What’s In a Number? Leveraging Scanner Data to Understand the Retail Beef Consumer

Date: October 13, 2016

You’re in the grocery store checkout line and as each item passes over an electronic scanner, you hear that omnipresent beep, beep, beep. Originally adopted in the mid-1970’s to speed up pricing and checkout, the scanner, with its ubiquitous bar code, facilitates retailer inventory management, loyalty cards and couponing, as well.

by Alison L. Krebs, Director, Market Intelligence, National Cattlemen’s Beef Association, a contractor to the Beef Checkoff

Summary

That Constant Beeping

You’re in the grocery store checkout line and as each item passes over an electronic scanner, you hear that omnipresent beep, beep, beep. Originally adopted in the mid-1970’s to speed up pricing and checkout, the scanner, with its ubiquitous bar code, facilitates retailer inventory management, loyalty cards and couponing, as well.

One additional opportunity, however, has been to consolidate this actual consumer purchase data beyond the store or chain level, and regroup it by product type – to understand that bigger picture market view. The National Cattlemen’s Beef Association, on behalf of the Beef Checkoff, purchases this data to gain important insight into retail beef sales.

Background

Two companies aggregate and sell retail scanner data, and NCBA purchases retail meat department data on a monthly basis from Information Resources, Inc. (IRI, formerly Freshlook). This data is then cleansed, categorized and formatted via Meat Solutions’ VMMeat System so the checkoff can understand what’s happening with beef and competing proteins in the retail meat case.

Discussion

What’s MULO?

When the scanner and bar code first became the norm, the vast majority of retail food purchases were made at the traditional grocery store. Today, food is frequently purchased from other retailer segments, such as club stores (BJs and Sam’s Club), mass merchandisers (Target and WalMart), drug, dollar and convenience stores, as well. So having just supermarket data in today’s world is not enough.

So, what is MULO? It’s all of these retailer types grouped together: MULO – or Multi-Outlet – in the IRI data world. As some store segments lack traditional meat departments, however, (despite selling some fresh meat products such as ground beef), MULO for the meat case does not include sales from drug, dollar or convenience stores. The data set also excludes small grocery stores (total annual sales less than $2 million), butcher shops, online retailers and military commissaries. Finally, while the vast majority of retailers have chosen to share their sales data, a handful of retailers – most notably Costco and Whole Foods – currently do not share.

As consumers have a long-standing fondness for fresh beef, the majority of retail beef sales (70-75
percent) move through the meat case. As a result, NCBA currently only purchases meat department data, so beef sales through other departments such as refrigerated meats (e.g. hot dogs), packaged lunch meats, dried snacks (e.g. jerky), deli/prepared foods (supermarket foodservice), etc. are not included. Retail sales data for all other animal proteins, with the exception of fish and seafood, is purchased as well.

Finally, as mergers occur, new stores open and others go out of business, the complete data set is “restated” each year to reflect the current list of participating retail chains and stores. For example, when Wal-Mart sales were added a few ago, the previous five years’ data was updated to include Wal-Mart. This restatement allows for accurate comparison over time, but limits the comparison to the past five years.

While the data has some limitations, it’s extremely informative. It provides the beef checkoff with excellent insight into how consumers are spending their meat department dollars.

Slice and Dice

Sales data, like the beef that is being measured, is amazingly versatile. It can be mixed, matched, studied and summarized in many ways to understand trends and changes in the marketplace. The three primary measures are price per pound, dollars and pounds. Add this to a whole host of other characteristics that are captured by that beep, and the insights that can be gained from the sales data are nearly endless.

Here are just a few examples of how the available data can be viewed: cut, primal, package size (range), grade, category (e.g. ground), form (e.g. bulk or chub for ground beef, steak or roast for whole muscle), timeframe (weekly, monthly, quarterly or annual), region (Figure 1) and production claim. Sales of additions, such as beef preparations with vegetables or cheese, or those that are marinated or seasoned are captured, as well. In all, the data enables the checkoff to answer numerous questions and gain important insight into what consumers are buying.

Figure 1: IRI/Freshlook Standard Regions

![Figure 1: IRI/Freshlook Standard Regions](image-url)
Making Numbers Count

In and of itself, the retail scanner data is just a bunch of numbers. What matters at the end of the day, is turning this information into meaningful insight to drive beef demand. Key to this is getting quality information to the right audience in a timely manner.

Select data summaries, for example, are available to retailers and other industry partners under the Sales Data tab of www.BeefRetail.org. For example, Figure 2 shows July 2016 versus year ago pound sales of selected proteins and the meat case overall, as well as the most recent 52-week period compared to the prior year. Note that due to the complexity of collecting, organizing and summarizing, data is typically available five weeks following the end of the month. Here are some additional frequently-accessed resources:

- Monthly pound and dollar sales, price per pound and USDA feature data tables, along with a written summary: http://beefretail.com/monthlysalesandfeaturingsummaryreports.aspx
- Quarterly top 10 cut lists (e.g. steaks, lean cuts, pot roasts): http://www.beefretail.org/top10cutlists.aspx
- Quarterly category reports (e.g. ground beef, middle meats, select production claims): http://www.beefretail.org/categoryreports.aspx

![Figure 2: Total US – Fresh Meat Sales](http://www.beefretail.org/)

<table>
<thead>
<tr>
<th>Class</th>
<th>4 WEEKS 06/27/16-07/24/16</th>
<th>% Change</th>
<th>52 WEEKS 07/24/16</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL MEAT</td>
<td>1,084,924,652</td>
<td>+ 0.6%</td>
<td>14,727,148,254</td>
<td>+ 3.5%</td>
</tr>
<tr>
<td>Beef</td>
<td>391,024,771</td>
<td>+ 5.3%</td>
<td>4,869,988,964</td>
<td>+ 6.3%</td>
</tr>
<tr>
<td>Chicken</td>
<td>407,497,228</td>
<td>0.0%</td>
<td>5,069,920,119</td>
<td>+ 2.6%</td>
</tr>
<tr>
<td>Pork</td>
<td>226,041,718</td>
<td>- 6.0%</td>
<td>3,240,828,490</td>
<td>+ 3.2%</td>
</tr>
</tbody>
</table>

Source: HRI/Freshlook MULO, Total US, Four weeks ending 7/24/16; Categorized by the VMMEA® System

Beyond this website publication, NCBA actively leverages scanner data to support numerous checkoff programs, including: communications, culinary, product development, innovation, issues management, trust, market research, strategy, planning and marketing. One recent example confirms 2016 retail beef pound sales are increasing in line with supply. Figure 3 shows that despite weaker ground beef sales through May (see Ground Beef Challenges article in this same issue), many consumers have been trading over to roasts and up to higher value steaks as prices have moderated in 2016.

![Figure 3: January-May 2016 vs. 2015: Increase in Beef Pound Sales by Primal and Form](http://www.beefretail.org/)

Date: October 13, 2016

You’re in...’s consumer.

Additional Resources

BeefRetail.com
Other data users include strategic account managers, who frequently share information with key accounts to help them evaluate their performance against national norms and look for incremental merchandising opportunities to improve their beef sales and profits. State beef councils regularly request data to support their efforts, as do other checkoff contractors and the Cattlemen’s Beef Board for ongoing demand measurement work.

**Conclusions**

Connecting the Dots

With an eye on making the most from this checkoff investment, NCBA continues to seek ways to learn from, leverage and apply this valuable resource. Combined with market research insights that bring consumer rationale to light along with other informative data sets and tools, retail meat case scanner data enables the beef checkoff to track and understand the retail purchase behavior of today’s consumer.

**Additional Resources**

- BeefRetail.com

**Tags:** Beef Issues Quarterly, Fall 2016, Trends Analyses
Cattle Markets Have Many Moving Parts

Date: October 12, 2016

What a tremendous variance in emotion, perspective and market psychology on behalf of cattle producers and especially cow-calf operators over the past two years from the two years preceding. Cow-calf producers have endured the bulk of the decline in margin, at the same time they had the most margin to lose. Think of it this way, there’s only so much margin per animal and each segment (i.e. cow-calf, stocker, feedyard, packer, retailer) is attempting to get the highest percentage of the pie.

by Troy Applehans, Market Analyst, CattleFax

Summary

What a tremendous variance in emotion, perspective and market psychology on behalf of cattle producers and especially cow-calf operators over the past two years from the two years preceding. Cow-calf producers have endured the bulk of the decline in margin, at the same time they had the most margin to lose. Think of it this way, there’s only so much margin per animal and each segment (i.e. cow-calf, stocker, feedyard, packer, retailer) is attempting to get the highest percentage of the pie. As the accompanying chart indicates, cow-calf producers have been the biggest benefactor with regard to margin per animal to the detriment of other segments, namely feedyard and stocker operators. At some point there is a “redistribution of margin” due to the non-profitable segments simply having to pay less and buy margin in order to remain in business. Leverage transfers to another segment. This is what the cow-calf sector has endured the past couple of years, and potentially will continue to undergo for several more.

![Industry Profitability Chart](image)

Background

The bull market of 2013 and 2014 were years that producers never experienced with regard to profitability and upward price trajectory. Now, after back to back bear market years of 2015 and so far in 2016, just the opposite is true. The market swiftly moved into uncharted territory to the high side, followed by the most rapid percentage price decline in history, all in a relatively short period of time. The quick trip down got the market to levels most would not have anticipated would occur until 2018 or early 2019.

Discussion

What entirely is responsible for the market downfall is not easily quantified, because it’s not one, two or even ten easily identifiable items that can be pinpointed. There are an incredible number of moving parts that impact commodity markets in general. Supply and demand are primary components of commodity...
Commodity prices at some point move towards the “average” cost of production. Recent examples of this are the grain and crude oil markets. Often times what happens is high cost and/or low return producers are the first to lose money, next the most inefficient of average producers begin to lose money. In the case of cow-calf producers, history has shown that many of them are willing to endure losses on two consecutive calf crops before beginning to liquidate cow inventories due to lack of profit. This is how cattle and commodity cycles work. Expansion occurs due to profitability, which is most often the result of low inventories. Enough expansion results in lower prices, due to larger supplies. At some point when prices decline to the point average producers are losing equity, liquidation begins to occur. Yet in the case of cattle, prices are slow to respond due to the additional tonnage of product as a result of increased cow slaughter. This is supply fundamentals in its simplest form. What is clearly more difficult to measure and take into account is demand. And what is not possible to quantify are all the other moving parts and variables of markets mentioned earlier.

Presently a large component impacting cattle markets are the burdensome supplies of competing proteins. Total meat production is simply larger than domestic and current exportable consumption at the present time. Pork and poultry producers, at this point, have little incentive to curb production since most are at a breakeven to profitable regarding returns. Cattle numbers, after rapid expansion, will also continue to grow for the next several years. Cattle packing plant utilization rates are extremely high, giving the packing segment of production tremendous leverage over segments below them. Retailers remain profitable on beef due to continued high beef prices for consumers, as well as plenty of options regarding abundant supplies of lower priced alternative proteins.

So, how do cattle producers regain leverage and begin to see higher values? Simply put, it’s going to take time. The pure vastness of the challenges for cattle producers don’t heal overnight. Now obviously, if China were to open and accept imports of U.S. beef, something of that nature is an immediate game-changer. Significantly increasing not only beef, but total meat exports can be a tremendous help, but the global economy has to be able to support the increase and currency values be more advantageous to exporting countries. Packer and retailer margins can decrease, yet they can remain profitable in order to move more product to the consumer. At some point the competing proteins can lose the incentive to produce more and limit protein production – pork and poultry producers have the ability to significantly increase or decrease production rapidly. There are a multitude of ways the cattle market can increase, but looking for something to wave the magic wand is risky to bet on. And hoping the market will go higher is simply not a good strategy.

**Conclusion**

The odds are that this cattle cycle will have to play itself out just like the previous cycles before it. The accompanying chart illustrates that earlier cycles historically lasted 10-12 years, either from a high to a high or a low to a low. If history repeats itself, the 2014 high in cattle prices would indicate a possible low 5 to 6 years down the road. That’s a long time and certainly doesn’t mean you can’t be profitable during down cycle years, just less profitable. Is this a quicker cycle? Possibly, especially considering how quickly the market decline has been. Is the bulk of the decline behind us? That would make sense, but doesn’t mean there still isn’t risk for lower prices going forward. Managing risk and equity preservation become that much more important for cattlemen going forward. Manage your risk...Don’t be great at what you do and have the market take you out!
**Additional Resources**

- [CattleFax](#)

**Tags:** Beef Issues Quarterly,Fall 2016,Trends Analyses
Ground Beef Challenges

Date: October 11, 2016

This article will look at more direct challenges to ground beef demand, and discuss needed industry actions. This article is written in recognition of the importance of ground beef to the beef industry, with close to 60 percent of current beef volume domestically reaching the market as ground beef.

by John Lundeen, Senior Executive Director, Market Research, National Cattlemen’s Beef Association, a contractor to the Beef Checkoff

Summary

In the last Beef Issues Quarterly, an article explored whether lab-grown meat and ground crickets are potentially a challenge to ground beef. Beyond these more exotic choices, the article also considered the percentage of consumers that may seek out a closer substitute to ground beef, such as a plant-based-option product derived from soy and chickpeas. In conclusion, that article noted that there isn’t a hue and cry among consumers for these alternatives.

This article will look at more direct challenges to ground beef demand, and discuss needed industry actions. This article is written in recognition of the importance of ground beef to the beef industry, with close to 60 percent of current beef volume domestically reaching the market as ground beef.

Figure 1

Background

For the first six months of 2016, additional beef moved through the grocery channel. Interestingly, there was a small shift in the type of beef purchased, with an increase in steak and roast volume, and a 3 percent decrease in ground beef. This led to additional analysis by the market research and intelligence department, to investigate the consumer forces behind ground beef’s small sales shift. The rationale was to determine if market fundamentals for ground beef were evolving.

In addition to in-depth sales analysis, two checkoff-funded studies have recently been run by the market research department, one exploring ground beef purchasing in fast food restaurants, and the other focused on in-home ground beef usage. Both suggest that a minority of consumers are shifting their ground beef eating habits. Note that other tracking of the consumer over the last three years documents that 15 percent of consumers expect to see their “beef” usage increase while 17 percent intend to eat less beef. This provides important context - we have always seen segments of consumers adopting increased or decreased usage of beef products. A significant amount of analysis has been conducted on the reasons behind the intended shift up or down in beef consumption. One should also recognize that as recently as
2014, an estimate of burger consumption showed a record 14 billion estimated as consumed, combining in-home and foodservice consumption. \textsuperscript{5}

<table>
<thead>
<tr>
<th>Fast Food Burger Study (2)</th>
<th>In-Home Ground Beef Usage (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intent to decrease consumption of fast food burgers</td>
<td>Percent who have purchased less ground beef for their family</td>
</tr>
<tr>
<td>22%</td>
<td>29%</td>
</tr>
<tr>
<td>Intent to increase consumption of fast food burgers</td>
<td></td>
</tr>
<tr>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>

\textbf{Discussion}

\textbf{Drivers of Change in Ground Beef Usage}

The following is a list of the reasons given for changes in ground beef consumption noted in the two ground beef studies recently completed. It combines the reasons given in the two studies for changes in consumption and solutions to stimulate increased demand, ranging from nutritional perceptions, trading up actions, convenience issues, lifestyle changes and quality concerns.

\begin{center}
\begin{tabular}{|c|c|c|}
\hline
Impact on Beef & Ground Beef Challenge/Insight & Volume Moving To \\
\hline
\textdownarrow & Nutrition concerns with beef and ground beef & \bullet Chicken breasts \bullet Fish/seafood \bullet Ground turkey (longer-term) \\
\hline
\textdownarrow & Price & \bullet Other protein choices, primarily chicken \\
\hline
\textuparrow & Trading up to better quality & \bullet Higher end beef steaks and a variety of roasts \bullet Higher lean levels of ground beef \\
\hline
\textdownarrow & Convenience solutions that could increase demand & \bullet Many, many options including prepared foods, restaurant take-out, microwaveable foods \\
\hline
\textdownarrow & Lifestyle changes impacting ground beef & \bullet In-home meals \bullet Fast casual restaurants \\
\hline
\textdownarrow & Quality concerns with ground beef & \bullet Unknown \\
\hline
\end{tabular}
\end{center}

\textbf{Further Detail on Drivers of Change}

\textbf{Health Concerns}

Historically nutrition has been the greatest challenge for the beef industry impacting planned consumption levels. Consumers are concerned about fat, cholesterol and calories, and beef is seen as a choice to restrict. The same was true in the two studies recently run concerning foodservice and at-home ground beef purchase intentions; nutrition was the number one reason to cut back on ground beef.

\begin{itemize}
\item The primary reason given for gravitating to chicken products in fast food burger restaurants is nutrition.\textsuperscript{1,2}
\item Scanner data indicates the primary ground product competitively in grocery stores is ground turkey (long-term). This product is perceived by the consumer as being healthier.\textsuperscript{1}
\end{itemize}

The industry has strengths here that must be emphasized, head-to-head nutritional comparisons of ground beef to poultry products should continue to be emphasized. The industry is producing a range of ground beef products for the consumer, including lean (90 percent lean or better) and extra lean (96 percent lean or better) options that compare very favorably nutritionally to poultry products. Before the recession, leaner ground was becoming more popular. Then, as the recession struck, sales shifted towards
less lean, more price-competitive product. In the first six months of 2016, 70 – 77 percent lean product showed scanner sales declines while higher lean products (78 – 84 percent, and 90 – 95 percent lean) showed an increase in sales.

Price Concerns

The second most noted reason for decreased use of ground beef in-home was price (“too expensive” or “other proteins being more affordable”). The Consumer Beef Index, a semi-annual tracker of consumer perceptions has shown over time that chicken enjoys a strong lead over beef on value perceptions. 4

Trading Up to Better Quality

Although it is too early to tell if this is a long-term trend, consumers recently are buying a better steak or roast to serve in-home. Scanner data from the first six months of the year showed strength in T-bone, porterhouse, strip and petite sirloin steak sales. (1) The third most significant reason given in the fast food survey for eating less fast food burgers was a migration by the consumer to burgers served at more expensive locations. (2) Note however that the overall sales of fast food burgers still dwarfs higher priced competitors. In other millennial restaurant research, a propensity to dine at a local “independent” has been noted.

Convenience

Consumers do not note convenience as an issue with using ground beef. However, in the Ground Beef Usage study, a range of solutions were tested to determine what might stimulate demand for ground beef; enhanced convenient packaging solutions did very well.

<table>
<thead>
<tr>
<th>Tactic</th>
<th>Potentially would increase use among those eating less ground beef in-home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved packaging solutions</td>
<td>44%</td>
</tr>
<tr>
<td>Fresh, value added ground beef offerings</td>
<td>38%</td>
</tr>
<tr>
<td>Further knowledge on ground beef (nutrition, recipes)</td>
<td>30%</td>
</tr>
</tbody>
</table>

Lifestyle Changes

Consumers are shifting some of their meals to in-home, including those in the millennial generation. Part of this is based on nutritional desires, as the consumer believes they can prepare a more nutritious dish at home than is traditionally served at a restaurant.

The number one reason for eating less burgers at fast food restaurants was simply “not eating as much fast food.” Note that quotes from the study indicated that major drivers of this trend were a desire to be healthier, to save money by eating out less, a trend to eat more often in-home and the desire to lose weight. 2

Quality Concerns

Quality concerns surfaced as the third most quoted detractor to usage in the in-home ground beef study.
A range of perceptions were noted, including concerns about safety, lack of freshness, and questions about additives or fillers being used.3

The primary enticers to eat more fast food burgers were knowing that the beef is fresh, more nutritious side dishes and the use of leaner beef.2

Conclusions

If one considers all of the factors above, there are several other meat protein products that are gaining interest at the expense of ground beef. Among the 29 percent of consumers who noted cutting back on their ground beef purchase for in-home use, the following proteins were noted as being “purchased instead.” Note that very few people noted eating less protein overall (7%); and 41% noted shifting to beef steaks and/or beef roasts.

Figure 2

<table>
<thead>
<tr>
<th>Replacements for Ground Beef</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  64% Chicken</td>
</tr>
<tr>
<td>B  49% Fish/Seafood</td>
</tr>
<tr>
<td>C  43% Ground turkey</td>
</tr>
<tr>
<td>D  38% Pork (ribs, chops)</td>
</tr>
<tr>
<td>E  34% Lunch meat</td>
</tr>
<tr>
<td>F  32% Beef steaks</td>
</tr>
<tr>
<td>G  28% Ground chicken</td>
</tr>
<tr>
<td>H  27% Vegetable-based (soy, beans, etc.)</td>
</tr>
<tr>
<td>I  26% Beef roasts</td>
</tr>
<tr>
<td>J  22% Ground pork</td>
</tr>
<tr>
<td>K  2% Other</td>
</tr>
<tr>
<td>L  7% None – Just eating less protein overall</td>
</tr>
</tbody>
</table>

Ground beef is a wonderful product that meets consumers’ needs. Over the last several years sales have climbed, helping to power incremental industry revenues. Due to the sheer scale in volume and dollars of ground beef sales, ground beef will draw competitive attention. The industry must continue to stress the taste, versatility, nutritional benefits and overall value of ground beef.

Additional Resources

- Executive Summary, Consumer Image Index, October, 2015
- Why Buy and Eat Ground Beef, 2014 (an extract from the Ground Beef Answers report)

1. IRI/Freshlook, Total US MULO, Jan – May 2015 ending 5/24/15 and 2016 ending 5/22/16, Categorized by VMMeat System
4. Consumer Beef Index, Spring and Summer Waves, 2016
5. Source: The NPD Group / CREST
Scanner data indicates the primary ground product competitively in grocery stores is ground turkey.

Source: The NPD Group / CREST

The primary reason given for gravitating to chicken products in fast food burger restaurants is...

Why Buy and Eat Ground Beef
Consumer Beef Index, Spring and Summer Waves, 2016

Drivers of Change in Ground Beef Usage

The following is a list of the reasons given for changes in ground beef consumption noted in the two studies recently completed. It combines the reasons given in the two studies for changes in ground beef usage.

1. Lifestyle Changes

Consumers are shifting some of their meals to in-home than is traditionally served at a restaurant.

2. Health Concerns

Consumers are concerned about fat, cholesterol and calories, and beef is seen as a choice to...

3. Quality Concerns

A range of perceptions were noted, including concerns about safety, lack of freshness, and questions...

4. Nutrition

Historically nutrition has been the greatest challenge for the beef industry impacting planned consumption...

5. Source: The NPD Group / CREST
How to Measure Trust in Beef and Beef Production and Why it Matters

Date: October 10, 2016

The beef industry’s 2016-2020 Long Range Plan (LRP) was adopted in the summer of 2015. The plan, whose vision is “to responsibly produce the most trusted and preferred protein in the world,” set forth to address four focused core strategies.

by Rick Husted, MBA, Vice President, Strategic Planning and Market Research, National Cattlemen’s Beef Association, a contractor to the Beef Checkoff

Summary

The beef industry’s 2016-2020 Long Range Plan (LRP) was adopted in the summer of 2015. The plan, whose vision is “to responsibly produce the most trusted and preferred protein in the world,” set forth to address four focused core strategies. Key to achieving these strategic goals is the ability to accurately measure progress and outcomes. One of the core strategies, Grow Consumer Trust in Beef and Beef Production, called for the development of a custom metric to make sure progress could be effectively tracked and evaluated. This trust measure, an algorithm based on six focused questions, was benchmarked in last fall’s Consumer Image Index. Following is an overview of how that measure was developed and how it will be applied to track consumer perceptions of trust in the beef industry over the next several years.

Background

The 2016-2020 beef industry long range plan focuses on four core strategies.

Figure 1

![Diagram of 2020 Strategic Objective]

More specifically, the trust strategy calls for more focus on antibiotic stewardship, the implementation of a certification/verification program and continued investment in beef safety initiatives. Moreover, the industry must engage the entire beef community in building consumer trust and collaborate with a broader group of industry partners and outside organizations to protect beef’s image.

While the other core strategies had readily available measures to track progress, the trust strategy did not. As the task force of industry leaders responsible for developing the plan considered this challenge, they requested that a measure be developed that would provide this perspective. In response, the checkoff looked at a variety of potential metrics and ultimately determined that, given how much ground this strategy covers, focusing on just one area of trust would not suffice. The task started with an in-depth review of the variables tracked in the checkoff-funded Consumer Image Index, a market research study...
conducted annually with 1,000 consumers since 2012, capturing feedback on a wide variety of importance and performance criteria about beef and beef production.

The goal was to identify the question or questions within the survey that most directly measured trust, and that also covered variables considered “important” to the consumer in measuring their attitudes about beef’s production practices. Consumers consider beef safety, a nutritious product, animal welfare, and responsible use of hormones and antibiotics to be important. Sustainable practices are a growing area of importance and should not be ignored. All of the six variables chosen were shown to be positively correlated with beef consumption.

**Discussion**

The following more directly outlines the process taken to develop this algorithm approach. It essentially called for answering several questions to arrive at a benchmark measurement for the strongest trust segment (i.e., the group or segment of consumers who have the highest trust in those factors most highly correlated with beef consumption and confidence in the beef industry’s production practices). The result was not just defining this Strong Trust Segment (STS) of consumers, but also sizing that segment and learning more about what shapes consumer trust attitudes and where the greatest likelihood for improving overall trust resides. The goal over the life of the long range plan is to grow the size of this segment of consumers, and consequently, positively measure growth in trust in our production practices. With greater emphasis being placed today on how food is raised, we believe this will not only create trust in our production practices, but carry over into increased beef consumption.

**Consideration 1**

Is it reasonable to expect that an increase in the size of the defined STS could have a positive effect on industry volume?

- Yes. Consumers with that level of trust put a premium on beef usage and have higher positive perceptions of beef/beef production performance.

**Consideration 2**

Is there room for growth in the size of the STS, assuming reasonable effort from the industry?

- Yes. The opportunity lies in growing trust among those consumers who are close, but just outside, the STS in their current levels of trust.

**Consideration 3**

Is there consistency over time for an aggregate/combination metric such as the one being used to define the STS?

- Yes. Although the metric was defined this year using a few new questions, a surrogate measure of existing, parallel questions from the Consumer Image Index (CII) going back to 2012 does show consistency over time.

So, how did we ask the question?

In the 2015 annual Consumer Image Index survey, the question was asked this way: “On a scale of 0 to 10, where 0 is ‘do not trust at all’ and 10 is ‘completely trust’, how would you rate your trust that..."
The beef industry is doing everything they can to make beef safe
The beef you eat is healthy
The beef industry uses sustainable practices
The beef industry uses antibiotics responsibly
The beef industry uses hormones responsibly
The beef industry treats animals humanely

How was the algorithm ultimately determined?

The next, and final step was to come up with an algorithm that would clearly define a trust segment that could be benchmarked for objective setting. Based on all of the information at hand, and the results of the 2015 Consumer Image Index survey, the following was decided.

- Take all of the consumers who gave at least five of the six questions above a rating of seven or better on the scale of 0 to 10.

By doing that we were able to size the Strong Trust Segment at 33 percent of consumers 18-65 years old and involved in household grocery shopping and meal decisions. This approach not only yields a segment with tremendous upside, but also one large enough to facilitate additional diagnostics about who they are, what forms their attitudes about beef, and what trust related messages might resonate with them, and others, to drive growth in the segment. Again, this makes sense because we know that consumers are increasingly asking questions about how their food is raised, and a higher level of trust should translate into increased beef demand over time.

**Conclusions**

So where do we go from here?

Figure 2

Now that this measure is in place and we will be tracking it year over year, a goal needed to be set. With input from the Long Range Plan task force co-chairmen, it was determined that a realistic, yet somewhat aggressive objective would be to increase the size of the trust segment from 33 percent to 36 percent of consumers. With the beef supply growing steadily, it is critical for the industry to continue working hard to encourage greater trust by focusing on the positives of beef while at the same time addressing barriers
among consumers.

The challenge for the beef industry, and the beef checkoff, is to aggressively pursue efforts and activities that will positively impact consumer trust in our product.

**Additional Resources**

- A [dashboard](#) was also developed to track progress on all four long range plan core strategies.

**Tags:** Beef Issues Quarterly, Fall 2016, Research Findings
**Potential Use of Vaccination for the U.S. Cattle Herd in Response to an FMD Outbreak: Benefits and Challenges**

Date: October 9, 2016

While not a human (public) health concern, Foot and Mouth Disease (FMD) is the most contagious disease of livestock with cloven hooves, such as cattle, sheep, goats, and pigs. The virus rarely kills adult animals, it causes fever and painful blisters in/on an infected animal’s mouth, muzzle, feet and teats, often resulting in dramatic loss in feed intake, weight gain, body condition, and milk production. Foot and Mouth Disease is the most important disease restricting global trade of animals and animal products, and presents the greatest economic threat to U.S. animal agriculture, with devastating economic impacts extending far beyond animal agriculture.

by Renée D. Dewell DVM, MS; Molly J. Lee, DVM Center for Food Security & Public Health, Iowa State University

**Summary**

While not a human (public) health concern, Foot and Mouth Disease (FMD) is the most contagious disease of livestock with cloven hooves, such as cattle, sheep, goats, and pigs. The virus rarely kills adult animals, it causes fever and painful blisters in/on an infected animal’s mouth, muzzle, feet and teats, often resulting in dramatic loss in feed intake, weight gain, body condition, and milk production. Foot and Mouth Disease is the most important disease restricting global trade of animals and animal products, and presents the greatest economic threat to U.S. animal agriculture, with devastating economic impacts extending far beyond animal agriculture. Agriculture is critical infrastructure in the U.S. Cash receipts for livestock and poultry often exceed $100 billion per year. The size, structure, efficiency, and extensive movement within and between states that is inherent in the United States livestock industry will present unprecedented challenges in the event of an FMD outbreak. No country with a livestock industry comparable to that of the U.S. has had to deal with an outbreak of FMD. This article will introduce the potential role of vaccination in a response to an FMD outbreak in the U.S. and will describe some challenges associated with FMD vaccination.

**Background**

There is no treatment for Foot and Mouth Disease. Historically, control has consisted of quarantining herds, testing animals for disease presence, and killing and disposal of positive herds. This practice, called “depopulation” or “stamping out” is still a useful emergency procedure to control and contain the virus. However, the U.S. has some very large herds including feedlots with greater than 50,000 head of cattle, dairies with greater than 5,000 lactating cows, dairy calf ranches with greater than 70,000 head of calves (between 1 day and 4 months of age), and swine farms with greater than 20,000 sows. These premises are too large to rapidly depopulate to stamp out the disease. If it were possible to depopulate them, carcass disposal would present enormous environmental problems. Stamping out may still be used as part of an FMD outbreak response, especially if the outbreak is a small, localized outbreak. Responding agencies may employ a variety of strategies depending on the circumstances of the outbreak. The use of vaccination against FMD is likely to play a part in a larger FMD outbreak response.

**Discussion**

Benefits of Vaccination in an FMD Outbreak

In an FMD outbreak involving a moderate or large number of animals, the rapid use of tens of millions of doses of FMD vaccine will likely be necessary to effectively respond to the outbreak.
Vaccine has been used in other countries to control and eradicate FMD. There can be significant advantages to including FMD vaccination as part of a response. For example, in the 2001 FMD outbreak in Uruguay, a very successful country-wide vaccination program was instrumental in controlling and containing the FMD virus. Cattle are usually considered to be a high priority for emergency FMD vaccine use. If the disease is under control in cattle, most FMD virus strains should not persist in other species. Vaccination can reduce the number of herds requiring depopulation (thus reducing the costs and environmental impacts associated with disease eradication and carcass disposal) and reduce economic losses to the industry. Foot and Mouth Disease vaccination can reduce, and may eliminate clinical disease and can increase resistance to infection. Finally, because it reduces virus shedding, vaccination may slow the spread of the outbreak and allow responding agencies to stop the spread of the disease more quickly.

Without sufficient FMD vaccine, FMD could rapidly spread across the U.S. and prolong the length of time to eradicate an FMD outbreak. The FMD virus could potentially spread to deer and feral swine and prolong the problem. If an FMD outbreak is not eradicated quickly, it would then require a much more extensive control program and could take many years to eradicate.

There is clear desire on the part of many emergency management personnel to be able to use vaccination as part of the response to FMD. Rapid availability of large amounts of vaccine is very important for controlling an FMD outbreak. In a study designed to estimate vaccination needs for an FMD outbreak in Minnesota, large scale vaccination (1,500 herds per day) reduced the size and duration of the outbreak if initiated within 21 days of the start of the outbreak.  

Challenges of FMD Vaccination

Some stakeholders wonder why the U.S. cattle herd is not routinely vaccinated against FMD to reduce the negative effects if this virus were introduced in our country. After all, if the vaccine is a good tool to use to help control disease outbreaks when they happen, why aren’t we using it before an outbreak occurs? Perhaps like we use calf-hood vaccination to prevent Brucellosis or pre-breeding vaccines in swine? A major challenge of FMD vaccination is the complexity in selecting “which one” of the FMD vaccines should be used. There are more than 65 different strains of the FMD virus in seven different groups or serotypes, with very limited cross-protection between vaccine strains. Approximately 23 different vaccines would be needed to provide protection against all strains. Vaccine protection is short-lived and vaccination would need to be repeated every 6 to 12 months to be protective. The cost to producers of repeated vaccination for multiple strains would be enormous!

Foot and Mouth Disease vaccination is not permitted by USDA-APHIS as an option for routine, pre-outbreak use, and as a result, the U.S. enjoys “FMD-free without vaccination” status, a highly favored trade status that would be lost with the use of FMD vaccination. The use of FMD vaccine when there is no FMD outbreak in the U.S. would result in significant trade restrictions to U.S. exports, potentially resulting in annual losses of up to $6 billion to the beef industry.

Additionally, while vaccination against FMD increases disease resistance and reduces clinical disease and virus shedding, some vaccinated animals may still become infected with FMD. No vaccine is 100 percent effective in protection against infection. Some vaccinated, but FMD-infected animals may look healthy, and yet still be carrying the virus.

The amount of vaccine needed will depend on the extent of the outbreak, and whether the goal is rapid eradication or implementing a control program. Unfortunately, the amount of vaccine available to the U.S. during an FMD outbreak is far below what would be needed to provide vaccine for even a single livestock dense state. A U.S. outbreak of FMD could quickly outstrip even the world’s supply of emergency FMD vaccine. For example, an FMD outbreak in South Korea depleted the banks of FMD vaccines from around
the world in order to vaccinate a population roughly half the size of the livestock population in Iowa. Insufficient vaccination capacity limits the ability of the US to be able to effectively respond with a vaccination strategy should that be the response choice made by USDA.

The U.S. currently has very limited quantities of vaccine that may be available during an outbreak. The USDA has recognized the need for a larger stockpile of FMD vaccine for emergency use. However, development of an adequate FMD vaccine stockpile would be expensive. The USDA lacks the funding to develop an adequate stockpile. It would take many months to obtain the volume of FMD vaccine needed to effectively respond to a large FMD outbreak.

**Conclusion**

**Actions the Beef Community Can Take**

The need for additional supplies of FMD vaccine, as well as new vaccine approaches and technologies, to help meet this need has been recognized by USDA and other government entities. USDA APHIS has funded the development of Secure Food Supply Plans that incorporate the use of FMD vaccine as an important control tool. The USDA is collaborating with state officials and all segments of the livestock industries to develop plans to help protect your herds and businesses from foreign animal disease outbreaks such as FMD. As members of the beef community, you should consider benefiting from participation in the voluntary Secure Beef Supply plan, which emphasizes biosecurity—consistently and carefully implemented—as the most effective way to protect your herd before, during, and after an outbreak.

**Additional Resources**

- [Secure Beef Supply Plan](#)

**Tags:** Beef Issues Quarterly, Fall 2016, Issues Updates
Helping Consumers Reduce Food Waste

Date: October 8, 2016

Food waste has been a worldwide topic of conversation for the past few years and rightfully so - nearly 40 percent of the food raised and grown in the U.S. is thrown in the garbage and ends up in a landfill. Although beef is seen as a precious food source and is among one of the least-wasted commodities, beef waste is a significant issue.

by Brandi Buzzard Frobose, M.S., Associate Director, Issues Communication, National Cattlemen's Beef Association, a contractor to the Beef Checkoff

Summary

Food waste has been a worldwide topic of conversation for the past few years and rightfully so - nearly 40 percent of the food raised and grown in the U.S. is thrown in the garbage and ends up in a landfill. Although beef is seen as a precious food source and is among one of the least-wasted commodities, beef waste is a significant issue. In fact, according to research conducted by the Beef Checkoff as part of the sustainability lifecycle assessment, if beef waste was cut in half, full supply chain sustainability would increase by 10 percent. Addressing the issue has to start at home, with consumers, by taking small steps to mitigate food waste.

Background

Over the past few years, various states have instituted new procedures and policies to help mitigate food waste. For example, California buys more than 100 million pounds of farmers’ extra crops to give to food banks and the state offers tax incentives to farmers who donate produce and the haulers who transport it to nonprofits. In Vermont, the state legislature passed its universal recycling law, which includes a ban on organic waste in landfills. Even Wal-Mart has taken big steps to reduce food waste by selling “ugly” fruits and vegetables at a discounted price – weather-damaged apples and potatoes are being sold in Texas and Florida stores. These actions and more are helping all consumers, nationwide, realize the severe impact that food waste has on our food supply, environment and food chain sustainability.

Discussion

Recognizing that food waste is a huge challenge for consumers, as well as influencers and beef producers who work hard to raise beef, several checkoff-funded teams, including Beef Advocacy Training and Engagement, Consumer Engagement, Consumer Influencer and Retail and Foodservice, rallied together to develop a campaign that could reach a number of different audiences, with one unified message – fight against food waste. The 30-Day Food Waste Challenge, which is modeled after the highly successful Protein Challenge, is a drip-style campaign that was designed to challenge consumers to raise awareness and introduce simple changes to fight food waste.

The challenge, which launched on August 1, incorporates many assets from “Beef. It’s What’s For Dinner.” as well as new infographics, inventory sheets and meal planning programs. The teams collaborated on reaching out and sharing pre-designed talking points, social media messages and FAQs to specific beef community sectors that allowed those groups to reach a broader consumer audience, all while utilizing the campaign-wide theme of #WasteLess, which is a key term that can be measured using digital tools and tracking. These promotional materials were distributed to more than 40,000 Masters of Beef Advocacy (MBA) grads, consumer influencers and retail and food service stakeholders. These shared materials include messages that resonate with a consumer audience and can be accompanied with an image from the infographic. Additionally, regular updates and reminders are shared with MBA grads to keep the
The campaign has generated multiple valuable pieces of content from third-party influencers and MBA grads. For example, Terryn Drieling, a rancher from the Sandhills of Nebraska who blogs at Faith, Family and Beef, ask readers:

“Shouldn’t we be more upset about the food we work so hard to grow being literally thrown in the garbage? Shouldn’t we be making more noise on the issue?

The answer is yes. We should be more upset, and we should be making more noise to draw attention to the insane amounts of food being wasted each year.”

Another prime example of the organic campaign promotion from influencers is a post from popular registered dietitian, and Beef Expert Bureau member, Melissa Joy Dobbins in which she discusses being challenged in life and how those challenges make life interesting. Dobbins previously was highly engaged in the Protein Challenge and now looks to find ways to reduce her food waste at home by signing up for the 30-Day Food Waste Challenge.

With every successful media campaign, there is also a digital aspect. Using insight from cross-collaboration, specific messages have been chosen to be amplified across multiple social media platforms, including Facebook, Twitter and popular search engines such as Google. As of mid-September, the paid media amplification has resulted in 300,000 impressions and views with more outlets running campaigns through the end of September and into October. These figures are constantly monitored through advanced social media measurement tools such as Nuvi and are growing on a daily basis. All forms of promotion, both organic and paid, have yielded more than 1,075 mentions and 4.2 million impressions using the hashtag #WasteLess.

Figure 1. Sample tweet promoting the Food Waste Challenge

Conclusions
The 30-Day Food Waste Campaign is a prime example of cross-collaboration between multiple programs and the successes that accompany strategic planning. Through utilization of multiple teams and resources, this campaign is able to have far-reaching effects on not just beef producers and their families, but on every consumer who purchases beef or wants to make smart choices for their family, while keeping sustainability at the forefront of their purchasing habits. The checkoff-funded Beef Advocacy Training and Engagement team strives to identify key areas of focus, such as food waste, in order to engage MBA grads to share their stories with an inquiring consumer audience. The success of the Food Waste Challenge will provide valuable insight and learnings for future campaigns.

If you would like to sign up for the ongoing 30-Day Food Waste Challenge or are interested in the engaging resources promoting a reduction in food waste, you can explore the Food Waste landing page at Beef. It’s What’s For Dinner.com.

Additional Resources

- Food Waste Challenge

1. http://www.huffingtonpost.com/entry/states-food-waste-policies_us_5798a40ce4b0d3568f853698

Tags: Beef Issues Quarterly, Fall 2016, Issues Updates
Dr. Dan Kniffen and his wife, Dr. Ann Swinker, operate Windy Butte Ranch-Kniffen Livestock in Spring Mills, Pennsylvania. The 35 head cow-calf and seed stock operation specializes in purebred Hereford cattle.

Off the farm, Kniffen works as an Assistant Professor of Animal Sciences at Penn State, serving as the Beef Specialist. His wife, Ann, is the Extension Horse Specialist at Penn State and an Associate Professor of Equine Science. Kniffen has or also serves on the Pennsylvania Beef Council Board of Directors, the Cattlemen’s Beef Board and the Pennsylvania Cattlemen’s Association. He is County Farm Bureau Policy Development Chair and is the Past President; he is also the chairman of the National Beef Quality Assurance (BQA) Advisory Board.

**Beef Issues Quarterly (BIQ):** What changes are happening regarding antibiotics moving forward?

**Dan Kniffen (DK):** As you’ve probably heard the FDA has released two Industry Guidances that go into effect January 1st, 2017. Guidance for Industry (GFI) #209 limits the use of medically important antimicrobial drugs used in feed and water for animals to the following uses:

- Those considered necessary for assuring animal health (therapy, prevention, and control) and NOT for feed efficiency or growth promotion;
- Veterinary oversight or consultation.

Guidance for Industry #213 defines how this will be implemented. First, drug sponsors will change drug labels to remove any production or growth claims by December 31, 2016. With the label changes it will no longer be legal to use the medically important antibiotics in feed/water for feed efficiency; therapeutic uses will be maintained. Second, beginning January 1, 2017 GFI #213 requires a transition to Veterinary Oversight. This includes a prescription for water soluble products (medicated drinking water) and a Veterinary Feed Directive (VFD) for medically important antibiotics used in or on feed and requires use to be authorized by a licensed veterinarian in the context of a Veterinarian-Client-Patient Relationship (VCPR).

**BIQ:** What do producers need to do to be ready for the changes?

**DK:** The first thing producers need to do is talk to their veterinarian. Each veterinarian will know better how the changing regulations will effect an individual operation. Be certain to establish a valid VCPR with your veterinarian.

**BIQ:** I already talk to my vet, what more do I need to do? What is a VCPR?

**DK:** A “veterinary-client-patient relationship” or VCPR documents your relationship with your veterinarian and establishes, in writing, their agreement to have oversight of the affected medically important antibiotics and how they are used. The veterinarian-client-patient relationship is the basis for interaction among veterinarians, their clients, and their patients and is critical to cattle health and well-being. There is a federal definition for a VCPR and many states have definitions that exist under the state veterinary practice acts. In regards to the VFD, the FDA has released a list of the VCPR jurisdiction for the state or federal definition that can be found at this link:

[http://www.fda.gov/AnimalVeterinary/DevelopmentApprovalProcess/ucm460406.htm](http://www.fda.gov/AnimalVeterinary/DevelopmentApprovalProcess/ucm460406.htm)
Generally, a VCPR exists when:

- The veterinarian has assumed the responsibility for making clinical judgements regarding the health of the animal and the need for medical treatment, and the client has agreed to follow the veterinarian’s instructions.
- The veterinarian has sufficient knowledge of the animal to initiate at least a general or preliminary diagnosis of the medical condition of the animal. This means the veterinarian had recently seen and is personally acquainted with the keeping and care of the animal by virtue of an examination of the animal or the medically appropriate and timely visits to the premises where the animal is kept.
- The veterinarian is responsible for maintaining and evaluating case and treatment records, and is readily available for follow up evaluation in the event of adverse reactions or failure of treatment regimen.

**BIQ:** What resources are available to get me ready for changing regulations?

**DK:** The industry has compiled a host of resources for producers and industry stakeholders, available at [www.beefusa.org/antibiotics](http://www.beefusa.org/antibiotics). This page includes brochures and pamphlets from FDA with specific information about how the new regulations effect each level of the industry and stakeholders, from feed manufacturers to veterinarians and producers. It also includes recorded webinars so producers can hear directly from FDA and renowned veterinarians on the topic of antibiotics and how to be prepared.

Additionally, the BQA program has just released a publication, Antibiotic Stewardship for Beef Producers, specifically addressing the use of antibiotics on the farm or ranch. This new handbook compliments BQA’s other documents by compiling all the relevant antibiotics information into a single 23-page, dashboard ready, reference. All of BQA’s resources can be found at [www.bqa.org](http://www.bqa.org).

These resources, as well as other industry news sources, would be a great starting place for producers who have any questions or just want to know how to comply with the new regulations.

**BIQ:** How did this all come about?

**DK:** The FDA developed these rules in an effort to establish more veterinary oversight over the use of medically important antibiotics used in animal medicine. These GFI’s support President Obama’s Executive Order: Combating Antibiotic-Resistant Bacteria.

**BIQ:** How can these new regulations help the industry?

**DK:** This allows the beef industry to better communicate with consumers that antibiotics are being used judiciously and responsibly to raise a healthy, wholesome cattle herd. Ultimately, these guidance’s will allow our industry to better tell our story of cattle production and instill more confidence in our product from the consumer level.

Tags: Beef Issues Quarterly, Fall 2016, Questions and Answers
On a daily basis, the Beef Checkoff-funded Daily News Team carefully surveys the landscape across traditional media, broadcast media and social media to determine which issues warrant a response.

by Brandi Buzzard Frobose, M.S., Associate Director, Issues Communication, National Cattlemen's Beef Association, a contractor to the Beef Checkoff

Summary

On a daily basis, the Beef Checkoff-funded Daily News Team carefully surveys the landscape across traditional media, broadcast media and social media to determine which issues warrant a response. Using a variety of tools, including Lexis Nexis for traditional and broadcast media monitoring, NUVI for social media monitoring, Sprinklr to track influencer engagement, and social media outlets to monitor beef community contributions, the team overlays the data from several applications to create a clear picture of how an issue is playing out in the external environment.

Background

Each quarter, the team reviews traditional media coverage and a sampling of social media coverage to determine the level of attention that an issue receives. From July 2016 – September 2016 more than 975 traditional media stories and 1,264,516 social media mentions of the beef industry were analyzed as part of the quarterly monitoring report through Lexis Nexis and Nuvi. The one million social media mentions resulted in more than 1.2 billion social media impressions during the same period, many of which were generated in response to a study from JAMA Internal Medicine titled “Association of Animal and Plant Protein Intake with All-Cause and Cause-Specific Mortality.” The focus of this article will center on the media surrounding the JAMA study in addition to proactive media management addressing topics of local food and antibiotic use on the farm or ranch.

Discussion

As an issue breaks onto the news horizon, it is imperative to listen and analyze the media landscape in order to understand how a topic is being interpreted by the consumer and portrayed by the media. Careful analysis of both traditional and social media can provide significant, impactful insights that are critical in helping manage and respond to an issue in a timely and effective manner.

On August 1, The Journal of the American Medical Association (JAMA) released a study from the Harvard Public Health group called "Association of Animal and Plant Protein Intake with All-Cause and Cause-Specific Mortality." The study suggested that the choice of protein sources (whether animal or plant-based) would inevitably influence other components of diet and affect health outcomes.

The study found a weak association between higher intake of animal protein and higher mortality, according to a statement from Shalene McNeill, PhD, RD, Executive Director of Nutrition Research at the National Cattlemen’s Beef Association, a contractor to the Beef Checkoff. The authors of the study concluded that “high animal protein intake was positively associated with mortality and high plant protein intake was inversely associated with mortality, especially among individuals with at least one lifestyle risk factor.”

As you can see in the figure below, initial media coverage when the report was first covered by TIME and
Medical Xpress caused a media spike for approximately the first 12 hours. However, in the following days, media coverage and online impressions decreased dramatically.

Figure 1. Social media impressions during the first 48 hours of media coverage

While there was no specific mention of beef in the study, the team immediately recognized that these results and headlines may prompt consumers to question the inclusion of red meat in their diet. The team worked with subject matter expert, Dr. Shalene McNeill, to create a media statement to be distributed and posted on the checkoff-funded, issues-based website FactsAboutBeef.com. Additionally, nutrition content on FactsAboutBeef.com was made easily available for readers and interested consumers to find.

While the JAMA study received a lot of attention initially and garnered more than 18 million impressions within a few days of publication, traditional and social media conversations around this subject declined after the first 48 hours of coverage.

Figure 2. Snapshot of coverage from the initial report release to the end of the week (August 1 – August 5).

Issues and reputation management isn’t always reacting to studies or stories of the day – sometimes it’s identifying key issues around beef production and promoting positive messages from the beef community.

For example, Masters of Beef Advocacy alumna and beef farmer Val Wagner took the issue of local food to task on her blog Wag’n Tales. Wagner explained in her post “The Legend of Local” that:
“I’ll buy my food from sources I know when I can...and I’ll go to the grocery store and buy food for my family without a second thought as well.

Sometimes we need to remember that food is food. It’s a privilege that many of us take for granted. And buying food from one place or another does not make you better than anyone else – it just makes you less hungry.”

Recognizing that food purchasing trends are top of mind for many consumers and the local food movement is a constant presence on social media, the team decided to amplify this content to a broader audience who are interested in local food chains and purchasing decisions. This paid digital amplification helped ensure that more people saw the post on Twitter. Additionally, the post was also served up as suggested reading on key consumer websites via search engine placement on websites such as The Atlantic.

Figure 3. Screenshot of MBA blog placement on popular news sites.

The outcome of this paid amplification exceeded industry averages for similar promotions – between the two outlets, the promoted content received more than 5,000 link clicks and more than 3.4 million impressions or views.

Figure 4. Screenshot of Twitter content amplified through strategic audience targeting.
Yet another successful amplification of beef community content came from another MBA grad post – veterinarian Jake Geis shared his thoughts on antibiotic-free meat in a post from his blog, The Cow Docs, called “The Ethics of ‘Antibiotic-Free’ Meat.” Again, through specific audience targeting, the team was able to strategically place this content in front of a consumer audience which is looking for information about this extremely important topic. The paid amplification of the antibiotics content garnered more than 4,300 link clicks and more than 1.6 million impressions or views. The most encouraging outcome of this promotion was the engagement of a non-agriculture audience. This campaign generated robust discussion in the comments section and most notably, non-meat eaters chimed in on the conversation.

Figure 5 – Screenshot of tweet from non-meat eater about antibiotics use in agriculture

Through refined targeting and takeaways and close relationships with MBA grads, the team is able to serve up positive beef stories to an inquiring consumer base through utilization of social media and other digital media tools.

Conclusions

Issues and reputation management is equal parts art and science and the beef checkoff has the tools and the team in in place to protect consumer confidence, and therefore consumer demand, in beef. The ability to understand how an issue is being perceived and interpreted by consumers and the media, provide perspective or shift a strategy during an issue at the right time, is critical. The team uses all of the tools – traditional and social media monitoring, to advise response efforts on a daily basis.

The ability to serve-up a message, provide perspective or shift a strategy during an issue at the right time, is critical. The team uses all of the tools – traditional and social media monitoring, to advise on response efforts on a daily basis.

Additional Resources

- Facts About Beef – Statement on JAMA Study

Tags: Beef Issues Quarterly, Fall 2016, Issues Monitoring
Lagging the Commodity Cycle

Market prices are going through a historic decline during this particular cattle cycle—losing more value faster than any break in 40 years. Cattle producers are not unique in this battle. All commodity markets—grains, metals, energies and proteins—are experiencing historically large devaluations. The price breaks are part of a larger 20-year commodity cycle. The protein markets generally peaked during this cycle from 2014 to 2015. Grains and other feedstuffs topped from 2012 to 2014, while energies and metals peaked from 2010 to 2011.

The proteins were able to reach highs later than the other commodities, largely because the market needed to incentivize livestock producers with better margins. That meant feedstuffs needed to move cheaper relative to beef, pork, and poultry prices to encourage additional production. Now, expansion is here. And while pork and poultry prices have retreated quickly and found some recovery, devaluation of cattle markets continues, and additional price breaks are still a risk.

The first two years of the cattle cycle downturn has been deeper than expected. Challenges came quickly as the calendar transitioned to 2015. Higher U.S. Dollar values stunted export growth. Then, the west coast port slow down halted export shipments for months. Seasonally, broiler and pork production increases from summer into winter, and the lack of global destinations for the new supply flooded the domestic marketplace into year’s end.

Those challenges came as the beef industry was fighting its own battles. Feedyards carried fed cattle longer, and front-end cattle supplies became excessively abundant by year-end 2015. As a result, cattle producers handed bargaining position to processors, retailers and restaurants. The cattle industry is in a better fundamental position in 2016, but expansion is going to continue for beef, pork and poultry for the next few years. That means bargaining position will remain historically weak.

**Bottom Line:** Commodity market cycles have long tails—presenting additional risk to cattle producers going forward. Also, prices generally break back to the cost of production in commodity markets. Fundamentals suggest the bulk of the cattle cycle price break is behind us, but those previous thoughts present a potential roadmap. It is likely that three or more years of downside price risk exists for cattle producers. Similar to the breaks in pork, poultry and the prevailing feedstuffs, the lows may be another 10 to 20 percentage points below the recent highs.

**Exports Growing—More is Necessary**

In the latest USDA trade data release, July beef exports were at 216 million pounds, up 8 percent versus a year ago. Year-to-date, beef exports are up 3.1 percent. Beef imports were 268 million pounds, down 7 percent from July 2015. Year-to-date, beef imports are down 12 percent. The 2016 forecast calls for a 6 percent increase in beef exports, and 9 percent decrease in beef imports versus 2015.

Pork exports this year are following the seasonal—peaking in the spring when production is higher and slowing into summer. July pork exports were 403 million pounds, up 1.9 percent versus 2015 and down 0.5 percent year-to-date. The pork export forecast calls for a 1.5 percent increase by year-end compared to 2015. China is largely to credit for the increased pork exports—up 141 percent or 203 million pounds year-to-date. Without the year-over-year increase from China, U.S. pork exports would be 7 percent below year-ago levels.

Broiler exports struggled in first half 2016, with five of the first six months seeing year-over-year declines. Aided by increased shipments to Angola, Cuba and Georgia, July broiler exports were 564 million pounds, up 12 percent from 2015 and down 2.6 percent year-to-date. CattleFax forecasts broiler exports to be up 1.5 percent by year-end versus 2015.

**Bottom Line:** Beef exports are performing well in 2016. Pork and poultry are on track to meet forecasts, but stronger 2016 protein production places more importance on growing U.S. exports for all three major proteins going forward.
Quarterly Corn Exports Record High

The month of August 2016 was the final month of the 2015/16 marketing year, a year in which projections for U.S. corn exports were extremely volatile. Total exports for the marketing year were projected at 1.925 billion bushels by USDA last month and the final tally is expected to be from 1.900-1.925 billion bushels. The current USDA export projection for the new crop marketing year (2016/17) stands at 2.175 billion bushels, which if realized, would be the largest total since 2007/08.

Early projections for 2015/16 U.S. corn exports ranged from 1.850-1.900 billion bushels from May through October 2015, but those projections dipped as low as 1.650 billion bushels in the spring of 2016 as offerings outside of the U.S. were much more competitive on the world market. However, when South American corn exports dropped from record high levels during the September ’15 through February ’16 periods to the lowest levels in years during the March ’16 through August ’16 period, U.S. corn exports soared higher. In fact, in Q1 of the 2015/16 market year U.S. corn exports totaled only 305 million bushels and were the second smallest in 41 years. In Q4 however, U.S. exports soared to over 700 million bushels, exceeding the previous Q4 record of 676 million bushels during the 1978/79 market year.

**Bottom Line:** After an extremely slow start to the 2015/16 market year, U.S. corn exports ended up capturing approximately 41 percent of the total global corn export market share, rebounding from the previous 5-year average of 35 percent. U.S. corn stocks-to-use levels are expected to range from 14-16% through end of year, which supports the practical range for spot corn futures prices from $2.95-$3.15/bu on the low end, with resistance from $3.60-$3.75/bu on the high end.

**Principal Corn Exporting Countries**

- Percent of global total projected for 2016/17 marketing year
- Percent average over the past five years

- United States, 40%, 34%
- Brazil, 16%, 20%
- Argentina, 17%, 15%
- Ukraine, 12%, 13%
- Other, 14%, 17%

**Source:** USDA, August 2016 projection

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