

# **Major Issues In The U.S. Livestock Industry Under CUSTA<sup>1</sup>**

by

Harlan Hughes<sup>2</sup>

## **Introduction**

The Canada—U.S. Free Trade Agreement (CUSTA) was implemented on January 1, 1989, creating the world's largest free-trading bloc between the world's largest trading partners. This trade agreement also helped in formulating the North American Free Trade Agreement (NAFTA), which went into effect in January 1, 1994. According to CUSTA, all agricultural tariffs between the United States and Canada would be phased out over a 10-year period,<sup>3</sup> In addition, market access for products was to be improved from both countries and the use of subsidies was to be lowered in both countries.<sup>4</sup>

International trade can be a very contentious issue. When prices are high and supplies are tight, like beef was in the early 1990s, it is rather easy for producers to support free trade. Conversely,

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<sup>1</sup>G:\CUSTApaper10270.wpd.

<sup>2</sup>Harlan Hughes is Livestock Economist and Professor Emeritus, North Dakota State University. Paper presented at Challenges In Agricultural Trade Under CUSTA Trade Conference, Fargo, North Dakota October 25-26, 2000.

<sup>3</sup>For a complete discussion on the tariffs in place at the signing, see Linda Young and John Marsh, "Integration and Interdependence In the U.S. and Canadian Live Cattle and Beef Sectors." Policy Issue Paper No. 5, Jun 1998, Montana State University, Bozeman, Montana.

<sup>4</sup>"The Canada – U.S. Free Trade Agreement: Competitive Tradeoffs Between Foreign Direct Investment and Trade." Chapter 8, Southern Cooperative Series Bulletin SCSB# 390, Nov 1998, Auburn University Web Page [www.ag.auburn.edu/aaes/information/390site/chaptereight/chpteight.htm](http://www.ag.auburn.edu/aaes/information/390site/chaptereight/chpteight.htm).

when prices are low and supplies are abundant, like beef was in 1995-1998, it is just as easy to oppose imports. The latter situation was evident with the 1998 push

in the northern states to block live cattle trade with Canada. Emotions were running high in 1998 and many U.S. beef cow producers were hurting.

Emotions replaced economic logic and many key beef industry economic factors were forgotten or

ignored as rank and file producers responded to the tough, tough economic times. Beef producers were hurting and they wanted action now! So in the Fall 1998, Northern Plains producers responded with a “Border Blockage Of Canadian Cattle Trucks.”

### Magnitude Of The Canadian/U.S. Beef Trade

Any beef import discussion related to CUSTA has to be predicated on the participants understanding the changing U.S./Canadian beef import history.

Figure 2 presents the live cattle imports from Canada ( and Mexico) over the 1974 – 1999 time period. Live cattle imports from Canada changed dramatically from mid-1980s through the late 1990s. From 1987 through 1997, Canadian live cattle imports went from under 300,000 annually to a 1,500,000 record high in 1996. When Canadian imports of beef and veal

are combined with live cattle imports, Canadian beef, veal, and live animal imports peaked in 1997.

While 1.5 million animals is a lot of animals, Figure 3 puts the magnitude of Canadian imports

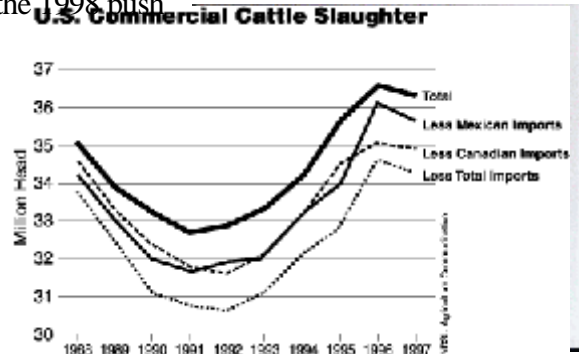


Figure 3: Impact of Canadian (and Mexican) Cattle Imports On U.S. Slaughter Numbers.

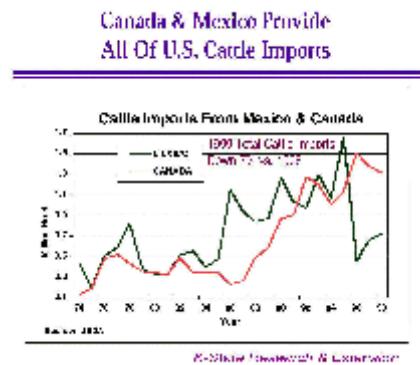
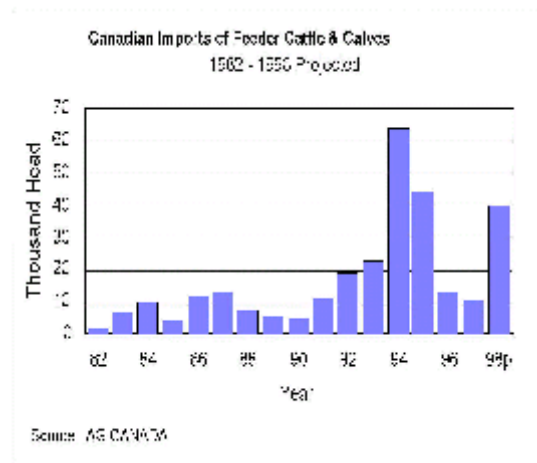


Figure 2: Canadian & Mexico Live Cattle Imports 1974-1999.

(and Mexican imports) in perspective by showing the U.S. Commercial Slaughter with and without Canadian imports. In 1997, Canadian live animal imports represented approximately 4.1 percent of the total number of cattle slaughtered in 1997.

Looking at the other side of the picture, Canadian imports of U.S. live cattle are presented in Figure 4. While live cattle exports to Canada increased in the 1990s, the overall absolute magnitude of U.S. live beef animal exports to Canada was small. The largest number of live animals exported for any one year to Canada was 62,000 head. The average exports over the decade of the 1990s was around 80,000 per year while the average U.S. exports to Canada averaged under 10,000 head in the 1980s.

I have personally talked to cattle buyers that have moved cattle south and north and they confirmed that it was always easier to move cattle south than it was to move cattle north. Health restrictions were generally the limiting factor in moving cattle north.



**Figure 4:** Canadian Imports Of Live Cattle From the U.S.

Economic theory suggests that an increase in the amount of a product available will cause the price of the product to decline. From that standpoint, it was easy for ranchers to conclude that Canadian imports were forcing beef supplies higher and beef prices lower; thus, a simple perceived solution for beef's low prices was to stop imports. Imports, unfortunately, are not the only factors that impacted U.S. beef prices during the decade of the 90s.

**Objective**

The primary objective of this paper is to brief conference participants on the key economic forces impacting the *North American Beef Industry* in the 1990s. I am using the term *North American Beef Industry* to include both the U.S. and Canadian beef cattle industries.

I have divided this paper into two sections. The first section will focus on the current *Industry Production, Economic and Financial Factors* impacting the North American Beef Industry. This section will focus on ten factors impacting the North American Beef Industry. The second section will review the *Current Trade Issues* still on the minds of cattle producers on both sides of the Border. I am leaving the specifics about Canadian U.S. livestock trade to our next three speakers.

## **Part I: Beef Industry Production, Economic, And Financial Factors**

### **1. Putting The Two North American Herds In Perspective**

Cattle production in Canada is very similar to that in the US. The average Canadian beef cowherd is 45 head and there are a lot of small cattle farms. While the number of farms with over 100 cows is increasing in both countries, much of the North American beef production remains in small herds with less than 100 cows per herd. Herds with over 100 cows account for only 35 percent of the beef cows in Canada and only 48 percent of the beef cows in the U.S.<sup>5</sup>

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<sup>5</sup>Op Cit page 177.

It is important for conference participants to gain a feel for the relative size of the U.S. and Canadian cattle herds. Based on sheer size, the U.S. dominates the North American beef production and the North American marketing system. Over the years I have pointed out in producer meetings in both Canada and the U.S. which

<b>All-Cattle Inventory U.S. and Canada January 1 Inventory</b>				
	<b>U.S.</b>	<b>Canada</b>	<b>Ratio</b>	<b>U.S. &amp; Ca</b>
	<b>Million Head</b>		<b>U.S./Ca</b>	<b>Million Hd</b>
All-Cattle Numbers (million hd)	98.018	12.677	7.7	110.725
Beef Cows	33.548	4.151	8.1	37.697
Milk Cows	9.188	1.145	8.0	10.333
Heifers 500 Lbs and Over	19.528	1.889	11.5	21.227
For Beef Replacements	5.53	0.579	9.8	6.109
For Milk Cow Replacement	3.954	0.468	8.4	4.422
Other Heifers	10.045	0.852	15.4	10.897
Steers 500 Lbs and Over	16.852	1.122	14.8	17.774
Calves Under 500 Lbs	16.84	4.311	3.9	21.151
Calf Crop	38.71	5.142	7.5	43.852

Figure 5: All Cattle Inventories U.S. and Canada

country is the dog and which country is the tail. It is important to recognize that the dog wags the tail and not vice versa. Clearly, sheer size of the industry says that the U.S. is the dog.

The Canadian all-cattle herd consists of approximately 12.7 million head (Jan 1, 2000) while the US All-Cattle Inventory was 98.0 million head – a ratio of 7.7 :1 (see Figure 5 and 6).<sup>6</sup> The number of Canadian beef cows was 4.1 million head compared to 33.5 million U.S. beef cows – a ratio of 8.1:1 (see Figure 7). Canada is a huge country but its beef herd is small relative to the U.S. beef cow herd.<sup>7</sup>

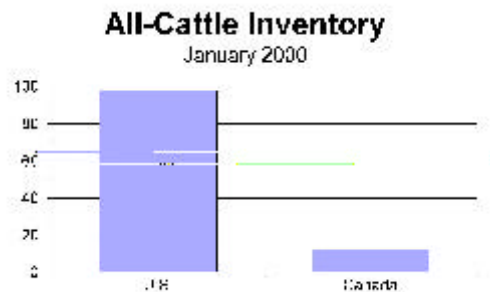


Figure 6: U.S. Numbers Dominate The North American All-Cattle Numbers.

The total calf crop (dairy and beef) totaled 5.1 million Canadian calves verses 38.7 million U.S. calves –

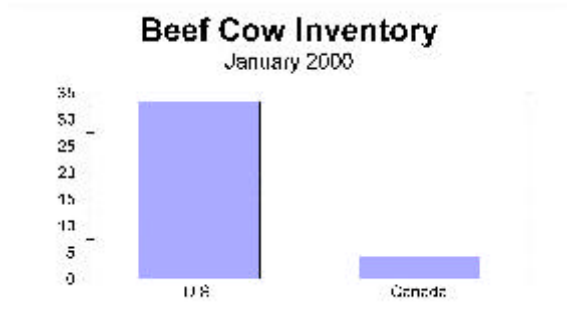
<sup>6</sup>USDA January All-Cattle Inventory Report.

<sup>7</sup>A fact not well known is that Texas has more beef cows than all of Canada put together.

a ratio of 7.6:1. Canada feeds 3.2 million cattle each year and the U.S. feeds approximately 36 million head – a 11:1 ratio. Canada produces 3 billion pounds of beef compared to the U.S. production of 26 billion pounds of beef – an 8.7:1 ratio. Canada has 1.3 percent of the world’s cattle inventory and produces 2 percent of the world’s beef supply.

What Canada does with its beef production is where the two industries differ greatly. U.S. exports under 9 percent (1998 data) of its total beef production with Japan as its largest customer.

Mexico is the 2<sup>nd</sup> largest customer. South Korea is number 3 and Canada is number 4 customer. Canada, on-the-other-hand, exports 53 percent of its total beef produced (721 million pound) with the largest proportion (89 percent) of the Canadian exports going to the US.<sup>8</sup>



**Figure 7:** Relative Sizes Of Beef Cow Herds In the U.S. and Canada.

Researchers published a comprehensive comparison of the cow-calf industries in Canada and U.S.<sup>9</sup> I have elected to highlight some of their selected comparisons of the U.S. and Canadian herds.

1. Cattle numbers in both countries follow similar cattle cycles. Western Canada cycle peaks correspond with the national peaks. Eastern Canada’s cattle industry, on-the-other-hand, does not really have peaks and valleys.
2. Canada has been a net exporter of beef since the mid 1970s. The U.S. has never become a net exporter of pounds although the U.S. came close to being a net exporter in the late 1900s. The U.S. has, however, been a net exporter of dollar value for some time. The U.S. mainly exports

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<sup>8</sup>Op Cit. Dr. Boles.

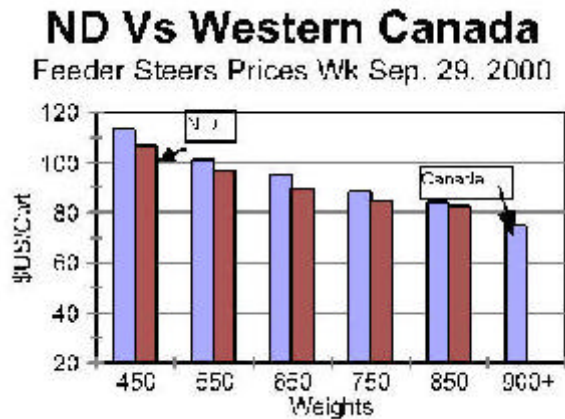
<sup>9</sup>Bill Schissel, Ken Mathews, and Ken Nelson, “The Cow-Calf Industry In Canada And The United States: A Comparison”, Canadian Journal Agricultural Economics 1995 Special Edition, pages 177-194.

high valued beef and imports considerable low valued beef.

3. Due to its dependance on beef exports, Canada is more exposed to fluctuating exchange rates, and import and export controls on international markets.

4. Feeder cattle prices have tracked quite closely over time and are currently tracking closely.

Once adjusted for the value of the Canadian dollar, feeder cattle prices are very similar in both markets. This tracking is illustrated for the week of September 29<sup>th</sup>, 2000 feeder price comparison in Figure 8 where North Dakota and Western Canada feeder cattle are compared. The prices for both countries are expressed in U.S. dollars.



**Figure 8:** North Dakota Western Canada Feeder Cattle Prices.

5. The number of farms with cow-calf enterprises in both countries decreased at similar rates of about 1.5 percent annually since 1960.

6. The structural adjustment patterns towards concentration appear to be similar in both countries.

7. The adjustments away from small scale cow-calf farming is taking place at a faster rate in Canada than in the U.S.

8. In Canada the average number of beef cows per farm doubled to 38 head in 1991 compared to 18 head in 1966. The U.S., on the other hand, increased 52 percent from 25 head average in 1964 to 38 head in 1987.

9. In Canada, farms with over 100 beef cows in 1991 accounted for only 8 percent of all farms with cow-calf enterprises but these farms accounted for 35 percent of the cows. This compares to the U.S. having 10 percent of its herds greater than 100 cows accounting for 48 percent of the total beef cows in 1987.

10. The data suggests that, on average, Canadian cow-calf producers are younger than their U.S. counterparts.

11. In the U.S. 73 percent of all producers indicated that cow-calf production was their major occupation. That number was 81 percent for Western Canada. This number was lower for Eastern Canada and this number was lower for Southern U.S.

12. Calving rate is very high in both countries indicating high breeding and husbandry practices on cow-calf operations in both countries.
13. When adjusted for the exchange rate, total receipts per cow are lower for the U.S. than for Canada.
14. Ontario has high receipts and high costs as compared to Western Canada or the U.S.
15. It appears that Alberta can take advantage of ample supplies of cheap forages and surplus feed grains.
16. While maximum production is an important part of the cow-calf operations, cost of production is even more important.
17. Gross value added -- defined as the value accruing to the four factors of production -- land, labor, capital, and management -- was very similar for Alberta and the U.S. Ontario, on the other hand, was significantly lower. Economic theory suggests that beef production should move to those regions of North America with the highest value added.

In my literature review, several authors commented that beef production will and is moving to the region(s) that can produce it the most efficiently. Several authors indicated that beef production was moving from Eastern Canada to Western Canada. Others, suggested that Southeastern U.S. was a high cost region that may not be very competitive. The question that was not documented in the literature is how competitive is Western Canada with the Western United States?

Figure 9 presents a summary of my Integrated Resource Management (IRM) Cost & Return Analysis Workshop with Saskatchewan beef cow producers compared to my Northern Plains IRM Cooperators herd averages. The Canadian numbers were adjusted to U.S. dollars.

These Saskatchewan ranchers demonstrated many of the characteristics pointed out by researchers in the previous paragraph. First of all, herd sizes between the countries are not that different. Second, Canadian capital investment per cow is somewhat lower. Third, gross accrual adjusted income per cow was larger for the

Canadian herds. Fourth, Cost per cow was less on the Canadian herds. Fifth, value added per cow was substantially higher on the Canadian herds. Sixth, unit cost of producing a hundredweight of calf (UCOP) takes both the herds' production (the numerator) and the herds' total costs (the denominator) into account was less for the Canadian herds. Seventh, average market price received for calves was substantially different and this difference was not expected.

Table 1: Northern Plains Benchmark Herds' Average Costs & Returns (2000000000 Values)					
Item	1994	1995	1996	1997	Sask Herds <sup>2</sup>
					1997
Number of Herds	38	45	73	41	5
Females Exposed	174	247	247	192	193
Cows On Hand Jan 1	159	217	233	171	175
Capital Invested/Cow	\$1,042	\$1,999	\$2,031	\$2,306	\$1,835
Debt/Cow	\$267	\$250	\$416	\$425	\$288
Average Steer Price	\$77	\$67	\$65	\$86	\$75
Average Weaning Wt.	571	562	525	555	559
Gross Income/Cow	\$471	\$374	\$313	\$379	\$401
Summer Grazing Cost	\$72	\$65	\$68	\$79	\$46
Stored Feed Costs	\$152	\$135	\$143	\$157	\$109
Total Feed Costs	\$225	\$201	\$214	\$236	\$147
Total Cost/Cow	\$297	\$365	\$351	\$374	\$214
Value Added/Cow	\$74	\$19	-\$37	\$5	\$97
Unit Cost Of Production <sup>1</sup>	\$67	\$66	\$73	\$79	\$65
Average Market Price	\$77	\$67	\$65	\$86	\$75
Management Score	\$10	\$1	-\$8	\$7	\$18

<sup>1</sup> Adjusted to U.S. Dollar at 0.66 U.S. dollars to the Canadian Dollar.

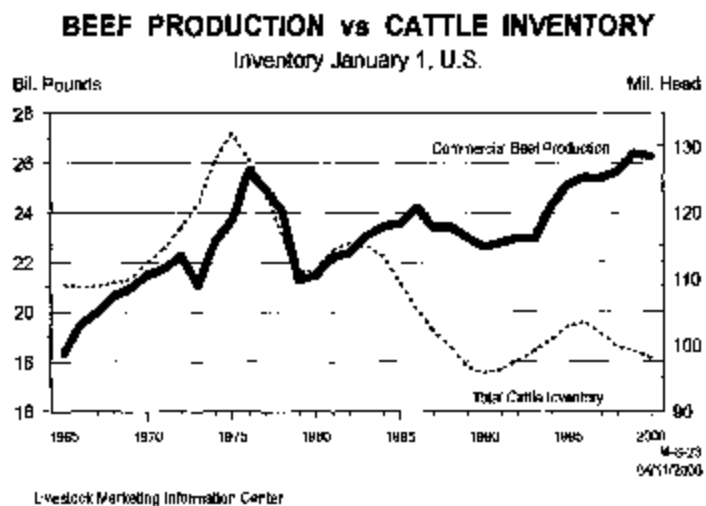
**Figure 9: IRM Cost & Return Analyses For Saskatchewan Herds And U.S. Northern Plains Herds.**

I summarize all of the production and economic factors for my IRM Cooperators by a term entitled *Management Score*. Management score is defined as the difference between UCOP and

average market price received. The net result of all of this is that in 1997 the Canadian IRM Cooperators earned a higher management score than the Northern Plains IRM Cooperators. The Canadian herds had a larger average gross income per cow and lower unit costs of production. It does appear that Western Canada is positioning to take advantage of its ample supplies of cheap forages and surplus feed grains. Market prices in Canada, however, will be determined by U.S. market conditions based on the North American beef supply.

## 2. Increased Beef Produced Per Cow

While the cattle cycle's influence on cattle numbers is a primary factor determining beef supply, it certainly does not explain the total picture. Figure 10 illustrate the USDA All-Cattle Inventory numbers from 1960 through year 2000 via the dashed line measured on the right axis. You can see that cattle numbers peaked in the mid-1970s, again in the



**Figure 10:** Beef Production and All-Cattle Inventory 1960 - 2000.

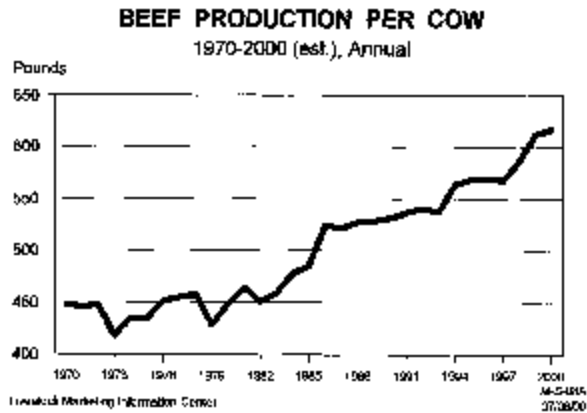
mid-1980s, and once again in the mid-1990s. You also see that the long run trend in cattle numbers from 1975 through year 2000 has been downward.

The dark line in Figure 10 presents beef production measured on the left axis. While beef production varies during each cattle cycle, the overall long-term trend since 1960 has been upward. I particularly want to call your attention to the 1980 through year 2000 time period. While the all-

inventory numbers trended downward over this 20-year period, beef production trended upward. In fact, beef production in 1998 exceeded the record beef production in 1975. How could this be? We have 34 million less cattle in 2000 as compared to 1975?

The key reason for upward trending beef production from less and less cattle is “increasing beef production per cow (see Figure 11).

Beef production per cow has trended upward over the last 30 years. In 1980, each cow produced an average of about 450 pounds of carcass beef per year. By 2000, production had risen to 620 pounds of carcass beef per cow per year. This 170 pound increase in a 20 year time span represents an average annual productivity gain of 1.8 percent.<sup>10</sup>



**Figure 11:** Beef Produced Per Cow 1960-2000.

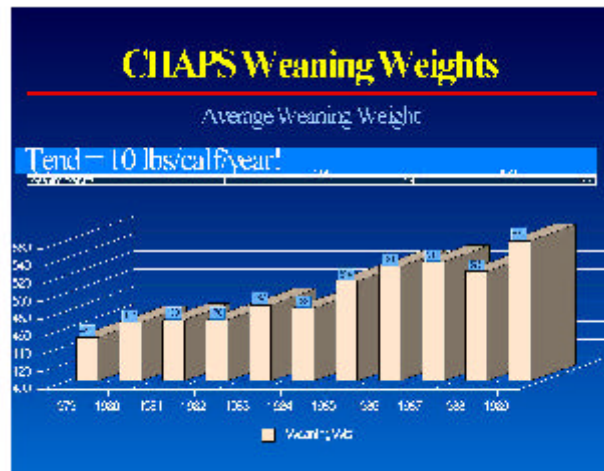
Even though beef cow numbers have been dropping since 1995, total beef production has continued to rise. This is due primarily to the increased productivity of the remaining cows. The amount of beef produced per cow is rising at a rate of about 1.8 percent per year, while domestic and foreign demand is only increasing at about 1.3 percent per year. This means that productivity growth will likely tend to outpace demand growth, and as a consequence, brood cow numbers will decrease over time.<sup>11</sup>

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<sup>10</sup>Ibid.

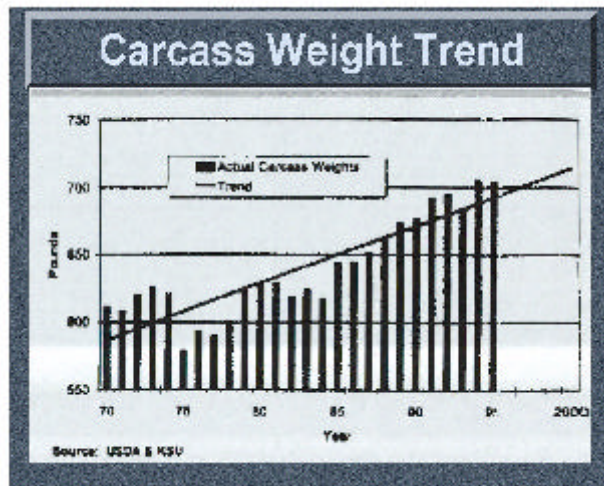
<sup>11</sup>Kris Hurt, “Cycle Nears End Of Contraction” Livestock Outlook Web Page, [http://web.aces.uiuc.edu/farm.doc/marketing/livestockoutlook/0700cattle\\_text.html](http://web.aces.uiuc.edu/farm.doc/marketing/livestockoutlook/0700cattle_text.html).

Several factors are responsible for the production increase. We are all aware of today's higher weaning weights. Figure 12 shows that in the decade of the 1980s, North Dakota beef cow producers added an average of 10 pounds per calf weaned per year. This totals to 100 pounds added to weaning weights in the decade of the 1980s. I fully believe that this increase in weaning weights is indicative of the U.S. beef industry in general. I also believe that Canada, on the other hand, shifted to a higher percentage exotic breeding programs and, as a result, increase weaning weights even more than the U.S.



**Figure 12:** North Dakota's Increase In Weaning Weights During 1980s.

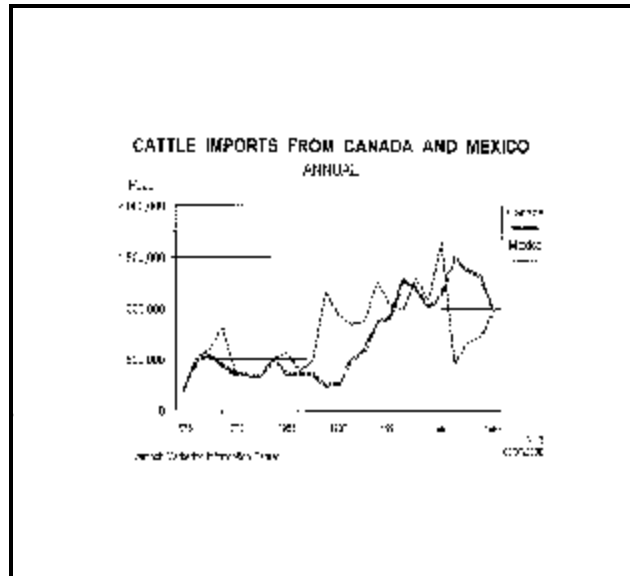
Certainly, genetic improvement in both countries has resulted in bigger and bigger slaughter weights making slaughter weight a major component of increased beef production per cow. Adding 100 pounds to slaughter weight results in an additional 3.6 billion pounds



**Figure 13:** Carcass Weight Increased Through Time.

of beef.<sup>12</sup>

The primary source of productivity gains is heavier weights. Over the past 20 years, while annual productivity gains have averaged 1.8 percent, weight gain has accounted for 1.1 percent of the total 1.8 percent growth per year. All other productivity increases have accounted for about 0.7 percent per year.<sup>13</sup> These other productivity increases involve the ability to produce more calves from a given number of brood cows and include fewer non-productive cow days and higher calving rates.



**Figure 14:** Live Cattle Imports From Canada and Mexico.

Better husbandry practices have to also be part of the picture and improved health programs are contributors. The popularity of slaughtering veal calves has decreased so today we are taking a high percentage of all calves to slaughter weights. Finally, imports have to be part of this picture.

Cattle imports make up of all types of cattle – breeding, feeders, and slaughter. Most Mexican exports into the U.S. are feeder cattle while Canada is inclined to export slaughter cattle, cull cows, and feeder cattle into the U.S. In any case, U.S. imports add to the total beef supply produced in the U.S.

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<sup>12</sup>Assumed 36 million head slaughtered annually. 36 million times 100 pound increase comes to 3.6 billions added pounds of beef. Carcass weights have continued to increase for the last 30 years.

<sup>13</sup>Ibid.

The issue for this conference has to be 1) the magnitude of the Canadian imports and 2) what would happen to U.S. beef prices if all Canadian exports were sold in the world market and none were sold in the U.S.?<sup>14</sup> I fully expect that these two issues will be addressed by one of the other speakers in this section.

### 3. Decreasing Demand For Beef Led To Lower Real Prices Which Led To Lower Quality Which, In Turn, Led To Lower Beef Demand

During the 1980s beef consumption in North America declined due in part to concerns about human health and grazing pressures on public lands. Poultry and fish enjoyed increases in consumption due to lower prices and alleged health advantages. With real incomes also declining in the 1980s, consumers became more cost conscious and began to pay more attention to the quality of meat obtained per dollar spent.

Decreasing demand for beef led to continual decrease in the real price of beef. While nominal steer prices trended upward since the early 1960s (see Figure 15), inflation drove the real price of steers ever downward (Figure 16). By 1995, the real steer price

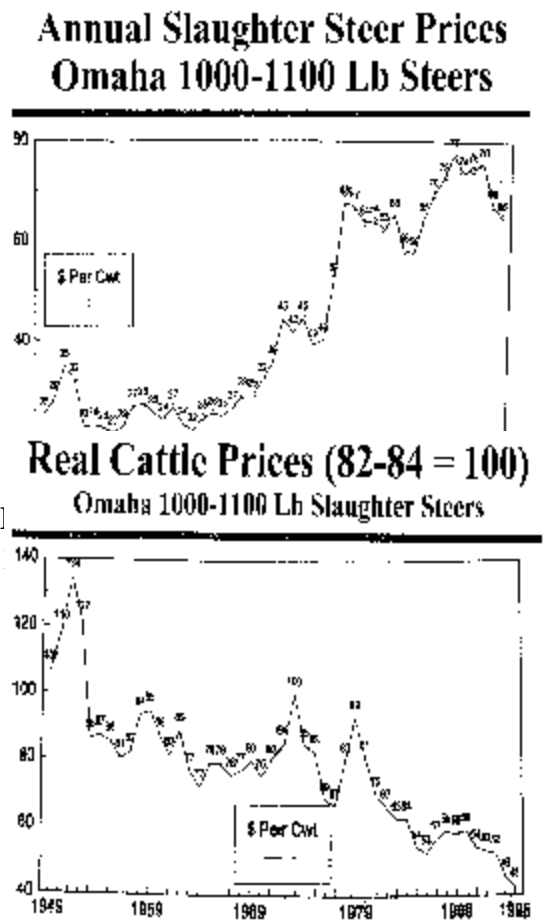


Figure 16: Real (Inflation Adjusted) Slaughter Seer Prices 1949-1995.

<sup>14</sup>Personal conversation with Jim Robb, Livestock Market Information Center, October 19, 2000.

was one-half of steer price in 1979.

Most cattlemen totally missed the impact that decreasing demand for beef and the continued drop in the real price of beef was having on the ranching industry. Over the last 30 years, ranch after ranch has been forced out of business by decreasing demand. Consolidation of beef ranches into larger ranches has been one way of coping with decreasing real beef prices.

To remain competitive at the retail level, beef producers in the U.S. and Canada had to lower production costs. The primary structural change instigated was the introduction of continental European breeds with significant increases in size and cutability of beef animals. The genetic drive of the 1970s and 1980s was to increase weaning weights, carcass weights and to produce beef more efficiently. This focus on increasing weaning weights led to the rise in popularity of producing USDA Select quality grade beef.

In 1986, USDA changed the name of existing beef quality grade from Good to Select and the amount of beef graded Select has increased markedly since that time. In 1986 only 1.3 million pounds per month of Select beef were graded as compared to 30.2 million pounds per month in 1999.<sup>15</sup> During this time period, the production of Choice beef has remained relatively stable at around 46 million pounds per month.

Increased use of the USDA beef quality grading system reflects heightened consumer demand for quality information and segregation at the retail level. According to USDA data, over 90 percent of

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<sup>15</sup>Jayson L. Lusk and Thomas L. Marsh, "Wholesale Demand For USDA Quality Graded Boxed Beef And Effects On Seasonality." Selected paper, Western Agricultural Economics Association Annual Meeting, Vancouver, British Columbia, Jun 29-July 1, 2000.

beef from steer and heifer slaughter was quality graded in 1999 as compared to just 67 percent in 1986. In a market of increasing differentiation, USDA beef quality grades played an important role in distributing quality throughout the marketing chain and providing signals to cattle producers of consumer desires at the retail level. Although the amount of beef graded has increased markedly, not much is known about the price sensitivity of the USDA beef quality grades or the substitutability between grades and among other meat products.

Recent published research has shed some light on beef demand.<sup>16</sup> For example, chicken is only a substitute for Select beef, not choice beef. Thus, chicken may be substituted for low quality, but not high quality beef. These researchers reported that their pork and chicken statistical estimates suggest that pork and chicken are compliments.

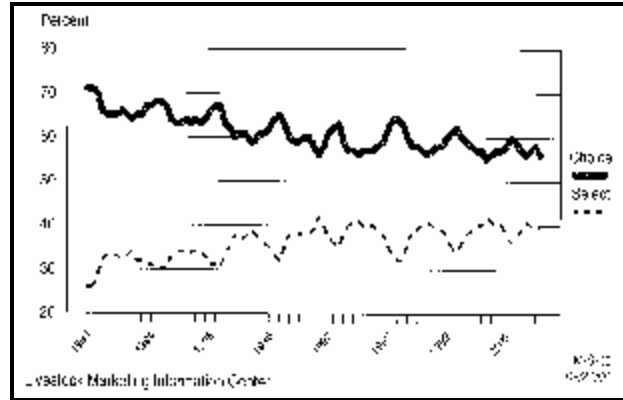
Research shows that the two beef quality grades are good substitutes for one another during the fall and winter. However, during the summer Select beef is not a substitute for Choice beef. Apparently, retailer demand for Choice beef cannot be met by changes in relative prices of lower quality beef during the cookout season. In addition, demand for both Choice and Select beef becomes much more inelastic ( $\% \text{ change in quantity demanded verses } \% \text{ change in price is less than } 1.0$ ) during the spring and summer than during the fall and winter.

Increases in retail beef price have negative influences on the amount of wholesale pork and poultry demanded by the meat retailer. Increases in retail beef price have as much, if not more, of an impact on wholesale pork and chicken demand than equivalent changes in wholesale pork and poultry.

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<sup>16</sup>Ibid.

A previously unreported result, presented in the above study is the cross price elasticity between Choice and Select beef. Results indicate that a 1 percent increase in the price of Choice beef is associated with a 0.28 percent increase in the quantity of Select demanded while a 1 percent increase in the price of Select is associated with a 0.19 percent increase in the quantity of Choice demanded by meat retailers. Price changes in Choice have a larger impact on the quantity of Select demanded than the reverse.



**Figure 17:** Percent Cattle Grading Choice & Select 1993 Thru Mid 2000.

The same pattern of beef demand may apply to producers marketing fed cattle. If the same seasonal fluctuations in beef demand are transmitted to the farm level, cattle producers, as a whole, may be able to benefit from timing the feeding of cattle. Feeding cattle to heavier weights during the spring or summer to achieve the Choice quality grade may prove to be a profitable strategy. However, if the seasonal pattern of beef demand is not transmitted to the farm level, packers may be capturing economic surplus. Packers may be able to take advantage of changes in retailer demand for quality graded beef by increasing its margins through strategic seasonal cattle purchasing.

The 1995 National Beef Quality Audit (NBQA) suggested that current USDA quality grading system segregates carcasses into: 1 percent Prime, 47 percent Choice (11 percent upper 2/3 Choice and 36 percent Low Choice), 47 percent Select, and 5 percent Standard.<sup>17</sup> Slaughter quality in the

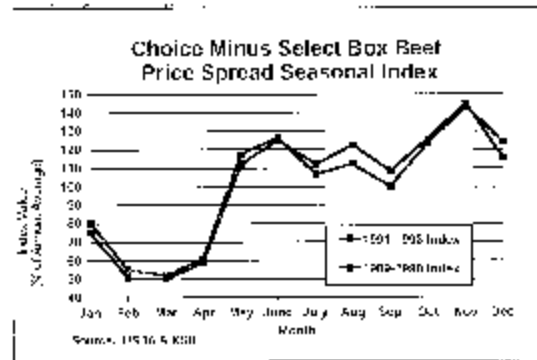
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<sup>17</sup>Kenneth Eng, “Conference Focuses On Optimizing Performance, Improving Feeding Efficiency,” Page 16, Feedstuffs, April 15, 1996.

1995 Audit quality actually decreased from the earlier 1991 NQBA. Based on USDA 1974 data, the percent cattle grading prime and choice decreased 36 percent from 1975 to 1995. Decreasing demand since 1975 has paralleled this beef quality decrease since 1975.

During the 1990s, the percent of the carcasses grading Choice went down (see Figure 17) while the percent of the carcasses grading Select went up. It appears that today's beef industry is currently living with the cost cutting continental genetics brought on board in the 1970s and 1980s. The net result of all of this is that the market is demanding more choice cattle and producers are producing more select cattle.

This is further demonstrated by looking at Kansas State University's Choice/Select Price Spread Index (Figure 18). The choice/select price spread has followed a distinct pattern. The Choice/Select prices index is low during the first four months of the year suggesting that the Choice/Select prices spread is low. By May, the index gets large and stays large the rest of the year peaking in November.<sup>18</sup> The price spread tends to be widest in the fall, especially in October.



**Figure 18:** KSU Choice/Select Index.

A large index suggest a larger Choice/Select price spread. This Kansas research suggests that during 8 out of the 12 months the discount for select cattle is large. Once again, the market is signaling that it wants choice cattle. The Choice-Select price spread averaged \$15.09 per

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<sup>18</sup>Get this footnote from ??

hundredweight in October 1999.

To adequately meet the needs of all customers, the U.S. beef industry should produce cattle grading 7 percent prime, 21 percent upper 2/3 Choice, 34 percent low Choice, and 38 percent Select carcasses.<sup>19</sup> Retailers indicate that 50 percent of the beef marketed through their stores must be Select to meet consumer needs. Exporters, on-the-other-hand, say they need 30 percent prime, 42 percent upper 2/3 Choice and 28 percent low Choice with no select to satisfy their customers. Food service representatives need another product mix different yet from retailers and exporters. Market segmentation and targeting will be increasing necessary for ranchers to efficiently match production resources to consumer product targets.

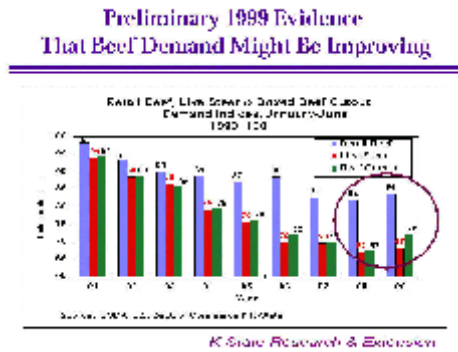
Demand for quality graded beef at the retail level has resulted in beef packers offering cattle producers premiums and discounts based upon the quality and yield grades of their cattle. With the current flurry of marketing alliances, it behooves alliance participants to understand how the market's demand trend for choice beef is in direct conflict with the past genetic performance trend in the industry. This all suggests that, as the quantity of Choice slaughter cattle goes down, price premiums for Choice cattle will go upward. Meeting the demand for Choice cattle might have to include importing Choice cattle from Canadian slaughter plants.

#### **4. The Good News Is That Demand May Be Increasing**

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<sup>19</sup>Warren Kester, "Consistency's The Quest," Pg 46-47, Beef, November 1996.

The most exciting news impacting the North American beef industry is the apparent recent turn around in beef demand. Kansas State University researchers have documented 1) the magnitude in the drop in demand during the 1990s and 2) the apparent turn up in demand towards the end of the decade (see Figure 19).

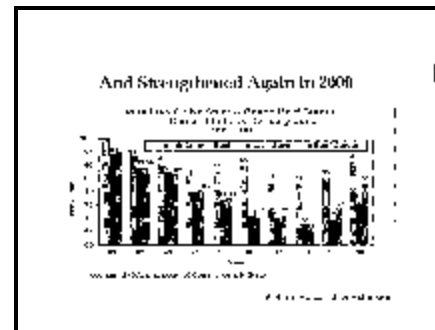


**Figure 19:** Demand Turned Around in 1999 and Remained To Date In 2000.

Let’s first look at the decrease in demand during the 1990s. As pointed out in Figure 19, Year 1990 was set as the base of 100. By 1997, retail beef price was down to 83 percent of what it would have been if demand had stayed at the 1990 level. This represents a 13 percent drop in demand over the 7-year 1990 to 1997 period.

Beef cutout demand went down 30 percent over this same 7-year period. Live slaughter steer demand also went down 30 percent over this same 7-year period. All three demand values went down even more in 1998.

The apparent turnaround in demand is illustrated in the 1999 and preliminary year 2000 data as both years shown by increases in all three values (see Figure 20). By June 2000, the



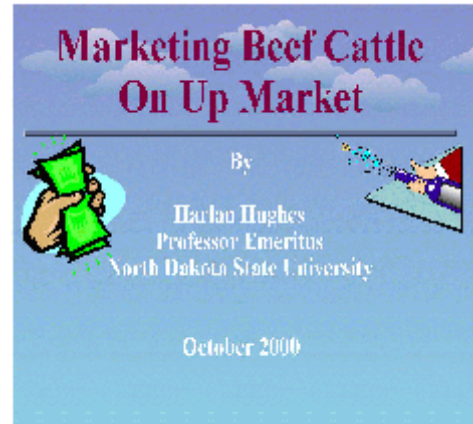
**Figure 20:** Demand Increase Signal Has Been Received.

retail beef index went up to 91, beef cutout went up to 83 and live steer price went up to 76. While two years do not make a trend, this apparent increase in demand is the best news that the beef industry has received in many, many years.

### 5. Ranchers Are Now Marketing Beef Cattle On An Up Market

Figure 21 presents my opening slide that I have used over the past year in my beef producer meetings. Note the champagne bottle on the slide. Note the fist-of-money on this slide. Why would I begin my beef presentations with a bottle of champagne and a fist-full of money?

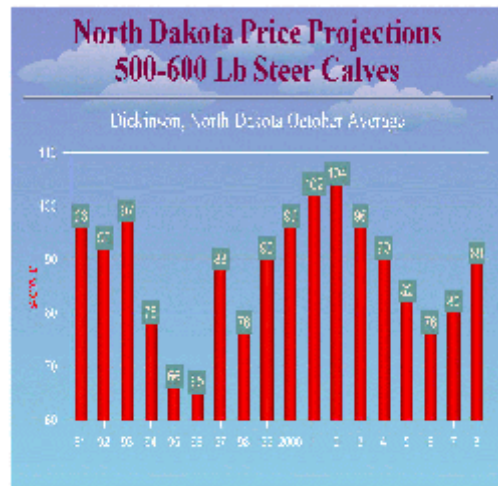
After showing the bottle of champagne and the fist-of-money to last year’s audiences, I have asked the question: “ARE YOU READY TO MAKE SOME MONEY??”



**Figure 21:** Introduction Slide In Recent Presentations

It is interesting to see the response I get from beef producers. Ten to twenty percent respond by vigorously shaking their head yes and immediately echoing “You bet!” The rest are either in shock that I would ask such a question or in complete disbelief of the whole question.

Finally, I bring attention to the relative profitability of beef by asking: “What other commodity group could I stand in front of in year 2000 and ask if they are ready to make some money”? I certainly would not do it with wheat producers. I assure you that I would not do it with corn producers. I would not do it with swine producers nor dairy producers. My whole point with all of this is that the beef cow industry is currently positioned in the cattle cycle to have several very favorable years. Let me

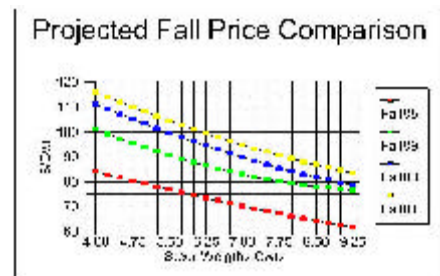


**Figure 22:** North Dakota Calf Planning Prices 1990 thru 2008.

summarize all of this by stating that the beef business goes in 10-year cycles and we entering the upward phase of the current beef price cycle.

Figure 22 presents my current planning prices for North Dakota beef cow producers. These are October's average monthly prices for 500-600 pound steer calves marketed in Western North Dakota. The left-hand side presents history from 1990 through year 1999. The right-hand side presents my projected planning prices for years 2000 through 2008. These projections suggest that we will see steer calf prices trend upward for the next 2-plus years reaching a peak October price in year 2002. When I revise these numbers later this Fall, I fully expect the drought of 2000 will have shifted the projected October peak planning price to 2003.

Let's take a more in-depth look at short-run feeder calf planning prices. Weekly the Extension Economics Section, Department of Agribusiness and Applied Economics, North Dakota State University, posts Futures based planning prices centered off the weight/price spreads of last week's feeder cattle auction sales.<sup>20</sup> Figure 23 compares October's 1998, 1999 actual feeder steer prices with October projections for 2000 and 2001 for feeder steer weights ranging from 400 to 925 pound feeders.

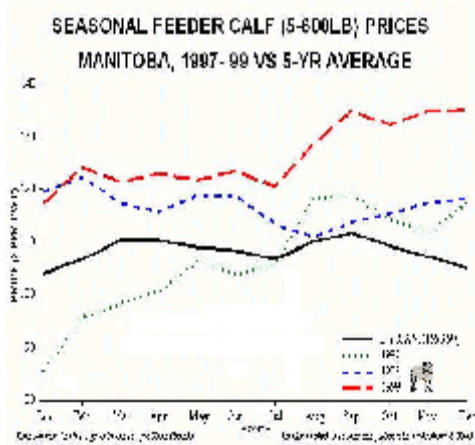


**Figure 23:** Western North Dakota Feeder Calf Prices for Oct 98-01.

Two price trends are evident in Figure 23. First, feeder steer prices for all feeder weights have trended upward from 1998 through 2000 and are projected to continue this trend into the Fall 2001.

<sup>20</sup>: The web page is [www.ag.ndsu.nodak.edu/cow](http://www.ag.ndsu.nodak.edu/cow) under the "weekly prices" hot button.

Second, cheap feed grains, and the resulting low-cost gains, are driving the price of light-weight feeder calves up relatively more than for heavier-weight feeders. This is evident by the clock-wise rotation of the price line in Figure 23.



**Figure 24:** Manitoba, Canada Feeder Calf Prices Also Trending Upward

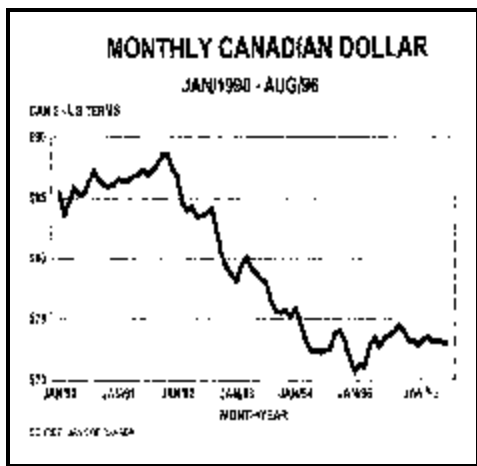
U.S. and Canadian cattle prices are linked and Canadian beef cow producers have also experienced upward trending fall calf prices (see Figure 24). The Manitoba chart also illustrates the general upward trend in the Canadian feeder calf prices since January 1998.

### 6. Value Of The Canadian Dollar

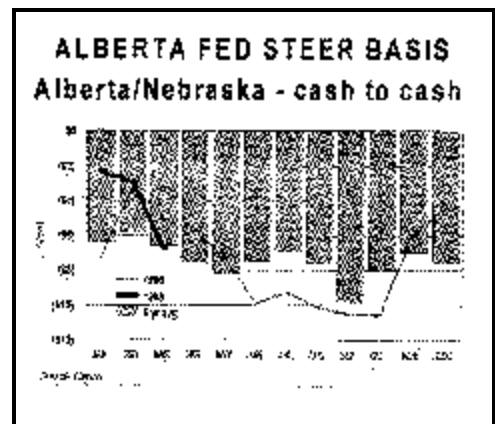
Exchange rates can have a major impact on trade. Since the U.S. dominates beef production in the North America, Canadian beef markets are tied directly

into U.S. prices.

When you talk to an Alberta cattle feeder, they will generally quote their market prices as Nebraska



**Figure 26:** Canadian Exchange Rate 1990-1996.



**Figure 25:** Alberta Market Price Basis To U.S. Cash Prices.

Direct Slaughter Cattle prices minus a basis. Figure 25

suggests that the average Alberta/Nebraska basis ranges in the minus \$6 to \$8 per hundredweight.

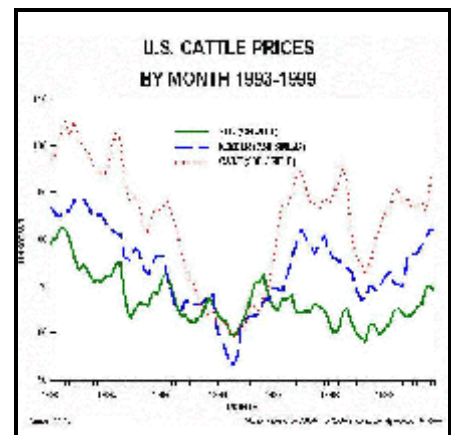
Economic theory suggest that transportation costs make up a large share of the Alberta/Nebraska basis.

Canada experienced a dramatic drop in the value of the Canadian dollar from 1992 into 1996 (see Figure 26). Since Canadian beef prices are linked directly to U.S. prices, a decrease in the value of the Canadian dollar translates into a direct price increase for Canadian beef producers. The relative low value of the Canadian dollar since 1996 may well have been the single largest contributor to the increased Canadian beef exports to the U.S. during the 1990s.

The high valued U.S. dollar in the late 1990s worked like a huge vacuum cleaner that “sucked in” commodities from all over the world. Examples are Australian feeder cattle via Mexico, world barley into the West Coast, Canadian wheat into the U.S., etc. During the tough times of the mid-1990s, beef and cattle simply moved to the region of the highest prices.

### 7. Cattle Cycles Impact Beef Production

Beef cattle prices go in 10-year cycles that correspond to each decade. History demonstrates that we can expect a “U” or “V” beef price cycle each decade. Cattle prices start the decade with high prices and move to bottom in the mid-decade only to increase again towards the end of the decade. Figure 27 illustrates the “V” shaped price cycle generated in the decade of the 1990s. The magnitude of the price depression in



**Figure 27:** US Calf, Feeder, and Slaughter Prices In 1990s.

1996 is best illustrated by the fact that feeder calf prices per hundred weight went below the price of slaughter steers.

For 22 years and two complete cattle cycles I had talked about 1974 being a unique time in history when calf prices per hundred weight averaged below slaughter cattle prices per hundred weight. Twenty-two years and two cattle cycles later it happened again. In 1996, the average price of feeder calves went below the average price of slaughter cattle. Both record lows – the 1974 and 1996 lows – were brought on by record feed grain prices.

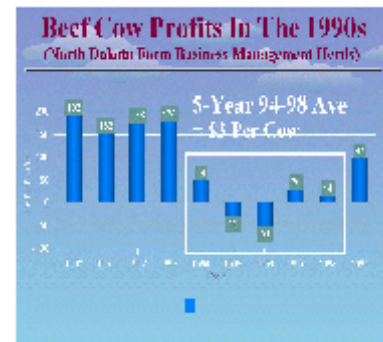
### 8. Economic Hurt In The U.S. Beef Cow Industry Triggered The Border Dispute

The economic impact of the 1990's price depression was devastating for beef cow producers.

Figure 28 presents the average profit<sup>21</sup> per cow earned by North Dakota's Farm Business Management Association Members.

Profit per cow was high in the early part of the decade averaging \$152 to \$192 per cow.

Nineteen-hundred-and-ninety-four signaled the beginning of the down turn with a 74 percent drop in profits in that year. Average profits even went negative in 1995 and went even more negative in 1996. Average profits came back positive in 1997 and 1998 and turned upward considerably in 1999. Profits are projected to come back even more in year 2000 with my projection of \$130 to \$150 per cow average. Better times are returning.



**Figure 28:** Average North Dakota Beef Cow Profits During The 1990s.

An important point for this conference is that we recognized the fact that over the five-year period – 1994 thru 1998 – North Dakota producers earned an average profit of only \$3 per cow

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<sup>21</sup>Profit here is defined as the earned returns to unpaid family and operator labor, management, and equity capital. These are the three resources that a ranch family contributes to the ranch business.

annually for this five year period. Yes, there was considerable hurt throughout cow country!

A signal that beef cow profit margins are getting smaller and smaller is the fact that this 5-year \$3 average in the decade of the 1990s compares to the 5-year average low of a positive \$33 for the decade of the 1980s. In fact, none of the 1980 years averaged below zero while two years in the 1990s averaged below zero. Clearly, something was raising havoc with the beef industry!

### **9. R-CALF Comes About As A Response To The Economic Hurt**

With calf and fed cattle prices in the dumpster, northern state's cattle producers were angry. They could see truck load after truck load of Canadian cattle heading south on Interstate 15 to U.S. slaughter plants and it was natural to associate these truck loads of imported cattle with the decade's low cattle prices.

In May and June of 1998, concerned producers began gathering, first in small neighborhood groups of 20 to 30 ranchers, later in groups as large as 500 to 1,000, to talk about one of the perceived causes of the problem – the steady stream of cattle-laden trucks heading south across the Canadian border. Those trucks were like rubbing salt in an already deep wound.

Out of those gatherings came R-CALF (Ranchers-Cattlemen Action Legal Foundation), a voluntarily funded, nonmembership grassroots movement. R-CALF asked the International Trade Commission and the U.S. Department of Commerce to investigate and enforce trade laws relative to importation of Canadian and Mexican cattle. They were seeking antidumping enforcement or countervailing duties or both. <sup>22</sup>

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<sup>22</sup>Rod Fee, "Beefed-up Border Battles." Livestock Editor, Successful Farming, December 1998, page unknown.

The beef cattle import issue came to a head when the Governor of South Dakota refused entry to all trucks carrying Canadian grain, cattle, or swine in the fall of 1998. A number of neighboring states supported South Dakota by performing truck inspections, thereby making transportation to market more difficult. The U.S. action highlighted a number of Canadian barriers to US imports.<sup>23</sup>

The Department Of Commerce ruled in July 1999 against Canada and alleged that Canadian cattle were being “dumped” into the United States cattle industry. At this time, anti-dumping tariffs (see Figure 29) were levied on Canadian live cattle entering the U.S.

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<sup>23</sup> “Policy Update: Canada/U.S. Trade,” June 1999. Web page Manitoba Agriculture And Food.

COMPLAINTS	FINAL DUTY
United States Beef Producers	4.43
United States Meat Producers	4.43
Canadian Beef Producers	3.99
Canadian Cattle Producers	4.73
B&W Producers	2.92
United States Aquaculture Producers	0.10 (for 1999)
United States Producers	0.01
Canadian Cattle Producers	4.81
United States Producers	4.43
U.S. Producers	4.43

**Figure 29:** Import Duties Issued By Dept Of Commerce in July 1999.

On November 9, 1999, The United States International Trade Commission (ITO) made a negative final determination, finding that a U.S. industry is neither materially injured nor threatened with material injury by reason of imports of live cattle from Canada that the U.S. Department of Commerce had determined are sold in the United States at less than fair value. As a result of the negative determination, the U.S. Department of Commerce decided to not impose antidumping duties on these imports.<sup>24</sup> On March 9, 1999, R-CALF decided to withdraw separate appeals relating to the dumping cases it filed against Canada and Mexico.

WASHINGTON, July 2 (Reuters) - The Commerce Department has issued a preliminary ruling that will impose anti-dumping duties of as much as \$50 per head on imports of live Canadian cattle, according to industry and government officials.

The ruling, issued on Thursday, means that companies will have to pay duties ranging between 3.9 percent and 6.81 percent on cattle exported across the border.

Most companies will pay duties of 4.73 percent, the Commerce Department said.

The dumping complaint was filed last November by the Ranchers-Cattlemen Action legal Foundation known as R-CALF.

Leo McDonnell, a Montana rancher and president of R-CALF, said the ruling meant that some importers would have to soon start posting bonds for as much as \$50 per head.

"It is good news for U.S. cattlemen," he said.

Under U.S. trade law, the next step will be a final determination by the Commerce Department in September. If that decision also finds dumping occurred, the case goes to the U.S. International Trade Commission for a determination of how much harm was suffered by the U.S. domestic industry.

News Release Announcing Anti-Dumping Duties.

<sup>24</sup>ITC News Release 99-156. Inv. No. 731-TA-812 (Final).

## 10. Post-Blockade Trade Actions

In spite of the ITC final ruling, trade concessions were accomplished. Discussions triggered by the border dispute produced a Canada/U.S. Record of Understanding (ROU), which included a 17-point action plan addressing a number of trade issues.<sup>25</sup> The ROU reaffirms both countries' commitment to the WTO and NAFTA Sanitary and Phyto-Sanitary agreements, and encourages provinces and states to increase dialogue on agricultural trade issues. Most importantly, the ROU allows for US swine to enter Canada, permits shipments of US grain on the Canadian rail system to final destinations in the US, improves access for US farmers to primary elevators in western Canada, and encourages greater pesticide harmonization.

In the summer of 2000 a Cross Country Beef Summit formed between Canadian and U.S. cattlemen.<sup>26</sup> The cross-border group – made up of the Alberta Cattle Feeders Association and Pacific Northwestern Economic Region Organization -- identified key problems facing producers on both sides of the border. They prioritized issues for industry reps to collaboratively work at resolving. Animal health, animal identification and equitable business environments were highlighted as key issues. Year-around access for U.S. feeder cattle and animal health-related barriers to 2-way trade were seen as priority topics needing prompt attention. In all, 19 actions teams were formed to uncover the facts of their assigned issue and report back to the total group. Stay tuned.

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<sup>25</sup>Op. Cite. "Policy Update: Canada/U.S. Trade."

<sup>26</sup>"Cross-Border Beef Summit Forms Action Teams," Canadian Cattlemen Magazine, page 48, August 2000.

## **11. One North American Beef Industry**

Some of us are suggesting that we need to combine the U.S. and Canadian beef cow herds into one beef industry and manage this industry as a single North American Beef Cow Herd. While the cow-calf sector is unique as it exists in virtually every state and province in North America, feeder calf prices track closely suggesting that the feeder calf sub-sector is continental in scope.<sup>27</sup> Even the feedlot industries of the two countries made similar historical moves. The U.S. feedlot industry moved from the Eastern Corn Belt to the Central and Southern Plains over the last 40 years and the Canadian feedlot industry has also moved from Eastern Canada to Western Canada, specifically, Alberta. Both are centering around large, specialized feedlots that purchase most if not all feeds feed.

## **12. Canadian Quality Grading System Adjusts Towards U.S. System<sup>28</sup>**

Since 1972, the Canadian beef grading system has encouraged a tremendous reduction in the amount of fat on beef carcasses. But, by 1987, consumer responses indicated that the tenderness of beef was a concern and, in 1992, the grading system was altered to include a measure of marbling and to make it partly compatible with USDA beef grades. The system was altered again in 1998 to include Canada Prime to allow for competition with the higher quality beef in the US. The Canadian beef quality grading system is based on the amount of marbling in the loin muscle between the twelfth and thirteenth rib. Marbling is the fat that is deposited within the muscle. The marbling requirements for the Canadian Quality grades are as follows:

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<sup>27</sup>Bill Schissel, Ken Mathews, and Ken Nelson, "The Cow-Calf Industry In Canada And The United States: A Comparison." Page 177, Can J. Agric Econ, 1995 Special Issue.

<sup>28</sup>Quoted from the Dr. Boles Paper.

A - must contain at least traces of marbling  
AA - must contain slight marbling (requirement for USDA Select)  
AAA - contains small or greater marbling (requirement for USDA Choice)  
Canada Prime - slightly abundant marbling or greater (requirement for USDA Prime)

All A grades are from youthful animals with bright red, firm and fine grained muscle and fat that is firm and white. The quality grade (A, AA, AAA or Canada Prime) is marked on each of the four quarters of the carcass within a maple leaf badge.

## **Part II: Two Critical Trade Issues Remain**

### **1. Country Of Origin Labeling**

Now that the long-run trend for calf prices has turned up, the Nation's unrest with respect to beef imports has settled down. There are, however, two trade issues that are still on the minds of U.S. beef cow producers. These are 1) country of origin labeling for meat and 2) the use of the Grade Stamp on imported meat.

Country of origin labeling has become a very popular idea with producers as Canadian cattle continue to move across the border and are slaughtered in US meat packing plants. The country of origin labels would affect this trade only if you put a minimum time in the US.

There is a perception that the inconsistency in the meat supply is caused by the imported product from around the world. This theory would work if the imported product were being used for table cuts.<sup>29</sup> However, this is not true. Countries like Australia and New Zealand would like to label their products in the market. They believe in the quality and consistency of their product and would like to see

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<sup>29</sup>Dr. Jane Ann Boles, "International Meat Issues," Bovine Connection Proceedings, Dec 1999. Dr. Boles is member of the Animal and Range Science Department, Montana State University.

country of origin labels.

The majority of the product imported from countries like New Zealand and Australia are used for processing. It is a necessary part because it is very difficult to get sufficient domestic lean trim product necessary to manufacture the processed meat products demanded in today's marketplace. This is part of the reason meat processors are against the country of origin labeling. What would be the country of origin if you have 1/3 foreign beef and 2/3 local?

#### **b. Use Of USDA Grade Stamp On Imported Meat**

Restricting the use of USDA quality grade stamp to only U.S. product has been a top agenda item for cattlemen across the United States. Larry Meadows, Chief of the USDA Meat Grading Division, said that in 1999 there were only six Canadian plants involved in importing any carcasses. In 2000, 95 percent of the carcasses were coming from two plants. These two plants are close to the U.S. border. Meadows also suggested that the reason for importing the Choice carcasses is that the U.S. does not feed enough choice beef.

R-Calf contends that these cattle should not be allowed to receive the USDA Stamp. R-Calf has met twice with President Clinton and discussed this Stamp issue. The Clinton Administration has announced that it will take the necessary steps – by the end of the year – to require that USDA stop applying its quality grade stamp to imported meat.<sup>30</sup> The beef industry is currently in a heated debate as to how this will be implemented. Stay tuned.

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<sup>30</sup>“R-Calf Supports Clinton’s Decision To Restrict Use Of USDA Grade Stamp,” Sidney, Montana Herald-Leader, Web page July 30, 2000.

## Summary

### **So... Are Canadian Beef Imports Contributing To The Problem?<sup>31</sup>**

Canada is both a major destination for U.S. beef in the East and a major foreign supplier of beef in the West. During the last 10 years, U.S. imports of beef and veal from Canada grew from 243,564 animal equivalents in 1988 to 1.018 million animal equivalents in 1997. Canadian net imports (imports minus exports) beef and veal have ranged from a negative 51,200 animal equivalents in 1991 to a positive 614,500 animal equivalents in 1997.

Combining live animal trade with meat trade illustrates that the U.S. total imports from Canada have risen in the last decade while U.S. total beef exports to Canada rose in the early part of the decade and since then have remained rather stable. In summary let me share the import/export numbers. In 1997, Canada exported 1.38 million head of cattle to the U.S. In addition, beef and veal exports to the U.S. totaled another 1.018 million animal equivalents for a total of 2.4 million animal equivalents coming south. The U.S. exported approximately 500,000 animal equivalents north in 1997. This nets out to 1.9 million animal equivalents coming south in 1997.

If Canadian imports had been eliminated, total U.S. beef supplies would have been 2.1 percent smaller in 1988 and 6.6 percent smaller in 1997. On the other hand, if U.S. imports plus exports to Canada were eliminated in 1998, total U.S. beef supplies would have been about 1.9 percent smaller.

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<sup>31</sup>For a complete discussion on this topic, see Harlan Hughes, "Are Canadian Beef Imports Contributing To The Problem?" Market Advisor September 17, 1998. Available at [www.ag.ndsu.nodak.edu/cow/lsmanews/09-17-98.htm](http://www.ag.ndsu.nodak.edu/cow/lsmanews/09-17-98.htm).

Without Canadian beef trade in either direction in 1997, U.S. beef supplies would have been 5.6 percent smaller.

Using a crude 1.6-percent price flexibility, a 5.6-percent drop in U.S. beef supplies could result in a 9-percent increase in U.S. beef prices. For \$60 per hundredweight slaughter cattle, 9 percent would be \$5/40 per hundredweight, or \$65 per 1,200 pound slaughter animal. If Canada were to sell that meat on the world market, we probably would see U.S. exports to other countries go down, reducing our beef prices back toward today's \$60 cattle.

As stated in 1998, It is my professional judgement that banning Canadian imports would not have solved the 1990s price problem brought on by the record meat (beef, pork, and poultry) supplies. The answer to the record North American beef production, and the resulting low prices, is some form of supply reduction.

I believe that the marketing system is currently signaling a reduced beef supply. Cattle feeders in both countries, however, are doing everything in their power to increase beef production through heavier carcass weights.<sup>32</sup> In spite of cattle feeders, beef supply is projected to be on its way down in 2001 and beyond, and beef prices are projected to remain strong or get stronger through year 2003.

The cattle cycle of the 1990s and its resulting beef price cycle of the 1990s is alive and well. The challenge to the beef industry is that there will be another cattle cycle, and another beef price cycle, in the decade of 2000. It will be interesting to see if the beef industry learned from its' experiences of

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<sup>32</sup>Week of Oct 19<sup>th</sup> U.S. dressed weights (755 lb), +18lb over same week in 1999, Canadian steer weights +4 lb. on week(849 lb.). Source: Canadian Western Feedlots Ltd Newsletter, Oct 20, 2000.

the 1990s.