer likely better off *relative to typical*
    - **But** differentiation, labeling, etc. alternatives do exist...



# Economic Implications of AW Situation: Government

- Global comparative advantage changes?
  - Implications for meeting food export targets
  - Reduced industry base for tax revenue
- Tax implications
  - Enforcement & oversight expenses follow passing ballots, legislative changes, etc.
- School lunches – costs of protein provision...



# Economic Implications of AW Situation: Society

- Society always varies “weights” placed on producer, consumer, citizen, and central gov’t impacts when assessing change...
- R&D investment restrictions?
  - Food security (2050 challenge) implications
  - Likely similar impacts on meeting food safety, climate change, etc. challenges



# Overall Take

- AW is a “social challenge” here to stay
  - Public perceptions frequently drive change
  - Trend of pressure coming from sources “outside the retail shelf” also likely here to stay
- AW is not univariate
  - Yet many debates treat it as such - unwise
- AW now is a “cost of doing business” in U.S.
  - Can’t be ignored
    - ***So how do the U.S. meat, milk, and egg industries go forward???***



# Alternative Industry Paths

- “Do Nothing”

PROS:

- Minimize current investment
- Wait for more information & avoid “building the wrong barn”

CONS:

- Limits nearly all ability to have influence if “not at the table”
- May miss “golden opportunity” as public views farmer/rancher to have most influence...
- Risk sending signal of indifference to AW...



# Alternative Industry Paths

- “Proactive” Options [not necessarily mutually exclusive]:
  1. Negotiate with concerned groups
    - Adjustment time and requirements may (or may not) be improved
  2. Seek additional legislation
    - Ag. may have more influence than reacting to ballot initiatives
  3. Support additional labeling of practices
    - However note trade impacts of mandatory so consider voluntary labeling
  4. Support ‘phase-out’ as older facilities come out of production
    - May align w/ timetables in prior ballot initiatives & reduce adjustment costs
  5. Invest in public image
    - Reconnect (not necessarily defend) with public; may not be sufficient for short-run response but may be necessary for long-run survival
  6. Adopt increasingly transparent protocols
    - May reduce public shock impacts of “surprises”
  7. Invest in public education
    - Likely necessary but recognize information overload, time constraints, etc.



More information available at:



This presentation will be available in PDF format at:


<http://www.agmanager.info/about/contributors/individual/tonsor.asp>

Glynn T. Tonsor  
Associate Professor  
Dept. of Agricultural Economics  
Kansas State University  
Email: [gtonsor@ksu.edu](mailto:gtonsor@ksu.edu)  
Twitter: @TonsorGlynn



More information @ AgManager (<http://www.agmanager.info/>)

<http://www.agmanager.info/livestock/marketing/AnimalWelfare/default.asp>




[About](#) [Contributors](#) [Useful links](#) [Site map](#) [Feedback](#)

Search AgManager

**AG MANAGER.INFO**  
Department of Agricultural Economics

- ✓ Agribusiness
- ✓ Crops
- ✓ Energy
- ✓ Farm Management
- ✓ Livestock & Meat
- ✓ Policy
- ✓ Decision Tools
- ✓ Ag Econ News
- ✓ Contributors
- ✓ Programs
- ✓ Sponsors
- ✓ Upcoming Events
- ✓ [KFMA](#)
- ✓ [Department Theses & Dissertations](#)
- ✓ [SIGN-UP for Weekly Email Updates](#)
- ✓ [RSS](#)

  
Kansas State University  
Research and Extension

### Home / Livestock Marketing

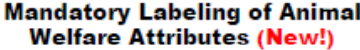
Market Outlook and Newsletters	Charts and Databases	Marketing Extension Bulletins	USDA News, Reports, Futures Market Prices	Budgets, Economics, LRP and Policy	Related Sites	Cross-Subject Areas
<a href="#">In The Cattle Markets</a>	<a href="#">Livestock &amp; Hay Charts</a>	<a href="#">Marketing Strategies</a>	<a href="#">USDA News</a>	<a href="#">Projected Budgets</a>	<a href="#">BeefBasis.com</a>	<a href="#">Animal ID &amp; Traceability</a>
<a href="#">Livestock Outlook Radio</a>	<a href="#">Livestock Databases</a>	<a href="#">Financial Analysis</a>	<a href="#">Futures Market Prices</a>	<a href="#">Historical Budgets</a>	<a href="#">NAIBER</a>	<a href="#">Animal Well-Being</a>
<a href="#">Cattle Finishing Returns</a>	<a href="#">Beef Demand Charts</a>	<a href="#">Trade and Demand</a>	<a href="#">Pork Price Reporting</a>	<a href="#">Production Economics</a>	<a href="#">LMIC</a>	<a href="#">CLPER</a>
	<a href="#">Grain Supply &amp; Demand</a>	<a href="#">Price Risk Management</a>	<a href="#">Interest Rate Forecasts</a>	<a href="#">LRP Insurance</a>		
				<a href="#">Policy</a>		

### Livestock & Meat Marketing: Animal Well-Being and Welfare

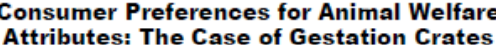
Title	Author	Date	Factsheet, Paper, Presentation, or Journal article	Video
Mandatory Labeling of Animal Welfare Attributes: Public Support and Considerations for Policymakers	<a href="#">Tonsor</a> and Wolf	July, 2011	<a href="#">Journal Article Fact Sheet (AM-GT-2011.1)</a>	<a href="#">WMV MP4</a>
U.S. Meat Demand: The Influence of Animal Welfare Media Coverage	<a href="#">Tonsor</a>	September, 2010	<a href="#">Journal Article Fact Sheet (MF2951)</a>	<a href="#">WMV MP4</a>
Consumer Preferences for Animal Welfare Attributes: The Case of Gestation Crates	<a href="#">Tonsor</a> , Olynk, and Wolf	December, 2009	<a href="#">Journal Article</a>	<a href="#">WMV MP4</a>
Consumer Voting and Demand Behavior Regarding Swine Gestation Crates	<a href="#">Tonsor</a> , Wolf, and Olynk	July, 2009	<a href="#">Journal Article</a>	<a href="#">WMV MP4</a>
Consumer Use, Perceptions, and Demand Impacts of Alternative Animal Information Sources	<a href="#">Tonsor</a>	July, 2009	<a href="#">Presentation</a>	
Alternative Animal Welfare Responses: Options and Implications for Producers and Industry-at-Large	<a href="#">Tonsor</a>	March, 2009	<a href="#">Presentation</a>	

#### Animal Welfare Videos by [Dr. Glynn Tonsor](#)

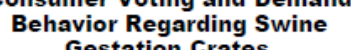
**Mandatory Labeling of Animal Welfare Attributes (New!)**



**Consumer Preferences for Animal Welfare Attributes: The Case of Gestation Crates**



**Consumer Voting and Demand Behavior Regarding Swine Gestation Crates**



KANSAS STATE UNIVERSITY

