

Market and Logistics Research Report for Two Regional Beef Value Chains in BC, Canada



Grass-Fed Beef



Grain Finished Beef



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Table of Contents

A. Market Research Report

1. Introduction
2. Context of the Research
3. Methodology
4. Results
 - 4-1. Segment A1: Upscale Restaurants in the Thompson/Okanagan region - *Okanagan's Finest Angus Beef*
 - 4-2. Segment A2: Upscale Asian Restaurants and Banquet Facilities in the Lower Mainland region - *Okanagan's Finest Angus Beef*
 - 4-3. Segment A3: Upscale Hotels and Restaurants in downtown Vancouver - *Okanagan's Finest Angus Beef*
 - 4-4. *Okanagan's Finest Angus Beef* Logo
 - 4-5. Segment B1: Local Food Service and Tourism Lodges within the Cariboo region - *Healthy Steps Grass-fed Beef*
 - 4-6. Segment B2: Larger Upscale Restaurant Chains within BC - *Healthy Steps Grass-fed Beef*
 - 4-7. Segment B3: Specialty Retail Stores within BC - *Healthy Steps Grass-fed Beef*
 - 4-8. Segment B4: Household Consumers within BC - *Healthy Steps Grass-fed Beef*
5. Conclusion

B. Logistics Research Report

1. Beef Production and Supply Chain Process
2. *Okanagan's Finest Angus Beef*
3. *Healthy Steppes Grass-fed Beef*
4. Major Issues and Recommendations for the Value Chains
5. Distribution Analysis
6. Response to Specific Research Questions

C. References

D. Appendix

I. Logistics Research – Cost Tables

Table 12 -100% Self Distribution using owned 1 Ton Reefer Van – Weekly Delivery

Table 13 - 100% Self Distribution using leased 1 Ton Reefer Van – Weekly Delivery

Table 14 - Clark Haul Plus Self-Delivery from Kelowna and Coquitlam – Weekly Delivery

Table 15 -100% Self Distribution using owned 1 Ton Reefer Van – Biweekly Delivery

Table 16 - 100% Self Distribution using leased 1 Ton Reefer Van – Biweekly Delivery

Table 17 - OFAB: Revenue by Primal and Expense by Value Chain Member

Table 18 - HS: Market Segment B1-B4 Product Costing-Sales and Distribution Contracted Out

Table 19 - HS: Market Segment B1-B3 Product Costing-Sales and Distribution in House

II. Market Research – Market Survey Questionnaires

Market Research Report

Dr. Wei Song & Dr. Eric Lien

1. Introduction and Acknowledgments

The co-applicants and industry sponsors for this research project were the British Columbia Association of Cattle Feeders (BCACF) and the Cariboo Cattlemen's Association (CCA). BCACF was established in 1988 to support the needs of cattle feeders in British Columbia. The main objective of the association is to bring information, technology and education, as well as other services, to the cattle feeders of the province (BCACF report 2011). The Cariboo Cattlemen's Association was established in 1956 to promote, encourage, develop and protect the beef cattle industry in the Cariboo. (Constitution and Bylaws, Cariboo Cattlemen's Association). In addition, this project was made possible through funding from the Investment Agriculture Foundation of BC and Agriculture Canada.

The principal investigators include Dr. Eric Lien, Dr. Wei Song and Dr. Avninder Gill, who worked on this project through the Office of Research, Innovation and Graduate Studies at TRU (RIGS). The research project has two parts - market analysis and logistics research. Dr. Eric Lien and Dr. Wei Song were responsible for the market analysis while Dr. Avninder Gill was responsible for the logistics research. Project Management was provided by Gillian Watt from TRU RIGS. Six students from the School of Business and Economics (SOBE) at TRU were also engaged in this project: Pamela De Lime Ishy, Xiye Chen, Nick Meyers, Robert Tallon, Orest Kuzma and Drew Beesley. Mr. Martin Doree, transportation consultant also contributed research and information for the logistics report. Bill Freding, Dimity Hammon, David Zirnhelt and Dave Fernie provided information and valuable insight into the beef production and processing side and, Stanley Zappa shared initial pilot project findings from the culinary side. Colin James of TRU RIGS completed the editing and final design and layout was provided by Mairi Budreau, Thompson Rivers University Office of Advancement. Dr. Nancy Van Wagoner, Associate Vice President, Research and Graduate Studies extends her thanks to all those who came together to make this project possible.

BC Beef Industry

Over the last few decades, the noticeable decline in beef consumption in developed countries has had a significant effect on the beef industry. Possible factors for the decline include a change of consumer preferences; high prices of beef in comparison to other meats such as pork, turkey and chicken; lack of quality standards; and several beef safety debacles. These have all contributed to the reduction of beef consumption (Menkhaus, Whipple, Field and Moore, 1988; Atance, Bardaji and Garate, 2004). Consequently, the beef industry has been severely challenged, especially in developed markets, including Canada and the USA.

Beef producers in BC are currently in a state of financial distress from several years of commodity prices below the cost of production. The BC ranching industry is composed primarily of family operations with between 150 and 500 head of mother cows. Over the past 50 to 70 years, the industry has moved from growing, finishing and marketing cattle here in BC to selling calves or backgrounded yearlings to feedlots on the prairies, where they are finished, processed and marketed under a commodity-type system of trade.

As the BC Beef industry moved away from finishing and marketing their beef locally to supplying a commodity-driven feedlot system in the prairies, their margins slowly began to erode, with the largest reduction occurring over the past ten years. This margin decline for beef producers is due to a number of production and revenue factors. Globalization of the retail, food service and distribution industries has played a critical role on the revenue side; however, at the same time, there is a growing segment of chefs and consumers who do not want to buy commodity beef and who are willing to pay more for locally produced beef with certain valued attributes. This project is aimed at assessing whether this new perspective on beef

consumption has the potential to provide new opportunities for the beef industry in BC.

The main research questions for this project are:

1. The chefs', store managers', and consumers' attitudes toward the price and the value of various attributes of BC locally produced beef.
2. If high quality local beef were available, would BC chefs and customers pay a premium price?
3. The consumers' preferences for ordering/distribution systems.

To address these questions, seven sub-research questions have been developed to address the following points:

- The value to chefs and to the guests' eating experience of the various attributes of locally produced beef: taste and tenderness, interest in the local story, supporting local producers, reducing the carbon footprint, health aspects, no antibiotics in feed and no growth implants, and dry-aging. This is designated as "Willingness to pay."
- What volumes of the various primal cuts would each chef order weekly through the seasons, and if a software program was available to assist in carcass optimization and identifying the cost per serving, would the chef be interested in purchasing the beef on a carcass basis providing the value could be demonstrated?
- What are the most important considerations for chefs in choosing the source of their beef?
- What ordering/delivery system would be most effective in meeting the needs of the chefs?
- What percentage of gross sales would the distributor require in order to provide an effective service? "Full service sales and distribution vs. simple distribution"
- What pricing would the processor require in

order to provide an effective service. Length of dry-aging is from 14 days to 21 days.

- What is the required price per pound of carcass weight for finished beef for the producer?

Following a brief discussion on seven segments of the BC beef market, the methodology used in the studies is explained. Finally, the detailed findings and related discussion are presented. The management implications and the limitations of the study as well as the direction for possible further study are discussed.

2. Context of the Research

Two regional beef companies: *Okanagan's Finest Angus Beef* (OFAB) and *Healthy Steppes Grass-fed Beef* (HS) partially sponsored our study and are therefore selected as the case studies. These two firms have different market segments and serve different groups of customers, including business owners, chefs, retailers, and final customers, i.e., the consumers who consume beef. Consequently, two sets of interviews were conducted.

The first set of interviews was for the markets served by *Okanagan's Finest Angus Beef*. There are three segments that have been identified:

- 1) Segment A1: This segment includes upscale restaurants in the Thompson/Okanagan region. Eighteen interviews with chefs, owners and managers of these restaurants were conducted.
- 2) Segment A2: This segment covers upscale Asian restaurants and banquet facilities in the Lower Mainland region. Eight interviews with chefs, owners and managers were conducted.
- 3) Segment A3: Comprises the upscale hotels and restaurants in downtown Vancouver. Nineteen interviews with chefs, owners and managers were conducted.

The second set of interviews was for the markets served by *Healthy Steppes*. There are four segments:

- 1) Segment B1: Covers local food service and tourism lodges within the Cariboo region. Twelve interviews with chefs, owners and managers were conducted.
- 2) Segment B2: Includes larger upscale restaurant chains and specialty food restaurants throughout the Thompson/Okanagan and Lower Mainland regions, e.g., Earls, Whitespot, etc. Ten interviews with chefs, owners and managers were conducted.
- 3) Segment B3: Comprises Specialty Retail Stores within BC e.g. Natures Fare, etc. Ten interviews with owners and managers were conducted.
- 4) Segment B4: This segment is for Consumer Households in order to identify the possibility of Shipping Direct within BC. One hundred and twenty nine interviews with individual customers were conducted.

Questionnaires with similar questions were distributed to survey participants from both A and B segments. The focus of the questions was on quality standard, premium pricing strategy and preferred delivery system. The purpose is to explore the opportunity for decreasing the channel cost in anticipation of increasing the profit margins for BC beef producers.

3. Methodology

This is a qualitative study with some quantitative components. The project manager, Gillian Watt, coordinated the connections between the investigators and clients; developed the interview guide; provided the interviewee name lists and arranged the specific onsite interview meetings. The main objective of this study is to determine market and logistics feasibility for the development of two regional beef value chains in BC, producing beef under a grain finishing system in the South Okanagan and a forage finishing system in the Cariboo.

The research method for the qualitative study is semi-structured interviews with a group of 77 beef sector experts and a group of 129 individual customers. The aim of this type of interview is to gain the perspectives of the interviewees so that the investigated topics can be further explored (Daymon & Holloway, 2004). Selection of the 77 interviewees was based on recommendations made by OFAB, HS and Gillian Watt, as well as the availability of these individuals. The interviewees were restaurants/hotel/retail store owners, managers and chefs. Some of these individuals hold both manager and chef positions. The 129 customer interviewees were randomly approached and interviewed in supermarkets in the Lower Mainland of BC.

Six students from TRU were selected to assist in the study. Two of them are senior undergraduate students while the other four are MBA students. Selection criteria were primarily based on academic performance as reflected by their GPAs, past experience related to the beef industry or relevant experience in this field, and excellent communication skills. Two formal training sessions were held: one for the qualitative method and the second for the quantitative method. For the former, the investigators stressed data reduction by taking a content analysis approach using thematic techniques. For the latter, data editing and data coding were instructed via PASW. Both training sessions ran successfully, which enabled the later data collection and data analysis procedures to be completed smoothly.

The initial questionnaire was designed and developed by the three faculty members based on the guidelines provided by the project manager. The final version, which is given in the Appendix, was modified in order to best elicit the ideas, opinions, and perspectives of the interviewees. The questionnaire serves as the interview guide for both A and B segments. Four main criteria were followed:

Credibility - address the aspect of truth, rather than the fact

Fittingness - concerned with the context of the subjects investigated

Audit-ability - stressing consistency of the findings

Confirm-ability - concerned with the minimum level of basic findings (Sin, 2010).

Although a common criticism of qualitative research is its tendency toward bias in terms of a lack of detachment, it is arguable as to whether attachment always generates bias. Of course, keeping “intimacy” from a researcher could increase the level of objectivity, while the beauty of qualitative research is to emphasize “value-laden” rather than “value free” results (Denzin and Lincoln, 1998).

Both the experts’ and individual customers’ opinions are important for this project, but customers’ preferences are the key to a successful marketing strategy. The data were systematically entered, analyzed, and the statistical values, such as mean and medium, were reported.

The summaries for each of these seven segments, as well as the survey of *Okanagan’s Finest Angus Beef* logo, were generated by the students and compiled by both Dr. Eric Lien and Dr. Wei Song for the final submission. The results of the report were also used as the basis for the further investigation in the field of logistics performed by Dr. Avninder Gill. Both off-site and on-site note-taking methods were used, as some interviewees were uncomfortable with note-taking during the actual interview. Verbatim note-taking was sometimes discouraged, particularly for the interviews with senior managers. Interviews with managers, chefs and owners were conducted in their offices and local restaurants, as well as in their stores.

Data analysis was performed, including three phases in employing thematic analysis (Boyatzis, 1998). First, the themes were developed from the raw data of the interviewees by taking an inductive approach, categorizing the codes by

comparison to prior research findings. Second, new categories of codes were created, which were not matched with the existing themes. Third, the internal validity and external validity of coding was examined. The former was achieved by the member-checking process carried out at the end of each interview. The latter was completed by inviting two experienced researchers to review the results to ensure the transferability of the coding. It should be noted that anonymity was required by all the interviewees, which made it difficult to use direct quotes in this study.

4. Results

4-1. Segment A1: Upscale Restaurants in the Thompson/Okanagan Region - *Okanagan's Finest Angus Beef*

Part I: Main Questions

Q 1 What is the value of the various attributes of locally produced beef to you and the guests' eating experience?

Every respondent believed that all of the listed attributes held some level of importance and ranked them accordingly. The majority of respondents rank quality (i.e., taste, juiciness, and consistent tenderness) as their number one concern. The respondents can be categorized under the following three groups:

QUALITY These respondents (14 out of 18, 77.77%) number one concern is quality related issues. See the following statement:

"A customer could eat 100 great steaks but if they are served just one that isn't up to standard they will never come back or tell their friends about it. Consistency of cut is very important. Every steak needed to be the same size and have a great taste."

Interviewee 1

The respondents from the larger upscale and resort restaurants said that the main reason people returned to their establishment was because they offered fine steaks with great taste and enriched juiciness (being the main selling menu option). The other reason for their customers returning was consistency of tenderness. Nevertheless, customers will come back again if they know they can obtain the same quality with the same size just like their previous enjoyable eating experience.

In addition, some quality conscious chefs did appreciate a minimum of 21–28 day dry-aging process.

However, some smaller restaurants indicated that they would prefer to buy dry-aged beef without a 21–28 day aging requirement if the value could be shown in quality.

A small group of respondents indicated that they would prefer to have actual 28 day dry-aged steaks and they also looked for good white (not yellow) marbling.

HEALTH AND LOCAL ECONOMY SUPPORT All respondents valued the importance of a hormone-free, no antibiotic system and said that they sometimes advertised this on their menu as many of their customers were beginning to become focused on health. These respondents tended to be smaller upscale specialty restaurants that had a keen focus on local fare. However, some chefs that worked in upscale restaurants that were situated on wine-tasting/vineyard resorts also valued this in their business philosophy. They said,

"This added an extra sense of value to our customers as well as creating an exclusive feel and local theme to the restaurant."

Interviewee 2

One respondent specifically mentioned:

"That pregnant woman eat more beef than average because they need to cut out fish for health reasons. They especially would appreciate seeing hormone-free beef on a menu."

Interviewee 3

A few respondents complained that they would love to support BC beef but they had tried in the past and ran into the situation of inconsistency of cut, taste, and supply. In other words, they would love to buy local beef if the quality and supply is ensured.

Some respondents felt the locally produced high-end BC beef is preferred. They liked the idea of going to meet the producer and bringing their trainees to see the processing. They liked the idea that the manure was used on Okanagan vineyards;

COST CONSCIOUS Many of the smaller local restaurants fell into this category. Not one large hotel chain considered cost number one. Those who did not consider cost the most important aspect felt that they could price any premium product into their menus. These interviewees frequently complained of the poor economy, economic uncertainty like a possible minimum wage hike, and competitors. All of these outside factors made them feel wary about experimenting with a higher-end and higher cost product. They felt that the product coming from Alberta was already so good and consistent that it would take a lot to get them to switch. *“Helping your neighbour and local economy only goes so far when you have to feed your kids,”* one owner said.

Q 2 If *Okanagan’s Finest Angus Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

This question had a varied response. Most chefs (11 out of 18, 61.11%) felt a 5–10% premium could be worked into their existing menu. However, some chefs felt that, if they really could taste a higher quality difference on sampling the product, they would then consider paying an increased premium of 10–15%.

The major concern for smaller restaurant chefs was that they felt that by introducing a higher-end product to their menu their customers would ultimately be faced with higher menu prices that might drive business away. These respondents belonged to the cost conscious group that was focused on attracting customers by keeping prices low.

Larger upscale restaurants did not mention this detail as a concern.

One respondent said that most customers cannot really taste a difference in quality and it is only the true connoisseurs that can, so it does not really make sense to introduce a higher costing product to the restaurant’s menu.

Q 3 Based on the pricing matrix, what volumes (Unit:kg) of the various primal cuts would you order weekly through the seasons?

1) High Season: What constitutes ‘High Season’ varied widely between respondents based on location, but it is generally accepted that summer is high season.

In Kamloops, during the summer, the Rocky Mountain Rail Tour is a major driver of business.

In Vernon, spring break was especially slow because all of the white-collar steak-house customers can afford and do leave town for this period.

However, some interviewees have indicated that late November and December would also be a high season for some businesses that seem to pick up because of corporate staff parties, the Christmas holiday, and upcoming New Year parties.

The weekly order volumes (Unit:Kg) of the various primal cuts during the high season are shown in Table 1.

Table 1. Weekly Order Volumes (Unit:kg) of the Various Primal Cuts during the High Season

Flat Iron	Strip Loin	Top Sirloin	Flank Steak	Brisket	Skirt Steak
750	150	15	0	0	0
0	60	23	0	0	0
6.50	6.50	4.50	6.50	0	0
0	50	50	0	0	0
0	100	0	0	0	0
0	65	65	0	0	0
0	27	56	0	0	27
0	0	45	0	0	0
0	20	0	0	0	0
9.50	0	0	0	2.70	0
0	5.40	7.25	0	0	0
25	250	0	0	0	0
0	50	0	0	0	0
0	0	5.40	0	0	0
0	35	70	0	0	0
5	10	0	0	0	0
0	20	0	0	0	0
10	40	60	0	40	0

Note: 18 respondents

2) Low Season: Winter months are generally considered as the low season amongst most restaurant respondents. For example, in Kelowna, West Bank, Summerland and Penticton, tourism especially dropped in the wintertime for smaller in-town restaurants while the resort restaurants experienced an increase in business. The weekly order volumes (unit:kg) of the various primal cuts during the low season are shown in Table 2.

Table 2. Weekly Order Volumes (Unit:kg) of the Various Primal Cuts during the Low Season

Flat Iron	Strip Loin	Top Sirloin	Flank Steak	Brisket	Skirt Steak
20	25	15	0	0	0
0	30	11	0	0	0
3.50	2	2.50	4.50	0	0
0	10	10	0	0	0
0	80	0	0	0	0
0	36	36	0	0	0
0	13.50	28	0	0	13.50
0	0	25	0	0	0
0	1.50	0	0	0	0
7	0	0	0	1.30	0
0	1.35	1.80	0	0	0
10	150	0	0	0	0
0	15	0	0	0	0
0	0	2.70	0	0	0
0	20	35	0	0	0
1.50	3	0	0	0	0
0	20	0	0	0	0
05	20	30	0	20	0

Note: 18 respondents

Based on Tables 1 and 2, there is a stronger demand for Strip Loin and Top Sirloin, compared to cuts like Flat Iron, Flank Steak, Brisket, and Skirt Steak.

Q 4 Are there any other cuts that you would be interested in?

The results varied among respondents as this question identified cuts that different restaurants offered according to their unique menus.

Some wanted to periodically feature exotic cuts like tongue or cheek.

Ground beef was another popular cut that had some demand in the smaller specialty restaurants that offered Italian cuisine options; some restaurants used this for meatballs or in tomato sauces in pasta dishes.

The more experimental and rare cuts tended to be demanded by the smaller proprietors.

The majority of the larger/resort restaurants wanted to stick to the basics.

However, the majority of respondents said they were interested in rib eye and tenderloin cuts as their menus changed according to the different seasons.

Q 5 If a software program and the brand manager are available to assist in carcass optimization and identifying cost per serving, would you be interested in purchasing beef on a carcass-basis providing its value could be demonstrated?

Most respondents (12 out of 18, 66.67%) have seen the value of this approach and expressed their interest in the software program. They stressed that it would have to be user friendly, and simple. However, the cost savings as a result of the use of a program was not the main reason they were interested in the software. Nearly all respondents liked the concept because of the training and experience it would offer to their young apprentices. They saw it more as an educational tool, to help apprentices connect with the product. The cost savings were a secondary consideration for most. Some chefs went as far as ordering in an entire carcass periodically to teach their apprentices how to cut and appreciate the product. This response was consistent in both large chains and popular yet smaller restaurants.

A minority of respondents (6 out of 18, 33.33%) did not see value in this because they had either previously had a bad experience with a similar program or they just did not order enough beef to warrant the entire animal. Some chefs only used one or two primal cuts.

Q 6 What are the most important considerations for you in choosing the source of beef?

The responses to this question varied widely but basically were in accord with the views of the three different category groups (i.e., quality, health and local economy support and cost) mentioned in question 1, (i.e., what is the value of the various attributes of locally produced beef to you and the guests' eating experience).

The quality-concerned group felt that the most important consideration for them in choosing the source of beef was quality, size, taste, and tenderness of the product.

The health conscious and the supporters of the local economy group were concerned with the treatment and the natural raising process of the cattle, minimizing food miles, and reducing the carbon footprint and waste.

The cost conscious group respondents were obviously concerned with minimizing costs but also with obtaining a consistent supply to meet demand and finding a trustworthy supplier.

Q 7 What ordering/delivery system would be most effective in meeting your needs?

Most respondents (16 out of 18, 88.88%) like the idea of having sales/delivery by the producer if they could find someone trustworthy and establish a relationship with someone who is consistent, price flexible, and guarantees on-time delivery with freshness in mind.

The larger upscale and resort restaurants were concerned with liability issues if the delivery system was not defensible and safe. They also would require this person to be licensed. However both small and larger restaurant groups liked the idea of “cutting out the middle man.”

Regarding the lead-time and order method, generally chefs would allow 1–2 days lead-time.

Order Method: Once trust is established, many chefs would appreciate online ordering. Some would order online or by phone, either way. Generally, it was more often the younger chefs that embraced online ordering.

Two respondents who believed it would be more effective in working with their current distributor (e.g Sysco Kelowna) said that it was because their business relationships were already established. They felt comfortable with the customer services already provided and ordering methods through the distributor’s sales reps. They were mainly concerned with finding a single distributor who could provide all the meat products to meet the needs of their restaurants without having to call multiple places for different product needs.

Part II: Demographics Data

1. The average time for the interviews: 24 minutes
2. The average years of experience in this field: 19 years
3. Position:
 - Owner: 5
 - General Manager: 1
 - Chef: 12

4-2. Segment A2: Upscale Asian Restaurants and Banquet Facilities in the Lower Mainland Region *- Okanagan’s Finest Angus Beef*

Part I: Main Questions

Q 1 What is the value of the various attributes of locally produced beef to you and the guests’ eating experience?

Most of the respondents answered that, since everything was important when considering their purchase, it was hard to even rank the attributes. Some of the attributes not listed in the survey that were important to some of the respondent were: marbling of the meat, and the various periods of dry aging since it affects the taste of the meat. One respondent even did the dry aging process by himself. One chef said that he would not consider buying any beef that has been fed corn and he was very against it.

One consistent comment by the majority of the respondents is that they would like to consider all the attributes and use local meat but the reality is that not all customers are willing to pay a premium price for it. Therefore, sometimes chefs (specifically in a Japanese restaurant) are forced to use meat with growth implants because it can, and does, reduce the cost.

Q 2 If *Okanagan’s Finest Angus Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

The percentage premium that restaurants are willing to pay varied significantly. Two respondents (2 out of 8, 25%) who are extremely price-driven and focus on cutting cost would pay 0% premium for the product even if *Okanagan’s Finest Angus Beef* offered all the quality and attributes that they are looking for.

On the other hand, most respondents (6 out of 8, 75%) are willing to pay a percentage premium of between 5% and 40% if their expectations were met, because they believe they can add more value to their service by using a good quality product.

Q 3 Based on the pricing matrix, what volumes (unit:kg) of the various primal cuts would you order weekly through the seasons?

One respondent has a big order of chuck because of their in-house-made burger patties. The same respondent does not order too many short ribs in the summer, even if it is their high season, because their customers find short ribs too heavy.

Some of the reasoning for low/high seasons depended on the location of the restaurant. In one case, winter season was considered as a high season in comparison to summer season (Japanese restaurant). Tables 3 and 4 show the weekly order volumes (Unit:Kg) of the various primal cuts during the high and low seasons.

Table 3. Weekly Order Volumes (Unit:kg) of the Various Primal Cuts during the High Season

Chuck	Prime Rib	Short Rib	Tenderloin	Outside Round	Eye of Round	Inside Top Round
0	5	10	8	0	5	5
60	80	20	0	0	40	0
0	0	36.29	36.29	0	0	0
0	0	0	100	200	150	0
0	10	0	12.50	0	0	0
0	0	0	0	0	0	0
0	0	45	0	0	0	0
0	0	0	40	0	0	0

Note: 8 respondents

Table 4. Weekly Order Volumes (Unit:kg) of the Various Primal Cuts during the Low Season

Chuck	Prime Rib	Short Rib	Tenderloin	Outside Round	Eye of Round	Inside Top Round
0	0	5	5	0	0	0
40	80	10	0	0	40	0
0	0	18.14	18.14	0	0	0
0	0	0	50	100	75	0
13.50	6	0	6.50	0	0	0
0	0	0	0	0	0	0
0	0	45	0	0	0	0
0	0	0	0	0	0	0

Note: 8 respondents

Based on Tables 3 and 4, there is a stronger demand for Prime Rib, Short Rib, Tenderloin, and Eye of Round compared with cuts like Chuck, Outside Round, and Inside Top Round.-

Q 4 Are there any other cuts that you would be interested in?

Responses to this question were varied. One chef indicated he would order more, even of all cuts of the animal, if the market consisted of Japanese customers, due to the fact that they eat all parts of the animal. However, the market demographic tends to be more towards Canadians (Japanese restaurant in Canada) so it is unwise for them to order other cuts.

Another chef was very interested in being able to order cheeks from the cow and he was willing to order them in large quantities since he hasn't been able to find a supplier that would meet his needs in terms of that specific cut.

One manager said that the beef they ordered had to be fat because they use it to roll vegetables and that is one dish on their menu.

The preference for cuts including cheeks and fat largely depends on the individual chef's opinions and his/her special needs.

Q 5 If a software program and the brand manager are available to assist in carcass optimization and identifying cost per serving, would you be interested in purchasing the beef on a carcass basis providing the value could be demonstrated?

As far as this question was concerned, their answer of “yes” or “no” depends on the nature of their restaurants. Generally, the smaller restaurants (4 out of 8, 50%) with the flexibility to change and modify their product offering would be interested in the carcass optimization program. One chef already used a whole animal for its business and another was interested to know the costs involved if he actually decided to use the service and, if it were free, he would like to use it.

However, 50% of the respondents did not show an interest in the software program. One manager said that because his restaurant was based on all-you-can-eat style and only uses specific parts of the beef animal, he said he was not interested in such services.

Q 6 What are the most important considerations for you in choosing the source of beef?

The answers were general.

They all want products that offer good price, quality, and consistency in reliability.

One respondent said that the cleanliness of the place where they keep the product was the most important factor when choosing their source of beef.

Also, there was a trend where respondents tended to choose their source of beef depending on the health of the animal, whether it is grass fed or not, and if it is raised in a free range. One of the respondents even goes to Pemberton to see how the animal is being raised, and what it is fed with.

One respondent pointed out that the relationship with the supplier is very critical. They have to have the ability to handle complaints and deal with them, and as well they don't want distributors who fail to meet their expectations or who commit the same mistakes again.

One chef said that he would never buy anything if it were previously frozen. Therefore, they only purchase fresh beef.

One respondent said that their products come from the Fraser Valley, Chilliwack and Pemberton because they base their products on local proximity. In other words, local beef is preferred by this group of chefs.

Q 7 What ordering/delivery system would be most effective in meeting your needs?

The majority of the respondents (7 out of 8, 87.5%) prefer to have sales and service delivered by existing distributors (e.g. Two Rivers Meats, Maple Leaf, Intercity Packers) because they know the restaurants' needs and provide consistency in quality and availability of the products. The implication is that if the producers could meet the restaurants' requirement with quality assured, then the middleman may be eliminated.

An important aspect in choosing suppliers for one respondent is to have good communication with them.

Another chef identified the importance of everyday delivery. The primary investigators suggest that the producer build a close relationship with the individual restaurant and develop a customized delivery system with the restaurant.

One chef uses Two Rivers Meats because his father in-law owns part of the company. This implies that networking is important.

One manager expects that he can order beef at night and receive it the next morning. Therefore, the time frame could also be a crucial issue.

Part II: Demographics Data

1. The average time for the interviews: 13 minutes
2. The average years of experience in this field: 17 years
3. Position:
 - Owner: 1
 - General Manager: 2
 - Chef: 5

4-3. Segment A3: Upscale Hotels and Restaurants in downtown Vancouver - *Okanagan's Finest Angus Beef*

Part I: Main Questions

Q 1 What is the value of the various attributes of locally produced beef to you and the guests' eating experience?

The majority of responses (18 out of 19, 94.74%) had a common theme for this question. Quality (taste, juiciness, and consistent tenderness) is the most important. Respondents felt that those three attributes were paramount over any other considerations when choosing a locally produced beef for their restaurant or hotel. A significant number of the respondents (8 out of 19, 42.1%) also felt that the dry-aging process beef undergoes also contributes heavily to the overall quality of the beef.

A theme we noticed throughout our interviews was the ambiguity and lack of knowledge regarding dry-aging vs. wet-aging. Many of the respondents felt dry-aging was important but weren't completely certain what the process actually involved.

After the previously mentioned attributes, price and overall consistency in the beef were also stressed heavily by several of the respondents.

Supporting the local economy, health aspects, environmental sustainability, and reducing food miles are all important considerations for the respondents, but in most cases they are secondary to taste, juiciness, and consistent tenderness.

Q 2 If *Okanagan's Finest Angus Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Most respondents (9 out of 19, 47.37%) felt that a premium in the range of 5–20% would be appropriate granted the product could provide all of the characteristics they outlined in the first question.

Three respondents (3 out of 19, 15.79%) said they would definitely be open to price negotiations but could not give an estimate of the premium they would be willing to pay without having tried the product first.

The remaining seven respondents (36.84%) felt that the price they were currently paying for their beef was the most that they could afford.

One respondent was noted as saying that their customers like the idea of locally produced beef but are not willing to pay more for it. The respondent continued on to emphasize that if the additional product cost cannot

be passed on at least in part to the customer, the business will not pay more for the product.

The feedback shows that the opportunity of charging a premium exists. The key issue for charging a higher price is to convince customers that the beef provided is high quality.

Q 3 Based on the pricing matrix, what volumes (unit:kg) of the various primal cuts would you order weekly through the seasons?

This question had three major themes in the responses from the chefs working at Western style restaurants and hotels in downtown Vancouver.

The first category was four respondents (21.05%) that had high levels of demand for some primal cuts (e.g., chuck, short rib and tenderloin) year round. Within this group, there are three upscale restaurants and one high-end hotel.

The second category was four respondents (21.05%) that were busy primarily through the winter months when beef and heavier proteins are more popular. This is because tourists prefer to have seafood rather than beef dishes during the summer time.

The third category covers the majority of the respondents (11 out of 19, 57.89%). They indicated that they had higher demand over the summer months and at Christmas time. For these respondents tourism was the major driver for their high and low seasons. The target market for these restaurants and hotels is toward the tourists.

Based on the investigation, we have found that one of the important criteria to gauge quality is the location where the beef is produced. The chefs prefer Alberta beef and have the perception that local beef is less favourable. This particular perception creates a major challenge for local beef producers. Tables 5 and 6 show the weekly order volumes (Unit:Kg) of the various primal cuts during the high and low seasons.

Table 5. Weekly Order Volumes (Unit:kg) of the Various Primal Cuts during the High Season

Chuck	Prime Rib	Short Rib	Tenderloin	Outside Round	Eye of Round	Inside Top Round
7.50	0	0	27	0	0	0
0	0	10	15	0	0	0
Newly opened in Jan	Newly Opened in Jan	Newly opened in Jan	Newly opened in Jan	Newly opened in Jan	Newly opened in Jan	Newly opened in Jan
11.35**	0	0	0	0	0	0
0	0	20	15	0	0	0
0	21*	0	0	0	0	0
0	0	158.90**	227**	0	0	0
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
4.54	6.81	54.48	11.35	0	0	0
0	200*	0	270*	0	0	0
6.81	0	.91	0	0	2.27	0
N/A	N/A	N/A	N/A	N/A	N/A	N/A
0	200*	10*	60*	0	0	0
0	20	0	0	0	6	10
127.68*	7.45*	11.35*	113.50*	0	0	0
0	350	20	50	20	0	0
100	250	390	225	0	0	0
0	0	75	175	0	0	0

Note: (1) 19 respondents (2) The third respondent mentioned that the restaurant had just opened in Jan (low season), and he doesn't know about the weekly order volume in the high season (3) *: the high season is in winter (4) **: the high season is year round (5) N/A: Due to commercial secrecy, the chefs refused to tell interviewers their weekly order volumes

Table 6. Weekly Order Volumes (Unit:kg) of the Various Primal Cuts during the Low Season

Chuck	Prime Rib	Short Rib	Tenderloin	Outside Round	Eye of Round	Inside Top Round
3.75	0	0	13.5	0	0	0
0	0	7	10	0	0	0
0	0	30	0	0	0	0
11.35**	0	0	0	0	0	0
0	0	10	7.5	0	0	0
0	0 14*	0	0	0	0	0
0	0	158.90**	227**	0	0	0
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
0	0	0	0	0	0	0
0	150*	0	190*	0	0	0
0	0	0	0	0	0	0
N/A	N/A	N/A	N/A	N/A	N/A	N/A
0	100*	5*	30*	0	0	0
0	20	0	0	0	6	10
0	8.51*	5.68*	11.35*	0	0	0
0	150	0	0	0	0	0
60	0	120	200	0	0	0
0	0	25	50	0	0	0

Note: (1) 19 respondents (3) * the high season is in winter (4) ** the high season is year round (5) N/A: Due to commercial secrecy, the chefs refused to tell interviewers their weekly order volumes

Q 4 Are there any other cuts that you would be interested in?

Respondents had an extremely wide range of different cuts and parts of the animal that they used or were interested in using. Some respondents were interested in more exotic cuts (such as cheeks, tongue and neck) to feature as specials on their menus and others just commonly used certain types of steaks and cuts in their everyday operations. For more detailed information, please refer to Appendix.

Q 5 If a software program and the brand manager are available to assist in carcass optimization and identifying cost per serving, would you be interested in purchasing the beef on a carcass basis providing the value could be demonstrated?

Interest in the software program and purchasing beef on a per carcass basis was split right down the middle with 9 respondents answering yes to the question and 10 answering no. The two main reasons for the positive response was their interest in using the entire animal and the potential opportunity for cost savings.

Some of the issues identified with the negative response were limited storage space, lack of demand for all parts of the carcass, and the physical process involved with breaking down the animal by themselves. A number of the respondents that answered negatively did see the potential value in the service but ultimately felt it wasn't right for their establishment.

Q 6 What are the most important considerations for you in choosing the source of beef?

Most of the responses are a mirror to those in Q 1. Respondents main considerations were consistency in the quality of the meat, consistent level of supply, and the cost vs. quality relationship. Some of the other less common considerations included what the animals are being fed or finished on, sustainability of the production process, and whether or not the product is locally produced.

Q 7 What ordering/delivery system would be most effective in meeting your needs?

Eight respondents (42.11%) showed a very strong interest in dealing directly with *Okanagan's Finest Angus Beef* (OFAB). Three respondents (15.78%) show open attitudes to both existing distributor and producer as long as the delivery quality is good. Eight respondents (42.11%) identified that they would be happier to deal with an existing distributor (e.g., Metropolitan Meats, Centennial, Inner City Meats, etc.). The main reason for chefs to use existing distributors is that the chefs have built a long-term relationship with them and these distributors provide good and professional services (e.g., on time delivery and fresh beef as well as consistency of availability). Again, the underlying theme in almost all the responses to this question was product availability. Respondents could not stress enough how important it was to their establishment that product was available when they needed it and delivered in a consistent and punctual manner. However, an opportunity still exists as some of the respondents indicated that they would not mind to switch distributors if a cost saving advantage can be achieved as, it is assumed that the shortened channel should be able to lower the overall cost for distribution.

Part II: Demographics Data

1. The average time for the interviews: 18 minutes
2. The average years of experience in this field: 17 years
3. Position:
Chef: 19

4-4. *Okanagan's Finest Angus Beef* (OFAB) Logo

The response from individual customers to the design of the logo is as follows:

Orange: Customers liked that the entire cow was shown, as a healthy and complete animal. It made them feel more connected with the food, and less like they were buying a commodity. They generally found the orange colours bright and eye catching.

One constructive criticism was to remove the bottom portion of the cow to make it less anatomically correct. Most customers didn't know if the protrusion on the cow's underside was a penis, a teat, or something else. Some customers found this to be unappetizing but they were in the minority.

Sun/Red: The majority of respondents found this logo to be too geometric, too dark, and amateurish. One customer commented, "My kid could have made that on the computer in five minutes, it doesn't look professional"

Gray/Dish: A few respondents liked this and felt it gave them feelings of elegance, of eating at a top end restaurant. However, the majority of respondents felt it was dark, lacking something eye catching, and they didn't like that it only contained the cow's head.

Therefore, it is concluded that customers overwhelmingly chose the Orange *Okanagan's Finest Angus Beef* logo over the other two.

4-5. Segment B1: Local Food Service and Tourism Lodges within the Cariboo Region - *Healthy Steppes Grass-fed Beef*

Part I: Main Questions

Q 1 What are the most important considerations for you in choosing the source of beef

The most common response was concern for availability and supply. Restaurant owners and managers wanted to know that the product they were going to receive would be there on time and that there wouldn't be any problems receiving what they had ordered. Respondents also commonly remarked on how important it was for them to be purchasing a local product, and one that offered a competitive mix between price and quality. They seemed willing to pay for the quality that they wanted to receive.

However, one respondent mentioned a concern for purchasing grass-fed beef as it had a "gamey" taste to it.

Q 2 What is the value of the various attributes of locally produced beef to you and the guests eating experience?

There are three main concerns from this sector:

QUALITY These respondents' number one concern was quality related issues. These respondents, 4 out of 12 (33.33%) from the local food service and tourism lodges (within the Cariboo region) said that the main reason that people returned to their establishment was because of the beef's great taste, enriched juiciness and consistent tenderness.

HEALTH The second group of respondents (4 out of 12, 33.33%) valued hormone-free, no antibiotic systems, no growth implants, leaner beef and high Omega 3/6 ratios as their customers were beginning to become focused on health.

LOCAL ECONOMY SUPPORT The third group of respondents (4 out of 12, 33.33%) indicated that supporting the local economy would be the main reason for them to purchase local beef as it could enhance the firm's image by assuming social responsibility.

A common sentiment among the majority of the respondents was that they were unwilling to give up on taste, juiciness or tenderness in order to support a locally produced beef company. They believed that although the customers might say they wanted to buy local the customers wouldn't be willing to pay premium for a product that was not of the same calibre as a non-local product.

Q 3 If *Healthy Steppes Grass-fed Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

About 66% of respondents felt that a premium was acceptable for locally produced, grass-fed beef. These respondents proposed a premium range from 5% to 20%. Two respondents explained that the premium they were willing to pay was tied to the quality of the beef and the more that they perceived it was a high quality product, the more they would have been willing to pay for it. The implication is that chefs are willing to pay a premium price if the perceived quality is high but they felt it was hard to measure how much more they were willing to pay for the product without trying it. The remaining four respondents stated that they would not pay a premium price for locally produced grass-fed beef.

Q 4 Based on the pricing matrix, what volumes (Unit:kg) of the various primal cuts would you order per month through the seasons?

Six respondents out of twelve stated that May to September and Christmas are the high season months. Four respondents indicated that the high season is all year round. One respondent stated that May, June, September and October would be the high season for his business. Another one indicated that all seasons except for summer would be the high season for this operation. Tables 7 and 8 show the monthly order volumes (Unit:kg) of the various primal cuts during the high and low season.

Table 7. Monthly Order Volumes (Unit:kg) of the Various Primal Cuts during the High Season

Lean Ground	Hamburger Patties	Tenderloin	Rouladen	Breakfast Sausages	Blueberry Maple Sausage	Garlic/Pepperoni	Smokies	Jerky 80 g pkg
25	100	0	0	25	0	0	0	0
18.16	0	0	0	18.16	0	0	0	0
145.28	0	0	0	70.00	0	0	0	0
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
90.80	0	0	0	0	0	0	0	0
9.08	90.80	0	0	0	0	0	0	0
72.64	0	18.16	9.08	36.32	0	0	0	0
425.63	0	15.32	0	18.16	0	0	0	0
30	0	50	0	0	0	0	0	0
0	51.08	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
10	20	0	0	0	0	0	0	0

Note: (1) 12 respondents (2) N/A: The owner just purchased the restaurant

Table 8. Monthly Order Volumes (Unit:kg) of the Various Primal Cuts during the Low Season

Lean Ground	Hamburger Patties	Tenderloin	Rouladen	Breakfast Sausages	Blueberry Maple Sausage	Garlic/Pepperoni	Smokies	Jerky 80 g pkg
25	100	0	0	25	0	0	0	0
9.08	0	0	0	9.08	0	0	0	0
72.64	0	0	0	35	0	0	0	0
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0	0	0	0	0	0	0	0	0
1.70	8.51	0	0	0	0	0	0	0
18.16	0	9.08	9.08	9.08	0	0	0	0
198.38	0	47.94	0	36.32	0	0	0	0
15	0	25	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
5.50	11	0	0	0	0	0	0	0

Note: (1) 12 respondents (2) N/A: The owner just purchased the restaurant

Q 5 Are there any other cuts that you would be interested in?

Respondents did not seem to want many items on the list provided. Many of them who mentioned that they purchased ground beef said that at least a portion of that beef was going towards making their own hamburger patties, instead of buying prepared patties. They believed that they had better control over quality of the product as well as the ingredients that were going into it. Many of the restaurants also seemed to be using parts not offered in the list, mainly steaks (NY steak and Sirloin steak). However, based on the survey, the following five types of cuts are prevalent in their restaurants. These are: NY steak, prime rib, sirloin steak, NY strip and T-bones.

Q 6 What type of ordering and distribution system would be most effective in meeting your needs (Online ordering, product held for pick up at a depot in Williams Lake or 100 Mile or full service sales through an existing distributor)?

The majority of the respondents (83.33%; 10 out of 12) prefer to use phone/fax ordering compared with online ordering (16.67%, 2 out of 12). Regarding the distribution system, some respondents (41.67%, 5 out of 12) would like the product shipped via a local trucking company (e.g., Grocery People, Centennial Meats). Three respondents preferred the product to be held for pick up at a depot in Williams Lake or 100 Mile. The remaining three respondents would like to have the products delivered directly from *Healthy Steppes*.

Part II: Demographics Data

1. The average time for the interviews: 15 minutes
2. The average years of experience in this field: 22 years
3. Position:
 - Owner: 5
 - Manager: 4
 - Chef: 3

4-6. Segment B2: Larger Upscale Restaurant Chains within BC - *Healthy Steps Grass-fed Beef*

Part I: Main Questions

Q 1 What are the most important considerations for you in choosing the source of beef?

Generally there were only qualitative responses. Most respondents felt that quality was their number one concern including the attributes of taste and texture as well as marbling. Price was the next main obvious concern.

Q 2 What is the value of the various attributes of locally produced beef to you and the guests' eating experience?

COST CONSCIOUS These respondents' primary concern was cost. They believed it would also be nice to support Canadian beef. Some of these respondents generally didn't care from where in Canada their beef came from, they just cared that it was Canadian. However, some of these respondents stated that it is a bonus to buy from BC if the quality can be demonstrated.

One respondent commented that the kinds of products (ground beef, hamburger patties, sausage and cold cuts), which are being offered, are not high margin or quality (premium) foods. They are everyday foods and he felt his customers would have a difficult time discerning what grass-fed beef tasted like. He felt his spices and sauces, which he used, would overpower any taste difference and make paying a premium irrelevant.

Another comment we heard was "*I'm just a small operation, with my orders I can't make a significant impact on the environment. What can one small restaurant do? Why should the little guy pay big premiums for an environmental/healthy product? We already have to compete against the scale of the big chains and pay a much higher food cost because we aren't ordering the massive quantities that the big guys are.*" The implication is that the real target customer for higher priced beef products in this category should be large chains which have the scale to absorb the cost.

Some respondents in this category also cited government regulation and the economic environment as reasons they would not be very willing to experiment with more expensive products. The pubs tended to all cite: new more restrictive drunk driving laws, a possible change in minimum wages, and the economic recession as contributing factors which were squeezing their bottom line, they were not interested in absorbing additional cost through grass-fed beef.

In addition, one chef at a pub responded that personally he would love to have local products on his menu but because of his pub's tight financial standing the pub owner was currently looking at ways to reduce prices by any means necessary so that they could remain competitive with the high concentration of pubs in the Kamloops area. He mentioned that if money were not a concern, he would be willing to pay a 1–2% higher premium, as pub-goers are not too concerned with a higher quality burger; rather, a nice juicy burger that is filling and tastes good with a glass of beer.

It was interesting to note, that the owner/manager of one of the larger chain restaurants interviewed, was not so much concerned with the quality of his products but rather the cost to remain competitive in the restaurant chain market because brand loyalty was already established and his particular restaurant is very popular in BC.

QUALITY (CONSISTENT TENDERNESS, TASTE AND TEXTURE) Grass-fed beef was not a main issue of concern but they were more so interested or focused on the leanness of the beef: *“A burger must not be too lean, but lean enough to be juicy and tasty when drinking beer”* as one pub owner mentioned.

They also felt that customers were more engaged lately in a social trend to purchase more and more food products from locally produced food sources. They felt that with offering a higher tasting quality product on their menu, and by taking people's perceptions of locally produced food they would be successful in selling a new grass-fed product labelled as BC locally produced beef products to acquire a competitive edge over other pubs/restaurants that did not promote this fact. *“The quality of locally produced beef is much more tender and healthier than American beef suppliers, as nobody really knows what they put in their cattle feed. By having a local grass-fed producer of beef available for me, I feel much more comfortable in dealing with a business with this type of supplier than American,”* as one pub & grill owner mentioned.

The consensus of respondents agreed that taste, texture, and marbling are the main attributes that are considered when looking at the quality aspect of a beef product.

SUPPORTING THE LOCAL ECONOMY Most pubs and one diner owner said that they were all very engaged in local food purchasing and supported their local food growers whenever possible and convenient. If it were available, they would rather purchase from a local source than other sources as long as the price increase was within reason.

They also felt the market of knowledgeable customers who seek grass-fed beef is very small and the product wouldn't move on the menu without a considerable briefing from the server. The respondents went as far as agreeing supporting the local producers is important, but the grass-fed premium was asking too much in their opinion.

General Comment: One respondent who was the head chef of a major BC restaurant chain with over 9 locations made the comment *“We would love to support local, however it's so much more expensive and the product we are getting now is consistent, good quality, and reliable. We ventured with a BC beef supplier once and we liked the product. However, the business wasn't stable and it went under, leaving us with a big problem. We would be cautious about signing up with another smaller BC supplier out of fear that the same thing will happen.”*

Q 3 If *Healthy Steppes Grass-fed Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Generally there were only qualitative responses. However; respondents said that if they were to pay a premium (10%), they would require an easily deliverable story to tell about the product. The quality conscious respondents said that if they were to pay a premium that the quality of the product would have to stand out in taste differences by customers and exceed that of commodity-brand products.

The cost conscious group also stated that the price premium cannot exceed that much of their current menu pricing as they described their products as already being tasty to customers; the main reason for patrons to return to the pub & grill establishments. If cost becomes too high, sales will drop due to other cheaper competitive pub menu options. Those respondents that were just labelled as pubs rather than grills said that their customers are not so concerned with the image (of being grass-fed or not) of their burgers but rather something filling and tasty that will accompany alcohol consumption. However, they do strive to offer higher-quality products if the price makes sense.

Q 4 Based on the pricing matrix, what would you be interested in piloting and what volumes (Unit:kg) of the various primal cuts would your business utilize per month through the seasons?

Busy seasons varied widely based on the respondents. Pub owners mentioned that their sales increase in the summer months especially during hot days while the diner/restaurant respondents included both winter holiday months and summer vacation months due to the fact that people travel more and start to enjoy healthier and more active lifestyles outside, which drives in customers after a long hot day.

Table 9. Monthly Order Volumes (Unit:kg) of the Various Primal Cuts during the High Season

Lean Ground	Hamburger Patties	Sausage Tailored to Chefs' Need	Montreal Smoked Meat	Corned Beef
0	3500	0	0	0
1452.80	0	0	0	0
0	1920	0	32	32
40	144	0	0	0
40	0	0	40	40
1200	0	0	280	0
90	90	0	90	90
200	0	0	36	36
0	280	0	0	0
109	0	0	28	28

Note: 10 respondents

Generally speaking, the down time was the late fall/winter months and also months leading up to the summer, especially for the pubs.

Table 10. Monthly Order Volumes (Unit:kg) of the Various Primal Cuts during the Low Season

Lean Ground	Hamburger Patties	Sausage Tailored to Chefs' Need	Montreal Smoked Meat	Corned Beef
0	1750	0	0	0
1089.60	0	0	0	0
1920	0	32	32	0
28	101	0	0	0
13	0	0	13	13
600	0	0	180	0
30	30	0	30	30
100	0	0	16	16
0	160	0	0	0
40	0	0	28	28

Note: 10 respondents

Q 5 What type of ordering and distribution system would be most effective in meeting your needs?

The majority of the pub owners did not favour service by the producer. They felt that it would not be cost effective for the producer to deliver orders twice a week to dozens of locations. However, most respondents felt a high appreciation level towards the streamlined systems of their current distributors. They liked the ease of ordering and dealing with one company and they felt that their current suppliers weren't pushy. One respondent felt Gordon's Food Service (GFS) was too forceful in trying to sell products while Two Rivers Meats and other suppliers such as Centennial valued and respected their contracts more. Most respondents believed that if the smaller distributors could match the high level of customer satisfaction and engage in customer feedback or check up on them to maintain relations, that they would feel comfortable in dealing with them directly to supply beef products.

The idea of shopping at a one-stop-shop, convenience, and meeting supply with demand was a key interest of concern for the smaller pub respondents. The larger restaurant chains seem much more concerned with scale, centralized suppliers, and cost.

General Comments on the Segment B2

This segment was the most challenging segment to interview. Many of the chains had large purchasing departments and it was quite difficult to pin down the decision makers. Respondents generally were more guarded with their information. The smaller the chain, the less interested they seemed to be in grass-fed beef. We believe large-scale operations would be the most suitable customers for this product but only after a concerted personal selling effort.

One respondent seemed quite irritated by the interview. He felt it wasn't professional to talk about a single product (*Healthy Steppes*) and offer the information pamphlet. He said he agreed to do the interview because it was for TRU rather than for the firm as he felt the interview was like a "sales pitch". He was "very surprised TRU would be willing to hire students to basically pre-qualify customers for a single brand."

Part II: Demographics Data:

The average time for the interviews 21 minutes

The average years of experience in this field 12 years

Position:

Owner: 6

Manager: 3

Chef:1

4-7. Segment B3: Specialty Retail Stores within BC - *Healthy Steps Grass-fed Beef*

Part I: Main Questions

Q 1 What are the most important considerations for you in choosing the source of beef?

Four respondents (4 out of 10, 40%) from the specialty retail stores indicated that their major concern is quality (e.g., taste). They seemed willing to pay for the quality that they wanted to receive. Three respondents (30%) believed that price is the important factor for them. Two respondents (20%) specifically indicated that they prefer Canadian beef since it is of superior quality compared to imported beef and that they would like the product to be organic, local and from well-raised animals. For example, one owner said that she carries both BC beef and Alberta beef so that she can offer value for any customers including those who are not willing to pay the price for the BC beef because they tend to be more expensive than the commodity brand.

One respondent (10%) from Vancouver stated that customer preference was his first concern.

Q 2 What is the value of the various attributes of locally produced beef to you and the guests' eating experience?

There are four main concerns from this sector, based on the data collected:

TASTE 3 out of 10 (30%) respondents said that the main reason that people returned to their stores was because of the great taste of their beef.

HEALTH Two respondents (20%) valued the hormone free, no antibiotic system, no growth implants, leaner beef and higher Omega 3/6 ratios as their customers were beginning to become focused on health.

LOCAL ECONOMY SUPPORT Only one respondent indicated that supporting the local economy is the main concern for them to purchase local beef as it could enhance the firm's image by showing social responsibility.

PRICE AND FRESHNESS Four respondents indicated their main concerns are price, freshness and Alberta beef. Among them, two emphasized that price is the only attribute for him to consider purchasing beef produced locally. Another one stressed that the freshness of beef and price is important factors for him. The last one indicated that Alberta beef is preferred because of its popularity and prestige.

Q 3 If *Healthy Steppes Grass-fed Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Five respondents (5 out of 10, 50%) felt that a premium was acceptable for a locally produced grass-fed beef. These respondents proposed a premium range from 5% to 30%. Among them, one would be willing to pay about 30%, two respondents they would pay around 20% to 25%. One respondent would be willing to pay 10 to 15% and the last one would pay about 5%.

However, five respondents (50%) indicated that they would not pay a premium. Three reasons were given: First, that grass-fed should be cheaper since they don't have to pay the operation costs for grain and wouldn't be able

to pay more since the meat wouldn't have enough fat which results in a better grade. Second, one respondent said that the term "organic" is being over-used and that people think that they can raise the price just because they say it is organic. Third, competition was also a key for not paying premium for the beef, as shown by the following quote:

"The local retail stores need to compete with others and paying too much will make it difficult for their business" (one respondent).

Q 4 Based on the pricing suggested, what volumes (Unit:Kg) of various cuts would your store potentially move per month?

A significant number of respondents (8 out of 10, 80%) were reluctant to answer this question because they felt it was none of the other party's business. One respondent said that she had no interest in processed products because they process the meat themselves and hence would be interested in either hanging or wet packages.

Another respondent answered that she goes through 3–4 sides of beef per month and from those they decide if they are going to sell more of ground or other cuts depending on their sales. One side of beef is approximately 350 lbs. (We had to write this here since there is no specific answer that could be entered into the data processing program).

However, two respondents have given a detailed ordering volume. See Table 11.

Table 11. Monthly Order Volumes (Unit:kg) of the Various Primal Cuts

Lean Ground	Hamburger Patties	Tenderloin	Rouladen	Breakfast Sausages	Garlic Sausage	Pepperoni	Smokies	Jerky 80 g pkg
225	101.25	24.75	9	67.50	27	112.50	112.50	67.50
0	0	0	0	0	0	3	0	4

Q 5 Would you welcome in-store promotions and taste testing?

For this question we had six respondents (60%) that said that they would welcome in-store promotion and taste testing. Four respondents (40%) do not want to have any marketing promotion and taste testing. The reasons for not doing these are due to the limited space and the association with a franchise so these specialty retail storeowners have to deal with their headquarters.

Q 6 What type of ordering and distribution system would be most effective in meeting the needs of your store?

Eight respondents (80%) chose to deal solely with existing distributors and their reasoning for that are that they need consistency in the delivery system, sometimes the producers require a minimum order amount which does not work for their businesses, and that they will not have direct delivery with the producers since they need to get the products they need when they need it.

One respondent (10%) said that she currently works with distributors with a week-to-week delivery system but wouldn't mind working directly with the producers as long as they can provide flexibility.

The other one (10%) indicated that sales and service could be delivered either from the existing distributor or the producer collaborative.

Part II: Demographics data:

The average time for the interviews 9 minutes

The average years of experience in this field 28 years

Position:

Owner: 4

Manager: 6

4-8. Segment B4: Consumer Households within BC - *Healthy Steppes Grass-fed Beef*

Part I: Main Questions

Q 1 What are the most important considerations for you in choosing the source of beef?

Three primary considerations were identified:

PRICE The overwhelming majority of consumers listed price as their most important consideration when choosing a source of beef. Respondents felt that the affordability and the price vs. quality relationship were paramount in their purchasing decision.

HEALTH ASPECTS INCLUDING BEING NITRATE FREE Respondents listed attributes like leanness, steroid and antibiotic free, organic, natural growth, free range, and low fat all being very important to them. Although health aspects were not as high a priority as price for respondents it should still be noted as being quite important to a large portion of consumers.

OVERALL QUALITY OF BEEF (TASTE, JUICINESS, TENDERNESS, MARBLE, VISUAL APPEAL, THICKNESS, AND GRADE) The physical characteristics of the beef and overall quality were the third consideration that many respondents identified in conjunction with price and health aspects of the beef they buy.

There were also a few of respondents that listed where the product originated from and its freshness as their main purchasing consideration.

Q 2 What is the value of the various attributes of locally produced beef to you?

The responses were similar to those of the first question with the exception of one of the listed attributes. In place of price as a major consideration when choosing a locally produced beef, many of the respondents listed supporting the local economy as a main priority. Overall quality including taste, juiciness, and tenderness were still very important along with health aspects but consumers showed a strong concern towards supporting a beef producer that was operating locally within British Columbia.

However, from other groups of respondents, there are some discrepancies. Many customers couldn't distinguish and rank between juiciness, taste, and tenderness. Many said that these factors all depend on the cut and preparation and thought it had very little to do with the animal or brand itself. They could all be enhanced or modified through preparation. Some respondents felt that taste, tenderness, and juiciness were all equal in their consideration and primary to their purchase decision.

COST CONSCIOUS These customers said that the number one concern for them is price point. They felt that their budgets were already strained and price was the most motivating factor for purchases. Customers cited low incomes, and they thought that all beef was the same.

TASTE/CUT In this group of respondents, the number one concern was acquiring the right cut and taste of the product. They were looking for good marbling, a rich red colour, and nice packaging. These customers liked to buy their beef fresh. They tended not to plan too far in advance and bought whatever was fresh in the market. They did not seem to have much brand loyalty but assessed what they would buy each day at the market.

HEALTH These customers tended to believe that grass-fed, hormone and antibiotic free were important product features. We found that the majority of these customers were quite knowledgeable about the health benefits of grass-fed beef. Generally these individuals either believed that all beef had similar taste/juiciness/ taste and couldn't distinguish between brands. They felt that these factors all came down to the way the beef was prepared.

SUPPORTING LOCAL ECONOMY This was generally the second concern for many of the customers that fell into the cost conscious, taste/cut, or health segments. They all liked the idea of supporting local producers. Some respondents ranked supporting the local economy their primary concern but generally we found that although this was important, it was a secondary concern.

GENERAL COMMENTS Gluten Free was not a consideration for many. The majority of customers did not have any gluten allergies. Also, they felt that gluten was only included in prepared ready-to-eat products. Those that were health conscious wouldn't consider buying these products because of their fat and salt content.

Q 3 How important is a year-round pure forage diet to the value of the product?

Based on the descriptive statistics, 47 respondents (36.4%) have indicated that a year round pure forage diet is somewhat important to the value of the product for their family while 66 respondents (51.2%) believe that a year round pure forage diet is very important. However, 16 respondents (12.4%) think this issue is not important. Hence the majority of individual customers believe a year round pure forage diet is important.

Q 4 Would low-level supplementation with grain during the winter season be acceptable, providing the omega 6/3 ratios and CLA levels can be optimized through a 60-day forage finishing period?

A small number (14 out of 129, 10.9%) of the respondents felt that low-level grain supplementation through the winter season was unacceptable. However, most respondents (115 out of 129, 89.1%) were very understanding of the fact that BC has cold winters and foraging for 100% of the year is very difficult throughout the Cariboo region.

Q 5 If *Healthy Steppes Grass-fed Beef* can offer all of the characteristics that you have chosen, what maximum percentage premium over base (supermarket) price would you be willing to spend for the products named below with delivery costs included?

Most respondents (100 out 129, 77.52%) were very willing to pay a premium for the product given the fact that it was locally produced and offered an impressive amount of health benefits. The range of premiums respondents were willing to pay spanned from 5–50% with only 4 respondents remarking that they would not be willing to pay any premium at all.

Q 6 Which of the following beef packages would you be willing to order?

Before asking respondents which beef package they would be most interested in purchasing we inquired as to whether or not respondents would be willing to purchase beef online or if an in store purchasing option would be better for them. The overwhelming response (127 out 129, 98.45%) was that respondents wanted to be able to shop for the product in stores. Only two respondents said they would be willing to purchase online and all of them said that building their own package would be most agreeable for them. The two main objections with purchasing in large quantity over the Internet were limited freezer space and a demand to see and hold the product in their hands before buying it.

Q 7 What would be your preferred ordering frequency and at what volumes per week (\$) would you order, if you were happy with the product and service offering.

Due to the fact that almost no one answered “yes” to online or phone ordering there was no response to parts 1 or 2 of Q 7. The main reason is that customers are not used to buying food without seeing or touching it. Possible ways to improve the rate of online or phone ordering is to set appropriate return policies. In the long term, developing and maintaining a good rapport with target customers would be another way to enhance the online/ phone ordering system.

Q 8 When you order beef directly, what type of ordering and delivery system would be most effective in meeting your need (delivered directly to home or to a central pick-up location)?

This question resulted in a similar outcome as Q 7. No respondents commented on the question. Customers prefer to visualize the physical product (beef).

Part II - Demographics Data

The average time for the interviews: 5 minutes

Gender:

Male - 49 (37.98%)

Female - 80 (62.02%)

The average family size: 2

Age of head of household:

Under 30 years - 11 (8.53%)

30–45 years - 33 (25.58%)

45–55 years - 30 (23.25%)

55 and above - 55 (42.64%)

5. Conclusion

Based on seven segments in the investigation, the study has revealed some factors which help explain why customers, including owners, chefs and managers would pay a premium for local, high quality beef. These factors can be further divided into three categories: Quality standards, including the taste, juiciness and consistent tenderness, health considerations, and supporting the local economy.

Although this study is qualitative in nature, its findings do suggest a number of managerial implications that BC or outside of BC beef industries might consider when developing beef products in BC

Since the quality of the beef is on the top of the list, then improving the quality, particularly perceived quality, becomes imperative.

Some of the factors that are relevant to BC may also be relevant to all of Canada. Therefore, when the BC cattle businesses operate in other parts of Canada, these factors should be taken into consideration.

Resource-based innovation plays a major role for beef markets. Both firms should use their own resources, such as networking with the customers, brand image and promotion of superior cattle ranches to enhance their company and product image. This supports the theory that competitive advantage can be achieved through the firms' resources (Hunt, 2000).

Instead of focussing on improving market share, more work needs to be done on increasing the share of customers' minds and hearts. The former refers to brand knowledge by the customers, while the latter refers to

the feelings of the customers. Most importantly, the task is to improve the share of the customers' hearts, which is the premise for market share in the long term.

The survey of the 129 customers reveals that the potential for them to pay a higher price for local beef exists. People are enthusiastic about purchasing good quality beef. Money is there, but in order to collect the "money" from customers, the firm must build its product as a brand.

The feature of "dry-aging" was not emphasized by the interviewees in any of the seven segments during our investigation. This indicates that consumer education may be needed. If overall knowledge of the products were enhanced, then the demand for beef that has been dry aged would be strengthened.

The study has some limitations.

First, the research design based on seven segments within only two firms may produce incomplete results; therefore, multiple case designs should be considered for any future study.

Second, although the interviewees have been chosen from different organizations, the interviews were limited to BC food service and retail experts, which may lead to biased opinions. Therefore, interviews with experts from other fields may be necessary for further exploration. This could include, for instance, dieticians, beef product manufacturers and health care workers.

Third, a larger sample may be selected by using both qualitative and quantitative paradigms.

Finally, we believe that there is a large ethnic group, i.e., Asian, in the Vancouver market that could be a good segment for generating revenue, although some challenges were encountered with this group during this study. There was a strong resistance to sharing their opinions with our students. We believe that one of the reasons for this situation is the issue of trust. If a good rapport was established by the researchers, then this group might feel freer to discuss their preferences and desires with the beef producers. Therefore, an approach that included monthly visits and regular contact may be required to establish trust.

Logistics Research Report

Dr. Avninder Gill

1. Beef Production and the Supply

Chain Process

The BC beef production process starts with seed stock producers who focus on the production of high quality purebred cattle that are sold to the commercial cow-calf operations to establish a desired genetic base. Most ranches turn the bulls out in June–July so that calves are born in March–April and can avoid the cold winters and take advantage of the low cost feed source (grass) during the summer months. Commercial cow-calf operations raise these calves from birth to the weaning stage. The weaning weight depends on age, genetic background and grazing conditions. The average weight of calves at weaning is about 250 kilograms, but weights can vary from 160 to 320 kilograms. Most often, an intermediate stage called backgrounding is necessary to further grow the smaller calves up to a weight of approximately 350 kilograms before putting them on a finishing ration in the feedlots. Backgrounding normally uses high forage feeding (alfalfa hay, silage, low grain) to make the calf gain weight at a slow rate (0.68 to 1.0 Kg per day). The idea is to have them increase in frame before putting on fat. The backgrounding can take place either in grass pastures or feedlots.

There are diverse business models for beef production. In some cases, feedlot owners would purchase calves (i.e. feeder cattle) from the cow-calf ranches and feedlots will background and/or finish them. In other cases, backgrounding is an intermediate stage where the owners would purchase calves from ranchers and later sell them to a finishing feedlot. Depending on the cow/calf producers' resources and the fall calf prices, ranchers will sometimes hold onto their calves for an additional six months and sell them as backgrounded yearlings. Currently, a small but increasing percentage of ranchers are retaining ownership of their calves and taking them right to finish on their home ranch. These ranchers will then have them processed at a local provincially licensed abattoir and market and distribute the beef directly to their clientele of consumer households, chefs and grocery stores. The costs and overhead however for the ranchers to

individually market and distribute high volumes of their beef in this fashion is often a limiting factor.

The finishing process in Canada mainly occurs in feedlots. The lighter animals (as discussed above) are first fed a high forage-low grain ration to gain about one kilogram per day for a few weeks and then the grain diet is almost doubled. Heavier cattle start with a high grain diet. At the high grain rationing, cattle gain about 1.2–1.7 kilograms per day. To ensure proper marbling and a firmer white fat, all cattle are fed a high-energy grain ration for about 90–120 days. At the time of processing, the average live weight for steers is approximately 590 kilograms, while for heifers, it is approximately 550 kilograms. The land, water resources and climate in Western Canada are quite suitable for cattle feeding. As a result, the feedlots have become larger and have grown in their operations over time. This growth has allowed the Canadian beef industry to have a higher number of cattle in feedlots to produce a uniform and consistent quality of beef products.

The commodity beef supply chain process in Canada can be represented through Figure 1. In general, each stage requires transporting of the beef animals or beef products and each arrow can add, on average, from 500 to 1200 km. to the food miles of the final product. As the commodity beef supply chain is relatively long, with a large number of linkages, there is often a large disconnect in information flow from the market back to the cow/calf producers and feedlot producers (back-grounding and finishing lots).

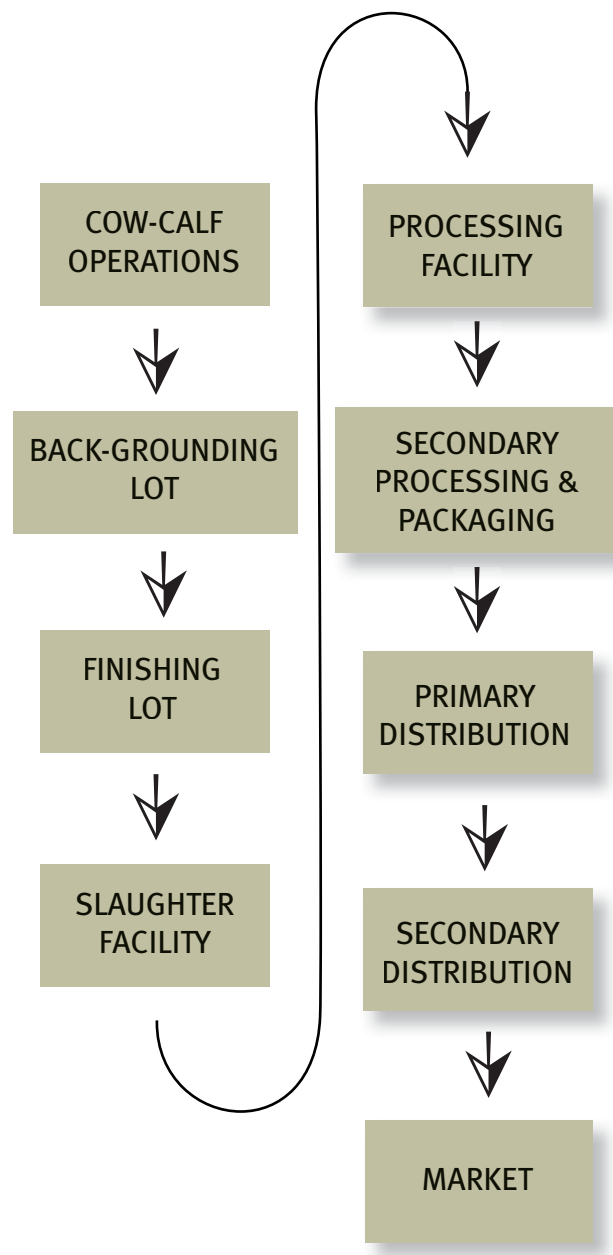


Figure 1: Commodity Beef Supply Chain

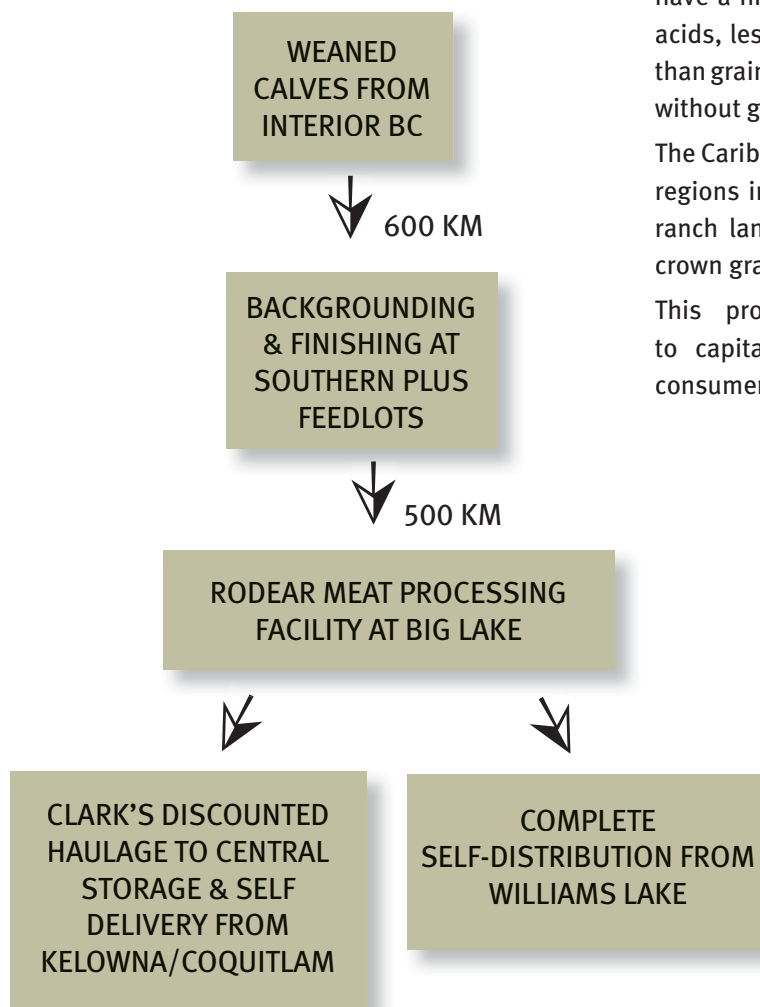
2. Okanagan's Finest Angus Beef

This value chain begins with premium Angus calves that are carefully hand-picked from BC's Interior ranchers and brought to Southern Plus Feedlot where they are nurtured to limit stress and fed an optimum diet containing locally grown hay and corn silage. The diet also consists of grain - wheat and barley both grown in Creston BC. A smaller percentage of the finishing ration is "GSP" or "grain screening pellets" which are manufactured on the coast from human-consumption-grade grains from the Canadian Prairies.

The beef animals are finished without the use of antibiotics or growth hormones and then processed and dry-aged in a provincially licensed local abattoir facility. The Okanagan Valley is a unique corridor from both a beef production and culinary market perspective. It is relatively self-contained from a beef production perspective with an ample supply of feeder calves from the BC Interior and a finishing lot with a holistic approach to livestock health and reducing the carbon footprint of beef production through a younger slaughter age. The warm climate is optimum for overwintering the animals as well as enabling efficient local production of high quality feedstuffs such as corn and alfalfa. From a market perspective, this corridor has a well-developed wine and tourism industry, with chefs that pride themselves in designing their menus around the availability of locally produced foods. The value chain's proximity to Vancouver provides the added opportunity to access this larger, diverse market with those cuts that are less likely to move in the Okanagan market.

In the past, chefs and food service companies preferred to buy from commodity markets due to consistent supply and low administration costs. However with the growing local food movement and desire to reduce the carbon footprint, our research shows that chefs are more interested in accessing locally grown, finished and processed beef. As the existing main distribution companies are only interested in distributing commodity type beef, (Federally inspected beef from Alberta feedlots), a new method of distribution will have to be developed to service that segment of the food service industry that values the BC product. The supply

chain for *Okanagan's Finest Angus Beef* is represented in Figure 2 below. As the diagram illustrates, there are fewer steps, which means that the total food-miles are reduced as well as significantly improving information flow from consumers and chefs back to the producers. This improvement of information flow provides a great opportunity for the beef producers to develop a higher value product offering in line with customer preferences.



Markets:

- A1: Small and medium upscale restaurants in Thompson/Okanagan (500km)
- A2: Upscale Asian restaurants in downtown Vancouver
- A3: Lower Mainland Upscale Hotels and Restaurants

Figure 2. *Okanagan's Finest Angus Beef* Supply Chain (A)

3. *Healthy Steppes Grass-fed Beef*

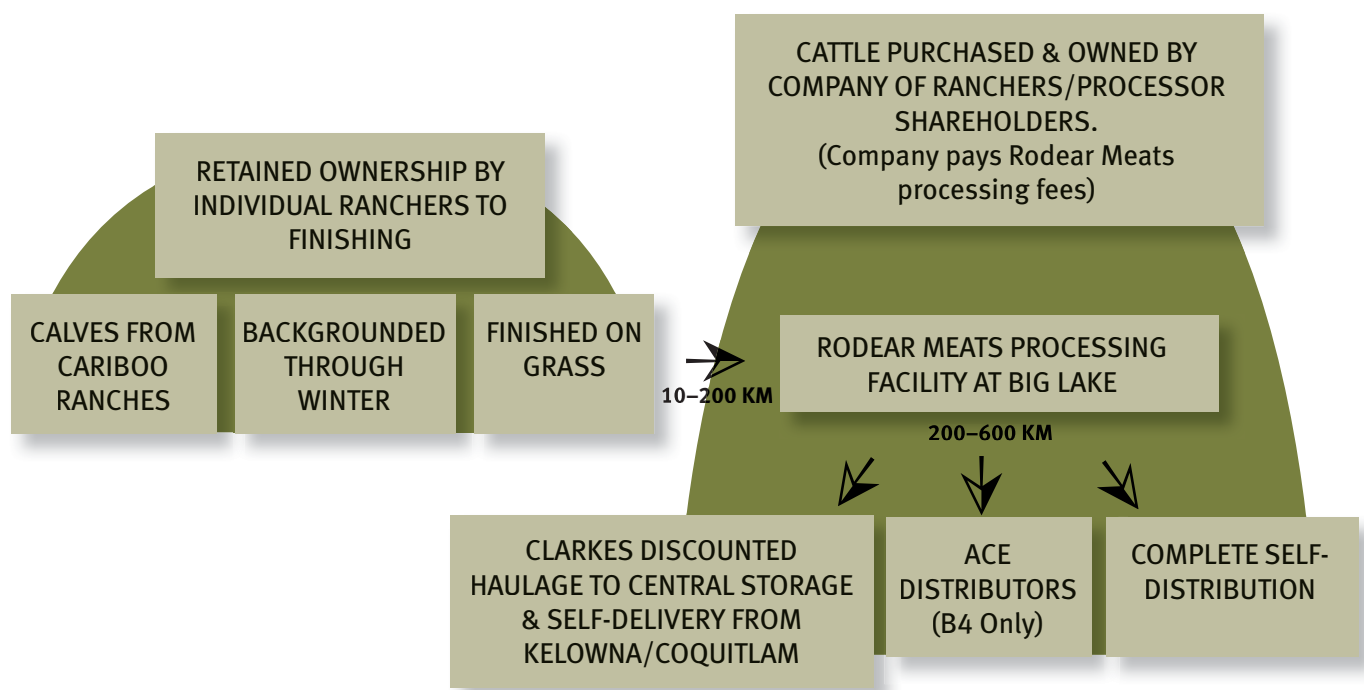
This value chain is composed of a one stop production process where Cariboo ranchers retain ownership of their calves, back-ground them through the winter, and finish them on grass as yearlings all on their home ranch and neighbouring crown range.

They then truck them a very short distance (10-200km.) to have them processed locally according to customers' needs. As the animals will be finished on grass, *Healthy Steppes Grass-fed beef* is expected to have a higher percentage of Omega 3/Omega 6 fatty acids, less total and saturated fats and fewer calories than grain finished beef. This beef will also be produced without growth hormone implants or antibiotics.

The Cariboo region is one of the largest beef producing regions in the province, due to its reasonably priced ranch lands and abundance of summer forage from crown grazing lands.

This production model allows these producers to capitalize on the value that health conscious consumers place on grass-fed beef raised in the natural

environment of BC rangelands. There are currently three provincially licensed abattoirs in the region and a focus group of cattle producers who are in the process of building a collaborative value chain model. The relevant portion of this value chain is presented in Figure 3. Again, this value chain illustrates a further reduction in linkages and trucking distances, which minimize food miles and provides the opportunity for information flow back to the producers, in order to constantly improve the value of the product offering in line with consumer demands.



Markets:

- B1 - Market Cow Product Line: Local Cariboo Food Service/Restaurants
- B2 - Market Cow Product Line: Specialty Restaurants in Thompson/Okanagan
- B3 - Market Cow Product Line: Specialty Retail Store in BC
- B4 - Grass-fed Yearling and Market Cow P.L.: Ship Direct to households

Figure 3. *Healthy Steppes Grass-Fed Beef Supply Chain (B)*

4. Major Issues and Recommendations for the Value Chains

Beef cuts vary in their popularity with customers and between customer segments. Some cuts are preferable over others. Only a small portion of the carcass can be sold at a high premium to offset the costs for less-popular cuts. Niche market supply chains face a challenge in being able to move the entire carcass at a premium. Therefore, a good strategy is to have a certain level of collaborative arrangement with commodity brand names for the less-popular cuts. If you can't compete with big commodity chains in terms of costs, the strategy is to join them in a selective manner. The current alliance is recommended to have a somewhat flexible approach in this regard. For those cuts for which the customer is willing to pay a high premium, the alliance can sell it under their private brand label to recover the high production, process and distribution costs. For those cuts for which it is difficult to get a high premium, it is advisable not to incur further high distribution and promotional costs by selling it as a private brand. It is recommended that these low-premium products be allowed to enter the commercially branded commodity chains. This approach not only saves high distribution and marketing costs, but it also allows the alliance to access newer and diverse markets which otherwise are out of their domain. However, if the beef alliance is reluctant to join branded commodity supply chains, then probably the only viable option is to further enhance the value of low-premium cuts through value-added processing (for example, pre-cooked, semi-cooked, frozen, customized packaging etc). This can open up additional avenues for collaboration with institutional buyers and food processing facilities and generate a further market for these products.

Niche market beef products (like the ones under this study) have high production and processing costs as compared with the commodity beef products. Therefore, they carry a higher price tag. However, very few consumers are willing to pay this price differential. As a result, the market size and segmentation is limited and it acts as an obstacle

in achieving production and processing economies. Therefore, it becomes difficult for the beef alliance to ensure that the profits and benefits received are greater than the costs incurred to produce, to process and to deliver beef products to the market place. If it is a temporary problem arising due to an unexpected increase in costs or reduction in sales, then it is important to ensure that short-term effects are not interpreted as a structural failure of the supply chain. In such cases, it is advisable to urge the alliance members to maintain a long-term commitment to the alliance program. However, it is unlikely that a participant will stay in an alliance, which is doomed to suffer losses over the longer term. For a long-term sustainability of the supply chain program, we must ensure that the benefits outweigh the costs. This can be achieved through the following approaches.

One recommendation is to find ways to increase the market size for high cost niche products where the alliance can sell larger volumes of smaller-margin products to generate revenues. This will allow the supply chain to achieve production, processing and distribution economies of scale. While customers may be willing to pay a premium for certain products, there is usually an upper limit on how much premium they will pay. Therefore, rather than depending on the expected premiums, reducing the costs and increasing market size is a more prudent way to ensure sustainability and ongoing success of an alliance. The marketing survey of this project focused on the differential consumers are willing to pay for beef from two very differently produced and branded product lines: *Okanagan's Finest Angus Beef* and *Healthy Steppes Grass-fed Beef*. One approach to increase the market size is through educating consumers about the benefits of quality beef products so that they are willing to pay the price differential over commodity items. Branding, process and production verifications, safety and quality auditing can go a long way to lowering the anxiety of BC consumers and to build the brand image of this alliance's products.

The second recommendation is to lower the overall costs (i.e. production, processing and distribution costs) of the supply chain. Although the production and processing costs are within the domain of the value chain members, exploring ways to reduce those costs is not the subject of this logistics study. The focus of this logistics report is to analyze various distribution options and recommend ways to lower the distribution costs. The subsequent section of the report deals with this analysis.

5. Distribution Analysis – *Okanagan's Finest Angus Beef and Healthy Steppes Grass-fed Beef*

The two beef supply chains considered under the scope of this study includes *Okanagan's Finest Angus Beef* and the *Healthy Steppes Grass-fed Beef* (Presented in Figure 2 and Figure 3). All the cattle are delivered FOB to the Rodear Meats facility. The processor delivers the beef products FOB to Clark's Cold Storage in Williams Lake, where it enters into the market distribution system.

OFAB Current Distribution

From Williams Lake onwards, the current distribution for OFAB is a mixed one with Sysco Kelowna, and self-distribution as the two main channels. However, Sysco Kelowna is no longer interested in distributing the whole range of beef-primal. This is because Sysco has been unsuccessful in moving a number of primals (particularly hinds) to their existing clientele and therefore they have been left with a backlog of certain cuts. Due to this challenge, as well as the chefs preferring a more hands-on service than Sysco can provide, the management of OFAB finds it problematic to continue the status-quo arrangements.

HS Current Distribution

As this collaborative of ranchers and processor are in the early development stages, the group is waiting for the results of this report before proceeding to a formal organizational structure and operations. They do not have a vehicle or a sales person at present and are looking for the most effective method of marketing and distributing their products to their target markets in

the Cariboo, the Thompson-Okanagan and the Lower Mainland regions. To begin with, their volumes were assumed to be in the 5–10 animals per month range. Therefore, running their own distribution system was not perceived as a solution in the past.

Proposed Distribution and Recommendation

The proposed distribution strategy has been suggested by exploring various options using both weekly deliveries (Tables 12–14) as well as bi-weekly deliveries (Table 15–16), and consulting with a transportation expert. The analysis uses data from vehicle leasing companies and quotes from *Clark Freightways'* backhaul discounted refrigerated transportation tariffs to Kelowna and Coquitlam. *Clark Freightways* maintains cold storage facilities at these locations (at cost) and early morning to late evening pick-up flexibility is also available at no extra cost.

The first option is a 100% self-distribution strategy where the alliance can either own or lease a one-ton reefer van and hire a driver for the self-distribution. For the ownership and leasing options, two options are explored: a Chevrolet gasoline van and a Mercedes diesel van. The self-distribution and delivery option besides providing the beef supply chain with lot of operational flexibility, also serves the whole range of products and can access any newer restaurants, lodges, stores or other buyers that are currently inaccessible using the *Sysco* distribution system.

Under the weekly self-distribution using an owned Chevrolet van, the annual distribution cost works out to be \$92,473.50 (\$2.45 per kg) and the annual distribution cost using an owned Mercedes van works out to be \$87,009.77 (\$2.30 per kg). (Please note that all of the per kg costs are based on a sales volume of 10 animals, approximately 3150 kg beef per month.) At the current distribution levels however, a bi-weekly delivery may suffice in the beginning in which case, the annual distribution cost using an owned Chevrolet van works out to be \$53,896.75 (\$1.43 per kg) and the annual distribution cost using an owned Mercedes van works out to be \$51,164.89 (\$1.35 per kg). It should be kept in mind that the van will be running close to its capacity in bi-weekly delivery.

Under the weekly self-distribution using a leased Chevrolet van, the annual distribution cost works out to be \$98,084.30 (\$2.59 per kg) and the annual distribution cost using a leased Mercedes van works out to be \$94,441.15 (\$2.50 per kg). However, at the current distribution levels, a bi-weekly delivery may suffice in the beginning in which case, the annual distribution cost using a leased Chevrolet van works out to be \$64,088.15 (\$1.69 per kg) and the annual distribution cost using a leased Mercedes van works out to be \$64,224.20 (\$1.70 per kg). It should be kept in mind that the van will be running close to its capacity in bi-weekly delivery.

Under the Clark Freightways' discounted rates up to Kelowna and Coquitlam and a self-delivery; using an owned Mercedes van the annual distribution cost works out to be \$99,783.86 (\$2.64 per kg); using a leased Mercedes van the annual distribution cost works out to be \$111,606.11 (\$2.95 per kg); using an owned Chevrolet van the annual distribution cost works out to be \$104,255.61 (\$2.76 per kg); using a leased Chevrolet van the annual distribution cost works out to be \$113,403.70 (\$3.00 per kg). However, at the current distribution levels, bi-weekly trips may suffice in the beginning but will be running close to the Van capacity. Under this scenario of biweekly trips, using an owned Mercedes van the annual distribution cost works out to be \$88,672.35 (\$2.34 per kg); using a leased Mercedes van the annual distribution cost works out to be \$104,705.73 (\$2.77 per kg); using an owned Chevrolet van the annual distribution cost works out to be \$90,908.23 (\$2.40 per kg); using a leased Chevrolet van the annual distribution cost works out to be \$103,483.77 (\$2.74 per kg).

An analysis of the above scenarios reveals that 100% self-distribution strategy is better than using Clark Freightways and a Mercedes van is a better option than a Chevrolet van. When it comes to comparing owning and leasing the van, the Mercedes ownership option is cheaper than Mercedes leasing option by \$7,431.38 annually. But it must be kept in mind that ownership is based on the cash price of the vehicle. If the management would like to have the owned vehicle financed, then most of \$7,431.38 saving will be eroded through interest payments. Keeping in view the interest rate and the fact that cost-wise, there is not

a substantial difference between owning and leasing, it would be advisable to lease the Mercedes vehicle rather than going through the trouble of owning it. Under the bi-weekly delivery scenario, the leasing cost is approximately \$13,000 more than the ownership option mainly because of the under-utilized leased vehicle but the management must keep a long term view of demands where it may be necessary to deliver on a weekly (rather than bi-weekly) basis.

When comparing the 100% self-distribution with Clark Freightways' discounted rates up to Kelowna and Coquitlam, and a self-delivery to customers; Clark Freightways option is more expensive. But what is interesting to note is that as the future demands and distribution levels will increase, the Clark's option based on weight-tariffs will cost even more but the self-distribution Van will serve up to 1800 lbs without any cost increase. Self-distribution cost will increase only when a second van is needed which appears unlikely in the near future. Clark Freightways indicate that they may be having more customers who want refrigerated haulage to Kelowna and Coquitlam locations, thereby pushing the cost down through consolidation. But without specific guarantee or a firm quotation on this, this factor was not considered in the analysis.

The direct-purchase household orders (B4) are often not large enough in size to warrant a dedicated distribution channel. Furthermore, the delivery locations are quite diverse. Therefore, it is not advisable to dedicate an entire distribution channel for them and make the investment in equipment. The suggested strategy is to use a courier service such as *Ace Courier* who deliver box sizes 15–21 kg anywhere in BC for a distribution fee of \$35.00 which works out to approximately \$2.33 per kg under a worst case scenario (15 kg orders).

Overall, our recommendation is to deliver (A1, A2, B1, B2, B3) using a 100% self-distribution by leasing a Mercedes van and hiring a driver.

6. Response to Specific Questions

Q: What ordering and delivery system would be most effective in meeting the needs of the chefs?

A central sales coordinator position, which collects all the orders, would be most effective. The household orders can be collected through telephone or Internet and should also be processed by the sales coordinator. The delivery system should preferably be using ACE distributors for the B4 market and a self-distribution using a leased Mercedes van for the rest of the markets segments.

Q: What percentage of gross sales would the distributor require to provide an effective service?

In the absence of current annual gross sales information, a specific answer cannot be provided. However, the proposed strategy of self-distribution for A1, A2, B1, B2, and B3 markets is flexible in terms of volume/sales handled. A one-ton van should suffice in the beginning but if the sales keep on growing, then there is a possibility that it will be necessary to lease two Vans: one for the Okanagan-Cariboo market and one for the Lower Mainland. For the B4 market, the \$35 distribution rate is applicable for boxes 15 kg to 21 kg but most of the orders will be close to 15 Kg. The annualized cost of self-distribution using a Mercedes leased van is around \$94,441.15. If the Sysco premium on distribution portion of the costs is estimated at 13%, then at a sales of \$726,470.40 (i.e. $\$94,441.15 \times 100/13$), the existing system and the proposed system break-even. But the current distributor will not deliver all the products and some self-distribution is still needed. If the self-distribution cost of those products which Sysco is unwilling to deliver is taken into account, then the proposed system of 100% self-distribution is justifiable for small sales volume and definitely outperforms the existing system for larger volumes. Furthermore, with bi-weekly deliveries, the proposed and existing systems break-even at \$494,032.30 and considering the cost of additional self-distribution for which Sysco is not interested, the proposed system is justifiable at even smaller gross sales.

Q: At each level of service, what pricing would the processor require to provide an effective service?

For *Healthy Steppes Grass-fed Beef*, the processor is paid processing fees, so the pricing should ideally not affect the service. For *Okanagan's Finest Angus Beef*, the processed pricing would depend on what the customer is actually willing to spend as well as how much profit margin the producer and processors want to make. The alliance should look more carefully at the market survey information regarding the willingness of customers to pay before adding the margins and determine the prices accordingly.

Q: How does the length of 14 days dry-aging compare with 21 days dry-aging?

No doubt, dry aging enhances concentration and saturation to provide natural flavours and taste; however, dry aging adds substantial costs (storage, refrigeration, energy, monitoring, and labour) to the product. The resulting weight loss further adds to the per-lb-cost. Furthermore, due to the requirement of consistency and even distribution of fat and marbling, only the highest grades are worthwhile for dry aging. Except for the finest restaurants, there are hardly any customers who will pay the high dry-aging price or who otherwise have 21 days dry-aging grade requirements. Approximately 11 days of aging should provide an adequate flavour. Although flavour can be enhanced through further aging, the weight loss and the product spoilage risks will far outweigh the benefits. Considering the time product spends in distribution and some aging taking place in restaurants, 14 days should suffice for dry aging. At 21 days, the risks of spoilage and costs due to weight loss are excessive. Our recommendation is 14 days dry-aging. If some customers demand additional aging (e.g. 21 days), they may be asked to either share the risks of spoilage and weight loss or they should be properly trained and educated to achieve a few days worth of aging at their facilities. Due to substantial reduction in costs, some customers may prefer to go for 14 days dry-aging. Alternatively, to off-set the weight loss, the processor may consider wet-aging in vacuum-sealed bags which

is becoming popular and can be achieved in almost half the time required for dry-aging and almost reducing the cost by half.

Q: If sales/service in house were preferred, what percentage of gross sales would a central sales coordinator require in order to manage sales, shipping and accounts?

Okanagan's Finest Angus Beef: At the expected level of sales in the first year, the central sales coordinator would also need to be the van driver until the volumes become such that it would warrant a full time sales coordinator separate from the van driver. At a sales commission of 5% of gross sales it would take \$1,000,000 in gross sales to pay for a full time sales coordinator position at \$50,000, which is separate from the driver. However, the driver's sales commission will reduce proportionally when the sales position becomes separate.

Healthy Steppes Grass-fed Beef: In the first year, it is recommended that *Healthy Steppes Grass-fed Beef* work collaboratively with OFAB for sales and distribution. Breaking out the 20% sales and distribution costs to 5% of gross sales for a sales coordinator and 15% of gross sales for the distribution it would take \$500,000 in gross sales in order to pay for a half time sales coordinator at \$25,000 per year.

Q: What level of volume sales from the combined market segments will be required to cover the overhead costs of the value chain including the sales coordinator position?

The question is partly answered above. It may be noted that although the sales coordinator position may bring some additional revenue/sales to the supply chain, the real gain will be in terms of operational benefits as the position would help to stream-line the sales activities by providing a single point of contact for customer ordering. Secondly, it would be misleading to measure the performance of a sales position in terms of gross sales. More sales can accrue from fewer orders and vice-versa, and it is the number of orders (not gross sales) that determine the actual workload of a sales coordinator. It is expected that a central sales point will provide a convenient ordering point for customers and increase the number of orders.

Q: What type of ordering and delivery system would be most effective in meeting the needs of the direct order consumers (delivered direct to home or office or to a central pick up location)?

For this segment of the *Healthy Steppes Grass-fed Beef*, the best ordering system will be a 1-800-telephone number and a website ordering that will be managed by the sales coordinator. The cost of a dedicated telephone line and maintaining a website is really minor. For the delivery method, we recommend using the services from *ACE* courier for 15–21 kg at a price of \$35 anywhere in BC.

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Part B: Logistics Research Report

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Appendix I – Costing Tables

Table 12. 100% Self Distribution using Owned 1-Ton Reefer Van-Weekly Delivery

	Self-Distribution (Owned Van)	
	Chevy-Gasoline	Mercedes Diesel
Driver Cost (salary+meals+accmd+ Commission)	\$52,800.00	\$52,800.00
Altered, Refg-Van	\$45,806.00	\$56,279.30
Annualized Van Depreciation	\$9,161.20	\$11,255.86
Annual Insurance	\$2,760.00	\$2,760.00
Annual Maintenance	\$3,850.00	\$2,000.00
Annual Fuel Costs	\$21,402.30	\$15,693.91
Tires/yr	\$500.00	\$500.00
Addl Cold Storage	\$2,000.00	\$2,000.00
Total annual cost of self-distribution	\$92,473.50	\$87,009.77
Distribution Cost/Kg	\$2.45	\$2.30

Assumptions

Distances: <http://www.th.gov.bc.ca/popular-topics/distances/calculator.asp>
 Transport Canada: 1-ton reefer diesel van at L/100km - 12.0 city-hwy @\$1.35 per litre
 Transport Canada: 1-ton reefer gasoline van aL/100km 21.4 city, 15.2 hwy @ \$1.35 per litre
 Van depreciation period = 5 years at 96876 Kms per year
 Driver makes one round trip (1863 Kms) per week
 \$2000 per year repairs
 \$3000 insurance related costs per annum
 Weekly meat volume is about 1600 lbs (4 skids of 400 lbs)
 37,818.18 kg. Annually

Table 13. 100% Self Distribution using leased 1-Ton Reefer Van-Weekly Delivery

	Chevrolet-Gasoline	Mercedes-Diesel
Driver Cost (salary, meals, accommodation, commission)	\$52,800.00	\$52,800.00
Refrig-Van Lease/Month	\$1,231.00	\$1,557.27
Annualized Leasing Cost	\$14,772.00	\$18,687.24
Annual Insurance	\$2,760.00	\$2,760.00
Annual Maintenance	\$3,850.00	\$2,000.00
Annual Fuel Costs	\$21,402.30	\$15,693.91
Tires/yr	\$500.00	\$500.00
Additional Cold Storage	\$2,000.00	\$2,000.00
Total annual cost of self-distribution	\$98,084.30	\$94,441.15
Cost/Kg (10carc/mo)	\$2.59	\$2.50

Assumptions as in Table 12

Table 14. Clark Discounted Rates Plus Self-Delivery using Owned/Leased Mercedes Diesel or Chevy Gasoline 1-Ton Reefer Van from Kelowna and Coquitlam - Weekly Delivery

Clark's Discounted Rates Plus Self-Delivery	Mercedes Diesel Owned	Mercedes Diesel Leased	Chevy Gas-Owned	Chevy Gas- Leased
Driver Cost (salary+meals+accmd + Commission)	\$39,507.89	\$39,507.89	\$39,507.89	\$39,507.89
Refr-Van Lease/month	N/A	\$1,557.27	N/A	\$1,231.00
Annualized Van Cost	\$8,422.26	\$18,687.24	\$6,854.92	\$14,772.00
Annual Insurance	\$2,760.00	\$2,760.00	\$2,760.00	\$2,760.00
Annual Maintenance	\$1,496.51	\$1,496.51	\$2,880.78	\$2,880.78
Annual Fuel Costs	\$11,743.06	\$11,743.06	\$16,397.88	\$16,397.88
Tires/yr	\$374.13	\$374.13	\$374.13	\$374.13
Additional Storage at Clark	\$3,225.46	\$3,225.46	\$3,225.46	\$3,225.46
WL>Kelowna-Clark	\$14,463.28	\$14,463.28	\$14,463.28	\$14,463.28
WL>Coquitlam-Clark	\$17,791.28	\$17,791.28	\$17,791.28	\$17,791.28
Total annual cost of distribution	\$99,783.86	\$111,606.11	\$104,255.61	\$113,403.70
Distribution Cost/Kg	\$2.64	\$2.95	\$ 2.76	\$ 3.00

Assumptions:

- Bulk shipment by Clark in 400 lbs skids (2 skids/wk to each depot) to Kelowna and Coquitlam
- Clark quoted rates: Kelowna (\$139.07/400 lbs), Coquitlam (\$171.07/400 lbs)
- Self-delivery from Kelowna and Vancouver using Leased Van
- When self-distribution reduced, the driver expense reduced proportionally
- When self-distribution reduced, maintenance and tire expense reduced proportionally
- When self-distribution reduced, owned vehicle life increased proportionally
- 0-2 days storage may be needed at Clark's, a 10% cost for avg one day is applied

Town to Town	Distance Kms
Kelowna > Penticton	72
Penticton > Oliver	40
Oliver > Vancouver (hwy 3)	410
Local Deliveries	350
Return-trip: Vancouver > Kelowna	522
Weekly kms	1394
Annualized Kms-Hwy	54288
Annualized Kms-City	18200
Ann. Fuel Costs-Gasoline	\$16,397.88
Ann. Fuel Costs-Diesel	\$11,743.06
Reduction in self-distribution	25%

Table 15. 100% Self Distribution using Owned 1-Ton Reefer Van-Bi-Weekly Delivery

	Self -Distribution (Owned Van)	
	Chevy-Gasoline	Mercedes Diesel
Driver Cost (salary+meals+accmd+ Commission)	\$31,680.00	\$31,680.00
Altered, Refg-Van	\$45,806.00	\$56,279.30
Annualized Van Depreciation	\$4,580.60	\$5,627.93
Annual Insurance	\$2,760.00	\$2,760.00
Annual Maintenance	\$1,925.00	\$1,000.00
Annual Fuel Costs	\$10,701.15	\$7,846.96
Tires/yr	\$250.00	\$250.00
Addl Cold Storage	\$2,000.00	\$2,000.00
Total annual cost of self-distribution	\$53,896.75	\$51,164.89
Distribution Cost/Kg	\$1.43	\$ 1.35

Table 16. 100% Self Distribution using Leased 1-Ton Reefer Van-Bi-Weekly Delivery

	Self -Distribution (Leased Van)	
	Chevy-Gasoline	Mercedes Diesel
Driver Cost (salary+meals+accmd+ Commission)	\$31,680.00	\$31,680.00
Refg-Van Lease/month	\$1,231.00	\$1,557.27
Annualized Leasing Cost	\$14,772.00	\$18,687.24
Annual Insurance	\$2,760.00	\$2,760.00
Annual Maintenance	\$1,925.00	\$1,000.00
Annual Fuel Costs	\$10,701.15	\$7,846.96
Tires/yr	\$250.00	\$250.00
Addl Cold Storage	\$2,000.00	\$2,000.00
Total annual cost of self-distribution	\$64,088.15	\$64,224.20
Distribution Cost/Kg	\$1.69	\$ 1.70

Assumptions

- Distances: www.th.gov.bc.ca/popular-topics/distances/calculator.asp
- Transport Canada: 1-ton reefer diesel van at L/100km - 12.0 city-hwy @\$1.35 per litre
- Transport Canada: 1-ton reefer gasoline van aL/100km 21.4 city, 15.2 hwy @\$1.35 per litre
- Van depreciation period = 10 years at 96876 kms per year
- Driver makes one round trip (1863 kms) per bi-week
- \$2000 per year repairs
- \$3000 insurance related costs per annum

Town to Town	Distance kms
Williams lake › Kelowna	451
Kelowna › Penticton	72
Penticton › Oliver	40
Oliver › Vancouver (hwy 3)	410
Local Deliveries	350
Return-trip: Vancouver › Williams Lake via Hope-Cache Creek	540
Bi-Weekly kms	1863
Annualized Kms-Hwy	39338
Annualized Kms-City	9100
Annl. Fuel Costs-Gasoline	\$10,701.15
Annl. Fuel Costs-Diesel	\$ 7,846.96

A1-A1 (curent): Sysco 13% premium on the revenues

A1-A2 , B1, B2, B3 Analysis: Self-distribution (owned vs lease; diesel vs gasoline) versus Clark'd Discounted Rates

B4: ACE Distributor 15 Kg–21Kg at \$35 fixed price anywhere I BC

Bi-weekly meat volume is about 3200 lbs (8 skids of 400 lbs each) or 37818.18 Kg annually

(approx. 10 animals/month) Annual Volume = 37818.18

Table. 17 Okanagan's Finest Angus Beef -Market Segments A1, A2: Revenue by Primal and Cost by Value Chain Member

	Assumptions		Actual Rev.		Actual Rev.		Actual Rev.		Actual Rev.		Actual Rev.	
	Price/kg	Revised Price/kg	kg by cut	Sep	kg by cut	Oct	kg by cut	19-Nov	kg by cut	14-Dec	kg by cut	5-May
Lot #s			1	1	2	2	3	3	4	4	4	1
Total # Head			6	6	6	6	6	6	5	5	5	2.5
Total Carcass Wt				1,849.43		2,005.91		2,070.00		1,701		884.45
Lean Meat Yield w/out fat, offal, bones & cheek meat				45.95%		49.81%		54.50%		51.00%		68.01%
Revenues by Primal												
Trim 85% Lean	5.07	5.79	156.3	792.44	231.85	1,175.48	317.81	1,611.30	229.65	1,164.33		0.00
Trim 80%		5.50										
Fat to Mix With Trim	1.47	1.47		0.00	63.61	93.51	172.25	253.21	179.27	263.53		0.00
Shoulder Clod	10.81	7.00	45.48	491.64	69.92	755.84	74.15	801.56	66.37	717.46		0.00
Brisket	13.5	9.80	37.74	509.49	44.86	605.64	42.47	573.35	34.96	471.96		218.88
Square Cut Chuck		5.50									230.60	1,268.30
Chuck Roll	9.13	9.00	74.04	675.99	77.63	708.76	82.92	757.06	65.27	595.92		0.00
Flat Iron	18.00	15.12	7.74	139.32	6.39	115.02	8.83	158.87	7.87	141.66		0.00
Chuck Flats		12.90										
107 Rib	24.83	20.00	99.00	2,458.17	105.24	2,613.11	121.79	3,024.05	97.76	2,427.38		858.10
Rib Steaks		23.00										
Short Ribs	13.46	11.31	51.18	688.88	43.20	581.42	48.37	651.06	30.84	415.11		336.70
Strip Loin	35.00	28.00	40.56	1,419.60	47.70	1,669.50	43.04	1,506.40	40.09	1,403.15		749.42
New York Steak		29.00										
Tenderloin	35.00	28.00	15.78	552.30	26.31	920.78	20.05	701.75	13.34	466.90		387.94
Top Sirloin Butt	14.69	9.50	51.06	750.07	55.94	821.76	58.82	864.07	45.49	668.25		243.49
Tri Tips	14.44	12.00	4.2	60.65	5.41	78.08	5.52	79.71	5.45	78.70		58.44
Flank Steak	16.84	14.15	5.82	98.01	7.10	119.56	7.84	132.03	5.94	100.03		63.51
Skirt Stk	17.5	16.00	17.64	308.70	16.22	283.89	19.60	343.07	16.90	295.75		0.00
Bottom Round incl eye	10.96	9.00	88.62	971.28	101.87	1,116.5	106.14	1,163.29	75.90	831.86		571.28
Inside Top Round	12.39	8.00	71.46	885.39	81.38	1,008.30	76.65	949.69	59.44	736.46		394.00
Sirloin Tip	12.84	8.79	42.12	540.82	46.34	594.98	47.55	610.54	35.34	453.77		309.85
Bone in Shank Steaks	4.65	5.00	39.66	184.42	31.82	147.94	45.47	211.44	32.61	151.64		261.40
Bones	3.39	3.00	12.66	42.92	12.70	43.05	31.00	105.09	14.51	49.19		0.00
Offal Pack	4.84	4.07	44.76	216.64	44.77	216.68	26.97	130.53	46.06	222.93		0.00
Oxtail	10.65	8.95	1.5	15.98		0.00	1.20	12.76	4.36	46.43		0.00
Cheek Meat	10.19	9.00	4.14	42.19	4.17	42.47	4.25	43.35	4.16	42.39		0.00
Tongue		4.50										0.00
Total Revenue			911.46	11,844.88	1,124.41	13,712.25	1,362.69	14,684.16	1,111.58	11,744.78	601.49	5,721.31
Costs by Value Chain Source												
Sales and Dist Costs 15% Mark up				1,539.83		1,782.59		1,908.94		1,526.82		743.77
Waste Disposal Costs				509.75		551.63		569.25		467.88		77.83
Slaughter Costs				450.00		450.00		450.00		375.00		194.58
Bone Out and Process Cost				2,242.90		2,427.15		2,381.05		2,058.65		914.52
Total Processing Costs				3,202.65		3,428.78		3,400.30		2,901.53		1,186.93
Yearling Cost				7,212.78		7,823.05		8,073.00		6,633.90		3,891.58
Branding, Promotion Costs (2% Total Rev)				236.90		274.24		293.68		234.90		114.43
Sales Coordinator (4% Total Rev)				473.80		548.49		587.37		469.79		228.85
Chef's Association (1% Total Rev)				118.45		137.12						
Total Value Chain Costs				12,784.40		13,994.28		14,263.29		11,766.94		6,165.56
Loss, Profit				-939.52		-282.03		420.87		-22.16		-444.25
Assumptions												
Revised Actual Rev. Actual Rev.												

Table 18. Healthy Steppes Market Segments B1-B4 Product Costing with Sales and Dist. Contracted Out

Assuming Animal Live Weight = 575 kg
 Carcass Yield = 50% (287.7kg)

	Raw material costs/kg (based on \$3.08/kg carcass wt)	Slaughter and processing costs/kg	Sales and Distribution Costs(20% markup/17% margin)	Total cost/kg	
B1 Local Food Service					
Lean Ground	\$2.49	1.27	\$0.75	\$4.51	
Hamburger Patties	\$2.49	3.03	\$1.10	\$6.62	
Tenderloin	\$22.79	3.98	\$5.35	\$32.12	
Breakfast Sausages	\$2.49	4.42	\$1.38	\$8.29	
Blueberry Maple Sausages	\$2.49	4.42	\$1.38	\$8.29	
Garlic /Pepperoni	\$2.49	6.36	\$1.77	\$10.62	
Smokies	\$2.49	6.36	\$1.77	\$10.62	
Jerky/80 g pkg.	\$2.45	2.50	\$0.99	\$5.94	per 80g pkg.
B2 Food Service					
Lean Ground	\$2.49	1.27	\$0.75	\$4.51	
Hamburger Patties	\$2.49	3.03	\$1.10	\$6.62	
Sausage tailored to chefs needs	\$2.49	4.42	\$1.38	\$8.29	
B3 Specialty Retail Stores					
Lean Ground	\$2.49	1.38	\$0.77	\$4.64	
Hamburger Patties	\$2.49	3.14	\$1.13	\$6.76	
Tenderloin	\$22.79	4.09	\$5.38	\$32.26	
Breakfast Sausages	\$2.49	4.51	\$1.40	\$8.40	
Blueberry Maple Sausages	\$2.49	4.51	\$1.40	\$8.40	
Garlic /Pepperoni	\$2.49	6.47	\$1.79	\$10.75	
Smokies/Hot Dogs	\$2.49	6.47	\$1.79	\$10.75	
Jerky 80 g pkg	\$2.49	2.18	\$0.93	\$5.60	per 80g pkg.
B4 Direct to Customers: ** Greass-fed Yearling and *Market Cow					
	Raw Material cost/kg	Processing cost/kg	In House Sales/ Admin costs/kg	Distribution costs (Ace Courier)	Total cost/kg
Mixed Variety Pack (1/8 beef)	8.14	3.80	1.73	2.33	16.00
Lean Ground	\$2.49	\$1.38	\$0.77	\$2.33	\$6.97
Pattie Box	\$2.49	\$3.14	\$1.13	\$2.33	\$9.09
Breakfast Sausages	\$2.49	\$4.50	\$1.40	\$2.33	\$10.72
Smokies	\$2.49	\$6.47	\$1.79	\$2.33	\$13.08
Garlic /Pepperoni Sausage	\$2.49	\$6.47	\$1.79	\$2.33	\$13.08
Beef Jerky/80 g package	\$2.45	\$2.18	\$0.93	\$0.25	\$5.81 per pkg.
Econo Tenderloin	\$22.79	\$4.09	\$5.38	\$2.33	\$34.59
					Ace:\$35/15kg
Material cost based on \$1.10/lb live weight, 53% carcass yield and 60% meat yield i.e. 172 kg					

Table 19. Healthy Steppes Market Segments B1-B3 Product Costing with Sales and Dist. in House

***Sales and Dist. In House (Assump. Biweekly delivery on Mercedes Diesel Refer to Table 15)**

Assuming Animal Live Weight =575 kg Carcass yield =50% (287.7kg)					
	Raw material costs/kg (based on \$3.08/kg carcass wt)	Slaughter and processing costs/kg	*Sales and Distribution Costs (20% markup/ 17% margin)	Total cost/kg	
B1 Local Food Service					
Lean Ground	\$2.49	1.27	\$1.35	\$5.11	
Hamburger Patties	\$2.49	3.03	\$1.35	\$6.87	
Tenderloin	\$22.79	3.98	\$1.35	\$28.12	
Breakfast Sausages	\$2.49	4.42	\$1.35	\$8.26	
Blueberry Maple Sausages	\$2.49	4.42	\$1.35	\$8.26	
Garlic /Pepperoni	\$2.49	6.36	\$1.35	\$10.20	
Smokies	\$2.49	6.36	\$1.35	\$10.20	
Jerky/80 g pkg.	\$2.45	2.50	\$0.99	\$5.94	per 80 g pkg.
B2 Food Service					
Lean Ground	\$2.49	1.27	\$1.35	\$5.11	
Hamburger Patties	\$2.49	3.03	\$1.35	\$6.87	
Sausage tailored to chefs needs	\$2.49	4.42	\$1.35	\$8.26	
B3 Specialty Retail Stores					
Lean Ground	\$2.49	1.38	\$1.35	\$5.22	
Hamburger Patties	\$2.49	3.14	\$1.35	\$6.98	
Tenderloin	\$22.79	4.09	\$1.35	\$28.23	
Breakfast Sausages	\$2.49	4.51	\$1.35	\$8.35	
Blueberry Maple Sausages	\$2.49	4.51	\$1.35	\$8.35	
Garlic /Pepperoni	\$2.49	6.47	\$1.35	\$10.31	
Smokies/Hot Dogs	\$2.49	6.47	\$1.35	\$10.31	
Jerky 80 g pkg	\$2.49	2.50	\$0.99	\$5.98	per 80 g pkg.

Appendix II – Market Research Questionnaires

Segment A1 – *Okanagan’s Finest Angus Beef* (Product Line Fresh)
Upscale Restaurants in the Thompson/Okanagan region (18 Interviews)

Part I - Main Questions

Q 1 What is the value of the various attributes of locally produced beef to you and the guests eating experience? (Choose all that apply and rank them)

- Taste and juiciness
- Consistent tenderness
- Supporting local economy
- Reducing food miles
- Health aspects (e.g., no antibiotics and growth implants)
- Environmental sustainability of production system
- Dry aging 14 days
- Dry aging 21 days
- Others, please specify _____

Q 2 If *Okanagan’s Finest Angus Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Q 3 Based on the pricing matrix, what volumes (unit:kg) of the various primal cuts would you order weekly through the seasons?

High Season: which months? _____

Flat Iron:

Strip Loin:

Top Sirloin:

Flank Steak:

Brisket:

Skirt Steak:

Low season: which months? _____

Flat Iron:

Strip Loin:

Top Sirloin:

Flank Steak:

Brisket:

Skirt Steak:

Q 4 Are there any other cuts that you would be interested in?

Q 5 If a software program and the brand manager are available to assist in carcass optimization and identifying cost per serving, would you be interested in purchasing the beef on a carcass basis providing the value could be demonstrated?

Yes

No

Q 6 What are the most important considerations for you in choosing the source of beef?

Q 7 What ordering/delivery system would be most effective in meeting your needs?

Sales and service through existing distributor (please name)

Available Choices: Sysco Kelowna

Two Rivers Meats

Note: Gordons Food Service will not carry Beef from BC (provincial licensed plants)

Sales/service provided by the producer

Part II - Demographics

Time (duration of interview): _____

Years in this field: _____

Position: _____

Segment A2 - Okanagan's Finest Beef in Vancouver (Product Line Fresh)

Upscale Asian restaurants and banquet facilities in lower mainland region (8 interviews)

Part I - Main Questions

Q 1 What is the value of the various attributes of locally produced beef to you and the guests eating experience? (Choose all that apply and rank them)

Taste and juiciness

Consistent tenderness

Supporting local economy

Reducing food miles

Health aspects (e.g., no antibiotics and growth implants)

Environmental sustainability of production system

Dry aging 14 days

Dry aging 21 days

Others, please specify _____

Q 2 If *Okanagan's Finest Angus Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Q 3 Based on the pricing matrix, what volumes (Unit:kg) of the various primal cuts would you order weekly through the seasons?

High Season: which months? _____

Chuck:

Shoulder Clod:

107 Rib:

Short Rib:

Tenderloin:

Outside Round and Eye of Round (Goose Neck):

Inside Top Round:

Low Season: which months? _____

Chuck:

Shoulder Clod:

107 Rib:

Short Rib:

Tenderloin:

Outside Round and Eye of Round (Goose Neck):

Inside Top Round:

Q 4 Are there any other cuts that you would be interested in?

Q 5 If a software program and the brand manager are available to assist in carcass optimization and identifying cost per serving, would you be interested in purchasing the beef on a carcass basis providing the value could be demonstrated?

Yes

No

Q 6 What are the most important considerations for you in choosing the source of beef?

Q 7 What ordering/delivery system would be most effective in meeting your need?

Sales and service through existing distributor (please name)

(Available Choices: Two Rivers Meats and any other distributor that will carry beef products from BC provincially licensed plants.)

(Note: Sysco Lower Mainland and Gordons Food Service will not carry Beef from BC (provincial licensed plants))

Sales/service provided by the producer

Part II - Demographics

Time (duration of interview): _____

Years in this field: _____

Position: _____

Segment A3 - Okanagan's Finest Beef in Vancouver (Product Line Fresh)

Upscale hotels and restaurants in down town Vancouver (19 interviews)

Part I - Main Questions

Q 1 What is the value of the various attributes of locally produced beef to you and the guests eating experience? (Choose all that apply and rank them)

- Taste and juiciness
- Consistent tenderness
- Supporting local economy
- Reducing food miles
- Health aspects (e.g., no antibiotics and growth implants)
- Environmental sustainability of production system
- Dry aging 14 days
- Dry aging 21 days
- Others, please specify _____

Q 2 If *Okanagan's Finest Angus Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Q 3 Based on the pricing matrix, what volumes (Unit:kg) of the various primal cuts would you order weekly through the seasons?

High Season: which months? _____

Chuck:

Shoulder Clod:

107 Rib:

Short Rib:

Tenderloin:

Outside Round and Eye of Round (Goose Neck):

Inside Top Round:

Low Season: which months? _____

Chuck:

Shoulder Clod:

107 Rib:

Short Rib:

Tenderloin:

(cont'd)

Outside Round and Eye of Round (Goose Neck):

Inside Top Round:

Q 4 Are there any other cuts that you would be interested in?

Q 5 If a software program and the brand manager are available to assist in carcass optimization and identifying cost per serving, would you be interested in purchasing the beef on a carcass basis providing the value could be demonstrated?

Yes

No

Q 6 What are the most important considerations for you in choosing the source of beef?

Q 7 What ordering/delivery system would be most effective in meeting your need?

Sales and service through existing distributor (please name)

(Available Choices: Two Rivers Meats and any other distributor that will carry beef products from BC provincially licensed plants.)

Note: Sysco Lower Mainland and Gordons Food Service will not carry Beef from BC (provincial licensed plants)

Sales/service provided by the producer

Part II - Demographics

Time (duration of interview): _____

Years in this field: _____

Position: _____

Segment B1- *Healthy Steppes Grass-fed Beef* from the Cariboo (All Products Frozen)

Local Food Service and Tourism Lodges within Cariboo Region (12 Interviews) (Market Cow Product Line)

Part I - Main Questions

Q 1 What are the most important considerations for you in choosing the source of beef?

Q 2 What is the value of the various attributes of locally produced beef to you and the guests eating experience? (Choose all that apply and rank them)

Taste and juiciness

Consistent tenderness

Supporting local economy

Reducing food miles

Health aspects (e.g., no antibiotics and growth implants, learner beef, Omega 6/3 ratios))

Environmental sustainability of production system

(cont'd)

Natural/low stress animal production system

Others, please specify _____

Q 3 If *Healthy Steppes Grass-fed Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Q 4 Based on the pricing matrix, what volumes (Unit:kg) of the various primal cuts would you order per month through the seasons?

High Season: which months? _____

Lean Ground:

Hamburger Patties:

Tenderloin:

Rouladen:

Breakfast Sausages:

Blueberry Maple Sausage:

Garlic/Pepperoni:

Smokies:

Jerky 80 g pkg:

Low Season: which months? _____

Lean Ground:

Hamburger Patties:

Tenderloin:

Rouladen:

Breakfast Sausages:

Blueberry Maple Sausage:

Garlic/Pepperoni:

Smokies:

Jerky 80 g pkg:

Q 5 Are there any other cuts that you would be interested in?

Q 6 What type of ordering and distribution system would be most effective in meeting your needs (On line ordering, product held for pick up at a depot in Williams Lake or 100 Mile or full service sales through existing distributor)?

Online or phone/fax ordering and product held for pick up at a depot in Williams Lake or 100 Mile
(please circle preference)

Online or phone/fax ordering and product shipped via local trucking company
(please circle preference and name the local trucking company)

Online or phone/fax ordering and delivery through *Healthy Steppes* directly.

Note: Gordon's Food Service and Sysco are not available because they will not carry ground meat products processed by BC provincially licensed abattoirs.

Part II - Demographics

Time (duration of interview): _____

Years in this field: _____

Position: _____

Segment B2- *Healthy Steppes Grass-fed Beef* from the Cariboo (All Products Frozen)

Food Service – larger upscale restaurant chains within BC (10 Interviews e.g. Earls, Whitespot etc.)

Market Cow Product Line

Part I - Main Questions

Q 1 What are the most important considerations for you in choosing the source of beef?

Q 2 What is the value of the various attributes of locally produced beef to you and the guests eating experience? (Choose all that apply and rank them)

- Taste and juiciness
- Consistent tenderness
- Supporting local economy
- Reducing food miles
- Health aspects (e.g., no antibiotics and growth implants, learner beef, Omega 6/3 ratios)
- Environmental sustainability of production system
- Natural/low stress animal production system
- Others, please specify _____

Q 3 If *Healthy Steppes Grass-fed Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Q 4 Based on the pricing matrix, what would you be interested in piloting and what volumes (unit:kg) of the various primal cuts would your business utilize per month through the seasons?

High Season: which months? _____

- Lean Ground
- Hamburger Patties (can be tailored to chef's recipe)
- Sausage tailored to chefs need
- Montreal Smoked Meat
- Corned Beef

Low Season: which months? _____

- Lean Ground
- Hamburger Patties (can be tailored to chef's recipe)
- Sausage tailored to chefs need
- Montreal Smoked Meat
- Corned Beef

Q 5 What type of ordering and distribution system would be most effective in meeting your needs?

Sales through existing distributor (please name other below)

Note. 1) Distributors not available as they will not carry beef products from BC abattoirs: Gordon's Food Service

2) Distributors not available for lean ground, patties or fresh sausage but available for all cooked meat products: Sysco Kelowna.

3) Distributors available for all products: Three Rivers Meats

Sales/service provided by the producer collaborative

Other suggestions _____

Part II - Demographics

Time (duration of interview): _____

Years in this field: _____

Position: _____

Segment B3 - *Healthy Steppes Grass-fed Beef* from the Cariboo (All Products Frozen)

Specialty Retail Stores within BC (9 interviews e.g. Natures Fair etc.)

Market Cow Product Line

Part I - Main Questions

Q 1 What are the most important considerations for you in choosing the source of beef?

Q 2 What is the value of the various attributes of locally produced beef to you and the guests eating experience? (Choose all that apply and rank them)

Packaging and promotion materials

Consistent tenderness

Supporting local economy

Reducing food miles

Health aspects (e.g., no antibiotics and growth implants, learner beef, Omega 6/3 ratios)

Environmental sustainability of production system

Natural/low stress animal production system

Others, please specify _____

Q 3 If *Healthy Steppes Grass-fed Beef* can offer all of the items you have chosen, what percentage premium are you willing to pay over the premium quality commodity brands?

Q 4 Based on the pricing suggested, what volumes (Unit:kg) of various cuts would your store potentially move per month?

Lean Ground:

Hamburger Patties:

Tenderloin:

Rouladen:

Breakfast Sausages:

Blueberry Maple Sausage:

Garlic/Pepperoni:

Smokies:

Jerky 80 g pkg:

Q 5 Would you welcome in store promotions and taste testing?

Yes

No

Q 6 What type of ordering and distribution system would be most effective in meeting the needs of your store.

Sales and service through existing distributor (please name)

Please note: need to choose distributor that will carry beef products from BC provincially licensed plants.

Sales/service and delivery provided by the producer collaborative

Part II - Demographics

Time (duration of interview): _____

Years in this field: _____

Position: _____

Segment B4 - *Healthy Steppes* Grass-fed Beef from the Cariboo (All Products Frozen)

Consumer Households—Shipping Direct within BC (129 Interviews)

Market Cow and Under 24 Months Product Lines

Part I - Main Questions

Q 1 What are the most important considerations for you in choosing the source of beef?

Q 2 What is the value of the various attributes of locally produced beef to you?

(Choose all that apply and rank them)

Juiciness

Taste

Tenderness

(cont'd)

- Supporting local economy
- Reducing the food miles
- Health aspects (e.g., no antibiotics and growth implants, learner beef, omega 6/3 ratios)
- Environmental sustainability of production system
- Natural/low stress animal production system
- Others, please specify _____

Q 3 How important is a year-round pure forage diet to the value of the product?

Q 4 Would low-level supplementation of grain during the winter season be acceptable, providing the omega 6/3 ratios and CLA levels can be optimized through a 60-day forage finishing period?

- Yes
- No

Q 5 If *Healthy Steppes* Grass-fed Beef can offer all of the characteristics that you have chosen, what maximum percentage premium over base (supermarket) price would you be willing to spend for the products named below with delivery costs included?

Percentage Premium: _____

Q 6 Which of the following beef packages would you be willing to order?

If not the above, what would be your preferred package?

Q 7 What would be your preferred ordering frequency and at what volumes per week (\$) would you order, if you were happy with the product and service offering.

Q7-1 Would you rather order

- every two weeks
- monthly
- longer (large freezer space)

Q7-2 Volume Per Week (\$) _____

Q 8 When you order beef directly, what type of ordering and delivery system would be most effective in meeting your need (delivered directly to home or to a central pick-up location)?

- Delivered directly to home
- To a central pick-up location

Part II - Demographics

Time (duration of interview): _____

Gender:

Male

Female

Family size

Age of head of household

under 30 years

30–45

45–55

55 and above



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