

International Competition and Opportunities for U.S. Quality Beef

Clint Peck

Director, Beef Quality Assurance, Montana State University
Contributing Editor, BEEF Magazine
Billings, MT

Nobody ever said the cattle business was going to be easy. But, who knew even 20 years ago, how complicated it would be to raise a calf and get it sent off to market? In fact, these days the word “market” means far more than a call from an order buyer or trip to the auction barn.

And, at every juncture, the beef industry is facing mounting and intense competition. Not long ago, the only thing the industry really had to worry about was white meat and white-gloved environmentalists. Today, duking it out for market share with chicken seems like a snap.

Additionally, horizontal and vertical integration in food service and retail foods has everyone wondering where their food comes from. And don't be fooled into thinking that there's no more room for more mergers and acquisitions. Just watch.

The undying constant in the food chain, led by nearly every other consumer good, is the trend toward globalization. Thinking back, the 1989 Canada/U.S. Free Trade Agreement and the ensuing North American Free Trade Agreement were a cake walk compared to the complexity of the new millennium trade picture.

In the shadow of the World Trade Organization, bi-and multi-lateral trade agreements, interestingly have been the vehicle of “free trade.” And, because the definition of free trade is so nebulous, and because agriculture often takes a back seat to other industries and issues in trade negotiations, we often feel like the fifth calf.

No wonder many U.S. cattle producers feel abandoned by their government when it comes to trade issues.

Where the Cattle are

The place to start when assessing global competition in the beef industry is to look at where the cattle are raised. India has, by far, the largest national cattle herd in the world. But, cows are sacred within the Hindu religion and according to Vedic scripture they are to be “respected as one's mother” because of the milk they provide.

Brazil, with the largest commercial cattle herd, is where cows are respected for the meat – and wealth – they provide. Estimated at 180-190 million head, Brazil's cattle herd has been growing by about 5 million head/year over the past decade. There are signs that growth is slowing due to competition for the better agricultural land in the southern regions of Brazil.

Interestingly, China's cattle herd is second in size globally. Prior to 1980, only culled draft animals were harvested for beef. Today, in a country with millions of small farmers, families typically sell one or two calves each year to local abattoirs for slaughter. Therefore, it's unlikely that China will be a world player in beef trade. And, there's a great deal of speculation – and not much agreement – of its future as an importer.

The U.S. Meat Export Federation (USMEF) simply says the Greater China region, comprised of Hong Kong, Macau, China, and Mongolia, holds growth potential for U.S. beef and beef products.

The U.S., with the world's fourth largest cattle herd, ranks first in beef production. Incredibly, the U.S. produces more beef than Brazil with nearly half as many cattle. This is really not that surprising, given the advances in cattle rearing productivity over the past few decades.

Few other countries can boast the rate of production on a per cow basis as the U.S. The combinations of genetics, nutrition, and animal health work well with our grazing and feeding infrastructure to make U.S. producers the envy of the beef world.

Consumption and Imports

The U.S., not surprisingly, is also the largest beef consuming nation in the world. Even with its production capacity the U.S. is the largest beef importer, much to the consternation of many producers. U.S. processing companies buy about 31%, by volume, of all beef that enters international trade.

But, what are the drivers of U.S. beef imports?

With the highest wholesale beef prices of any major trading country, the U.S. is a virtual economic sponge for global beef supplies. Last spring when U.S. fed beef prices were hovering around the \$90/cwt. mark, Uruguay slaughter cattle were fetching \$42/cwt. Even given transportation costs and in-quota and out-of-quota import tariffs of \$100 million in 2005 paid to the U.S. Treasury, this price differential makes Uruguayan beef a great buy for U.S. importers.

Related to the economic driver is our nation's insatiable appetite for ground beef. A recent national eating trends study shows that ground beef makes up 59% of all fresh beef consumed in the U.S. And, this trend shows no sign of slowing. Therefore, about half of all beef imports are lean (90% lean) beef trimmings used to blend with higher-fat domestic trimmings to produce typical 75%-85% lean ground beef for retail and food service.

The trend toward fewer dairy animals nationally (thus fewer "lean" culls cows), a smaller domestic cow herd and high-fat trimmings from fed animals create a shortfall in domestic lean trimmings. Adding to the lean trimmings shortfall is higher-value uses for chuck, plate, flank, and other lean cuts that historically were destined for the grinder.

U.S. Versus the World

U.S. beef production systems vary a great deal

geographically as ranchers and farmers have adapted to varying environmental conditions. But, overall, the U.S. has a highly differentiated beef production system compared to most other beef producing nations.

This difference can be summed up in one word – *corn*. The colossal feed grain resources granted by the Corn Belt shape the large majority of domestic beef production systems. U.S. producers put this unique feed resource advantage to work in creating beef products that virtually no one else in the world can enjoy – unless they trade for them. Even in Canada most grain finishing systems center on barley, but, "barley fed" beef just doesn't have the same ring to it, as "corn fed" beef.

Other cattle countries, mainly those in South America and Oceania are relegated to growing and finishing beef cattle primarily on forages – or grass. They simply don't have the vast climactic resources and production infrastructure to support a massive corn industry. And, they don't have the economic foundations that make raising corn for feed feasible or practical.

It makes sense in developing countries as well as developed countries where corn resources are lacking, that corn (or food crops) for human use will be grown on the best land first. While people will, conceptually, get the corn first; any "left over" corn is most likely to be fed to the best "converters" first – poultry and pigs, in that order.

If there's still corn available – and its feed value exceeds its value on cash markets – it can be used for "finishing" beef cattle. Few countries have the literal luxury of being able to turn corn protein into beef protein on a scale large enough to define an industry.

Take a Virtual Tour

A virtual tour of most other beef producing nations often includes Australia/New Zealand (Oceania), Brazil, Argentina, and Uruguay. Of course these are all beef systems based mainly on grass finishing.

In Australia, the beef cattle industry can be defined by three major factors:

1. Relatively strong cattle prices, but hampered by persistent drought.
2. Export demand boosted by the absence of competitors.
3. Strong growth in feedlot sector.

One can argue that Australia's beef system is a hybrid of grass and grain. The cattle feeding sector which has grown three-fold since 1996 to a capacity of 1 million head is tied to increased export demand—particularly the Asian Rim countries of Japan and Korea. Nearly half of all Australian feedlot cattle are finished for export.

In Australia, feed grains are mainly grain sorghum, wheat, and barley. This mix underscores the fact that Australia is a very arid country where persistent meteorological and hydrologic drought is a way of life. Lack of water impacts nearly every Australian to some degree and might be the leading factor in restricting growth of many major industries nationwide.

While water is a limiting factor for long term growth in Australia's cattle industry, Food and Agriculture Organization of the United Nations statistics indicate that grazing land is limited and under pressure throughout Oceania. The good pasture land is being converted into cropland, leaving increasingly poorer land for grazing and farming.

Moving across the globe to Brazil, 180-200 million acres of land could be developed for grazing systems. But, much of this vast land resource lies in remote sub-tropical scrub and brush land in need of clearing, seeding to adapted forages, watering, and fencing.

As Brazil's comparative advantage globally lays in low-cost grass-fed beef production, expansion into the frontier regions means distance from terminal markets and packing/processing facilities. It also means infrastructure must follow.

Of course, the limiting competitive factor throughout South America is the existence of Foot-

and-mouth disease (FMD). Uruguay (12 million head) is the continent's only major beef producing nation that enjoys a FMD-free (with vaccination) status.

Brazil and Argentina (55 million head) have fallen victim to recurring FMD outbreaks and continue to be shut out of North American and most Asian fresh beef markets. Most observers feel until the disease is controlled continent-wide, Brazil and Argentina will struggle to overcome the FMD threat.

Brazil's beef industry will also struggle to overcome the challenges of a harsh tropical environment. Reliance on heat-tolerant Zebu breeds (mainly Nelore) will cause a productivity differential compared to English breeds raised in temperate climates. Most of Brazil's cows are bred as two-year-olds (versus yearlings) with average calving rates below North American standards.

Brazil also takes a competitive hit in dressing percent of slaughter cattle (53% versus 63%) and age of slaughter (30-40 months versus 18-24 months) compared to the U.S. This is why the U.S. produces more beef with far fewer cows than Brazil.

In Uruguay, beef exports from its English-based breeds are the name of game. A majority (80%) of Uruguay's beef production is exported—with about 78% of that going to North America. Like Brazil and Argentina, anabolics and growth hormones are banned and animal protein is banned in feed.

Like Brazil and Argentina, Uruguay does not have a significant grain-based cattle feeding industry. And, in these countries where cost-of-production is a comparative advantage, added costs associated with concentrated feeding quickly erode this advantage.

Traceability and Trust

Common to each of the countries discussed, each has a working or work-in-progress national cattle ID and traceability system.

Australia is a world leader in cattle ID with its National Livestock Identification Scheme (NLIS).

Australia exports approximately 70% of livestock production and while not all producers like the system, they agree that whole-of-life traceability systems for livestock are necessary in maintaining a competitive advantage in a growing export market.

In October 2005 Brazil's traceability system helped contain an FMD outbreak to a few local regions in three states. Uruguay boasts that its traceability system tied to a national brand image helps consumers globally identify Uruguay as "clean" and environmentally "green" source of beef products.

Last spring at the World Meat Congress, Brisbane, Australia cattle ID was summed up in two short sentences by Marcos Fava Neves, University of São Paulo (Brazil) professor of food marketing strategy. "Traceability is the non-negotiable foundation of trust. Without traceability how can you be held accountable for what you produce? How else can you be rewarded for what you produce?"

Identifying the Competition

As U.S. beef producers address the growing global competition – for markets here and abroad – they face some "good news-bad news" scenarios with some "caution" signals.

The good news items include:

- Globally unique grain-fed beef production. U.S. beef producers are increasing their attention to establishing and exceeding benchmarks for production of safe and wholesome beef that increasingly satisfies consumer expectations for eating characteristics.
- World's leading infrastructure. No nation can match the private/public sector investment into programs and facilities that provide a foundation for beef production systems. U.S. producers are the envy of the world when it comes to transportation, storage and transfer, government production support, and historically, energy prices.

- Per cow productivity. Related to infrastructure, U.S. producers, along with their Canadian counterparts, yield more beef per cow than producers virtually anywhere else in the world.

The bad news items include:

- Lack of organized traceability. The U.S., especially now that the federal government has pulled the plug on support for a national ID system, is the only major beef exporting nation without organized traceability for disease management. That said, private market-driven ID systems are evolving – allowing producers to participate in domestic and global supply chains.
- A "global" outlook. For decades the U.S. beef industry has been focused on the huge domestic market potential – fighting for market share against the poultry industry. The USMEF has been the Lone Ranger in beef export development – with little attention and relatively little assistance from beef producers and processors.
- Competition for land and water. Nearly every U.S. beef producer is troubled by increasing land prices and lack of water. U.S. producers are not alone in this dilemma though, competition for the better land by higher-return industrial, recreational, and urban use is ringing a global agricultural alarm.

For U.S. producers, there are a couple of glaring warning signals:

- Increasing cost of production in face of declining prices. Energy prices and prices for energy-related inputs lead the list. Machinery and equipment parts and repair follow. U.S. producers must try and find ways to cut the costs of purchasing and operating "rolling stock" on their operations – certainly easier said than done.
- Uniformity and consistency of product. The 2005 National Beef Quality Audit identifies consistency of product as a continuing concern. Consumers

simply want every steak to eat the same every time. This is a huge challenge for producers and processors alike.

Addressing the Challenges

In order to maintain a comparative/competitive advantage and address the challenges ahead, it's suggested that beef producers nationwide consider the following:

1. Become Beef Quality Assurance (BQA) certified. Participation in the BQA is totally voluntary – and it is not a “government” program. BQA links beef producers with livestock production specialists, veterinarians, nutritionists, marketers, animal health companies, and food industry companies interested in maintaining and improving the quality of cattle and the beef produced in the U.S.
2. Carefully measure/monitor input and output. This means keeping better records and spending time in developing cost-benefit analysis for every production enterprise. A part of BQA, verification of production practices through auditable records will soon become a necessity.
3. Evaluate your genetic package. Certain supply chains are already mandating adherence to specific genetic systems. Attention to beef cattle genetics selection and management will become even more critical than in the past as “program” beef production increases and replaces commodity beef production.
4. Maintain a sound herd health program. “Management over medicine” will become more critical as our ability to use pharmaceutical products comes under increasing scrutiny. U.S. beef producers must work with their veterinarians to learn more about disease management and reducing treatment for disease. Biosecurity programs, including judicious vaccination for disease, must become a way of life on U.S. cattle operations.
5. Evaluate your pre-weaning/weaning protocol. This is probably the easiest way to manage weather-related variables as well as address marketing opportunities. Traditional weaning programs should be carefully and continually evaluated.
6. Establish source/age verification. This does not have to be high-tech or costly. Work with your local sale barn, order buyer, or join a program or alliance to learn more. But, don't expect market “premiums” to last forever – this niche will become the norm.
7. Continually seek better market opportunities. Think “*supply chain*” management. Don't think you're simply a rancher who turns grass into feeder cattle – manage for the end product and continually demand that your efforts be recognized and rewarded.

Notes: