



# Western Beef Development Centre

Division of PAMI

## 2008 Saskatchewan Cow/Calf Cost of Production Analysis

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### Introduction

The Western Beef Development Centre (WBDC) has been working with cow-calf producers across Saskatchewan to calculate their cow-calf cost of production (COP) since 2001. COP study results are published in WBDC Fact Sheets available on the WBDC website (under Publications & Information). This study was not completed for the 2006 and 2007 production years, however, Western Beef is pleased to release results for 2008.

The fiscal 2008 cow-calf cost of production data provided in **Table 1** on the following page, was generated from 18 producers situated across Saskatchewan with an average herd size of 241 cows. This was the first year producers entered their own data (in AgMpower software) and Kathy Larson, WBDC's Beef Economist, then analyzed and summarized the data in Microsoft Excel. Total costs of production and margins earned are expressed in both dollars per cow (\$/cow) as well as dollars per pound of calf weaned (\$/lb).

### Results

#### Income (A)

Cow-calf operations generate their income from the sale of weaned calves. Producers who retain their calves after weaning are required to provide a "sale price" for those calves as if they had been sold to their back-grounding operation. Average weaning weight was **545 lbs** and average income was **\$0.96/lb**. The income earned per cow was **\$463/cow**. The average weaning percentage in 2008 was **89%** (214 calves weaned / 241 cows exposed).

#### Direct Costs (B)

Direct costs include winter feed, grazing, vet expenses, vaccinations/medicine, supplies (e.g. RFID tags), and salt and minerals. Grazing included pasture, aftermath, and swath grazing. Producers were asked to value their home-grown feed, bedding and grazing (i.e. pasture, swath, aftermath grazing) at fair market value. Grazing days were valued assuming they were supervised (i.e. the cost of the grazing day included someone checking the cattle, fences, water, etc). All production costs associated with the bulls (feed, bedding, grazing, etc.) have been included and paid by the cowherd. Mineral and salt expenses are included in the winter feed and bedding expense. Veterinary and medicine covers vaccination, preg checking, and treatments for the cowherd, including calf vaccinations.

Feed and bedding costs (excluding salt and minerals) averaged \$1.29/cow per feeding day during the winter feeding period of 2007-08. The average cost per grazing day was \$0.72/pair/day. Total direct costs in 2008 are \$381/cow or \$0.79/lb of weaned calf. For comparison, the direct costs from 2001-2005 averaged \$352/cow or \$0.72/lb of weaned calf.



**Table 1. 2008 Saskatchewan Cow-Calf Cost of Production Analysis**

# of Herds	18		
Average Herd Size	241		
Number of Calves Weaned	214		
Average Weaning Weight	545		
Average Winter Feeding Days/Cow	151		
<b>Income (A)</b>	<b>\$/Cow</b>	<b>\$/lb</b>	
Weaned Calves	\$ 462.65	\$ 0.96	
<b>Direct Costs (B)</b>	<b>\$/Cow</b>	<b>\$/lb</b>	
Winter Feed/Bedding <sup>1</sup>	\$ 207.35	\$ 0.43	
Grazing	\$ 154.32	\$ 0.32	
Veterinary & Medicine	\$ 19.38	\$ 0.04	
<b>Total Direct Costs</b>	<b>\$ 381.05</b>	<b>\$ 0.79</b>	
<b>Yardage Costs (C)</b>	<b>\$/Cow</b>	<b>\$/lb</b>	<b>\$/WFD</b>
Fuel	\$ 24.74	\$ 0.05	\$ 0.16
Building and Machinery Repairs	\$ 20.60	\$ 0.04	\$ 0.14
Utilities	\$ 9.13	\$ 0.02	\$ 0.06
Custom Work	\$ 7.44	\$ 0.02	\$ 0.05
Paid Labour	\$ 9.72	\$ 0.02	\$ 0.06
Unpaid Labour	\$ 40.33	\$ 0.08	\$ 0.27
Taxes, Insurance, Dues, Marketing <sup>2</sup>	\$ 18.34	\$ 0.04	\$ 0.12
Depreciation	\$ 41.75	\$ 0.09	\$ 0.28
Lease Payments	\$ 1.06	\$ 0.002	\$ 0.01
<b>Total Yardage Costs</b>	<b>\$ 173.11</b>	<b>\$ 0.36</b>	<b>\$ 1.15</b>
<b>Other Costs (D)</b>	<b>\$/Cow</b>	<b>\$/lb</b>	
Interest	\$ 19.38	\$ 0.04	
<b>Summary (E)</b>	<b>\$/Cow</b>	<b>\$/lb</b>	
<b>Total Costs (B+C+D)</b>	\$ 573.54	\$ 1.19	
<b>Total Costs – Unpaid Labour</b>	\$ 533.22	\$ 1.12	
<b>Margin (A-B-C-D)</b>	\$ (110.89)	\$ (0.23)	
<b>Margin + Unpaid Labour</b>	\$ ( 70.57)	\$ (0.14)	

<sup>1</sup> Includes winter feed and bedding for the cows and herd sires, as well as minerals, salt, and supplies

<sup>2</sup> Includes taxes, insurance, professional fees and dues, marketing charges, and miscellaneous expenses



### **Yardage Costs (C)**

Total cowherd yardage costs in 2008 (i.e. all overhead costs including unpaid labour) were \$173/cow (\$1.15/winter feeding day). When unpaid labour was not included as a yardage cost, cowherd yardage costs equalled \$133/cow, or \$0.88/feeding day.

### **Other Costs (D)**

Interest payments related to the cowherd are included as a production cost. Principal debt payments are not included. The interest payments averaged \$19.38/cow or \$0.04/lb.

### **Summary (E)**

Total costs in 2008 were **just under \$574/cow**, which works out to a break-even price of **\$1.19/lb** for weaned calves (based on 89% weaning percentage and 545 lb calves). The average net margin in 2008 for the cow-calf enterprise was a **loss of just under \$111/cow** (when unpaid labour was included as an expense). When unpaid labour was not included as an expense, the net loss was \$70/cow.

Net margin (excluding unpaid labour) is what a producer has available to cover personal living expenses, principal debt payments and equity growth in the business. In 2008, a net loss was incurred, which means the producer could not even cover their production costs.

### **Management Style and Demographics**

A producer's management style can have a major impact on production costs. Providing details on the management practices of the cow-calf producers involved in this study is meant to offer further interpretation of the results.

When WBDC held COP workshops in the fall and winter of 2009-10, close to 40 producers attended. Inaccurate or incomplete data sets were removed from the study, resulting in a total of 18 producers being included in the analysis provided in Table 1. However, specific details on the production practices of all 38 producers are shared in this section.

#### *Feeding Information*

Days-on-feed depends on a number of factors including where a producer's operation is located, pasture availability in a given year, time of calving, etc. COP workshop participants fed their cattle an average of 172 days (5.5 months, or December to mid-May) each winter. The range among participants was a low of 60 days to a high of 240 days. Twenty-nine percent (29%) of participants use aftermath grazing and/or swath grazing as a fall feed source. Many of the producers used field feeding to keep their cows out of the yard pens for part of the winter feeding period.

#### *Calving/Retained Ownership Information*

The average weaning weight was 554 lb. Seventy-four percent (74%) of participants kept all or a portion of their weaned calves for backgrounding. With a large percentage of participants retaining their calves, it is important to note that the value of weaned calves reported in this analysis is not directly derived from market sales, but includes weaned calf values assigned by producers, based on what they believe their calves could have brought had they sold them at time of weaning. Eleven percent (11%) of participants indicated that they finished all or a portion of their calves.

#### *Diversification/Off-farm Employment Information*

Fifty-five percent (55%) of participants had cropland in addition to their cow-calf operations. Thirty-four percent (34%) indicated they (or their spouse, or both) had off-farm employment.



## Conclusions

Fall-run calf prices have been low the last few years as the industry makes its way through a downturn in the cattle cycle. Through October and November 2008, the average price for 400-500 lb feeder steers in Saskatchewan ranged from a low of \$1.03/lb to a high of \$1.15 per lb (CanFax). The range for 500-600 lb steers was \$0.98 to \$1.07/lb.

The break-even price based on the average total costs for the 2008 COP participants was \$1.19/lb for a 545 lb calf. When was the last time 550 lb calves were bringing \$1.19/lb? During the fall run of 2006 Canfax reported Saskatchewan 500-600 weight steer calves were above \$1.21 during September and October, but below \$1.21/lb for the first three weeks of November, while heifer calves averaged only \$1.06/lb (October-November).

The fall prices in 2008 and 2009 were not high enough to cover the 2008 break-even price. In hard times, cow-calf producers have to ensure they are being as efficient as possible in order to minimize losses. There are production performance measures that can be looked at to identify areas for improvement in an operation. For example, weaning percentage should be over 90%; the producers included in this 2008 analysis had a weaning percentage that averaged 89%.

## Looking forward

This Fact Sheet is being written in September 2010. In August, Statistics Canada reported the number of beef cows in Saskatchewan (as of July 1, 2010) has declined 12% from 2006, and now stands at 1.33 million. Beef cow numbers have also been declining nationally and in the United States. As herd numbers decline, so does the calf crop, which should lead to an eventual turnaround in the market prices as demand for beef exceeds supply.

There is a feeling by some market analysts that the herd downsizing that has been ongoing since 2006 should soon result in improved calf prices, perhaps as soon as this fall. During the last week of September, 2010, Saskatchewan 500-600 lb feeder steers averaged \$125.02/lb (SMA Cattle Market Update).

One must remember that there are many factors that affect calf prices - exchange rate, availability and price of feed grains, and market access all have a role in determining calf prices. Will the strong prices being reported in September hold through the fall run?

To obtain further information regarding this and many other articles pertaining to this topic, contact the WBDC at [www.wbdc.sk.ca](http://www.wbdc.sk.ca) or 306-682-3139 in Humboldt.

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