

LONG TERM OUTLOOK

Special Edition

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January 2015

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EXECUTIVE SUMMARY: THE PERFECT STORM HAS PASSED

It is accurate to say all protein and livestock markets experienced a perfect storm in 2014. Mother Nature turned from being an enemy to an ally by June 1 as moisture was prevalent across the Central Plains. Significant year-over-year declines in beef cow slaughter followed, and the desire to develop replacement females became clear with accelerated declines in heifer slaughter. The most prosperous time in decades for the beef industry was developing as competing protein segments were in turmoil. The pork industry dealt with crippling pig losses due to the porcine epidemic diarrhea virus – leading to enormous pork production declines. Broiler producers had their own challenges with poor productivity in the breeding flock – resulting in slower poultry expansion than anticipated.

The major livestock proteins were all facing supply declines in 2014, but the most impressive fundamental market shift was the growing demand for wholesale beef and fed cattle. The strongest year-over-year demand growth in more than 30 years led to record-high prices for cattle and hogs – producing record-large margins for producers in both industries – but all good things usually come to an end.

The protein sector is already transitioning from the tighter supplies that defined 2014. Pork and poultry production in 2015 are expected to be 4 to 6 percent higher than last year. Beef supplies will be smaller, but the year-over-year declines will be closer to 1 percent.

Another concern in 2015 is the potential for more limited growth in red meat and poultry exports. The top destinations for U.S. beef, pork and poultry are also countries that have been the most adversely affected by exchange rate shifts. That will create a trade environment where U.S. red meat and poultry will be more expensive for our top international customers in 2015 – potentially limiting export growth.

Domestic demand will also present some challenges in 2015. Retail beef demand was record high in 2014 with year-over-year gains of 7 percent. It will be difficult to maintain the same annual demand growth in 2015. Continuing record-high beef prices at retail will be met with cheaper pork and

poultry values – creating record-wide spreads between beef and competing proteins. Export market concerns, larger competing meat supplies and uncertainty regarding the global economy could all undermine gains in 2015 demand leading to a disappointing market.

The industry entered the year with record returns from the cow-calf, stocker and feedlot segments over the last 12 months. The cow-calf sector shattered historical record returns by double the previous level. With improving forage and range conditions across major cow-calf country, cowherd expansion is going to be prevalent – resulting in the first continuous expansion since 1996 to 1999. Through the early stages of the expansion, cow-calf operators will be highly profitable.

Pasture and range conditions have improved considerably across major cattle producing regions, and the recent improvement is expected to hold, which is different than the last 20 years. The drought cycle that has plagued the cattle industry for a generation is shifting to a period of more abundant rainfall. Expect periods of drier weather, but the droughts will be shorter lived. Increased moisture is not the only good news long term. The global economic recovery has been relatively slow, but the shift to increased beef consumption around the globe is real. Beef consumers recognize the value of grain-fed U.S. beef, and are willing to pay a premium for it. As global incomes continue to rise, U.S. cattle producers will be able to deliver the highest quality beef in the world.

Price Expectations	2014	2015	2015 Range	
			Low	High
All Fresh Retail Price (\$/lb.)	\$5.60	\$5.90	\$5.60	\$6.00
Composite Cutout (\$/cwt.)	\$237	\$242	\$220	\$265
Fed Steer Price (\$/cwt.)	\$154	\$157	\$140	\$170
750lb Steer Price (\$/cwt.)	\$207	\$220	\$195	\$240
550lb Steer Price (\$/cwt.)	\$244	\$260	\$235	\$290
Utility Cow Price (\$/cwt.)	\$107	\$115	\$90	\$125
Hide & Offal Value (\$/cwt.)	\$15.88	\$15.75	\$14.75	\$16.60
Spot Corn Futures Price (\$/bu.)	\$4.16	\$3.60	\$3.10	\$4.25

SUPPLY: TIGHTER SUPPLY REMAINS AS EXPANSION STARTS

Similar to 2014, the U.S. per capita net beef supply is forecast to decline yet again this year, but the year-over-year decline will be different than 2014 at less than 1 pound per person. That will create a less dramatic year-over-year change – and smaller market influence – than the 2.2 pound per person decline in 2014. Per capita net beef supply in 2015 is forecast to total 53.4 pounds compared to 54.3 pounds in 2014. The smaller 2014 calf crop and increase in heifer development by cow-calf operators – is expected to reduce fed slaughter in 2015. Beef cow slaughter is also forecast to decline 10 percent in 2015 as record-high cow-calf profitability entices producers to cull fewer cows.

U.S. beef production in 2015 is forecast to decline 1 percent or 260 million pounds – totaling 24 billion pounds and leading to the smallest total since 1993. Cattle slaughter declined 2.3 million head in 2014 – the second most in 35 years. The forecast for 2015 cattle slaughter represents a decline of more than 600,000 head. Fed slaughter is forecast to be 330,000 head smaller, and cow and bull slaughter is forecast to decline 300,000 head in 2015.

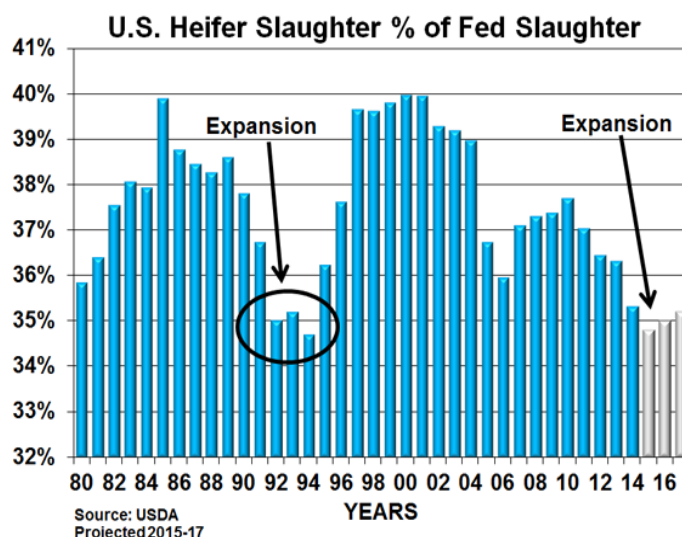
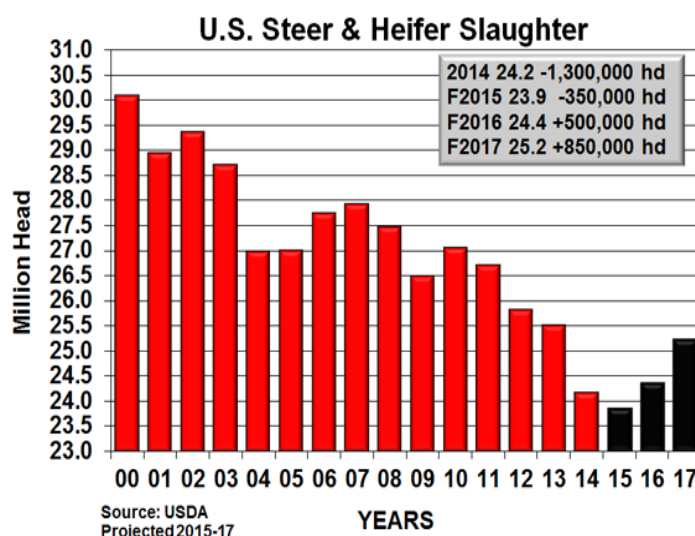
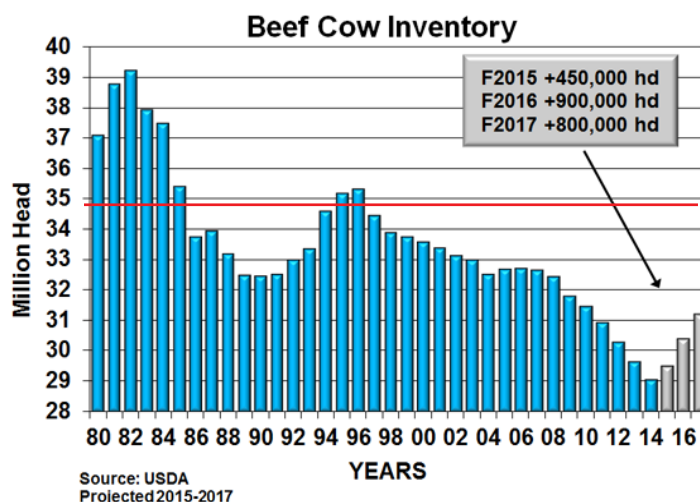
REASONS FOR EXPANSION

The U.S. beef cowherd on January 1, 2015, is expected to increase 450,000 head and total 29.5 million. Beef cow slaughter in 2014 was smaller than 2013 in every single month, but the transition from the first four months of 2014 to the rest of the year was staggering. Beef cow slaughter since 1970 has averaged 1.3 million head larger from May to December compared to the previous January to April. The increase in 2014 was 750,000 head. That is the smallest seasonal increase for that period on record.

The share of heifers in the fed slaughter mix was the smallest since the early 1990s at 35.3 percent. That is also the last time heifer retention signaled expansion with producers aggressively holding back heifers. A shift to aggressive beef cowherd expansion is occurring, but it will take until late 2016 or 2017 before it results in larger fed supplies and beef production.

The dairy cowherd is expected to increase 100,000 head on January 1, 2015 – totaling 9.31 million head as exceptional profits encouraged producers to carry more cows in 2014. Dairy cow slaughter in 2014 was down 320,000 head. The largest decline since 2004. More dairy heifers and the smallest dairy cow culling rate since 2009 contributes to the expected herd growth and puts the dairy cowherd at its largest level since 2009.

Cattle Slaughter and Beef Production	2014	2015	% Change
Commercial Cattle Slaughter (mil. head)	30.2	29.6	-2%
Fed Slaughter (mil. head)	24.2	23.9	-1%
Cow/Bull Slaughter (mil. head)	6.0	5.7	-5%
Dairy Cows (mil. head)	2.9	2.8	-0%
Beef Cows (mil. head)	2.6	2.3	-10%
Commercial Beef Production (bil. lbs.)	24.3	24.0	-1%



THE BOTTOM LINE

- The beef cow cull rate was 9 percent in 2014. That is the lowest level since 2005 and is the last time the cowherd increased in size.
- Carcass weights have increased more than 30 pounds in the past three years and are forecast to increase another 8 pounds in 2015 due to lower cost of gains.
- Tighter cattle supplies in 2015 will continue to be a supportive factor for prices in 2015.
- Milk futures averaged \$20/cwt. in 2014 but are currently averaging \$15/cwt. for 2015. Will lower prices reverse dairy herd expansion?

DEMAND: ADVANCES AMID RECORD-PRICE ENVIRONMENT

The U.S. All-Fresh retail beef price pushed to nearly \$6/lb. in 2014 as consumers paid to keep beef on the table and kick start the U.S. beef cowherd expansion. In total, the average U.S. beef consumer paid more than \$300 for beef last year. Since the 2010 recession, the increase in retail beef demand has been worth an additional \$225 per head to cattle values.

Cheaper competing protein prices should be a point of concern for the beef industry. Pressure will remain on grocery and food service segments to price beef affordably in 2015. However, retail beef demand has grown every year since the recession, and the last 15 years of data suggests no worse than steady 2015 beef demand barring an economic slowdown.

HOW CAN BEEF DEMAND INCREASE?

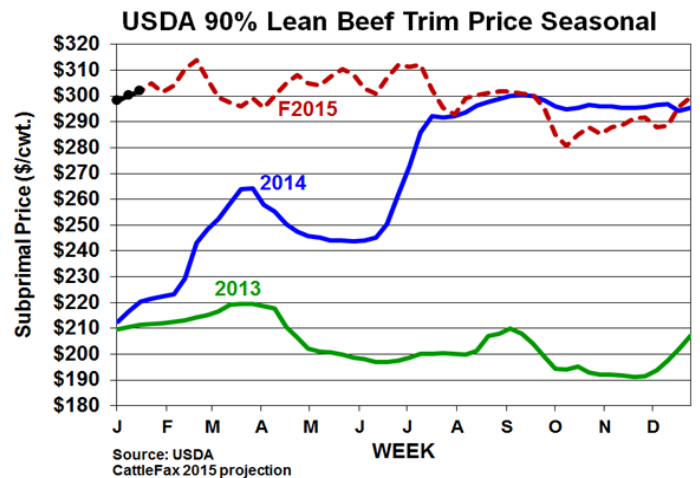
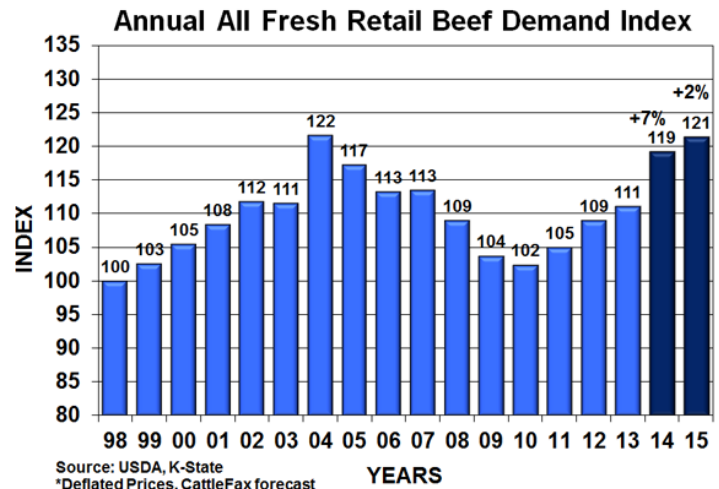
There are a number of explanations for this trend, but two stand out above the rest. Data suggests the United States is increasingly becoming a steak and ground beef nation. Roasts and stew meat have a place, but convenience and quality are among the most important factors consumers consider in meal selection – especially among younger shoppers. Ground beef and steaks embody those traits.

Wholesale demand for 90 percent lean beef trimmings increased 30 percent compared to 2013. Prices in early 2015 are already at record highs at \$302/cwt. The current forecast suggests a 2015 average between \$295 and \$300 – resulting in another 5 to 8 percent demand increase for lean trim in 2015. CattleFax estimates that around 55 percent of all beef consumed in the U.S. is ground beef. USDA Prime, branded product and even grind formulations including brisket and other high-end whole muscle cuts are gaining popularity. These trends will underpin commodity trim and grind values in 2015, and continue to be a supporting factor for fed-source end meats.

The U.S. beef industry has increased quality grade by 18 percent since the low in 2007. In fact, beef quality is the highest it has been since the early 1990s, and higher quality justifies part of the value increase. The price spreads for higher quality product have remained relatively flat outside of the recession, even with additional supply. Therefore, the premium to upgrade from Select to Choice or Choice to Prime is smaller compared to record-high beef prices. This can be increasingly important to restaurants fighting a trend that shows consumers are eating out less frequently but spending more per visit. That should allow fine dining and fast-casual beef restaurants to continue to outperform the family and casual dining segments in 2015, and support the current spread environment amid continued quality grade improvements.

MORE JOBS AND CHEAPER ENERGY

The U.S. Energy Information Administration estimates consumers will spend \$550 (22 percent) less on gasoline this year – freeing budgets to spend more on beef in 2015. Also, the U.S. unemployment rate, plus those marginally employed, dropped to 11.2 percent in December – the lowest since September 2008. Expect this to boost consumer incomes. These trends will allow consumers to spend more on beef in 2015, but there is one concern.



Per Capita Consumption (lbs./person)	2014	2015	% Change
Per Capita Net Beef Consumption/Supply	54.3	53.8	-1%
Per Capita Net Pork Consumption/Supply	46.2	46.1	-0%
Per Capita Net Poultry Consumption/Supply	98.7	101.8	+3%
Per Capita Net Meat Consumption/Supply	199.2	201.4	+1%

At the start of a cowherd expansion, more consumer dollars find their way back to cow-calf producers. That means beef margins from the packing to end-user segments are narrower than usual. As the market adjusts to an expansion environment, margins shift back to a more normal arrangement, which will pressure cattle prices.

The U.S. consumer contributed more than \$97 billion to fuel the record-high prices achieved across the beef and cattle complex in 2014. A 2 percent increase in retail beef demand is expected in 2015. That translates to an all-fresh retail beef price of \$5.90/lb. – producing a record \$102 billion of revenue for the various segments to share. Prices across all weight classes of cattle have the potential to increase, but it might depend on how margins adjust across the beef segments.

THE BOTTOM LINE

- The forecast for 2015 domestic beef demand is 2 percent higher, due mostly to continued gains in ground beef demand and additional per capita disposable income.
- The forecast for grocery and restaurant performance – as it relates to the beef complex – is steady at best.
- Growing pork and broiler production will limit beef price increases and jeopardize retail demand growth.

EMERGING TRENDS IN THE GLOBAL MARKET

2015 KEY TREND CHANGES

Tighter U.S. and global beef supplies have supported higher price levels. This trend will not change in 2015. Do not expect to see a significant increase in global beef supplies until 2017 or later.

Consumers around the world have adjusted to higher U.S. beef prices. Tighter supplies have truly found the highest paying consumers. As a result, the spread between grain-fed and grass-fed beef on the global market has widened. Diversification in the marketplace is evident and will be positive for U.S. beef in 2015. The strength of the U.S. dollar is concerning. The rising U.S. dollar has added a 10 to 15 percent cost to U.S. beef exports in key markets over the past six months. The exchange rate trend may stabilize in 2015, but dial back export forecasts if the dollar pushes higher. Rising prices and a stronger U.S. dollar have increased the price hike for beef – leading to smaller export volumes but slightly higher export values in 2015.

China's rapid rise to the No. 1 beef import destination (when combined with Hong Kong) in 2012 shifted global demand. Chinese beef prices remain near record high and imports continue to flow. However, China has yet to honor commitments to open borders to U.S. and Indian beef. Hong Kong will remain a strong buyer for U.S. beef in 2015.

INCREASED COMPETITION

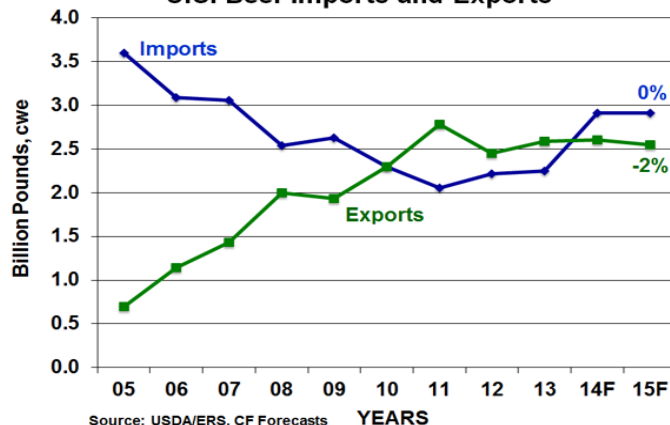
Global beef exporters are not all experiencing tighter supplies. The world's top two beef exporters – Brazil and India – are in expansion phases. Brazil's beef cowherd has been expanding for more than four years now and is nearing U.S. production levels. Brazilian beef exports are expected to post another 10 percent increase in 2015. India is also expanding production as more male dairy calves (buffalo) are going to slaughter. India will likely increase exports 5 percent in 2015. The difference is India and Brazil export product to more diverse markets than the United States. Only 4 percent of U.S. beef exports go to markets that buy 90 percent of India's beef.

Australia and Canada are smaller global beef exporters that are more influential to U.S. markets. The countries represent the top two suppliers of U.S. imported beef at 36 and 21 percent of volume, respectively. Each country also competes with U.S. exports in Japan, South Korea and Hong Kong. Australia's cowherd is declining after peaking at 14.4 million head in January 2013. The 2015 cowherd is 4 percent smaller after stronger export demand and drought led to increasing 2014 slaughter rates. This is expected to reduce Australian beef exports 7 percent in 2015. With less Australian beef on the global market, U.S. grinding prices may have to move higher for U.S. importers to keep pace with 2014 levels. Canada's cowherd remains stable near 3.9 million head, but higher global prices led to a 10 percent increase in 2014 exports, and tighter domestic supplies are likely to reduce 2015 exports.

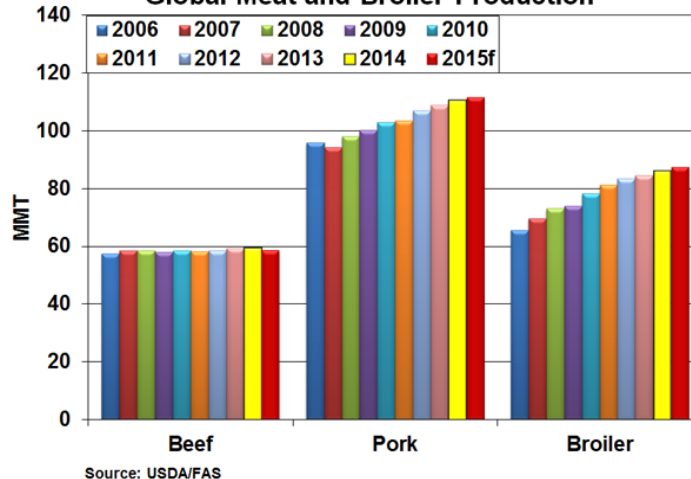
COMPETING MEATS

Increasing global pork and poultry production has allowed for smaller price increases compared to beef over the past decade. However, China pork producers liquidated 6 million sows in 2014 as two years of corn prices more than \$9.50/bu. have eroded margins. If the government data is correct, that would lead to a

U.S. Beef Imports and Exports



Global Meat and Broiler Production



International Beef and Cattle Trade	2014	2015	% Change
Beef Imports (bil. lbs)	2.92	3.10	+6%
Beef Exports (bil. lbs)	2.58	2.57	-0%
Total Net Beef Supply (bil. lbs)	24.62	24.55	-0%
Mexican Feeder Imports (mil. head)	1.09	1.07	-2%
Canadian Feeder Imports (mil. head)	0.439	0.472	+8%
Canadian Fed Cattle Imports (mil. head)	0.377	0.440	+17%

possible annual shortfall of 70 to 80 million pigs (10 percent) in 2015 – leading to rapid price increases as global pork supplies go to China.

Global poultry production remains in a growth phase and could see additional 2015 growth due to tighter beef supplies and historically strong profits. Abundant grain supplies will benefit margins and encourage more production.

U.S. OUTLOOK

The global markets will maintain strong demand for U.S. beef – leading to higher export prices. However, tighter supplies will lead to an export decline in 2015. Beef imports will also be constrained at higher price levels as Australian supplies tighten in second half 2015.

THE BOTTOM LINE

- Tighter global and U.S. supplies will support higher U.S. and world beef prices in 2015.
- Export volumes may decline in 2015 with tighter U.S. beef production, but the dollar value should increase.
- Imports will be constrained by tighter Australian supplies into second half 2015.

WHY WE DO WHAT WE DO

Ensuring Healthy Animals

A passion for veterinary medicine

While being a veterinarian in private practice for more than 20 years, Kerry Keffaber, D.V.M., advisor for Scientific Affairs and Policy at Elanco, developed a passion for helping animals get healthy and thrive in their environment.

“What is most fulfilling is helping ensure animals are healthy and free of pain and suffering,” said Kerry. “If I can help provide tools with Elanco’s Research and Development and Market Access teams so that animals can survive and producers have the resources they need to get animals thriving and highly productive, that’s what motivates me every day.”

Twelve years ago Kerry started as a field technical consultant for Elanco. Since then, he has had other roles, but in his current position, he helps the food-chain team communicate complex data and insights to educate a broader audience about contemporary agriculture and how technologies play an important role in food production.

Antibiotic acceptance in an evolving world

At a time when more and more consumers are looking for information about how their food is produced, it is imperative to build confidence in the food they’re eating. While practicing

veterinary medicine and working on Elanco’s Research and Development team, Kerry knew that veterinarians and producers needed tools such as antibiotics for animal health and well-being.

“Regardless of how safe, effective and valuable any tool is to producers, consumers need confidence in that technology, which is why there has been more focus on antibiotics,” said Kerry.

Consumers’ mindsets shift the industry’s outlook

“Because consumers have a growing interest and impact on food production, Elanco has made a commitment to better understand consumers’ needs,” said Kerry. “Being able to frame discussions and help consumer groups understand what is going on in farming is imperative so they have confidence in the food they eat.”

As part of this effort, Elanco conducted market research in multiple countries and cities across the United States to better understand what consumers know about antibiotics and particularly how the agriculture industry can better communicate its needs and build confidence in beef products.

“There’s always going to be 5 to 10 percent we’ll never agree with, but that leaves 90 percent in the middle that

we can engage with and find common ground,” said Kerry.

Part of that communication begins with visiting various food-chain groups, such as processors, retailers and quick-service restaurants, to help them educate consumers about how antibiotics are used. These conversations also focus on new regulations on antibiotic use and how they compare with policies in other countries.

“People in agriculture are not the moveable middle since we only make up 2 to 5 percent of the population,” says Kerry. “Finding solutions that support only agriculture will not build confidence in consumers and allow us to maintain the freedom to operate and use the tools we need. While continuing to use all products responsibly, we must do a better job at communicating with consumers in a language they understand.”

Antibiotic regulation changes

In December 2013, the U.S. Food and Drug Administration (FDA) finalized rules regarding veterinary feed directives (VFD) and how antibiotics should be used in



Elanco’s work in the area of Assurance and Access enables access to markets and technologies, and helps build confidence in the food products our customers and their customers provide to consumers around the world.



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production agriculture to better protect public health as it pertains to antibiotic resistance. Antibiotics in a shared class, which are medically important and used in both humans and animals, will be available only for therapeutic use under the oversight of a veterinarian. Antibiotics used in animals only will still be available over-the-counter for production and therapeutic reasons.

“Producers realize that if they’re going to raise animals, they’re going to need antibiotics and we want them to be used responsibly,” said Kerry. “That means using the shared-use-only antibiotics for therapy prescribed by a veterinarian.”

This transition is driven by three FDA reports. Guidance for Industry No. 209 establishes key principles for the use of medically important antimicrobial drugs in food-producing animals. The second report (No. 213) provides a road map for implementing those principles by addressing issues including label claims. The final report (CFFR 558) aims to modernize and streamline the VFD process.

“While the principles and labeling process are voluntary, once those labels have been changed, compliance with those labels is not voluntary,” says Kerry. “Veterinarians, feed manufacturers and producers will have to use these products only according to label.”

Producer involvement

“Antibiotics aren’t going away, but how we use them will change,” explains Kerry.

For cattle producers, the goal is to maintain access to the tools they need while doing the right thing in treatment of their animals. Demonstrating responsible use will allow them to maintain access to tools that are important for an animal’s well-being and for overall sustainability.

“Several producer associations are providing input that will be used to make the system workable,” said Kerry. “But it’s also important to know where the process is going.”

Kerry says it will be critical for producers to have an ongoing relationship with a veterinarian, one who knows your herd and its health needs, understands the processes and

will help make the transition.

“I think it’s a win-win. Having a veterinarian involved helps ensure you’re preventing antimicrobial resistance by implementing a protocol that is effective and provides producers the best return,” says Kerry.

Elanco’s role in antibiotic assurance

“Elanco had the first and only VFD product for swine over 10 years ago,” explains Kerry. “We helped develop both the paper and electronic forms and educated different groups on that process. Moving forward, we will support a web-based system that minimizes errors and manages VFD-related records.”

Elanco is committed to investing in systems to ease the transition and demonstrate antibiotic stewardship. It is also ready to educate producers, veterinarians, feedmill manufacturers and feedmill inspectors to help get everyone on the same page.

“We’re really focusing on helping build the sophistication of tools and educating those involved throughout the production process to be better equipped to use those tools correctly,” said Kerry.

Why Kerry does what he does

Every day at Elanco, people like Kerry are working to provide tools, education and support for producers. Kerry’s why — “Survive, Provide and Thrive” — applies to animals and more importantly to what he believes are the stepping stones a person takes to have an extraordinary life. Helping others on their path from survive to thrive applies to his work with people and his work with animals as a veterinarian.

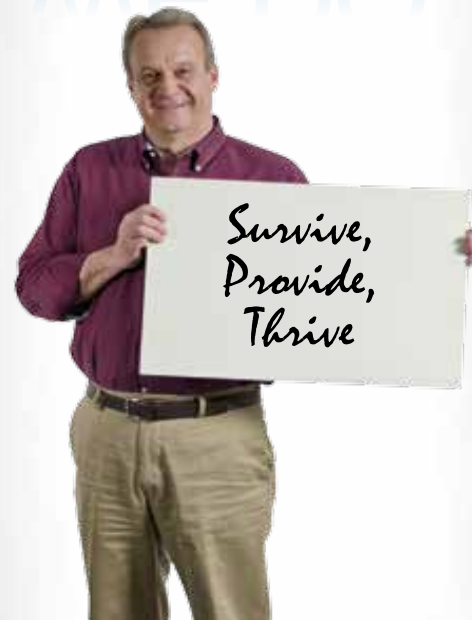
“The first thing we all need is the basics to simply survive, which is especially true in animals. One must meet these needs before they can provide to others” says Kerry. “It’s transformational when we get to thrive. People excel and impact others around them while animals thriving are extremely healthy.”

As a veterinarian, there is nothing more appealing to Kerry than an extremely healthy animal that is thriving in its environment. In his role, he is able to not only help producers

and veterinarians get to that level, but also help them get their animals there as well.

“In the beef industry, there will be challenges in implementing these changes, but the industry is working together to make sure it’s a practical solution going forward,” says Kerry. “We will get there, so remain calm and confident as we move through this time of change.”

WHY
WE DO
WHAT
WE DO



Kerry Keffaber, D.V.M.
Full Value Beef Expert



FEED AND FORAGE: SUPPLIES PRESSURE PRICE

Larger corn, soybean and hay crops in 2014 – coupled with lower prices – are expected to be supportive to livestock production in 2015. Price declines have continued for energy feeds, but protein feed sources could realize more price pressure in 2015.

World stocks-to-use levels of corn, wheat and soybeans are all expected to increase year-over-year during the current marketing year (2014-2015). The largest increase is forecast for soybeans with a record-large U.S. crop last fall and expectations for a record South American harvest this spring. Soybean and soybean meal prices have extended the lower price trend established in summer 2012. World corn stocks-to-use levels are expected to rise to the highest levels since the 2002-2003 marketing year, supported largely by a sharp increase for the U.S.

U.S. hay production rose to the highest level in nearly 10 years on average yields that matched the record highs set in 1995 and offset weaker 2014 harvested acreage.

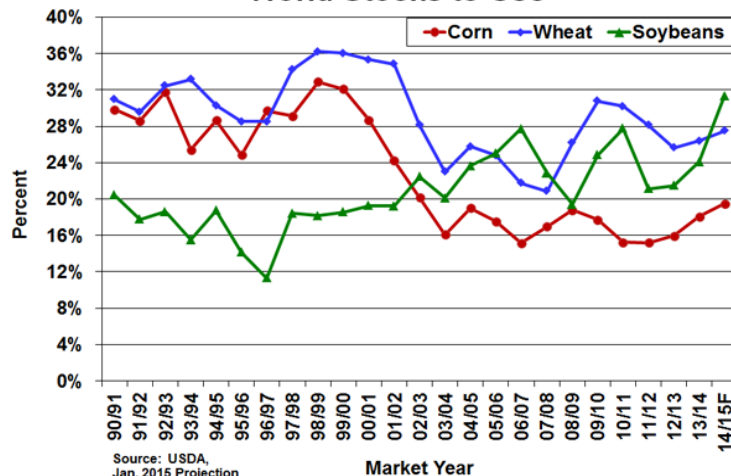
U.S. CORN 2014-2015 MARKETING YEAR

A sharp increase in total corn supply is expected to be met with a moderate increase in total corn usage. The largest increase in usage is expected to be the feed-and-residual category. Exports are expected to remain below year-ago levels. Corn used for ethanol production started the 2014-2015 marketing year on a record pace, but sharply lower gasoline prices will likely squeeze blending margins of ethanol into gasoline. Uncertainty surrounding the Renewable Fuels Standard (RFS) continues to grow for future years. The EPA is tasked with determining annual renewable fuel volume usage requirements and failed to finalize requirements for 2014. The agency also failed to provide 2015 volume requirements in a timely manner. Despite the longer-term uncertainty, corn-starch based ethanol production is expected to be supported near current expectations of approximately 5.2 billion bushels for 2014-2015.

U.S. CORN 2015-2016 MARKETING YEAR

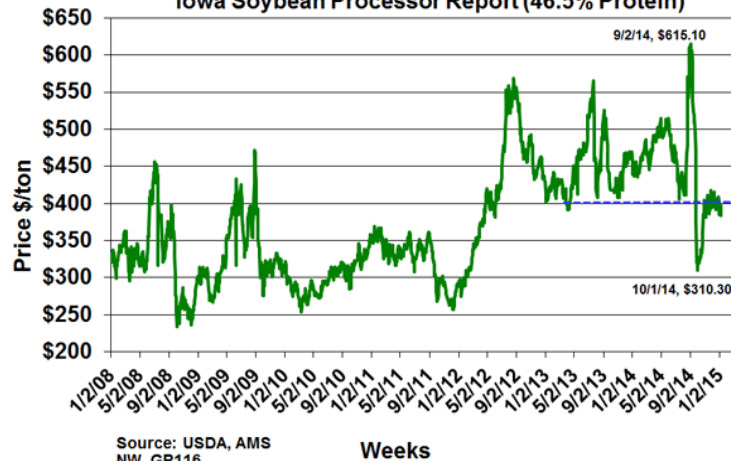
U.S. acreage potential will quickly become a key focus for the market. Current economics suggest corn acreage is likely to decline 1 to 2 million acres in 2015, while soybeans gain 2 to 3 million acres. Declining corn acreage and a trend line yield – weather adjusted to 164.2 bushels per acre – would reduce corn production 600 to 800 million bushels for the 2015-2016 marketing year. Total U.S. corn supply would be flat to 200 million bushels lower. Total U.S. corn usage is expected to steady to moderately higher compared to 2014-2015.

World Stocks to Use



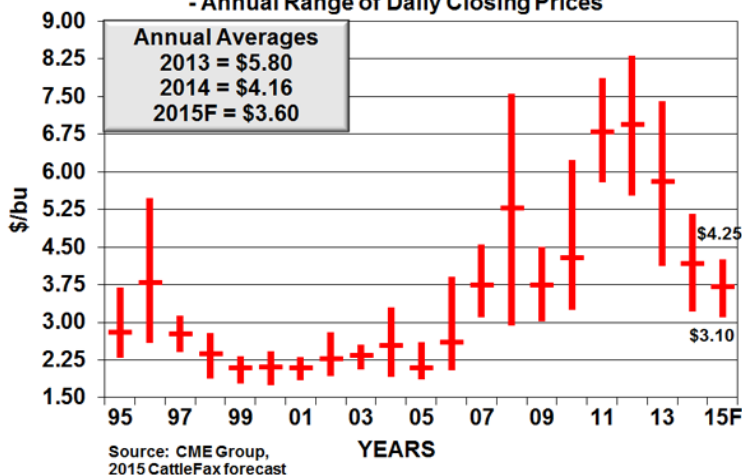
Weekly Soybean Meal Prices

Iowa Soybean Processor Report (46.5% Protein)



Spot Corn Futures

- Annual Range of Daily Closing Prices



THE BOTTOM LINE

- U.S. soybean supply has been rebuilt to a more historical level, and global supplies should rebuild during the 2014-2015 marketing year.
- 2014-2015 U.S. corn stocks-to-use levels are expected to range from 13 to 15 percent through April 2015 – supporting spot corn futures in the \$3.50 to \$3.60/bu. range, and providing resistance near \$4.00 to \$4.25.
- Spot corn futures prices should average \$3.60/bu. in 2015 compared to \$4.16/bu. in 2014.
- 2015-2016 U.S. corn stocks-to-use levels are expected to pull back to 12 to 13 percent – providing May to December 2015 price lows around \$3.10 to \$3.25/bu.

COMPETING PROTEIN OUTLOOK

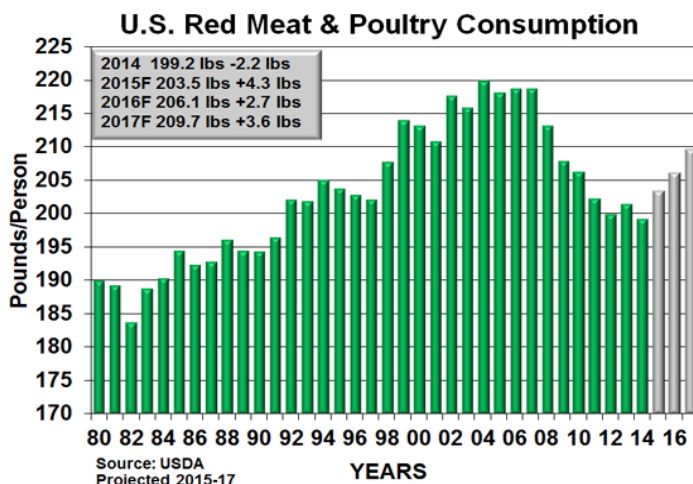
PORK SUPPLIES REMAIN MANAGEABLE

The hog industry has been better prepared for the porcine epidemic diarrhea virus (PEDv) this winter. The 2015 hog slaughter forecast is 5.7 percent larger than last year at 113 million head – nearly identical to 2013 levels. A larger available supply of market hogs in 2015 is expected to increase the pace of finished hog marketings and reduce barrow and gilt carcass weights 1 to 2 lbs. to 212 lbs. That will put 2015 pork production at 24.0 billion pounds, up 5.1 percent. Pork exports are projected to increase 5 percent compared to 2014 – totaling 5.1 billion lbs. The result is a 3 percent larger per capita pork supply compared to 2014 at 47.9 pounds. The pork cutout will likely trade in a similar range as 2013 – averaging around \$90/cwt. for the year, and retail pork prices should continue to find support with higher beef prices.

BROILER SUPPLIES INCREASE IN 2015

The chicken sector is placing more broiler-type pullet chicks in 2015, and other production gains, including eggs per layer, egg sets per chicks placed and carcass weights are all expected to increase. CattleFax expects 2015 broiler production to increase 4.3 percent to 39.6 billion pounds, and that could be too conservative. Exports this year should increase 3.4 percent to a record 7.6 billion pounds, and 2015 U.S. per capita net supplies should increase 3.2 pounds to a record 87.7 pounds. Whole bird, breast and leg quarter prices are expected to trade mostly steady compared to 2014 with support from higher beef prices offsetting some of the pressure

Competing Meats (bil. pounds)	2014	2015	% Change
Commercial Pork Production	22.9	24.0	+5%
Pork Exports	4.9	5.1	+5%
Poultry Production	43.9	45.5	+4%
Poultry Exports	8.2	8.4	+2%



from increased poultry production. Feed price reductions will continue to increase profitability and encourage more production.

THE BOTTOM LINE

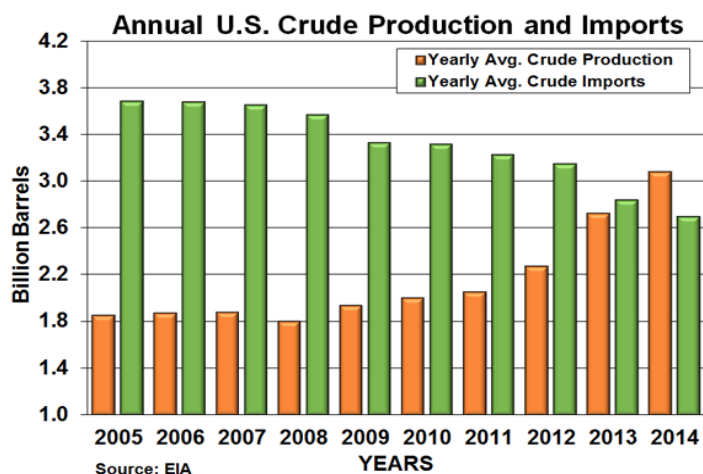
- Reduced production costs and increased profitability will result in a 4 to 6 percent increase in 2015 pork and broiler production.
- Increasing pork production and weaker demand relative to 2014 will pressure beef values.
- Increasing poultry supplies will pressure prices relative to 2014 – giving retailers and food service users a cheaper protein alternative.

ENERGY OUTLOOK: RECORD PRODUCTION, LOWER PRICES

Abundant supplies led the 2014 energy markets into a bear year. Hydraulic fracturing and oil-sands extraction technology in the United States and Canada created record production while other world leaders held production steady. Larger global supply and relatively flat demand pressured oil and petroleum prices nearly 50 percent lower in second half 2014 to the lowest prices since 2009.

U.S. crude oil production has been steadily rising over the course of the last several years – reaching 8.54 million barrels per day last year. Production increased 19,000 barrels per day on a weekly basis in 2014. With the average breakeven shale oil price at around \$70/barrel, many oil fields will slow production with early 2015 WTI crude oil prices closer to \$50/barrel.

Domestic production is only partially responsible for the lower 2015 energy market. Saudi Arabia has maintained production despite pressure from other OPEC members. OPEC is not anticipated to change production levels until at least June. In the meantime, the economies of net crude oil exporters – like Russia and Norway – could suffer as oil revenues shrink. The global economy will be important to the health of the U.S. energy complex in 2015. Domestic demand for petroleum products is trending sideways, and new demand is coming mostly from exports.



Gasoline and distillate production are starting 2015 at higher levels than last year – keeping pressure on fuel prices. Crude oil imports are lower, and the United States is nearing energy independence. In 2015, roughly 80 percent of U.S. crude oil will be domestically sourced – compared to 44 percent in 2010.

THE BOTTOM LINE

- The 2015 WTI crude oil price is expected to be in a trading range from \$40 to \$70/barrel.
- Expect retail gasoline prices from \$1.80 to \$2.80/gal., and diesel prices in a \$2.80 to \$4.00/gal. range.
- The retail market for natural gas is forecast from \$2.75 to \$4.00/mmBtu. in 2015.

PRICE OUTLOOK 2015

The cattle industry experienced record profits in 2014. Declining supplies undoubtedly led to advancing prices, but the structure of the market played a role as well with growing demand, strengthening leverage position, positive basis and declining corn price all contributing to additional profitability. Below is the summary of the 2015 price and margin structure for each segment.

ALL FRESH RETAIL: The 2015 forecast is near \$5.90/lb. The market will have a narrow trading range. The retail segment is still catching up in terms of beef margins, but it should regain margin from cattle producers and processors this year. The record-wide price spread between beef and competing proteins will remain historically large in 2015.

COMPOSITE CUTOUT: The boxed beef cutout will follow the fed cattle market in 2015 with an annual average near \$242/cwt. Packer margins in 2015 are expected to be near a breakeven level for the year. Smaller fed and non-fed slaughter levels will keep margins under pressure throughout the year.

FED CATTLE: Prices are expected to trade from the low \$140s to the low \$170s. Prices are forecast to average \$157/cwt. in 2015. Cattle feeders are expected to bid aggressively for cattle – even while margins suffer. That is expected to support feeder cattle and calf returns. Expect negative feeding margins on average in first half 2015 and improving margins in the second half of the year.

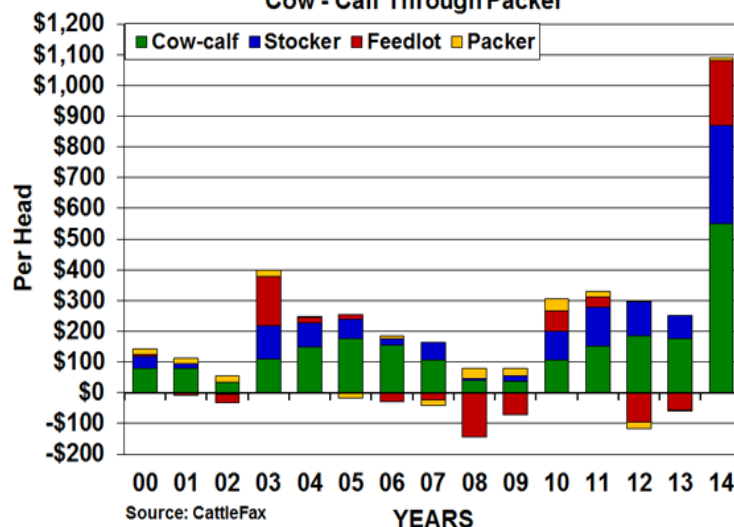
750-LB. STEER: Expect the 2015 market to bookend the year with its highest prices, and the lowest prices will be in the late spring. The U.S. average 750-lb. steer price is projected to be \$220/cwt. Record-high feeding margins in 2014, along with a tighter feeder cattle supply will keep prices well supported. The market will be volatile with highs near \$240/cwt. and lows around \$195. Similar to cattle feeders, 2015 stocker and backgrounding margins will be positive but smaller than last year.

550-LB. STEER: The calf market is going to benefit from an improved forage situation, cheaper grain prices, and record margins for cattle feeders and stocker operators last year. The 2015 U.S. average price forecast is \$260/cwt. Expect early year highs near \$290 and the lows around \$235. Calf values are at the higher end of a long-term trading range and are forecast to trend lower during the next three to five years. Calf prices from 2017 to 2020 trending toward \$200 to \$220/cwt. near the end of herd expansion are still projected to create positive returns for cow-calf operations.

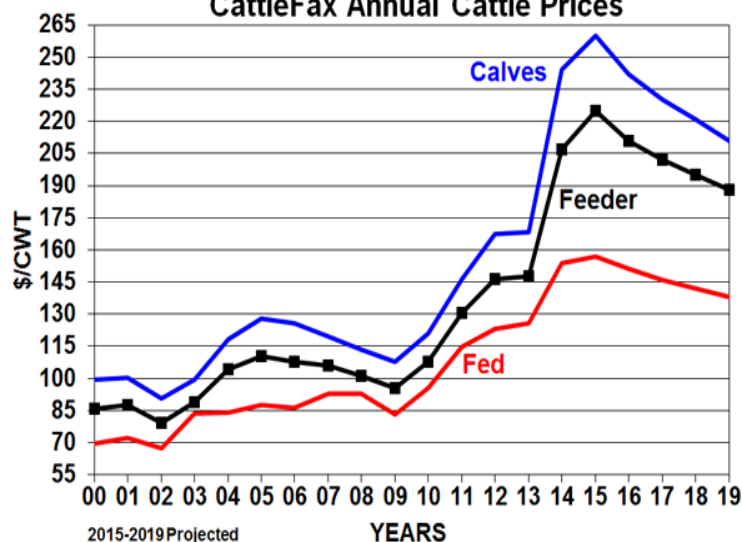
CULL COWS: The cull cow market is projected to average \$115/cwt. for the year. The lows should come in the fall, and trade back toward \$90/cwt. The highs could be limited to around \$125/cwt. The cull cow could have the narrowest trading range of any market in 2015.

BRED FEMALES: The demand for bred females will stay historically strong in 2015. The market is projected to average \$2,500/hd. – driven by record cow-calf margins and improving forage conditions. The bred females purchased in 2015 can still have returns that are positive even considering the fact calf prices are projected to decline going into the next few years as the industry expands. As the market continues to define its trading range, the accompanying table provides a benchmark for producers in terms of value and expected return.

Industry Profitability
Cow - Calf Through Packer



CattleFax Annual Cattle Prices



How Much Should You Pay for a Bred Cow?

Calf Price (\$/cwt)	Cash Cow Cost		
	\$600	\$700	\$800
\$240 (+0%)	\$4,000	\$3,400	\$2,800
\$220 (-2.5%)	\$3,400	\$2,800	\$2,200
\$196 (-5%)	\$2,800	\$2,200	\$1,600

Assumptions:

- Cow produces 7 calves
- Annual cow cost increases 3% per year
- Interest rate is 6%
- Cow cull value estimated at \$104/cwt decreasing 1% per year

LONG-TERM INDUSTRY CHALLENGES & OPPORTUNITIES

STRUCTURE

Annual cattle slaughter has declined 6.7 million head since 2000, and fed slaughter represents 94 percent of the decline. The rapid shift in supplies has led to far-reaching structural changes throughout the beef industry, and these changes will continue to be realized in the years ahead as cowherd expansion intensifies. The industry has already lost most of the fed cattle harvest capacity that was likely to close. The cattle feeding industry has reduced capacity or transitioned to grow yards and dairy heifer development facilities as supplies tightened. The feeding segment is still 25 percent overcapacity relative to the available supply, which will lead to more feedlots closing in 2015.

Annual fed cattle marketings in Texas and Kansas have declined about 1 million head during the last 10 to 12 years, and Nebraska fed cattle marketings have increased 500,000 to 700,000 head in the last eight to 10 years. South Dakota and Iowa are also increasing fed cattle marketings, while the Colorado market is declining. There has been a 7 percent increase in fed cattle marketings through the northern cattle feeding region compared to 2000. Nebraska, Iowa and South Dakota account for 34 percent of U.S. fed cattle marketings.

LEVERAGE & BARGAINING POSITION

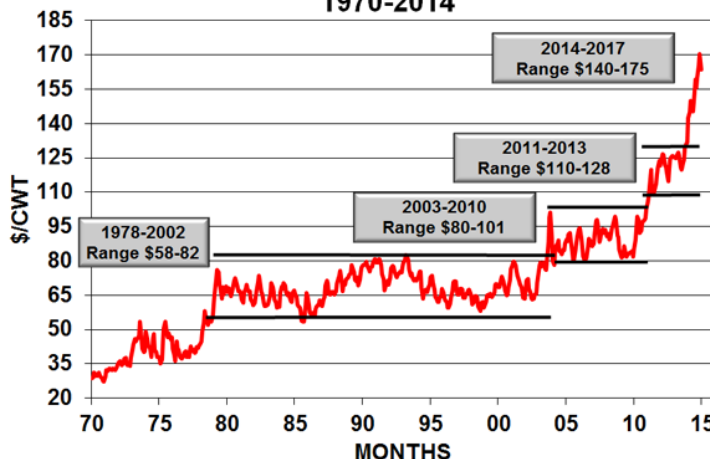
Cattle prices in all weight classes moved to a new-and-higher trading range in 2014 in response to three major trends: 1) a 17 percent (6 million head) decline in cattle slaughter since 2000, 2) a 16 percent increase in retail beef demand since the recession, and 3) a year-over-year U.S. per capita net supply decline of more than 2 pounds per person in 2014 across the protein complex. Producers were able to capture a record-high percentage of retail and wholesale beef revenue in 2014. As a result, all cattle prices pushed to the upper end of a new trading range. As supplies rebuild the next few years, a break back to the lower end of the new price range should be expected as cattle producers give back some of the leverage gained last year. The 2014 annual average fed price of \$154/cwt. was \$28 higher than 2013, and 30 percent of that increase was due to leverage gained over the processing and retail segments. A loss in the leverage component of the market has the potential to pressure fed cattle values to the low \$140s, but the upper end of the price range will remain in the mid \$170s. Growing supplies over the next several years will rebalance the normal price and margin environment among industry segments.

VOLATILITY & CAPITAL

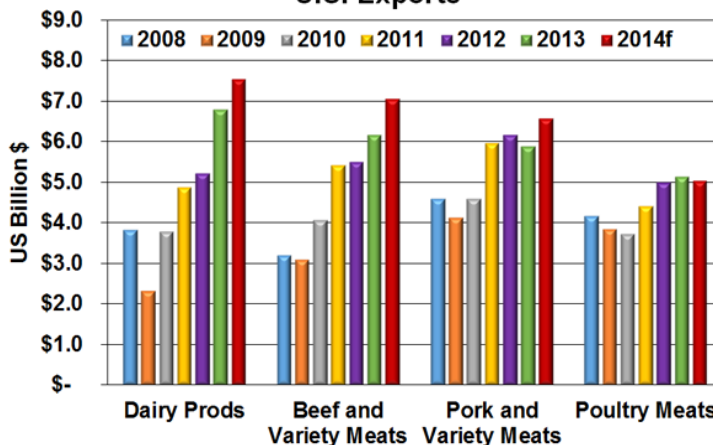
Extreme changes in supply and demand magnify market price volatility. A 5 to 10 percent change in short-term prices is common, which is equal to \$8 to \$15/cwt. price moves over a two-week period. The market has been forgiving because the trend has been higher. When the trend turns lower – and profit margins vanish – risk managers will be rewarded. At the same time, access to adequate amounts of capital and credit will be

Cattle Inventory (mil. head)	2014	2015	% Change
Total Cattle	87.7	89.9	+1%
Beef Cows	29.0	29.5	+2%
Dairy Cows	9.2	9.3	+1%
Total Cows	38.3	38.8	+1%
Calf Crop	33.6	34.1	+1%
Feeder & Calf Supply Outside Feedlots	24.7	24.0	-3%

CattleFax Fed Steer Price
1970-2014



U.S. Exports



Source: USDA/FAS

a limiting factor for many producers moving forward. Fed cattle values have advanced 40 percent in 18 months and 83 percent in five years. Producers need to invest more time and energy in building risk management plans and business processes that are in balance with their appetite for credit. Keep in mind the feeding segment is historically a breakeven business.

EXPANSION & COW-CALF MARGINS

Feeder cattle and calf prices experienced record increases in 2014 – leading to record-high profits. Growing beef demand will be even more important as the cowherd expands 2 to 3 million cows. One of the key components to building beef demand – besides a growing U.S. economy – is continued strength in beef exports. Beef and beef by-products have added more than \$350 per head in total value to producers. Maintaining a 6 percent annual growth rate in the value of beef and beef by-product exports – similar to the 20 year average – will contribute nearly \$500 per head to cattle values by 2020. Calf returns are at historically high levels – and are expected to remain relatively strong over the next few years. However, a growing U.S. beef cowherd and increasing beef production will narrow the gap between calf revenue and cow costs. Cow-calf producers who can minimize costs and maximize production will enjoy a profitable four to five year period.