

Marketing Beef to the Consumer

Caitlyn Abell

To market beef in this time of worldwide economic hardship, producers must focus on the wants and needs of their consumers. Despite the current economy, consumers are still willing to pay for a product if they feel it is worth the price. In order to meet the expectations of consumers, producers must review their production practices to evaluate if they are supplying the market with beef that consumers are willing to purchase. If they realize their practices fail to meet the needs of the market or consumer, they must be ready to make the necessary changes to their operation. For example, any cattle exported to Japan must be under 20 months of age when slaughtered. If producers want their cattle to qualify for exporting to Japan, they must have an operation set up that can finish cattle within the time constraints.

At the Congress, these ideas were resonated by the speakers and attendees. Barbara Beane, the Director of the Technology KFC–Product Support Center, spoke about the development and implementation of new products at KFC. She stressed the importance of customer satisfaction. For every new product used, extensive research is done on its expected success in the market before it is introduced. Additionally, ongoing appraisal is conducted regarding the success of the product after it has been put on the menu. Dr. Bruce German spoke about the concept of personalized diets. Today much emphasis is placed on having a healthy lifestyle. Showing people that beef is a key factor in having a healthy diet may prove to be a key factor in the marketing and promotion of beef products. These were just two illustrations of how the wants and needs of consumers are taken into consideration.

Tongue Creek Feeders and Feedlot Health and Management Service are two companies that have developed a business based on the needs of their clients. Tongue Creek Feeders noticed

that waste management was a major issue in their area so they now provide a composting facility where the feedlots and other producers can get rid of their waste. Feedlot Health and Management Service are providing what they call a win-win relationship between their veterinarians and the feedlots they serve. They have focused specifically on the needs of the feedlots they service. The feedlots pay for veterinarian services by a flat fee per head. This fee covers any medical service done by the veterinarians and the veterinarians provide advice on how the feedlots can reduce morbidity and mortality in their herds.

For the beef industry to remain profitable it must continue to change as the market changes. For example, Cargill used to give vitamin E injections to the cattle in the plant, but as consumers no longer demanded the treatment, they reduced costs by removing the injection from their procedures. This concept of responding to customer demands can be used at the feedlot level when determining how fat their cattle should get. If consumers want lean beef, there is no reason to produce high marbling cattle. Feed cost will increase and demand for the product will decrease.

Almost every industry one can think of is becoming more and more globalized. It is important for the beef industry to keep up with this trend in the markets. Dennis Laycraft commented on Canadian trade and how government policies need to be modified in order for an expanding export market to thrive. Those in the beef industry must be familiar not only with the current regulations in their county, but also the policies of the countries in which they intend to export.

Being introduced to new views that are based on providing customers with the product they want in a way that maximizes the benefit to the producer has changed my outlook of the beef industry. With the changing economic climate, beef producers must now market their

product under circumstances where demand may lessen and realize only the most consumer driven products are being sold.



UNIVERSIDADE FEDERAL DE VIÇOSA
CENTRO DE CIÊNCIAS AGRÁRIAS
DEPARTAMENTO DE ZOOTECNIA

International Livestock Congress
Calgary, Alberta, Canada

STUDENT REPORT

Daniel Carneiro de Abreu
Master Student, Animal Science and Agri-business

Office: +55 31 3891-7666

Cell: +55 31 8749-6269

Fax: +55 31 3899-2260

e-mail: daniel.abreu@ufv.br

**INTERNATIONAL LIVESTOCK CONGRESS
BEEF 2009: FIRING UP SCIENCE & INNOVATION
Calgary, AB, Canada**

I would like to thank all the organization staff and sponsors that allowed me and the other 15 students to take part of this magnificent event. Everything I saw during those days impressed me very much and it was really important to improve and deepen my knowledge. Initiatives like this give Canada an admirable image before the world need to be copied by other countries.

It was fascinating to see the reality and interaction of the Beef Production Chain. This event allowed me to verify some of our errors and I intend to fix them based on what I could see in the Canadian chain. All these characteristics place Canada in a greater position in the global beef commerce. I could observe that the Canadian Beef Production Chain has good quality products, compatible prices, large production and a constant supply. These characteristics made it possible for Canada to reach the 4th position in the beef export countries ranking, even with their huge domestic market.

Brazil is facing some problems on the beef production chain, especially between production and slaughter. Attending the congress I could identify some of our faults and I plan to fix them as much as I can based in what I saw in the Canadian Beef Production Chain.

Wednesday, July 8, 2009

On the first day I met Bill Gattinger, Iris Meck, Carol Huculak and all the other students. This day I received all the instructions in addition to the ones sent by e-mail. After the introductions we had a host dinner and we could talk more and get to know each other a little better.

Thursday, July 9, 2009

On the second day we started our activities going to the High River region, AB, where we spent most of our time. The first visit was at Cargill Plant where two respectful people were waiting. They showed and explained the entire slaughter process. The meat processing process has some peculiarities compared to the processing here in Brazil which I

have never seen before. The slaughtered animals present a standard carcass, different carcass cuts and a very rigorous system of classification and identification.

Afterwards, we went to the **Tongue Creek Feeders** to see how the industrial residue treatment process is done. It is a very important part of the process, mainly with the current context of nature preservation and sustainability. This area is coordinated attentively by its managers especially because of the risk of sick animals. This is an initiative that should be stimulated by all other governments around the world.

After the **Tongue Creek Feeders** we went to the **Round T Ranch**. During the trip Brenna Grant talked a little about the Canadian Beef Production Chain and I could understand Canada's position in the International market better, its merchandise destination, origin of its imported beef and the dimension of its domestic consumption.

At the **Round T Ranch** we were cordially received by the Western Feedlots collaborators and went to have lunch. Dave Plett told us more about the history of Western exploration. During lunch time I had the opportunity to ask about their culture, their climate, breeding system and some other things; and I noticed how efficient they need to be because of the very extended winter, and they are.

After lunch we headed for the **Western Feedlots** confinement that has a 100,000 head capacity. During this trip we had the opportunity to visit most of the installation and learned about the individual management of the animals, nutritional program, etc. It is very important to mention that they are extremely worried about worker health, animal well being and product quality control. Contrary to Brazil, in Canada the confinement works year round.

We finished the day in Okotoks, at the **Feedlot Health and Management Service** which gives assistance to the Western Feedlots. There Dr. Calvin Booker explained to us in detail the service they do and how important the information gained during the visit is.

Back at the Deerfoot Inn hotel we prepared ourselves for the magnificent reception with the entire organization committee staff, sponsors and speakers. It was a profitable reunion where I could meet many people whom I'll always remember. I could also tell them a little more about Brazil and learn more about Canada, especially about Alberta.

Friday, July 10, 2009

We started our activities little early because the distance between **Deerfoot Inn hotel** to the **BMO Centre no Palomino Room**, located where the Congress occurred.

Congress

Canalizing Global Recession by Glen Hodgson

I believe that recession is an issue in question in every country today. Dr. Glen presented a general view in today's context, mainly in European countries affected more by the crisis. The perspective for the international GDP is slow and it is propelled by countries with emerging economies like China and India. The tax incentive, according to Dr. Glen, will help to overcome the crisis, but unemployment will continue even after the recovery. The taxes should increase to cover the public deficit and it will hurt in many contributors.

A worrying fact will be the intervention of the United States through finance with no interest to stimulate the economy maintenance of the government subsidy, also practiced by other countries from the European Union which will be harmful to the economy of the emerging countries.

This situation needs even more attention from the producers especially with cost control and a ration of available resources, and with benefits and profitability.

Population Demographics and the livestock Industry by Earl Geddes

Based on Dr. Earl is lecture I could observe the increasing projection of human population focused on the main exporting and consumers countries.

The population will increase approximately 81 million people/year. Countries like India can reach a population of 1.424 billion people in 2050.

The demand for red meat is also increasing every year in developing countries which makes countries like Brazil increase its domestic market and reduce its exportations. The demand also increases and the products need to be adapted to the rules to be kept in the market. It needs to be good quality meat with a good price.

However, developed countries can reduce their consumption.

Mega Trends of Agriculture in the New Economic Reality by David Kohl

Dr. David presented the atmosphere of the new economic reality and the dimension of agriculture: food, fiber, fuel, life experience and science. The *commodities* that have been volatile should be observed by ranchers, farmers or managers and be able to change based on the future global market. The producers have responded with flexibility, good management at resource and making conscious decisions.

Feed Grain Complex: What is Happening Today by Brant Randles

The price of agricultural commodities and the prediction of grain harvests are some very important pieces of information of the *know how* of farms, where the feedlot diet is basically composed of grains like the USA and Canada.

Corn, wheat, barley and soy represent some of the main ingredients of animal concentrated feed. The profits related to this activity are decreasing every day, and this situation has made some North American investors give up the activity. In Brazil many producers don't have control of their spending, especially when it is a big farm. In these cases the large scale production covers the spending but it doesn't pay for the costs with land, implementation, etc and it is not possible to maintain the structures and machinery of the farm.

Another important factor that has increased the consumption of grains is ethanol production; the economic return in this kind of production is greater than the conventional use of grains. Even with its low efficiency compared to sugar cane, the production of ethanol has been maintained, creating a considerable increase on its demand. The decreasing price of the oil barrel inhibits ethanol production because it is a costly production.

The dry season is always an uncontrollable factor and worrisome when we have a short time to provide the food supply for animals during the winter. The forecast, according to Mrs. Randle is to reduce the yield for this year. Unlike countries with temperate weather like Canada, the dry season makes it possible to raise animals in many feedlots and without hormones, only pasture like hay and supplements. The urea has been an important resource used in this production system, because of its low cost compared to other sources of proteins for ruminants.

The use of crop residuals in some cases can be an alternative way to feed those animals and reduce costs.

Supporting the Beef Industry Through Science and Innovation by Dr. Alastair Cribb

Dr. Alastair didn't use any image resource in his lecture; only his voice. He spoke on important topics and one of them was about regulation policies of agricultural production. He also emphasized that the new policies could be worse than the current problems in the future.

The scientific results must be shown and used to benefit the entire Beef Production Chain. We have to face a news challenges and innovate together with science to achieve something new.

Sparking Global Innovation by Bárbara Beane

Attending the lecture of Ms. Beane I could understand better how technology and data can influence the creation and development of a product because the products are created from the necessity of the consumers so we should not ask them what they need or want. Today the challenge is, as we produce beef we must think about who will consume it and what kind of products they want. The producers must keep that in mind because that is what they are in business for. Producers need to know what is happening with their products in the retail store just as well as in the food service. They need to check how the food is being cut and labeled.

The world beef industry needs to develop high quality products for each market, with certifications showing its origin; and quality is part of consumers' conception. In United States the beef quality means prime and choice beef at the highest level, but in many other counties the meat quality in terms of eating characteristics is not important. However, the price should be cheaper.

Science and Innovation: The Future of Human Health and Personalizing Foods by J. Bruce German

Food production is the base of human survival. Humans have an incredible heterogeneity and live in regions with different habits and climate.

Dr. Bruce emphasized these differences and the idea that if everybody ate in the same way, we wouldn't survive because we are biologically different.

According to what Dr. Bruce said, technology aiming for health can elucidate people about these differences; a case of a technology developed with this purpose, would be creating customized foods containing the nutrients each person would need. Not every food is healthy food. Among healthy foods, red meat is one of the most nutritive.

Beef protein is essential for the human organism and some aminoacids are not produced by the body, so, it is essential to get them from food, preferably from bovine meat. These aminoacids are called essential and they are very accessible in beef protein. Beef has innumerable benefits, some of them are as a source of iron (more available) and essential fatty acids.

Red meat, provided from animals raised on pastures has been considered one of the most healthy and nutritious. Several researches have concluded that beef has high concentrations of betacarotene and α -tocopherol, and high levels of fatty acids, Omega 3, Omega-6 and conjugated linoleic acid. All these substances are known as favorable to human health.

Innovations in Canadian Trade Advocacy by Dennis Laycraft

Based on Mr. Laycraft's lecture the policies practiced in other countries like the USA, which is a large red meat producer, and large importers are worrying before this moment of crisis. Some methods can make these relations worse. I had difficulty understanding Mr. Laycraft, due to his pronunciation.

Stampede Ground

After the Congress we went to visit the famous installations of **Calgary Stampede**. We walked through the park during the exposition, we saw innumerable events on this day, people from different places around the world, a lot of different breeds of horses, bovines, sheep and animals that I have never seen so close before. The one I liked most was the Lama. During the event I had the opportunity to talk with some ranchers and change experiences. The ranchers showed me more about their reality in Canada.

When the night came we had dinner at the **Gland Stand Clubhouse Restaurant**, we went to watch the famous “**Stampede Chuck Wagon Races**” at the Grandstand Show. It was a lot of fun to watch the race that close and that day with no accidents.

Saturday, July 11, 2009

Industry Leader’s Round Table

On Saturday morning, at the end of the planning meeting, we took part in the round table to discuss the topics proposed.

Preposition: During times of recession and tight money, consumers watch their food bills closer than in times of prosperity.

The demand for *commodities* like Beef is growing every year. Consumer requirements are rising and producers have to accommodate new roles with different techniques to remain on the market. Beef should have quality. In the U.S. the quality beef means Prime and Choice at the highest level, but in many markets meat quality in terms of eating characteristics doesn’t matter, however, the price should be cheaper.

In a time of recession, like now, the economic effects of elasticity happen with lean meat as consumers try to find other protein sources like poultry and pork. But red meat, as produced in Canada, has a high added value and doesn’t receive the same response from the market, because they are consumers with high purchasing power.

One of the most important points is that we have to beef up, because Beef protein is essential to the system and some amino acids in beef protein is not synthesized by the body. Because of that it is essential to get them from food, preferably bovine meat. These amino acids, called essential, are very accessible in beef protein, which is rich in protein with these characteristics. Beef has innumerable benefits, some of which are a source of iron (more available) and essential fatty acids.

We have to use those arguments about how healthy it is to eat beef for consumers. On farm the producers can reduce their production’s costs and create advantage.

The areas of research, marketing or product development have to become integrated. Research has shown what has to be done. Marketing has to show these results and explain the benefits for a healthy body. Consumers today want fast food to eat and easy preparation of food. In Brazil. Beef has to standardize the meat, it means to raise animals in similar size

and conformity, for the market niche that producers would like to sell to. The Beef industry has to look to develop these products.

Inside the farm we have three import points that must be concentrated on: cost, profitability and benefit.

Producers must remain vigilant to not to allow increased costs to erode their comparative advantage. Low production cost means low –price advantage. But usually when you increase the productive you probably increase the cost. The cut bovine production in Brazil is almost 80% matured in pasture and feedlot feed with crop residuals (co product). But our product is different, as you know it is lean meat.

The world Beef industry has to develop product with good quality, certification and large scale. Beef associations has to find marketing alliances in domestic and international market.

For raise efficiency all Beef Cattle Production chain has to work together in:

- Food security;
- Environment protect, reducing the ambient impacts;
- Invest in human capital;
- Priority the intellectual resource with a consultants, trainee, qualification, etc;
- Cost control;
- Increase yield, strategically with correct decisions;
- Profit management on farm, the goal is using rationality the resources available;
- Animal welfare;
- Efficiency to use the soil.

One of the important challenge is to make consumers realize the benefits to eat beef, principally when they go to buy. The consumers have been satisfaction.

Brazilian Republic

Brazil is a country with continental dimensions, that present ideal climatic conditions for food production. It has 8.547.403 square kilometers of area, is located mostly in south hemisphere (5°16' north latitude and 33°45' south latitude) and completely in western hemisphere (34°47' western longitude and 73°59' western longitude), in the tropical and sub-tropical zone, with extremely favorable rain and weather conditions for agriculture.

In the Brazilian territory one of the largest amount of perennial rives in the world exists. There are three big hydrographical units, Amazonas, São Francisco and Paraná and it produces 80% of the hydro-electricity in the country. Drainage-basins cover around 72% of the Brazilian territory. Brazil has the largest water availability, with approximately 13.8% of the global fresh water.

With these excellent territorial and weather conditions, the Brazilian cattle are raised almost exclusively in pastures, with animal feed based only in grass and mineral supplements, ensuring an economic viable production and a healthy, safe product. However, with growing modernization, productivity increases and the necessity to support more demanding clients, confinement is becoming more important in the Brazilian productive system.

The Brazilian Beef Industry has had a real revolution in the last decade. Huge investments in genetics, nutrition, sanity and management have allotted a large productivity progress.

Around 2 million animals are fed in confinement every year in Brazil. The feed of these confined animals is completely of vegetal origin, with diets based in corn silage, broom-corn silage, sugar, soybean bran, etc. This strategy, even though more expensive compared to pasture feed, allows for a better and faster carcass finish, permitting the slaughter of younger animals that will produce a softer meat, according to consumer exigencies.

The livestock base is composed of *bos indicus* animals, mainly the Nelore breed, which are extremely adapted to Brazilian conditions. As a technique to increase productivity, crossbreeding is expanding and so are the number of cattle producers who choose to cross *bos indicus* with *bos taurus* animals, so they can use the advantages

produced by heterosis. In this context, the Angus breed is outstanding with a larger number of semen doses to sell, but also have a great importance the breeds Limousin, Charolais, Simmental, Caracu, Blonde d'Aquitaine, and others.

Brazilian progress is also noted in sanitation. The eradication program of Food and Mouth Disease began in 1992, when a zonification strategy was implanted and became a success, reaching great results in areas where the beef industry is represented. So, all vaccination campaigns covered around 100% of these area animals. With this, Brazil has approximately 80% of the livestock in areas without FMD recognized by the OIE (World Organization for Animal Health), making a total of 150 million animals, which make up the biggest herd without FMD in the world.

The zonification strategy is very important for a continental dimensions country like Brazil, which has huge disparities between different regions. So, each circuit is defined as a form to delimitate regions which have similar production styles and have connections with products and sub-products. Making it certain that the animal will complete his life cycle in the same circuit.

Currently, all regions with cattle and important beef production are free from FMD. The non-free region is basically constitutes the Rain Forest (Amazon Forest), where the cattle doesn't have a large economic prominence, and around the Brazilian northeast, with dry weather and without cattle raising aptitude. The animal, products and sub-products of a non-free FMD area have the entrance blocked to a free area and have rigorous fiscalization, impeding this from happening.

Beside the sanitary issue, something else very important in global commerce is food safety. In this area, Brazil has a huge advantage due to its production system and the food that is fed to the animals. Brazilian beef is internationally recognized, belonging to the small risk group of the Creutzfeldt-Jakob (Bovine Spongiform Encephalopathy). Bovine alimentation in Brazil is exclusively from vegetal origin products and it's forbidden by law to use any product of animal origin to feed the livestock.

Even with this reduced contamination risk, there is a constant monitoring of the livestock by the sanitary vigilance. So, any animal that die shewing neurological symptoms has its brain and spinal marrow collected and sent for to examination, because diseases like Rabies, can cause neurological symptoms similar to "Mad Cow Disease".

The Slaughter House industry deserves special recognition in beef production. With modern installations and equipment, the export industries act under rigorous fiscalisation of the Federal Inspection Service, Which fiscalizes all the procedures from when the animals arrive at the establishment until the entrance of the beef in refrigerated trucks, sealed up and just opened at their final destination. The exporter industries support all sanitary requirements of the European Community and are constantly verifying if the requirements are kept-up.

All these characteristics place Brazil in a greater position in global beef commerce. Association of a good quality product, extremely compatible prices, large production and a constant supply made it possible that Brazil has reached the top of the beef export countries ranking. This position is kept in recognition of the international consumer.

Travis Arp

Having the chance to participate in the International Livestock Congress was a tremendous opportunity for me from both an educational and professional standpoint. Attending the congress allowed me to observe the cattle production systems from the feedlot to the packing plant, and learn how these systems operate different from those in alternate parts of the United States. However, what was even more important was how these systems and producers interact with not only each other, but also their counterparts in the United States and other countries to produce beef on a global level. With the ever increasing globalization of the agriculture marketplace, understanding these concepts and system interactions will be crucial to me as I continue to pursue a future in the beef industry.

While many of the tours and seminars given were extremely valuable in understanding the broadening global economy and industry issues, I felt that one of the best opportunities I was given by being selected for the congress was the chance to meet other students from around the world that shared the same interest and concern for the beef industry. ILC allowed us to share experiences, ideas, and solutions for the happenings in the industry today, while building professional and personal relationships with individuals who will undoubtedly make an impact on the industry in the future. To go along with this, being able to network with the numerous industry professionals will give each of the students outstanding professional contacts as we finish our academic career and continue on to professions in the industry.

One of the best sessions that we attended was the student issues forum. At this, we were presented with questions and issues about the current beef industry, and it allowed each of the students to share ideas and solutions for the problems facing the industry today. Many outstanding opinions and ideas were presented by each student, and we each took a substantial amount of information away from the session. During the forum, we discussed ways to market beef during tough economic times. Through cooperation across the supply chain – from producer to retailer – we can make product that is more affordable for the consumer while improving the producer's bottom line by improving efficiency at all stages. Also, creating new marketing schemes and advertising campaigns, more effective use of technology and utilizing new cuts of beef are all ways to improve its marketability. All of these ideas were also discussed again when the question of what new research, marketing, and product development could be used to improve beef's competitive advantage. However, the biggest issue discussed was how the beef industry needs to instill more consumer confidence when we have to constantly face ridicule from groups like PETA and HSUS. Also, the topic of consumer education and information was highly debated as well, as we agreed that there are many misconceptions about beef production and as a food source which inhibit our marketability as well. Finally, we were asked to answer the question of what traditional beef production practices needed to be changed or enhanced to address the challenges we face? In my estimation, improving efficiency of both our cattle and our production techniques is crucial in improving the producer's bottom line. With a damaging economy, coupled with increased input cost, enhancing our production practices to reduce those input cost will improve returns across the supply chain. However, where these returns can substantially realized is by

improving the genetic base of our cattle through efficiency selection. As feed costs rise, more research is being done at both the private and institutional level for selection of high efficiency genetics. By implementing the findings of this research, along with utilizing new EPD data obtained by breed associations, we can improve the ultimate efficiency of our cattle herds to make cattle production more profitable for our producers.

. My Experience at the ILC 2009 Conference

The International livestock conference 2009 was a unique experience for me. It came forth as an event that cleverly combined history, education and inspiration. History, in the sense that, the setting and timing of the event offered participants a rather enlightening perspective of the history of Alberta particularly with respect to the cattle industry. From the airport to downtown and the stampede grounds one has a heightened sense of the conceitedness of a people eager to preserve the past and market it for the future. The pleasure of meeting other students from diverse backgrounds and the opportunities to share, interact and build mutually beneficial networks was one of the high points of the conference. Further, the opportunity to interact with sponsors, speakers and other stakeholders ensured that the conference was not a mere “top-down” type of discourse but that students and other interested parties were able to talk to the issues and raise legitimate concerns about the various issues raised during the presentations.

The opportunity to tour Cargill, western feedlots and other facilities gave me a firsthand view of how science, innovation and creativity can be used to meet human needs whilst meeting the economic aspirations of entrepreneurs. On the tour of Feedlot Health and Management Service, I learnt practically how a paradigm shift in thinking creates a common platform for seemingly contrasting objectives for the overall good of all.

Throughout the discussions on the way forward for the livestock industry in these trying times, certain key themes run through the various arguments and prepositions. Firstly, that the current crises should be seen as an opportunity or at worst a challenge that the industry must rise to. Secondly, the need to pursue aggressive marketing about the all the positives of eating beef but the price. Lastly, the imperativeness of proactive and not reactive education targeted at the younger generation of consumers and a more concerted effort at reaching out into new markets.

Looking back at my experience at the International Livestock Conference 2009, I appreciate the fact that it was not just a conference but a concept and a challenge. A remainder to think outside the box, be innovative and more creative. I look to a future of working as a better oriented young academic/researcher fired up to meet the challenges in my professional life, looking for potential opportunities with each challenge- the very concept imbibed at ILC 2009.

Albert Boaitey

MARKETING CANADIAN BEEF IN A GLOBAL MARKET

Presented in fulfillment of requirements for

The International Livestock Congress

Calgary, Alberta, Canada

July 8-11, 2009

Chelsey R. Carruthers

Canada's beef industry has always been highly integrated in international beef markets. As a country that exports approximately 50 % of its beef (Canada Beef Export Federation 2009), access to international markets has been crucial to the viability of beef production in Canada. Recent challenges such as the BSE crisis, and the subsequent changes to export and labelling laws, have highlighted the necessity for the players in Canada's beef industry to be proactive and innovative in their marketing strategies. The 2009 International Livestock Congress showcased beef producers, packers, as well as industry experts and marketing specialists, who share a common vision: effectively positioning their products in international markets. This paper will highlight some of the challenges, possible solutions, and common themes associated with marketing Canadian beef on a global scale.

According to Dennis Laycraft of the Canadian Trade Advocacy, there are no isolated domestic markets in livestock production. Especially in the case of by-products, items which are not valuable in their county of origin may hold more value when exported to other countries. As exporters, Canadian beef producers and packers must embrace the role, and devote time and attention to gaining and maintaining market access internationally. The primary tool for gaining and maintaining market access is food safety. Assurance that Canada's producers and packers provide the safest, highest quality product possible, is the key to market access. However, safety alone is not the only consideration for international trade. Many, including Earl Geddes, would argue that the most important information required for export of beef is the demographics of Canada's trading partners. The population structure of a country, as well as the preferences, economic climate, and beef consumption of that population, are vital statistics when targeting export markets. India and Mexico, for example, have a high proportion of young people, for whom beef consumption is increasing with added wealth. Therefore, these countries are a more viable target for beef export than are countries with aging populations tending towards decreasing beef consumption. This type of information is required in order to spend valuable resources developing relations with the countries most likely to be successful export markets.

The concept of the importance of initial research and investigation was highlighted by a number of presenters at the International Livestock Congress. Barbara Beane, Director of

Technology for Yum Brands, stressed the importance of research and development in marketing strategies. She argued that it is cheaper to fail early on in the process of developing a product, than to fail after the product has been developed and marketed. Therefore, the most important step in development is knowing what type of consumer is being targeted, and what that consumer requires and desires in a product. This philosophy can easily be applied to marketing beef products both domestically and internationally. Instead of marketing beef to consumers, Canada's beef industry must focus on marketing specific beef products to specific groups of consumers. In this way, the needs of consumers can be met, and marketing strategies can be developed to target a very specific audience.

There are a vast range of consumer demands and concerns that must be met by the beef industry in today's social, political, and economic climate. The primary concern for consumers is undoubtedly health and safety. Beef producers must assure consumers that they produce a safe and nutritious product. However, an additional challenge exists in convincing consumers that the safe and nutritious product was produced in a way that does not compromise animal welfare or environmental sustainability. For examples, the use of beta agonists in feedlot production is often opposed by consumers, due to their concerns about any "unnatural" substances potentially contaminating beef products. However, most consumers do not consider the fact that beta agonists improve feedlot efficiency, decreasing the amount of fossil fuels and other resources required to produce the resulting beef. By appealing to one consumer value, such as environmental sustainability, other concerns may be alleviated.

Bruce German spoke about personalized nutrition based on the inherent variation in humans. He suggested that aspects of beef which have historically been deemed unhealthy, such as saturated fat, may actually be beneficial to some people, depending on their individual needs. This suggestion again emphasizes the importance of specific marketing of beef products based on specific advantages. This type of marketing would introduce beef consumers to more advantages: beef not only as a source of nutrition, but also as a functional food for human health.

The practice of specific marketing strategies can be observed in other agricultural sectors as well as in the beef industry. At Tongue Creek Feeders, different types of compost are marketed based on the requirements of the customer. Organic compost, high quality compost for

golf courses, and horticultural compost are all marketed in addition to agricultural grade compost. By diversifying and adding value to the product, it is possible to capitalize on delivering exactly what each customer requires.

Making the most of each product is especially critical in today's economy, where consumers expect products to meet their diverse demands while remaining affordable. In such a volatile global economy, it is more important than ever to develop international markets through food safety assurances and marketing strategies. It is also vital to develop new marketing strategies domestically, in order to meet the demands and values of consumers. The speakers and tours at the 2009 International Livestock Congress served to integrate the issues and challenges facing Canada's beef industry, in order that these challenges be understood and addressed. Although the beef industry currently faces a wide range of challenges, it also possesses a solid foundation of quality, safety, and value. With these attributes, the Canadian beef industry is well equipped to transform challenges into opportunities in a global market.

Filogomes Alves de Carvalho Neto

Colorado State University

ILC-Calgary 2009

Calgary, AB

I would like to begin by thanking the Canadian Cattlemen's Association, the Calgary Stampede, and the International Stockman's Educational Foundation for being such great hosts for the 2009 ILC-Calgary. I also would like to thank the travel fellowship selection committee for giving me the opportunity to participate in such a terrific event. For me, being a participant in the ILC Student Program was a once in a life time opportunity that increased my exposure and awareness of the latest trends and issues faced by the livestock industry. I especially enjoyed my discussions with guest speakers, sponsors, stakeholders and students from around the world about the challenges and opportunities that are facing the global livestock industry.

I thoroughly enjoyed the opportunity to visit Calgary during the Stampede and to experience the rich agricultural history that Canada has to offer. From the very beginning of my trip I knew I was in familiar company with people who love agriculture and the livestock industry. I was received at the airport with a warm welcome from a live band and from other Calgary residents. I was very impressed with the commitment of all Calgary residents in making us, international visitors, feel very welcome.

During the first day, the student group toured various enterprises representing Alberta's livestock industry. Each company that we toured showed their commitment to producing safe and wholesome products that exceed consumer expectations with the highest degree of excellence. I was able to witness the perfect example of this consumer driven production chain at the Cargill beef plant in High River where a group of cattle destined for the Japanese market were being harvested. This specific group of cattle had to meet an extensive list of requirements in order to be eligible for export to Japan. The communication and coordination among beef producers and the packing plant makes it possible to produce a product that exceeds their requirements through age and source verification, genetic selection, and food safety compliance. Other factors of

relevant importance to the livestock industry beyond the final product itself, include animal husbandry, environmental stewardship, conservation of natural resources, and production efficiency were evident throughout the tours to Cargill, Tongue Creek Feeders, Western Feedlots and Feedlot Health and Management Services. I was definitely impressed by the high level professionalism and sophistication adopted by the Canadian livestock industry in general.

I believe, the Canadian Beef Industry is ahead of the curve by using the latest technologies to improve beef production. The Canadian beef industry has had to endure new requirements from their trading partners after they discovered their first case of BSE in May 2003. Even though the Canadian beef industry adapted to these new trade demands other problems, like the current global economic recession, continue to limit the industry's profitability. The beef industry needs to educate consumers on the innovations used by the industry to produce safe and wholesome animal protein in the most efficient and environmentally friendly way possible.

The word "innovation" was present in the titles of four of the eight presentations given at ILC-Calgary, which demonstrates that innovation is an important tool for the beef industry to utilize to improve its long-term profitability. The beef industry has always relied on innovation to increase production efficiency and profitability. Now it is time to apply this same innovation to the marketing side of the beef industry. One way to market beef, which is more expensive compared to other animal proteins, is to further educate consumers about the benefits of eating beef and about the responsible production practices that are used by the industry. Information is very important to the 21st century consumer. Marketing campaigns need to adopt more aggressive strategies that focus on informing the consumer about all of the positive aspects of including beef in their daily diets.

Future areas of research should concentrate on enhancing attributes that make beef more

appealing to the consumer. These areas include packaging, portion size at retail, increased shelf life of fresh product, food safety and nutritional profiles among other areas. There are substantial financial losses to the beef industry caused by the considerably short shelf life of fresh beef which is due in large part to color changes that make the product unacceptable to consumers. Some beef cuts are sold in portions that are too large for small households. Further, beef is still considered by many consumers as a food item that requires considerable time and preparation. There is an urgent need to develop beef products such as pre-cooked products that are easy to prepare and require a short amount of preparation time.

The beef industry must preserve its integrity and commitment to producing a high quality product that exceeds consumer's highest expectations. Consumers only purchase products that meet their expectations regarding product safety, flavor, tenderness, wholesomeness, and of course, price. The beef industry must find a path to mediate consumer requirements, profitability and preservation of the environment. It is critical to the beef industry 's survival and success that we remain grounded to our roots and transparent to our consumers.

The International Livestock Congress was a fascinating and educational experience that opened my eyes to the many facets of worldwide beef production. I learned a great deal about where people believe beef consumption will be centered in the future, most particularly from the presentation by Earl Geddes on age demographics, as well as how the final product is produced and marketed. Coming from a cow/calf background, I was intrigued by the harvest process at Cargill and how meat is marketed in a fast food marketplace from Barbara Beane's presentation.

Of all the events that we attended, I would have to say that I enjoyed the presentation by Feedlot Health Management Services the most. As a veterinary student, I found their approach to veterinarian/client relationships as a win/win situation to be revolutionary in comparison to the typical win/lose relationship, as well as their embracing of new technology to increase efficiency.

The International Livestock Congress will be of a great benefit to me as I carry on with my education and beyond into my career as a livestock veterinarian. Armed with a better understanding of international trade as well as a look at the Canadian beef industry, I will be able to communicate with my colleagues and clients how international trade impacts our industry and how American beef producers can take advantage of it. This experience was a unique and valuable opportunity and I would like to thank all the parties involved for sponsoring my attendance.

Proposition: During times of recession and tight money, consumers watch their food bills closer than in times of prosperity.

1. How do we market the most expensive protein in times like this?

We need to focus on value in our marketing programs. Consumers have less money, but they are not broke, so they are carefully watching their expenditures to purchase products they see as being a good value. We need to prove to consumers that the price they are paying for beef is of a higher value relative to other sources of protein, although it is more expensive, and that the beef was produced to meet their expectations of animal humane treatment (meaning the general public, not animal rights groups) and product safety.

2. What areas of research, marketing or product development would assist in contributing to beef's competitive advantage over other proteins?

In product development, we need to continue to create products that are quick to prepare, tasty, and priced competitively. The Yankee Pot Roast by Tyson is one example. The more products of this nature we develop, the more choices the consumer will have to fill their particular craving.

In marketing, we need to show the value that beef has by focusing on the nutrient density that is found in our product. Like how Total cereal illustrated its nutrient density in commercials by comparing a single bowl of Total to multiple bowls of competition cereals, beef should be stacked up against other plant and animal sources of protein, zinc, iron, and other nutrients to show how beef, though more expensive, is a better value. For example, ask consumers if they would rather have a 3 oz. serving of beef or almost 30 oz. of spinach to get the same amount of protein—the result should be favorable for beef.

3. What traditional beef cattle production practices need to change or conversely be enhanced to address the challenge above?

The main challenge to our current production practices is pressure from animal rights groups to change our practices. Currently, we produce an inexpensive, safe, and humanely raise product, but our consumers do not know that. We have not told our consumers who we are and how we produce beef and consequently they trust the claims of animal rights activists. Individual producers need to communicate with consumers about our production practices, via direct contact or advertisements in media sources, in order to maintain their trust.

International Livestock Congress – Calgary, AB
BEEF 2009: FIRING UP SCIENCE AND INNOVATION
July 8-11, 2009

Lynne Girardin, B.S.A., P.Ag.
Animal and Poultry Science Department
University of Saskatchewan
Saskatoon, SK CANADA

The international livestock congress (ILC) in Calgary, Alberta had a remarkable program. The event was well rounded with a tour of the beef industry in southern Alberta and showcased both innovative and leading enterprises within the industry. The congress itself was a vibrant day with impressive speakers from all over the world representing the beef industry. The congress also allowed the students to learn about the Beef Industry locally, nationally and internationally. The eight international students involved in the program allowed for great discussions and illustrated the similarities and differences in the Beef Industry globally.

Students were fortunate enough to have the opportunity to tour the Cargill Foods Plant in High River. The energy and passion the individuals had touring the group was enlightening and the demonstration of the extensive work that is done for the safety of Canadian beef exemplifies the advancement of the livestock industry to date.

Tongue Creek Feeders was a particularly impressive integrated business. The business demonstrated very well how innovative a business can be, such as the use of waste from the construction businesses to include in the compost pile. It is a great way of proving that agriculture is innovative and always trying to find new ways to decrease our carbon footprint.

Round T Ranch was a great part of the tour, with a rich history that has been well preserved. Even though Canada is still a young country, preservation of its great history must be on-going! Meeting representatives of the Alberta Beef Producers was also a great addition. Communicating with these individuals was very insightful. Western Feedlots Ltd. was yet another remarkable operation. Every feedstuff, implant, antibiotic and supplement in their operation is implemented via the on-site research program. Thus all products are “tried, tested and true” before they are considered for implementation into their protocols. The company embodies the ideal combination of scientific research and commercial business to ensure all decisions employed are based on concrete facts.

Feedlot Health and Management Services (FHMS) was a great example of a different approach to working with producers than the conventional veterinary clinic. This company as a whole is based on a win-win strategy with their clients. If both parties utilize each other’s resources adequately and efficiently, they will be happy, thrive and benefit everyone involved. FHMS hire a variety of professionals, varying from veterinarians, to nutritionists, to technical staff and other support staff making it a extremely diversified operation.

The speakers included in this year’s Congress were all very interesting. The presentations were ideally chosen to include all aspects of the supply chain. The opportunity to speak with the congress organizers and speakers, while touring the Stampede grounds, was outstanding. Sharing the passion for

the beef industry and agriculture as a whole was exciting and needed. Student recipients were presented with many great opportunities to meet industry representatives that covered a wide array of jobs all leading to the betterment and support of the beef industry. Globally and locally, the beef industry is led by passionate people!

The ILC-Calgary was closed with a discussion forum where the students were presented with three important questions regarding the beef industry: *During times of recession and tight money, consumers watch their food bills closer than in times of prosperity.*

1. *How do we market the most expensive protein in times like this?*
2. *What areas of research, marketing or product develop would assist in contributing to beef's competitive advantage over other proteins?*
3. *What traditional beef cattle production practices need to change or conversely be enhanced to address the challenge above?*

During the forum discussion, it was illustrated that the beef industry, as a whole, is facing difficult times and changes are needed to remain competitive with other meat industries. Marketing a product that is an expensive protein is no doubt difficult in these trying times. Beef is the first protein source to exit the grocery list when consumers are short of money. The beef industry needs a great and innovative marketing team, or many small ones that work together, to promote a great protein source worldwide and as well or better than its competitors. Consumers do not always know what they want and how they can get it; thus we need to show them how beef can easily be part of their everyday lifestyle without costing a significant percentage of their dispensable cash they work so hard to get. It is imperative to illustrate that beef is vital to the consumer's everyday life.

Within the industry, collaboration and sharing of information must be widely implemented. We are all interdependent, but we currently act as though we are independent and stand alone enterprises. The information to better each part of the supply chain is crucial. Information feedback is fundamental and key to knowing what is occurring vertically and laterally in the industry. South America's livestock industry is a perfect example of how integrated the business should be to better supply our product to the consumer. We can learn from each other without giving up *secrets*.

In today's society, it is more common that people do not have a direct tie to agriculture. We are a world of information overload and we need to send the right message out to the public. There is a need to differentiate ourselves from our competitors through accurate and factual information and to include three important features the beef industry already supports: (1) safety; (2) health; and (3) environment. Informing the young people of today is central to ensuring accurate exchange of information and ensuring the educators of today are accurately informed. The educators of today are part of the 'supply chain' and are fundamental to ensuring the right message is vocalized throughout the bright and young people of today.

Following a remarkable discussion period, there were three crucial points that were raised: (1) good communication - laterally and vertically; (2) Educate/be informative; and (3) Be proactive, *not reactive*. These are all crucial factors to a thriving business and the beef industry is no exception!

The organizing board for ILC was a phenomenal group of people that were both exceptionally interesting and informative. It was great to see we have amazing people representing the industry and I am eager to join the group to continue to showcase our great industry.

All in all, ILC was a great opportunity to meet industry representatives and to form a network of great people locally and globally. The congress was a great vehicle to gain global contacts that is so very important in the livestock industry today. I would enjoy the chance to attend the event again next year.

Sitting at the Top of the Food Chain

Sitting at the orientation for the 2009 International Livestock Congress I scanned the faces of the future leaders of the beef industry. The room was filled with 16 students who had come to Calgary from around the world bringing with them a number of different perspectives of the beef industry. The Congress proved to be an extremely valuable tool for networking, meeting students with similar interests, and for understanding the evolving industry of agriculture.

The Congress kept students busy with tours of the Cargill Plant, Tongue Creek Feeders, Round T Ranch, Western Feedlots, and the Feedlot Health and Management Services (FHMS). Every stop represented one more piece of the jigsaw puzzle that is essential to producing the beef needed to feed the world. FHMS is one of the best feedlot consultation practices in the world and Canada's beef industry should capitalize on that fact.

The guest speakers were excellent and offered a broad range of intellect. Barbara Beane from YUM explored the challenges faced by the food processing and marketing industries, Earl Geddes looked at the changing demographics of consumers and Canadians, and Dr. Kohl lit the stage on fire with his presentation on mega-trends. It is important to understand how the industry is evolving in order to find the niche that will suit your career. The careers in the future of agriculture will be very different than they were twenty years ago. ILC offered a peek into the future economics, mega-trends, and production practices that will shape the future.

This conference was exceptional and ended with a round table discussion between students and ILC board members on this proposition: During times of recession and tight money, consumers watch their food bills closer than in times of prosperity: How do we market the most expensive protein in times like this?, What areas of research, marketing or product develop would assist in contributing to beef's competitive advantage over other proteins? What traditional beef cattle production practices need to change or conversely be enhanced to address the challenge above? The discussion was so enthusiastic that we only had time to discuss the first two questions, however we could all agree the beef industry has made considerable efforts to stay competitive in the protein food industry.

One of the key marketing techniques to efficiently sell the most expensive protein that needs to be fully exploited by the beef industry is the health value of beef. By marketing beef to consumers as the healthy red meat of choice, producers can use the current health trend to their advantage. The egg and dairy industry is already doing an excellent job to market their products to the health conscious consumer by selling omega three enriched eggs or pro-biotic enhanced yogurt. The beef industry should be following their lead of value adding and needs to further differentiate beef as a nutritious source of protein. They should take advantage of the current research, which has shown beef is a high protein product enriched with healthy oleic-acids. The oleic-acid contained in beef has numerous health benefits such as the ability to lower bad cholesterol (LDL) and increase the good cholesterol (HDL).

The article "Marbling helps people live past 100" by Larry Thomas (October 2008, pp36) in the Canadian Cattlemen explains the first hand experience of the author, who is battling high cholesterol. Thomas explains how his doctor gave him the advice to cut red meat from his diet. This advice did not sit well

with the beef rancher and was proof that many health “experts” under-estimate the nutritional value of beef. Thomas sticking to his meat and potatoes roots, refused to cut beef out of his diet and decided to do some of his own research and find out the science behind his doctors claim. Stephen Smith from Texas A & M a meat biologist found that beef contained oleic-acid, which had been proven to decrease low-density lipoprotein (LDL) or “bad” cholesterol. The more marbled the beef the higher the percentage of oleic-acid contained in the beef and the lower the percentage of saturated and trans-fatty acids. Oleic acid is a mono-saturated fat that is also found in Olive oil and is good for you and your heart. Thomas successfully reduced his cholesterol to a healthy level while continuing to eat beef. His experience made him realize the negative perception many Canadians have about beef and he is completely accurate with his statement, “ To the consumer perception is reality.” The reality for the beef industry is we need to start educating doctors, nutritionists, the media, and consumers about the nutritional values of beef. If we can start marketing beef as a healthy product that consumers demand we can regain a positive reputation for the beef industry. This article has a great message but has only reached a miniscule amount of consumers and most of that audience is composed of similar stubborn beef producers that don’t need science to tell them that beef is actually GOOD for you.

Another aspect of research that can be used to support the beef industry is happening at the University of Saskatchewan who is using genetic fingerprinting to develop practical marbling prediction tests. These tests will identify the best animals for production and breeding to produce a product with exceptional marbling qualities. This research will help increase the efficiency of the beef industry and has the potential to select animals with increased oleic-acid levels in their meat. The new movie Food Inc is proof of how moldable consumers are and that they in fact listen to the media and not science. Consumers are not reading the hot science magazine like Nature, but they are watching T.V. and listening to the radio. We can use this as an advantage and to broadcast a positive message about beef.

The good news is that consumer perspectives are always changing. If consumers believe that Pepsi can make them younger and more attractive then surely they can be convinced of the true health benefits of beef. Why can consumers be convinced to eat fatty deep fried potatoes or onion rings and yet they cringe at the thought of eating a steak because it may contain hormones? Fast Food is extremely high in calories and yet most families will serve it more often than meatloaf, roast beef, or steak. The price may be limiting consumption of beef, which is known as the most expensive source of protein. This excuse is not valid because they are millions of consumer willing to pay two to three times the price for fruits and vegetables if they are marketed as “organic or natural”. Consumers pay millions of dollars for organic products that lack strict guidelines of production or any actual scientific proof that they are a healthier option. Consumers believe organic products are healthier because the media markets them that way. Consumers buy ideas not products they believe they are buying their health through purchasing organic and natural produce. This same venue can used to market beef.

People need to eat for nutrition, however people like to eat for pleasure. The beef industry can meet both of these standards; consumers already value beef as an extremely tasty product, however they also need to value beef as an extremely nutritious product. When a person thinks “I am going to eat really healthy this week” they do not usually put beef at the top of their grocery list. WHY NOT? The perception of consumers can be changed they need to take some advice from some old cattlemen, “ My ancestors did not fight their way to the top of the food chain for me to become a vegetarian.” (Author unknown Canadian Cattlemen Sept 2008 pp.56)

Jessica Igo - Meeting the Demand

Attending the International Livestock Congress in Calgary opened my eyes to a whole new side of agriculture that I have not seen growing up in Texas. I grew up in a farming and ranching community in the panhandle of Texas and have had hands on experience with agriculture stemming from the cow-calf producers, stockers, feedlots and even have a Cargill beef plant in my hometown. The tours brought a whole new perspective of agriculture and the beef industry on an international level for me. I was able to not only compare and contrast the differences, but I also had the opportunity to learn from the feedlot new and innovative ways to make a company as large as themselves as profitable as they could possibly be. I also enjoyed learning from the veterinary supply company that being independent can only get you so far and that you cannot be a specialist in every area; whereas if you are interdependent, you are better prepared for a greater amount of issues that could arise and come to the best solution for the particular producer. The tours were a wonderful way of introducing students, first hand, what agriculture is truly like and what the beef producer's thoughts are on an international level.

The congress itself was a once in a lifetime opportunity to attend and the thoughts and talks that were given throughout the day were definitely appropriate for the state of the economy, producers and even the food service industry. The first few speakers talked about how the economy and recession was doing, what the state of the economy was and how the population and consumption demographics were affected the beef industry. They also both contributed their thoughts about the state of the economy as well as the simple fact that it will eventually get better. Agriculture economics was also touched on as to how we got into the financial crisis we have got ourselves into and how to keep from doing it again. Feed and grain are a very central part of agriculture and the differences in how animals are fed today as they were 20 years ago and how different grains are being used because some are more scarce or too expensive to feed

Meating the Demand

to the livestock. Consumers and food service was touched on by one speaker who shared how data sharing between different restaurant chains has increased their consumer base and repeat consumers. I think that this has improved not only their efficiency, but their profitability as well. All of the speakers spoke on relevant up-to-date topics that are all issues that the agricultural society faces in the future and has already faced and overcome throughout the past few years.

After getting to go on the tours and attend the Congress, the students were able to discuss their thoughts on everything that went on, how to market the most expensive protein in times like these, what areas of research, marketing or product development would assist in contributing to beef's competitive advantage over other proteins, and what traditional beef cattle production practices need to change or conversely be enhanced to address the challenge above. Students shared a lot of ideas on how to market and make beef a more desired and sought after protein source. Students shared ideas about marketing the products, whether it go to natural, organic, or on the COOL label, list everything about the beef the consumer is about to purchase and eat. Other suggestions involved the Beef Nutrient Database Improvement (NDI) project and how once the National Cattlemen's Beef Association gets the project completed and published, the values will be of great importance and highly valuable to the beef industry as a whole, because poultry and pork will not be able to make the claims they currently are about being the leanest, most healthy protein source available. Traditional beef production practices can be enhanced as time goes on and technology increases. Currently 97 percent of cattle weighing over 700 pounds entering the finishing phase are receiving at least one implant prior to slaughter. With the demand that high for improving the efficiency and growth of cattle to reach their end point faster, technology is increasing with the implants and implant regimens available for producers. In addition, beta-agonists are currently being developed and although few implants and no beta-

Meating the Demand

agonists are approved for cattle production use in Canada, it is making improvements and causing producers to be more profitable in the United States and the consumers can find minimal to no differences when some implant regimens are used compared to non-implanted or beta-agonist fed beef.

The knowledge gained from attending the International Livestock Congress will be greatly beneficial to my studies as I am continuing my education for a Ph. D. in Animal Science. The information shared from producers, economists and others at the Congress will significantly contribute to the ways I see agriculture not only on a national level but an international level. This was truly a once in a lifetime experience and I am extremely grateful to have had the opportunity to learn so much in a short amount of time about the beef industry and agriculture on an international level.

The 2009 International Livestock Congress

**What was learned,
How it applies, and
Discussion on three industry questions.**

Riley Mengarelli

July 9th-11th 2009

Calgary, Alberta

The International Livestock Congress (ILC) is one of the most influential events any cattle producer, young or old, could attend to become aware of the global marketplace. Not only does the congress allow one to do this, but it gives cattlemen the time and place to network and build life-long international relationships. At the ILC, I was able to get a new perspective on the global cattle industry and the knowledge I have taken away will be invaluable as I move forward in my career in agriculture. I would like to discuss not only what I learned from the congress and how it applies to my future, but I would also like to speak on the three topics discussed amongst myself and the other 15 international student leaders at the Leadership Roundtable.

The two broad themes I took from the ILC are as follows: we must be thinking globally in our changing world and economy; and there is a vast amount of resourcefulness and progressiveness in the beef industry today. These two broad topics seem to sum up the majority of information that I have gathered from my time spend at the ILC amongst fellow cattlemen, economists, and my peers.

Thinking Globally-

The world seemed like a large place before I attended the ILC, but I now understand how globalized we truly are. I started thinking on global terms while visiting the Cargill plant in High River, Alberta. That 4,500 head capacity plant employs people who speak 50 different language dialects. This taught me how extremely diverse industries are becoming and how crucial it will be in my agricultural career to continue learning about languages and cultures of the world as we market beef to the people of the world.

Later on in the congress, we heard from Glen Hodgson and Earl Geddes, economists who echoed each other while speaking on the changing world economy and demographics. In their respective presentation they explained that the world's largest economies of today will not be the largest of tomorrow. They talked of countries such as Japan and those in Europe not being able to replacing themselves at a rate that will allow them to keep up economically. These countries, with aging populations, will fall behind those which are still growing. Both presenters spoke of the "BRIC" nations, including Brazil, Russia, India, and China as the upcoming economies with relatively young, growing populations. As a student of Washington State, I have always felt, like many Washingtonians, that we should focus our marketing strategies on the Pacific Rim. This conference showed me that I need to start looking at the future and where the growing populations and economies will be 25 or 50 years down the road.

As I discussed this global change with my international peers, we seemed to conclude that we must better understand these cultures and their perceptions of beef in order to be ahead in finding the type of product that will be appealing. An example of this is that in the U.S., we think quality beef has a lot of white, Intramuscular fat but in Brazil, almost everything is grass fed with yellow fat. As a U.S. student, I don't think about exports as often as those in countries that export over half of their beef, but it is something we must focus on as the U.S. beef consumption continues to fall and beef consumption in other parts of the world continues to grow.

Resourcefulness and Progressiveness in the Beef Industry-

The second general theme I gained from the conference is that there is a tremendous amount of resourcefulness and progressiveness in the beef industry. As international students at the ILC, we went on a tour of a packing plant, a composting yard, a feedlot, as well as a veterinary clinic. Each of these organizations thought outside the box on a daily basis and showed me the importance of continually re-assessing the norms in production agriculture in order to explore progressive, new ideas.

Our first stop was a Cargill plant in High River, Alberta. This plant had a waste water problem in the past, but thought resourcefully and used that waste water to rejuvenate a nearby "Frank Lake." This restored lake is now waterfowl habitat under Ducks Unlimited. This ingenuity has allowed the plant to find an outlet for all their waste water needs, while doing something beneficial for the community. There were many resourceful things about this plant, but Frank Lake was one I felt epitomized something beneficial an operation can do while solving a problem.

The second stop on our tour was a compost yard. Compost is not something I know a lot about, but with carbon credits becoming a more popular idea, it is an upcoming resource that the cattle industry is using. This operation took stomach material from the Cargill plant, waste from feedlots, and even construction waste (sheetrock containing gypsum) that they mixed together, composted, and marketed to farmers, plant nurseries, and organic operations. This operation is a profitable business model which is resourceful, progressive, and it captured carbon credits. I believe this is an upcoming industry and will continue to grow as we look for more profit centers and for ways to re-use waste, and cut costs associated with waste disposal.

Western Feedlots was probably one of the most interesting stops we made on our tour as this feedlot was at the forefront with ingenuity and progressiveness in private research. This operation had 75,000 head worth of individual data in their database and were continually capturing data and statistically analyzing it in order to gain a competitive advantage in the way they feed cattle. At the time we visited the feedlot, one of the projects they were analyzing was the impact of feeding high energy barley verses low energy barley. This operation's research reminded me of those performed in academia, but more specific, applicable to this operation, and very practical. In speaking of this enhanced industry research, it must be noted that the Canadian National Animal Identification System, requiring every animal to have a Radio Frequency Identification Tag when it leaves the cow-calf ranch, has made this process of data collection extremely easy and efficient for this and other Canadian feedlot.

The last stop on our tour was Feedlot Health Management Services which is the most progressive vet clinic I have been exposed to. One of the most progressive things this clinic did was look at the win/lose relationship between vets and feedlots and try and change that. These vets, instead of having a good day every time the feedlot has a bad day, charge a flat rate per head. This structure put them on the same side of the table as the feedlot and has allowed both the customer and vet to work together to keep cattle healthy. Another surprising thing this feedlot did was teach pen riders at each of their customer's feedlots to do a simple necropsies, take pictures throughout the necropsy, and then send those pictures electronically to the vet clinic

where diagnosis would then happen. These vets, with the use of a little technology and employee training, diagnose deaths over e-mail on a daily basis saving both parties time and money. All in all, each of the above operations are extremely resourceful and progressive and it was encouraging to see such organizations at work.

Leadership Roundtable-

The leadership roundtable was an event on the last day of the ILC where each of us 16 respective students from Brazil, Canada, Ghana, and the United States discussed three topics supplied to us by the conference. These topics were as follows:

- 1) How do we market the most expensive protein in times like this?
- 2) What areas of research, marketing or product develop would assist in contributing to beef's competitive advantage over other proteins?
- 3) What traditional beef cattle production practices need to change or conversely be enhanced to address the challenge?

The first topic we discussed related to marketing a relatively expensive product to consumers in a tough economic environment where people are choosing to eat cheap over all else. As we started discussing this topic it was brought up that beef is and will continue to be an expensive protein to produce compared to other protein forms. Because of this fact we must concentrate on doing a better job of marketing and presenting our healthy and nutritious product to the consumer. One of the most significant themes as we spoke of marketing was unity. As an industry, we often fight amongst each of the other respective groups up and down the production chain. We must unify and work unilaterally in order to come together with one voice as an industry. Along with this central theme, discussion focused on producing a more quality, value added product. We also discussed the importance of consumer education and promoting the health benefits of our product because consumers need to be more exposed to the health benefits of our product to counter the bad publicity we see today.

The second topic discussed related to research and market development to assist in giving beef a competitive advantage. As the transition was made to this topic, marketing seemed to be the central theme in giving beef a competitive advantage. We felt this was an area where beef could significantly improve. We, as the upcoming leaders in the industry, collectively felt the industry needed to unify and send the message that our product is a secure, nutritious, homey staple which every family should enjoy. To send this message we thought showcasing producer stories might be helpful by re-connecting consumers to the people producing their meat. One catch phrase which arose was, "Real Food from Real Farmers." As we continue to move from an agricultural society to an urban society, we must keep a connection with the consumer through educating youth as well as the adult on the benefits of our product. As we move to a more environmentally conscious society, we as beef producers, packers, and retailers must continue to move towards practical sustainability, adaptability, and traceability. This is what the consumer is demanding and what we should focus on providing.

The third topic, which we didn't get to discuss due to time issues, related to the production practices of today that need to be changed or address. This is a difficult subject

because of the immense disconnect found in the majority of our consumers. The question I posed is this. If the educated consumer would stop eating our product because of a certain production practice, should we continue doing it? As one raised on a farm who owns cattle, this question makes me uncomfortable because I must ask myself if I brought an every day consumer to watch me castrate, dehorn, implant or brand a calf, would they stop eating beef? At the roundtable discussion, one producer felt that the consumer didn't need to know about these production practices. I must disagree. If we try hiding these practices, it gives terrorist groups such as PETA and ALF something more to distort into cruelty to animals as they have already done with so many practices (i.e. furrowing crates).

In addressing these issues, we must be as transparent as possible and fight ignorance with offensive education. This is imperative in keeping the consumer's confidence. The consumer needs to know and feel that we as an industry are truthful, transparent, and that we have them in mind when we are raising these animals from the time they hit the ground to the time they are purchased at the retailer. If a production practice jeopardizes a mother's choice to feed her family beef, we should rethink that practice, change it, or do a better job at educating the consumer that we are focused on the welfare of our animals and providing a good, wholesome, and healthy product.

In concluding, I must reiterate the impact of this conference on all those who attend. As one who has just graduated from academia and is now working in agriculture, I know that this conference was more than beneficial in giving me a more global perspective and an appreciation for the industry that I am passionate about. The tours I attended were eye opening and allowed me to see how ingenuity, resourcefulness, and progressiveness continue to abound in industry today. Not only did I tour state of the art operation, but I heard from international economist and spent time discussing pertinent topics with my peers from around the world. I am coming away from this congress with a pool of knowledge, international contacts, and a more positive outlook and I am extremely thankful for having the opportunity to attend.

Professional Paper – International Livestock Congress – Calgary 2009

ILC Calgary 2009 provided a host of opportunities for us as young people seeking to learn about the livestock industry and how we can contribute to it. Opportunities to view the different components, stages, and industry infrastructure, opportunities to learn about the current issues, opportunities to network with industry professionals, and opportunities to express some of our own ideas about solutions to the current obstacles we face. I learned a great deal at the congress about issues surrounding marketing meat in international markets under the influence of the global economy. Who will the major meat consuming nations be in the future? How can we ensure market access and meet consumer needs in these countries? There will be consumer demands to ensure proper animal care and welfare. We need to look ahead of our current position and attempt to forecast future potential problems or setbacks, and find solutions to them before they blow up in our face and present us with catastrophe. I've learned that beef really is an incredible thing.

I feel that attending the congress has given me far greater insight as to the current issues facing the industry. My career objective is to become a food animal veterinarian with the goal of being a part of animal agriculture to feed the world. It is clear to me that we live in a global economy and that an awareness for what is happening around the world is extremely important. In a small yet very practical way, I hope to help producers work towards a common goal of producing a safe, highly desirable, and nutritious product to feed the nations. Through the ILC I have gained a thorough understanding of many aspects in the industry that will allow me to do so.

One of the most impressive and beneficial portions of the student fellowship was the tours. Touring feedlots, veterinary health consultants, and large abattoirs/packinghouses is something that all members of the industry should get a chance to do. If all the individual members along the entire production chain can see how the other components work, we can find ways of optimally meeting the needs of the each stage in production; in effect, we increase our efficiency as a group working towards a common goal. A tour of a large abattoir such as Cargill at High River, is an increasingly rare opportunity with today's stringent security, liability, and sanitary health standards necessary in food processing facilities. In addition, farm tours allow us students to see the realities of what occurs in the daily workings of cattle operations. Student delegates who were from other geographic regions or other parts of the livestock sector found it particularly valuable to see the differences in management systems and facilities. Lastly, a chance to take in the atmosphere surrounding the Calgary Stampede was also a thrilling experience to be a part of.

We wrapped up our time together, using our past and newfound knowledge over the course of the congress with a forum discussing three very pertinent issues currently facing our industry. The major thoughts, ideas, and outcomes on the three topics are as follows:

Question One: “How do we market the most expensive protein in times like this?” We need to convince the consumer that beef is worth the money. They need to know it is undoubtedly tested and safe. They need to know there are health benefits. They need a product they feel is raised to their ethical standards. They need to experience consistent satisfaction from their meat purchase. We know that beef demand follows wealth. Hence, we need to market beef to the international population demographics that are able to afford beef (middle class and higher). We should also always continue to strive for greater production efficiencies, but not at the expense of delivering the perfect product that meets the consumers’ needs.

Question Two: “What areas of research, marketing or product development would assist in contributing to beef’s competitive advantage over other proteins?” Good solid research data in comparing beef to other protein sources such as pork or chicken would be beneficial. Relaying to the consumer information about health benefits, sustainability of the industry, and product safety within the chain all boost consumer confidence. We need to identify the specific product that consumers want, and then deliver it. It is as simple as that.

Question Three: “What traditional beef cattle production practices need to change or conversely be enhanced to address the challenge above?” In today’s competitive global markets we need strong business models in all parts of the production chain. These models must minimize risk and maximize profit yet most importantly maintain delivering the product that the consumer wants. It is also important to recognize that consumers in international markets often want different things. This is where we must get creative to meet the needs and ask the traditional practices to change if they want to be a part of the competitive Canadian beef advantage. As an industry we need to heed to environmental issues such as decreasing our carbon footprint. Issues of animal welfare will become at the forefront. The general population of consumers may not understand all of the realities of raising livestock, but all the same they trust the industry (individual producers) to ensure animal welfare is acceptable and that animals are not suffering. It is absolutely imperative that we never lose this trust. Dehorning, castration, branding, ... all of these cause some levels of distress and pain to an animal. We must ask ourselves if our current practices deter meat consumption, or alternatively will they deter consumption if they knew everything about our practices. This is the type of issue we need to find solutions for now, before it becomes a disaster that paints an ugly picture on the industry. Additionally, we need a current codes of practice as guidelines for the industry to be able to say, “Look here, this is how we raise livestock and the research supports these practices”.

Conclusively, let me say that the student fellowship program really does provide a tremendous investment for the future of our industry. A big thanks to all its supporters. I learned a ton, enjoyed myself tremendously, made new contacts and friends, and discovered a little greater picture for how I can contribute.



Firing Up Science & Innovation

Meeting the global demands of tomorrow



Summation Report

Lee-Anne Walter

2009 ILC Calgary travel fellowship recipient

Acknowledgements

I would like to thank the Canadian Cattlemen's Association (CCA) and the International Stockman's Educational Foundation (ISEF) for collaborating with the global beef industry and annually hosting the International Livestock Congress (ILC) in Calgary. The ILC imparts a valuable learning experience from a Canadian perspective on all attendees. I would also like to commend the coordinators of the Calgary Stampede for a truly exceptional event.

As a recipient of the ISEF travel fellowship I would also like to thank all of the sponsors and Iris Meck Communications for organizing the event. The experience I had at ILC Calgary was truly one of the most valuable networking and leadership activities I have had in my student career.

Introduction

Due to the ever changing face of agriculture, the beef industry has undergone progressive changes in the last decade. The Canadian beef industry specifically, has had to react rapidly to BSE, COOL and a global recession. All of these issues have impacted the Canadian beef industry with considerable force due its the exporting nature. It is therefore important to be at the forefront of science and innovation as well as marketing and trade relations in order for the beef industry to be proactive. ILC Calgary has served as this forefront, highlighting trends and issues affecting the Canadian beef industry.

ILC Calgary offered participants a chance to immerse themselves in the Canadian Beef culture while channeling candid conversations into the cruxes of global beef issues. Individual participants represented the beef industry through producer organizations, feedlot and plant operators, retailers and international delegates. ILC Calgary also actively supported future leadership in the beef industry by providing travel fellowship awards to both national and international (USA, Ghana and Brazil) post-secondary students. The student program encompassed tours of feedlots, composting yards, health services and a processing plant as well as the ILC conference, leadership forum and numerous networking opportunities. The leadership program focused upon three fundamental questions: How do we market the most expensive protein in times like this, What areas of research, marketing or product development would assist in contributing to beef's competitive advantage over other proteins and What traditional beef production practices need to change or conversely be enhanced. International contacts and integrative understanding of the global marketplace is necessary to guarantee sustainability and profitability of the Canadian beef industry.

Market Analysis

Extensive market research knowledge is imperative in order to market the most expensive protein in tough economic and international trade times. Glen Hodgson with the Conference Board of Canada gave an animated seminar in regards to the global recession while Mr. Earl Geddes (CWB) illustrated population demographics and possibilities of future beef export markets. In terms of the EU, Mr. Hodgson reported weak growth for this past year with zero growth expected in the future. Mr. Hodgson commented that if trade tariffs were lifted, the EU could be an important affluent market for beef exports. Japan was noted to have the worst 1st quarter in the world due to its flailing auto industry and Mr. Geddes further lamented that Japan has a massive aging population and no immigration.

Mr. Hodgson further reported his belief that the future is in emerging economies especially those of China, Brazil, India, Russia and Mexico. Mr. Geddes also addressed the importance of targeting these future consumer superpowers particularly Russia, as they are large beef consumers and their demand will grow, if they can sustain their economy. Furthermore, Brazil is expected to maintain or increase their beef consumption with 30 million more people in 15 years. Also, with an increase in population and more sugar cane acreage Brazil may represent a market for North American beef in years to come or Brazilian export markets may open up due to their anticipated lack of supply.

In order to target new markets, new carcass fabrication methods may be needed to supply consumers with a uniform and consistent product while maximizing the value of every beef cut. In addition, every culture has a different palette and different expectations in relation to health consciousness. Trusted veterinarians need to become

more involved not only in ensuring the safety of the food supply but also in conveying that message to consumers. In order to create and maintain successful export markets, beef producers must cater to consumer demands. Although, the industry needs to become more proactive in order to maintain consumer confidence in our products and also to dispel myths that negatively impact the beef industry. In this sense communication is absolutely vital for the sustainability of the beef industry.

Research, Marketing and Product Development

From pasture to plate but just as importantly from plate to pasture, stakeholders (producers, plant operators, retailers and consumers) of the industry must communicate effectively. There is freedom of misinformation when it comes to animal production and thus all industry stakeholders must be willing to be transparent and proactive in regards marketing and technical development. Dr. Kohl (Virginia Tech) believes that people and industries involved in agriculture need to get better before you get bigger and a marketing plan is key. Ms. Bean the Director of Technology for YUM! Brands spoke about the international success her company has achieved. In order to develop a new product, there are a multitude of factors that must be addressed prior including:

- 1) Investigating your macro environment (industry, business, and brand equity),
- 2) Integrating your sales objectives, marketing and production innovation and
- 3) Initiating your product development.

In regards to the global marketing of Canadian beef, Dennis Laycraft (Executive Vice-President, CCA) spoke about the role of the new market secretariat and an update on the COOL impact. Global restricted access is estimated to still discount Canadian

beef by more than \$100/hd. Furthermore, COOL has resulted in increased segregation, restricted access and a shift to food service business costing the American industry to date \$3.9 billion dollars. Enhancing trade negotiations is the role of the new agriculture market access secretariat (AMAS) and his agenda will focus on:

- 1) Market access negotiations – vet infrastructure is very important
- 2) Communication and consultations – requires senior people
- 3) Analysis of technical issues

Much anticipation at the industry level is focused on improving market access and hopefully the new AMAS agenda will help the beef industry in Canada in doing so. It becomes evident in the Canadian beef industry “to think globally and act locally” (Dr. Kohl, ILC Calgary 2009).

Changing or Enhancing Traditional Beef Production Practices

Sustainability, traceability and adaptability need to be the focus of Canadian beef industry men and women in the future. In terms of traceability the Canadian beef industry has a fully integrated system from producer to processor by using CCIA RFID tags. Unfortunately, information back to the producer is still hampered by packer hesitation. Hopefully, information will be expressed both ways and used to implement new genetics and production practices that optimally result in a satisfied consumer experience.

The tours prior to the ILC Calgary conference allowed for a snapshot view progressive organizations committed to the sustainability of the Canadian beef industry. The tours started at the Cargill processing plant in High River, AB. The Cargill Plant

represents an important beef processing facility as it processes 4300 hd/day. Presently, at this plant most cattle are bought based on a rail basis (\$6-10 less than American cattle if all is stable) while 30% are bought on the grid and 25% on live basis. Currently, Japan is taking 200-300 age verified (<21 months) carcasses per day but all the tongues possible (1300 tongues per day shipped). COOL has not had a large impact on this plant as almost all of the cattle are Canadian, due to economics, and already require labeling due to BSE legislations.

In terms of sustainability while the Cargill Plant does use 1 million gallons of water per day, waste water is treated and methane is captured generating a third of the heat and electricity needed for the plant every year. The water is then pumped into a lake system that has rehabilitated a wet land area. Also, the receiving end and block of the plant were designed by Tempel Grandin and no downers even young cattle that may have froze due to stress are allowed to be processed. All downers are rendered on site with all other rendering done at the plant except for SRM material. In terms of maintaining the safety of their product, all trim lots are sampled for *E. coli* 0157 with a level II pathogen lab on site.

Eco-Initiatives, a family owned feed yard (30 000 hd capacity) and composting center was the second tour stop. The primary compost source is manure and bedding (processed wood chips and straw) from their feed yards but they also use a wide variety of other materials from Calgary's construction waste and Okotoks sewage sludge to the Cargill processing plant's ponch material. All compost is tested extensively and since the horticulture market is growing rapidly, agriculture fertilizer only comprises 60% of their

business when previously it was 95%. Mortalities from the feed yard are also composted, but not before every carcass, regardless of age is necropsied and tested for BSE.

At Western Feedlots, management and financial knowledge create a successful business. Individual animal management has been the focus of the feedlot for the last few years. Individual animal management utilizes phenotypic characteristics to group animals in order to target a premium carcass (height, weight, colour). Western Feedlots also utilizes full ration traceability and have now started investigating the energy content of barley using IR technology. Feedlot Animal Health Services in Okotoks was the last stop of the day. Dr. Booker provided an extensive overview of their business serving feedlots in the surrounding area as well as in neighboring provinces and states. Feedlot Animal Health Services has taken a progressive specialized approach to veterinary services and commercial research.

Conclusion

As an industry we must balance sustainability, traceability and adaptability to create a superior product and gain market access. Innovation and entrepreneurship supported by testimonials and full communication will hopefully achieve the sustainability that the beef industry needs for future generations. Many of the challenges we face as Canadian producers are globally linked and require accurate information and knowledgeable people to solve. The ISEF through the ILC will continue to serve as a meeting ground for ideas to flow, challenges to be discussed and strategies to be implemented.