

# County Extension Agent Preferences for USDA Market Information

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# Background

- USDA has long history of providing production and market data
  - Unbiased and survey based
  - Aids decision making process of buyers and sellers of agricultural commodities
- Prior research demonstrates data is welfare-enhancing
- Little information on relative value of publicly funded agricultural reports

# Objectives

- Determine current preferences of county Extension agents for USDA market information in livestock and poultry sector
- Improve understanding of preferences for USDA data to help enhance quality of existing reporting efforts

# Reports

- Following reports from USDA NASS included:
  - Grain Stocks
  - Cattle on Feed
  - Cattle (Inventory)
  - Cold Storage
  - Quarterly Hogs and Pigs
  - Broiler Hatchery
  - Chickens and Eggs
  - Crop Progress
- Following reports from USDA AMS included:
  - 5 Area Daily Fed Cattle Price
  - Daily Boxed Beef Cutout
  - FI Daily Livestock Slaughter
  - Weekly Superior Video Auction Report

# Methods

- Employed best/worst (max/min) scaling
  - Lusk and Briggeman's *AJAE* article "Food Values" (2009)
- Respondents answered the following question:
  - Which of the following reports do you believe is most important and which is least important for the USDA to maintain for the U.S. livestock and poultry industry? (Check only one report as the most important and one as the least important.)

Which of the following reports do you believe is most important and which is least important for the USDA to maintain for the U.S. livestock and poultry industry? (Check only one report as the most important and one as the least important.)

Most Important		Least Important
<input type="checkbox"/>	<b>Weekly Crop Progress</b> (information on livestock pasture and range conditions; and planting, emergence, harvest progress, and condition of field crops)	<input type="checkbox"/>
<input type="checkbox"/>	<b>Monthly Cattle on Feed</b> (number of head placed, marketed, and total on feed of 1,000+ head feedlots)	<input type="checkbox"/>
<input type="checkbox"/>	<b>Monthly Cold Storage</b> (information on stocks of red meat and poultry in public freezers)	<input type="checkbox"/>
<input type="checkbox"/>	<b>Daily 5 Area Fed Cattle Prices</b> (prices for fed cattle sold in major feeding regions)	<input type="checkbox"/>
<input type="checkbox"/>	<b>Daily Boxed Beef Cutout</b> (information on the number of choice and select loads sold and corresponding price for delivery 0-21 days in advance)	<input type="checkbox"/>
<input type="checkbox"/>	<b>Quarterly Hogs and Pigs</b> (information on the number of hogs farrowing in the quarter and weight breakdown of market ready hogs)	<input type="checkbox"/>
<input type="checkbox"/>	<b>Monthly Chickens and Eggs</b> (information on U.S. table egg and broiler layers, pullets, and egg production)	<input type="checkbox"/>

# Methods

- Three survey treatments were used:
  - 2 treatments repeated question 6 times, 1 treatment repeated question 5 times
  - 6 or 7 reports were shown each time question was repeated
  - Brief synopsis of each report was provided to respondents when included in choice set
  - Respondents randomly received one of the three treatments electronically
  - Demographic information also collected

# Data

- Questionnaire distributed to membership of National Association of County Agricultural Agents
  - Distributed to 3,119 email addresses (18.5% response rate)
  - Email sent with link to one of three survey versions housed on SurveyMonkey.com in January 2012
- Data collected from January 9<sup>th</sup> through February 10<sup>th</sup>, 2012

# Summary Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum
Female	0.17	0.38	0.00	1.00
Age	47.03	10.82	22.00	73.00
Experience	16.28	10.28	0.00	48.00
Livestock/Poultry Agent	0.61	0.49	0.00	1.00
Crop Agent	0.26	0.44	0.00	1.00
Other Agent	0.13	0.34	0.00	1.00
Region				
Northeast	0.06	0.24	0.00	1.00
Midwest	0.27	0.44	0.00	1.00
Southern	0.57	0.50	0.00	1.00
Western	0.10	0.30	0.00	1.00

# Results

- Random parameters logit regression was used to estimate data
- Likelihood ratio tests confirmed significant differences among survey treatments
  - Unable to pool data into one single model
- USDA NASS' *Grain Stocks* report was used as base report for analysis

# Relative Importance of USDA

Report	Treatment 1	Treatment 2	Treatment 3
Grain Stocks (base report)	13.5%	15.0%	13.0%
Crop Progress	42.3%*	24.8%	52.7%*
Cattle on Feed	13.2%	22.1%*	12.4%*
Daily FI Slaughter	8.5%*	6.5%*	3.9%*
Daily 5 Area Fed Cattle Price	7.2%*	9.7%*	5.3%*
Cattle (Inventory)	5.8%*	11.1%*	6.7%*
Hogs and Pigs	3.3%*	3.8%*	2.1%*
Daily Boxed Beef Cutout	1.9%*	2.6%*	1.2%*
Cold Storage	1.6%*	1.7%*	0.9%*
Chickens and Eggs	1.1%*	0.9%*	0.6%*
Superior Video Cattle Auctions	1.0%*	0.6%*	0.6%*
Broiler Hatchery	0.8%*	1.0%*	0.7%*
Number of Respondents	198	184	180

# Relative Importance of USDA

## Reports by Extension Responsibility

Report	Crop Agents	Livestock Agents	Other Agents
Grain Stocks (base report)	19.2% (2)	10.2% (3)	14.7% (2)
Crop Progress	56.7% (1)	35.6% (1)	52.6% (1)
Cattle on Feed	8.7% (3)	21.0% (2)	7.2% (3)
Daily FI Slaughter	2.8% (6)	6.1% (6)	5.7% (4)
Daily 5 Area Fed Cattle Price	3.9% (4)	8.4% (5)	4.5% (5)
Cattle (Inventory)	3.9% (5)	10.2% (4)	4.3% (6)
Hogs and Pigs	2.0% (7)	2.8% (7)	3.8% (7)
Daily Boxed Beef Cutout	0.9% (8)	2.1% (8)	1.5% (10)
Cold Storage	0.7% (9)	1.3% (9)	2.1% (8)
Chickens and Eggs	0.3% (12)	0.8% (11)	0.7% (12)
Superior Video Cattle Auctions	0.5% (10)	0.8% (10)	1.5% (9)
Broiler Hatchery	0.5% (11)	0.7% (12)	1.3% (11)
Number of Respondents	145	341	74

# Implications

- *Crop Progress* had largest preference share
  - Weekly, wide variety of topics
  - Serves wide variety of Extension clientele
  - Risk management aspects?
- Cattle reports viewed as more important than pork/chicken industry
- Farm level reports relatively more important than upstream reports

# Conclusions

- Low agent preferences do NOT mean report is not important
  - Who are clientele served by Extension agents?
  - Downstream information shapes decisions upstream (farm level)
- What about cost to develop and disseminate surveys?
- Of agents who farm, only 6% and 1% of livestock and crop farmers, respectively, purchase private data

# Discussion

