Introduction

Exporting slaughter cattle to the United States can be a profitable alternative when marketing cattle. The potential for better returns is increased when both domestic and export markets are accessible. Of course, understanding what is required by each market and how they work is imperative before attempting to use them. Producers must be able to weigh the advantages and limitations of each market in order to make their marketing decisions. However, marketing into the United States does not have to be complicated. This module discusses how producers can export live cattle to the United States; both in terms of why it can be a feasible alternative and how it can be done.

Why Are Live Cattle Exported?

Cattle are traded between Canada and the United States for specific reasons. Some are inherent to the market, such as the relative sizes of the Canadian and American industries or the differences in seasonality factors between the two markets. Other factors have changed over time. These include new opportunities of selling into a closer market and changes in feeding trends.

Industry size

Because the Canadian cattle industry is about one tenth the size of that of the United States, price trends in Canada follow US trends. Cattle prices primarily reflect North American markets with regional supply and demand factors causing local fluctuations.

Proximity to population

Canada’s consumer base is concentrated in Ontario and Quebec. Historically, most of the cattle finished for slaughter in the West have been shipped to this large market in Eastern Canada. However, this is an enormous distance to be shipping either live animals or a perishable product such as beef. (Calgary to Montreal is about 4,200 km). Since the US west
coast is significantly closer (Calgary to San Francisco is about 2,500 km) and it has a large number of potential consumers, more and more Western Canadian cattle, and beef has been exported to the US west coast.

Proximity to feed supplies

With a trend toward feeding cattle close to grain producing areas, fewer cattle are being fed in the US Northwest. This has left packing plants in the Northwest looking greater distances for their slaughter supplies. Western Canada is an excellent source of cattle for these American packers given the large grazing areas, feeder cattle supplies and local feed grain production. Starting in the early 1980s Western Canadian feedlots began selling into the United States. Since then, the volumes have grown.

Relative supply and demand

When supplies are tighter in the United States than in Canada (relatively speaking), prices are higher in the United States and cattle are exported from Canada. However, the opposite would occur if supplies were tight in Canada - prices would be higher locally than in the United States and cattle would not be exported. The same type of response happens in other segments of the market, such as retail demand. Retail movement of beef may be much brisker in one country than the other. This could ultimately affect the demand for slaughter cattle and the prices offered for them.

Seasonality

Seasonality is another factor that affects the trade of cattle between Canada and the United States. Slaughter cattle fed for longer periods are more suited to the US grading system. (see Grading Differences below) Specifically, cattle that are on feed 100 days or more are the most suitable. Therefore, finished calves with over 200 days on feed would receive premium grades in the US grading system. Given that most calves are born in the spring, weaned in the fall and then marketed the following spring or summer after a winter on a high rate of gain feed, it follows that spring and summer seasons tend to see higher export numbers compared to fall or winter. The Western Canadian feedlot industry also feeds more calves (versus grass cattle) than their US counterpart. This means that Canadian calves come onto a market in the United States that is often in short supply and has strong demand. Spring and summer are generally the months with the largest export volumes.
Also, due to a wider tolerance for carcass weight and thickness in the United States, the cleanup or tail-end cattle (i.e., end of the finished calf run - late summer, or end of the finished yearling run - mid winter) can often be sold into the United States with fewer discounts than in Canadian markets and net a higher price.

Grading Differences

Understanding the US grading system is probably the biggest hurdle in learning what is required to export live cattle. The Canadian grading system evaluates beef carcasses on their marbling and lean meat yield after they have met conformation, age and fat requirements. Quality cattle are ranked from Canada A, Canada AA, Canada AAA to Canada Prime depending on their marbling. Then lean meat yield is predicted and the carcass is assigned a yield grade from Canada 1 to Canada 3 (Canada 1 is the higher yielding). Yield is only predicted on Canada A or higher carcasses.

By contrast, the US system includes two separate evaluations. One is for quality, indicating tenderness, juiciness and flavour which have age, but no conformation or fat requirements. The other is for yield, indicating the amount of meat a beef carcass will yield after it has been cut and trimmed. The two types of evaluations are independent of each other.

Together the quality grade and the yield grade indicate the total value of a beef carcass in the US system.

Quality

Each United States Department of Agriculture (USDA) beef grade is a measure of a distinct level of quality. Eight grades are used to measure quality - Prime, Choice, Select, Standard, Commercial, Utility, Cutter and Canner. Most fed cattle exported from Alberta to the United States fall into two of these grades - Choice and Select. Choice grade beef is quite tender, juicy and flavourful. It has slightly less marbling (a term that refers to the fat deposits in the meat) than Prime but is still well marbled. Select beef is leaner than the two higher grades. It is relatively tender but it lacks some of the juiciness and flavour of the higher grades due to less marbling.

Yields

Yield grades indicate beef carcass cut ability or the amount of useable meat a carcass will yield after the waste fat has been trimmed off. Numbers 1 through 5 are used to identify the yield grades with Yield Grade 1 representing the highest yield and Yield Grade 5 the lowest.
Figure 1. USDA quality beef grades – relationship between marbling, maturity, and carcass quality grade, assuming that firmness of lean is comparably developed with the degree of marbling and that the carcass is not a ‘dark cutter’. Maturity increases from left to right (A to E). The A maturity portion of the figure is the only portion applicable to bullock carcasses.

Table 1 shows the comparison between Canadian and US quality grades. Canada Prime is virtually identical to the USDA Prime grade except that the Canadian grade does not allow dark coloured (dark cutters) or other off-quality characteristics. Canada AAA grade is virtually identical to USDA Choice. Canada AA is comparable to USDA Select and has slight marbling. Canada A grade is unique to Canada in that there is less marbling but all other quality attributes are still present. USDA Standard grade should not be compared to Canada A due to inconsistencies in the quality characteristics assigned to the grade. Grade B cattle would not fall into a USDA grade as they are devoid of marbling. Canada B4 (dark cutter) would have no comparable grade in the US since colour is balanced with the degree of marbling and would only cause a carcass to be moved down one grade on the US scale as opposed to Canada where colour removes a carcass from the quality grades.

Table 1. Canada-US Quality Grade Comparison.

<table>
<thead>
<tr>
<th>USDA Grade</th>
<th>Minimum Marbling</th>
<th>Canada Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime</td>
<td>Slightly Abundant</td>
<td>Canada Prime</td>
</tr>
<tr>
<td>Choice</td>
<td>Small</td>
<td>AAA</td>
</tr>
<tr>
<td>Select</td>
<td>Slight</td>
<td>AA</td>
</tr>
<tr>
<td>Trace</td>
<td>Practically Devoid</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>-</td>
<td>B1</td>
</tr>
<tr>
<td>No Comparable</td>
<td>Devoid</td>
<td>B4</td>
</tr>
<tr>
<td>No Comparable</td>
<td>Dark Cutters</td>
<td></td>
</tr>
</tbody>
</table>

Marbling

<table>
<thead>
<tr>
<th>Slightly Abundant</th>
<th>Prime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>Choice</td>
</tr>
<tr>
<td>Modest</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td></td>
</tr>
<tr>
<td>Slight</td>
<td></td>
</tr>
<tr>
<td>Traces</td>
<td></td>
</tr>
<tr>
<td>Practically Devoid</td>
<td></td>
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</tbody>
</table>
Dressing percentages

Since slaughter and trim methods also vary between Canada and the United States, the dressing percentages (warm carcass weight divided by the live animal weight) are different. In the United States, the kidney fat is not trimmed so the same carcass will dress out at a higher percentage in the United States than in Canada. On average, the difference is 2.0 to 3.0 per cent higher in the United States. For example, if the estimated yield of a steer in Canada was 59 per cent warm carcass weight it would be 61.0 to 62.0 per cent in the US system. It is wise to be conservative with this calculation until a good comparison can be made between the two systems.

Discounts

Due to the pricing structure of the Canadian grading system there is a narrow window for the ideal carcass and the highest price (no discounts). With four different grades (A, AA, AAA, Prime) for the high quality beef and several carcass weight categories, price discounts are often numerous, especially for cleanup or off-type cattle. If cattle do not fit the A grade handy weight category, sometimes the US market may be a viable option. However, the US market also has discounts on grades and weights so it is imperative to know the discounts and where cattle will fall within them.

Steer-heifer spread

The steer-heifer spread (or the discount on heifers) is also a factor to consider when evaluating marketing alternatives. Sometimes the spread will be wider in one country than the other. For a person marketing heifers there may be an outlet in the United States with a smaller discount. Of course, the opposite may be true as well - at times the spread may be narrower in Canada. These spreads relate back to supplies and seasonality. For example, at a time of ample marketings of heavy steer carcasses, heifers may be more actively sought after for their lighter carcasses and therefore trade higher than steers. On average, spreads in the United States are narrower.

Sellers of slaughter cattle may hold market-ready cattle beyond their optimum grade for the Canadian market and therefore may face large discounts. Reasons for this practice are numerous. Sellers may be anticipating higher prices in the future. Replacement cattle prices may be high or supplies tight, so slaughter cattle sales may be delayed due to the difficulty in replacing them. High breakevens often entice feedlots to put extra pounds on the cattle to bring the breakeven down. Cheap feed grain will also tempt producers to feed to heavier weights, especially at times of low slaughter
market prices. Exotic breed cattle also tend to finish at heavier weights. In all these cases, the cattle are heavy and/or over fat in the Canadian market; however, it may be suitable to sell some of these cattle in the US market.

Can Exporting Work For You?

Know your cattle

First and foremost producers must know their cattle in terms of the number of days they have been on feed, weight, estimated yield, and potential grade. It is useful to have someone with experience in exporting cattle to view the animals selected for export and provide an idea of how the cattle might grade in the United States. Once the first load of cattle has been shipped and the results are back, it will provide a better indication of what is required. It is also useful to have an idea of how additional days on feed will affect the finish on cattle and the final returns. For example, will two more weeks of feeding place cattle in the Choice rather than the Select category?

It is also important to know when cattle are worth a premium price in the Canadian market and what the potential price would be. Once it is decided to feed cattle for the U.S. market, turning back is difficult. The extra pounds cannot be taken off. The cattle could still be marketed in Canada but it may be with discounts. It is also important to know when cattle are premium for the US market because they may be too fat or too heavy and also meet large discounts in the United States. This is contrary to popular belief. Feeding beyond the “premium” stage makes the cattle more difficult to market due to discounts and packer requirements.

Freight and shrink

Most US bids will be quoted for cattle delivered to the packing plant. In order to accurately compare bids from different areas, know the freight costs. For example, if feeding cattle in Olds, Alberta it is necessary to know the freight to Calgary, Brooks, High River, and some US plants. It is also useful to have freight costs converted to per hundred weight (/cwt) basis for ease of calculation.

Typical freight charges from Olds to:

<table>
<thead>
<tr>
<th>Destination</th>
<th>Rate per cwt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calgary, Alberta</td>
<td>$1.00/cwt</td>
</tr>
<tr>
<td>Brooks, Alberta</td>
<td>$2.00/cwt</td>
</tr>
<tr>
<td>High River, Alberta</td>
<td>$1.50/cwt</td>
</tr>
<tr>
<td>Pasco, Washington</td>
<td>$4.50/cwt</td>
</tr>
</tbody>
</table>
Shrinkage is dealt with more completely in a separate module. (see *How Shrinkage Effects Returns for Feeder and Slaughter Cattle*). However, it is imperative to know how additional transportation will affect cattle. Again, discussions with other exporters and first hand experience will aid greatly in understanding the actual effect of the extra distance on shrinkage.

Determining the US price

Most US bids will be a rail grade bid quoted in US dollars delivered to a packing plant. The following examples use an US rail grade bid delivered to a packer and work it back to a live price FOB to a local feedlot in Canadian dollars. Before proceeding, it is necessary to understand the difference between a graded rail bid and a flat rail bid. Graded will be a Choice price with a discount on Select whereas a Flat bid will mean Choice and Select at the same price. Other potential discounts would still apply, i.e., weight or yield grade 4 (over fat). In the following examples it is assumed the cattle are exportable, i.e., sufficient days on feed, no weight discounts or over fats (YG4).

Example 1:

Assumptions: cattle are 60% Choice & 40% Select; estimated Canadian yield 59.0% (61% US)

Market price:

- **US rail** $1.20 Choice
- $0.05 discount on Select
- Alberta live A Grade steer $98/cwt
- Exchange rate 1.41 US or 70.9 Cdn

Freight & costs: $4.50/cwt

Calculations:

60% at $1.20 and 40% at $1.15

\[(.60 \times 1.20) + (.40 \times 1.15) = 1.18 \text{ Flat}\]

US to Live: $1.18 \times 0.61 = 71.98/cwt US.

US to Cdn: $71.98 \times 1.41 = 101.49/cwt Cdn

FOB Feedlot: $101.49 - $4.50 = $96.99/cwt live

In this example, the US bid nets back $1.01/cwt less than the local market, so it is better to sell the cattle in Alberta.
Example 2:
Assumptions: cattle are 70% Choice & 30% Select; estimated Canadian yield 60.0% (62% U.S.)
Market prices:
- US rail $1.19/cwt
- $0.03 discount on Select
- Alberta live A Grade steer $95/cwt
- Exchange rate $1.40 US or 71.4 Cdn
Freight & costs: $4.50/cwt
Calculations:
- 70% at $1.19 and 30% at $1.16
  \((.70 \times 1.19) - (.30 \times 1.16) = 118.10\) flat
- US to Live: \(118.10 \times 0.62 = 73.22\) US.
- US to Cdn: \(73.22 \times 1.40 = 102.51\) Cdn
- FOB Feedlot: \(102.50 - 4.50 = 98.01\) cwt live
In this example, the US price net backs $3.01/cwt more than the local market so it is more profitable to sell the cattle into the US market.

Example 3:
Assumptions: cattle are 50% Choice & 50% Select; estimated Canadian yield 58.5% (60.5% US).
Market prices:
- US rail $1.15 flat
- Alberta live A Grade steer $94/cwt
- Exchange rate $1.38 US or $72.46 Cdn
Freight & costs: $4.50/cwt
Calculations:
- US to Live: \(1.15 \times 0.605 = 69.58\) cwt
- US to Cdn: \(69.58 \times 1.38 = 96.02\) Cdn
- FOB Feedlot: \(96.02 - 4.50 = 91.52\) cwt live
In this example, the US bid nets back $2.48/cwt less than the Alberta market.

The Mechanics of Exporting

Making the sale
There are a few different ways to get US bids. The simplest and most direct method is to get a bid directly from the packing plant. As mentioned earlier, this will most likely be a rail grade price (graded or flat) basis delivery to packing plant. Often there will be a YG4 (yield grade) discount, however many plants allow a percentage tolerance. That is, up to five per cent of the cattle may be of the type that could be discounted before discounts are actually applied. Applicable weight discounts will be in effect.
Sometimes an order buyer in Canada will have orders for US plants. These buyers may offer a live or rail grade bid, either in Canadian or US dollars and either delivered or FOB the feedlot. Different buyers will offer a variety of conditions so it is necessary to fully understand what is being offered and how to compare it to other prices (locally). Some buyers will deduct a commission (i.e., $0.50/cwt) over and above the price offered while others may incorporate it into the price that is offered (net price).

Again, contact with other people that have exported would be useful to get names of potential US buyers. Names of packing plants and buyers can be obtained from Alberta Agriculture, Food and Rural Development staff, and the Cattlemen’s Association.

Export requirements

When selling slaughter cattle to the United States, a brand inspection is required and an A-Form must be completed to provide proof of ownership. For complete details on regulations regarding export of cattle refer to Import and Export of Feeder Cattle-Canada/USA. A local veterinarian is needed to inspect the cattle and complete a Health of Animals export form. Weigh (scale) tickets must also accompany the cattle along with a US Customs Export Clearance form, which can be obtained from a US Customs Broker. The form lists the total dollar amount of the sale and the unit price. The total amount of the sale must match the weigh tickets.

Documentation required

1. A - Form - Brand inspection, as proof of ownership.
2. Health of Animals Export Form - completed by a local veterinarian after his inspection.
3. US Customs Export Clearance Form - obtained from US Customs Broker.
4. Weigh tickets.

Exchange Rates

Selling into the United States means dealing in US dollars. This is an ever-changing variable and any change in rates directly affects the returns when selling cattle. Therefore, it is important to know exactly what the dollar is trading at when comparing bids between the two countries. Up to the minute dollar quotes can be obtained from a market information service, a commodity broker, or a bank. The dollar is influenced by such things as government policies, political events, world events and other currencies. Therefore, it is a volatile market.
Often dollar quotes are given with the Canadian dollar expressed in US terms. A simple calculation will convert this into a US dollar for ease of comparing bids. For example, if the Canadian dollar is 70.00, conversion is:

\[
100 \div 70.00 = 1.4286
\]

or conversely, to convert a US dollar back to Canadian terms:

\[
100 \div 1.4286 = 70.00
\]

As previously mentioned, any change in the dollar will directly affect the final price. If the Canadian dollar is declining relative to the US dollar, Canadian cattle prices are increasing, or if the Canadian dollar is trending higher, Canadian cattle prices are decreasing. Assume the US slaughter steer price is unchanged from one month to another, i.e., US $70/cwt. However, the dollar has dropped from $0.74 US to $0.72 US in the same time frame. Following is the effect on the Canadian price:

**Date 1:**

\[\$70 \times 1.3513 = \$94.60 - \$4.50 = \$90.10/cwt\text{ Cdn} \]

\[($0.74 \text{ US})\quad (\text{freight})\]

**Date 2:**

\[\$70 \times 1.3889 = \$97.22 - \$4.50 = \$92.72/cwt\text{ Cdn} \]

\[($0.72 \text{ US})\quad (\text{freight})\]

A two cent decline in the dollar increased cattle prices $2.62/cwt. Roughly speaking, a one cent move in the dollar will affect cattle prices by about $1.00/cwt

**Locking in the dollar**

Often with cash sales (versus forward contracting) the dollar is left ‘open’. The preliminary price for the cattle is determined the day the bid is received, however, the dollar may have changed between the time the bid was established and the final cheque received. Therefore, the final price for the cattle is not known until the cheque is received. The Canadian dollar may have dropped making the cattle worth more, or it may have strengthened thereby reducing the price for the cattle. This is the risk when the dollar is left open.

Sometimes a seller may want to ‘lock in’ or have the dollar guaranteed at a specific rate, especially if it is felt the dollar may move higher before the cattle are paid for. This can be accomplished in a few different ways. In some instances an order buyer or commission person who buys cattle for US packing plants will be able to offer a ‘fixed’ dollar. This person may do sufficient business in US funds, making it easier and
more worthwhile to have large amounts of dollars hedged. This predetermined dollar can then be offered to the seller. Often this is considered a selling feature, as the risk of the dollar going against the seller is eliminated.

A local bank can also be used to fix the dollar. In most cases they will want to know in advance of any intentions to sell into the United States, so that they can take a position on the futures market to cover a seller’s requirements, i.e., a month or two in advance. It may also be necessary to buy specific denominations, i.e., $50,000 amounts, which may be impractical in certain cases. This method also means the seller must use the money he has fixed, meaning that if for some reason the cattle are not marketed into the United States, he still has US dollars to deal with.

The other way to lock in dollars is through hedging the dollar on the futures or options market. The Canadian dollar trades on the Chicago Mercantile Exchange (CME) and in Philadelphia. A commodity broker can buy dollar contracts. Again, the dollar trades in predetermined denominations (per contract) making it difficult to exactly match a dollar amount with a sale value. On the CME, the dollar trades in the months on March, June, September, and December for one year in advance.

Summary

When exporting live cattle to the United States, know the class of cattle being sold and then compare the Canadian and U.S. prices for that class of cattle. Determine the extra costs and delivery time needed to sell into the US market. Sellers should be prepared to lock in a favourable price so that price will exist when the cattle are actually marketed. Always be thorough and complete with the documents and export arrangements. It is wise to find someone with exporting experience to help work through the system the first few times.