

When my professor approached me early this spring with the possibility taking part in the student program at the International Livestock Congress (ILC), my first reaction was that it sounded like a good time and the activities would be interesting. Little did I know just how much of an educational and enriching experience it would be. July 12-15, 2006 turned out to be a phenomenal time of networking with livestock industry leaders and broadening the scope of my knowledge of the livestock industry.

On the 12th day of July, I boarded a plane in Charlottetown and embarked on an experience that adjusted the lens through which I view the livestock industry. After a great day of travel, I arrived at the Deerfoot Hotel and Casino in Calgary for an evening of orientation and introduction to my fellow students who were taking part in the program. I was impressed at how diverse the selection of students was; there were students working on everything from a technical diploma to a B.Sc. or a Ph.D. We enjoyed a great meal that allowed us to chat and become comfortable with each other. After dinner, we had reservations for an evening performance at the casino. Afterward, we retired to our luxurious accommodations to rest for a big day of touring on Thursday.

The 13th of July dawned clear and bright as we ate our breakfast and boarded a coach. Our first stop was a tour of the Cargill packing plant near Okotokes. Once we passed through security, we were divided into two groups. The group I was in settled into the boardroom for some informal presentations while the other group started on their tour.

We were given a presentation on the Canadian Cattle Identification Agency (CCIA) and what is being initiated in the effort to streamline the identification and trace back issues that currently have such a high profile. It was good to hear how the CCIA began, where it has been and where it is going. The vision is encouraging, especially to me coming from a veterinary medicine perspective. We were able to discuss the new Radio Frequency Identification (RFID) tags; discussing not only the expectations but also the impediments to implementation in a country that contains very diverse livestock management systems.

As our discussion was winding down, the other half returned from their tour, and we prepared to begin ours. After removing jewelry and donning hair-nets, hardhats, lab coats and rubber boots, we set off beginning at the final packaging stage and working our way through to the initial processing stage after the kill floor. I was repeatedly impressed with the efficiency and well-thought planning that permeated the plant, especially when we were informed that the plant was only running at about 80% capacity.

Everything was clean and every effort was in place to prevent contamination of meat while maintaining a very high output level.

After the conclusion of our tour, we boarded the bus and headed for High River, where we were hosted at Round T Ranch by Dave Plett, President and CEO of Western Feedlots. We had presentations by the Canadian Cattlemen's Association, Canfax, Western Feedlots and Feedlot Health Management Services. Each of these organizations presented their perspective on the Beef industry in Canada. The need for educated and motivated so-called "new blood" in the industry was a current theme. There are many projects that are currently underway to improve the industry and affirm the quality and safety of our food production system in the eyes of the world. The Canadian beef production system is filled with safety measures and quality controls that ensure the product we consume and the product that gets shipped around the world is best and safest that we can produce. From monitoring the statistics of Canadian production to developing a database that tracks the performance and health of feedlot animals, these sessions provided us with a very comprehensive look at where the industry is and how we can play a part in where it will go.

After the presentations, we enjoyed a delicious lunch on the lawn with plenty of opportunities to introduce ourselves to the presenters. I was able to meet Dr. Booker and discuss my future goals as a veterinarian and the projects that are underway through Feedlot Health Management Services.

Getting back on the bus, we headed over to Western Feedlots. Our tour started off at the hospital. The setup for handling cattle was very streamlined. The computer system for keeping track of treatments and specifying protocols was very different from the way I am being taught medicine at school, but when one is working with 35,000 head of cattle, the individualized approach that most veterinarians use is very inefficient. Given the massive amount of data that Dr. Booker and his colleagues have been able to collect, the protocol system is very effective in treating the illnesses observed in the feedlot setting.

We visited the feed storage area and I marveled at the sheer volume of forage and grains that are consumed each week at Western Feedlots. As someone who grew up in the East, I had never seen such massive silage piles or grain storage tanks. The ration is mixed in the truck that fills the bunk. The system for monitoring nutrition is very particular given that saving even a penny per head fed results in tremendous savings when applied over 35,000 cattle being fed every day.

The next stop on our tour was the final one of the day. We drove through Tongue Creek Feeders

and were introduced to the composting system which they employ there. The dilemma of managing waste from the feedlot has been converted into an opportunity. The pens are scraped clean between groups of cattle, and the manure is windrowed in nearby field. These windrows are composted and regularly turned to keep the oxygen levels high and increase the speed of the composting process.

Traditionally, the waste material has been trucked to cropping land and spread directly as fertilizer, but as energy costs are increasingly becoming the limiting factor in so many aspects of agriculture, trucking costs limit farmers in how far away from the feedlot they can afford to truck the raw fertilizer. Also, because of the water content, the application rate must be quite high in order to achieve adequate levels on nutrient return. Pathogen load may also limit where and when manure may be spread.

Most of these issues are eliminated by composting. The water portion of the waste material is removed during composting leaving behind a dry, lightweight dust. This dust can be spread at less than 10lbs. to the acre, eliminating both the issue of high application rates and the amount of energy required to transport the product to the field. Pathogens are eliminated by the high heat produced during the composting process.

At Tongue Creek Feeders, they also compost the rumen contents, also called the paunch, which are a waste product from the packing plant. The paunch is transported to from the slaughter facility and placed in large windrows near the manure composting site. The water content in the paunch is very high, so it takes a long period of turning and drying before it can be added to the composting manure at a rate of about 25% dried paunch to 75% composting manure. The limiting factor in the composting of this material is the carbon : nitrogen ratio. The paunch is quite low in nitrogen but high in carbon, and this is complemented by the high nitrogen and low carbon content of the manure. Through innovative thinking, these waste materials are being converted into useful and valuable products.

After returning to the Deerfoot, the evening began as each of the students had a brief moment to introduce themselves to some of the sponsors of the student program. It was an excellent time to meet and greet the people who had played a vital role in making our trip possible. Afterward, several of us went out to take in some of Stampede spirit that had possessed Calgary. There are many fun memories from that evening that I will keep with me forever.

Friday began bright and early with breakfast at the hotel. We boarded the “Molly Trolley”, a

shuttle bus which took us downtown to the Stampede Grounds. We arrived at the Roundup Center and got settled for a great day of diverse presentations on pressing issues in the livestock industry.

The first speaker of the day was Alanna Koch, Vice President of the Canadian Agri-Food Trade Alliance (CAFTA). She presented “Why International Trade Negotiations are Critical to Your Future”. In her presentation she reviewed the current status of the international trade negotiations. In particular, when she discussed the results of the Doha Round, she presented the difficulties created when countries make bilateral agreements and why it is so crucial that Canada and the world get the World Trade negotiations settled.

The next presenter was Glen Hodgson, Vice President and Chief Economist with The Conference Board of Canada. In his topic, “Global Economics and Your Business”, he discussed trends in the global economy and what part Canada is playing. He demonstrated that Canada currently has a currency that is controlled by petroleum. This is making our economy very strong, and Mr. Hodgson projects that this will continue over the next few years.

Dennis McGivern, Vice President of Informa Economics, Inc., discussed “The Effect of Changes in The Exchange Rate on the Canadian Beef Industry”. Since 40% of the beef produced in Canada is exported, a small change in the value of our currency can have a very significant effect all the way down through the various sectors of the livestock industry resulting in the cow/calf producer bearing the majority of the economic burden.

In “Global Feed Grain Market and Supply”, Brant Randles, President of Louis Dreyfus Canada Ltd., discussed the effect of the high price of energy on feed grain production. As Canada and the United States move towards mandating a specific ethanol inclusion rate in all gasoline sold, the implications for finishing beef are tremendous. As the demand for grains as a source of ethanol increases, the price will likely increase dramatically, predicated the need to re-evaluate the status quo and discover new ways of achieving our goals.

After a delicious meal and time to network, the Honourable Doug Horner, the Minister of Agriculture Food and Rural Development for Alberta, discussed how Alberta is responding to the global demand for an increasingly accountable food production system. His topic, “Facilitating Change”, reviewed both historical, present and future steps that pave the way to meeting the consumers’ demands.

From mandating RFID tagging to implementing Age Verification, the Gate-to-Plate traceability concept will become ever more achievable.

In “Our Rural Human Resource Challenge”, David Baxter, Executive Director of Urban Futures Institute, dynamically presented the current Canadian population and demographic trends. His solution to a decreasing population depends on creating a more efficient system of immigration. He also discussed how the labour shortage is not limited to Alberta alone, but it is a national issue. The result is a large movement of the rural population to urban centers.

Professor Bernie Bindon, former Chief Executive Officer at the CRC for Cattle and Beef Quality in Australia presented “CRC Research to Guarantee Eating Quality of Australian Beef”. Prof. Bindon demonstrated the results of more than a decade of research for the production of a consistently high quality beef product. Through development of various tests, including a gene screen test, the CRC has been able to transform the Australian beef industry. A minor point which was of particular interest to me was the development of new bovine respiratory disease vaccines for Bovine Viral Diarrhea virus and *Histophilus somni*.

The final presentation of the day, “Solutions to Meet Global Challenges”, was delivered by Professor David Hughes of Imperial College at the University of London. He discussed how global meat protein preferences play a role in the development of new markets for beef products. Fish and poultry are likely to dominate the market due to the historical food choices of many of the nations of the world, but in a world with so large a population, even a very miniscule increase in beef consumption will translate into very large increases in demand for beef products.

Our day ended with a guided tour of the Stampede Grounds and a buffet dinner in the Grandstand. During dinner, we were able to get acquainted with a few more participants in the ILC. Great discussion and excellent food made a great combination to prepare for the finale of the day: the Chuckwagon races and the Grandstand show. After a long day, we returned to the Deerfoot for our final night’s rest.

On Saturday morning, we were allowed to listen to a roundtable discussion by industry leaders on the direction the industry must go and choices that must be made as a result of the move to increase the utilization of ethanol as an energy source. The views expressed were thought provoking. The industry is potentially in for a tremendous adjustment, but the prevailing thought was that the changes that are

necessary can be made and that the industry will not only survive but will thrive.

After the discussion was concluded, I checked out of my room and prepared for the journey home. Since my return, I have been reviewing the ideas that were presented and the experiences I gained, and my conclusion is that I have been very fortunate to be allowed to participate in such an enriching and educating experience as a student. Given the connections I was privileged to establish with industry leaders through the ILC student program, I am confident that I will be better equipped to contribute and take my place as an active participant in the livestock industry.