



# Western Beef Development Centre

Division of PAMI

## 2010 LOW-COST COW-CALF PRODUCERS

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### Introduction

The cow-calf cost of production study has been conducted by Western Beef since 2001. The 2010 study involved 22 producers situated across Saskatchewan. The findings for the study are summarized by averaging the results from all 22 participants. However, averaged results mask the range of the numbers (i.e. minimum, maximum). In this fact sheet, the top 25% low-cost participants are compared against the remaining study participants. The results are summarized in Table 1 and Table 2 .

### Results

Table 1. Summary of Low-Cost Producers vs Remaining Participants, 2010.

Average (\$/Cow) <sup>†</sup>	Top 25%	Remaining Participants	Difference +/-
<b>Total Costs</b>	\$512	\$659	- \$147
<b>Herd Size (# of cows)</b>	534	188	+ 346
<b>Winter Feedings Days</b>	156	161	- 5
<b>Direct Costs</b>	\$385	\$442	- \$57
<b>Yardage</b>	\$112	\$193	- \$81
<b>550 lb Break-even<sup>‡</sup></b>	\$1.02/lb	\$1.32/lb	- \$0.30/lb

<sup>†</sup> Rounded to nearest dollar

<sup>‡</sup> Break-even price assuming 90% wean percentage and 550 lb calf.

### Total Costs

The top 25% low-cost producers were those producers with the lowest total costs-per-cow costs. The average total costs among the low-cost producers was **\$512 per cow**, which is \$147/cow lower than the remaining producers in the study.

Average income (determined from actual weaned calf sales and estimated value of retained calves) for the low-cost producers was \$22/cow lower than the remaining participants. Table 2 shows that, despite lower revenue, the margins for the low-cost producers were nearly \$125/cow higher than the rest of the participants.



### **Herd Size**

A major contributing factor for the low-cost producers is their herd size. The average herd size was 534 cows (Min: 325; Max: 800). A large herd size enables a producer to “spread out” their fixed expenses. This is evident in the different yardage expenses between the low-cost producers and remaining participants; yardage costs differ by \$81/cow which accounts for 55% of the overall total cost difference (\$147/cow).

A paper authored by former WBDC economist, Ian McNinch, used 1999 data to determine optimal cowherd size. McNinch used econometric analysis to determine the link between total costs and herd size (pounds of weaned calf) and found there was no optimal herd size *per se*, rather increasing herd size would lead to continual decreases in average costs. Therefore, economies of size suggest a producer with 138 cows would have 40% higher costs than a producer with 500 cows.

Using the 2010 results, the low-cost producers (534 cows) had 29% lower costs than the remaining participants (188 cows).

### **Winter Feeding Days**

The difference for winter feeding days between the low-cost producers and remaining participants is only five days (156 d vs. 161 d). When this fact sheet was completed for 2005 results (see [Lang #2006-04](#)), the low-cost producers had 25 less winter feeding days. This suggests that the cost savings from minimizing winter feeding days and drylot pen feeding is becoming common knowledge and is widely practiced (Havens et al, 2006).

### **Direct Costs**

Direct costs include winter feed, bedding, minerals/salt, medicine/vet, grazing, and breeding stock depreciation. The low-cost producers had direct costs of \$385/cow (\$57/cow lower than the remaining participants). The biggest differences were in winter feed/bedding costs (\$44/cow lower) and vet/medicine (\$12/cow lower). Interestingly, the low-cost producers had varying winter feeding practices – bale grazing, straw/chaff pile, swath grazing, and feeding silage.

### **Yardage Costs**

Total cowherd yardage costs for the low-cost producers were \$112/cow or \$0.72 per winter feeding day. Low-cost producers' yardage is over 40% less than the remaining participants' average yardage expense. Seventy percent of the differences are in labour (paid + unpaid) and depreciation.

### **550 lb Break-Even Price**

The break-even price for the low-cost producers is \$0.30/lb lower than the remaining participants. This figure was calculated assuming 90% of cows wean a calf, and that the average weaning weight is 550 lb.

### **Management Style and Demographics**

Providing background on the management practices of the low-cost producers from this study offers additional insight on what makes a producer “low-cost.”

#### *Feeding Information*

Days on feed (156 d) is five days less than the remaining producers in the study. Swath grazing, bale grazing, and straw/chaff pile grazing are used by the low-cost producers. Bale processors and feeding silage are used on some but not all of the low-cost operations

#### *Calving/Retained Ownership Information*

The low-cost producers have calving start dates in April or May. All retained their entire 2010 calf crop. The producers are mixed on their feeding and marketing of calves – some only background, some background and grass calves, and some finish the calves to slaughter weight.



*Location*

These low-cost producers were from all over Saskatchewan, which suggests soil zone or location is not a factor in having lower costs.

**Table 2. 2010 Top 25% Low-Cost Producers vs Remaining Producers**

	<b>Top 25% Low-Cost</b>	<b>Remaining Producers</b>	<b>Difference</b>
<b>Herd Size</b>	534	188	346
<b># Calves</b>	465	167	297
<b>Wean %age</b>	87%	89%	-2%
<b>Total lbs Weaned</b>	252,329	90,434	161,895
<b>Avg WWT</b>	543	541	2
<b>DOF</b>	156	161	-5
<b>Income (\$/Cow)</b>	\$591.03	\$613.27	-22
<b>Direct Costs</b>			
Winter Feed/Bedding	\$ 179.17	\$ 223.37	\$ (44.20)
Veterinary & Medicine	\$ 9.93	\$ 21.94	\$ (12.01)
Grazing	\$ 143.40	\$ 145.07	\$ (1.67)
Breeding Stock Depreciation	\$ 52.78	\$ 51.79	\$ 1.00
<b>Total Direct Costs</b>	\$ 385.29	\$ 442.17	\$ (56.88)
<b>Yardage Costs</b>			
Fuel	\$ 14.26	\$ 18.11	\$ (3.84)
Machinery Repairs	\$ 13.82	\$ 16.41	\$ (2.59)
Building Repairs	\$ 1.51	\$ 6.01	\$ (4.50)
Utilities	\$ 11.80	\$ 14.63	\$ (2.83)
Custom Work	\$ 1.73	\$ 7.26	\$ (5.53)
Paid Labour	\$ 26.23	\$ 8.83	\$ 17.41
Unpaid Labour	\$ 18.71	\$ 77.96	\$ (59.25)
Taxes/Lisc./H2O	\$ 5.92	\$ 6.81	\$ (0.89)
Depreciation	\$ 15.67	\$ 31.16	\$ (15.50)
Lease Payments	\$ 2.04	\$ 5.99	\$ (3.95)
<b>Total Yardage Costs</b>	\$ 111.70	\$ 193.18	\$ (81.47)
<b>Other Costs</b>			
Capital Interest	\$ 7.05	\$ 6.89	\$ 0.16
Operating Interest	\$ 1.21	\$ 4.21	\$ (3.00)
Trucking/Marketing Costs	\$ 6.63	\$ 12.56	\$ (5.93)
<b>Total Other Costs</b>	\$ 14.88	\$ 23.65	\$ (8.77)
<b>Total Costs</b>	\$ 511.87	\$ <b>659.00</b>	\$ (147.12)
<b>Total Costs - Unpaid Labour</b>	\$ 493.16	\$ <b>581.03</b>	\$ (87.87)
<b>Margin</b>	\$ 79.15	\$ <b>(45.73)</b>	\$ 124.88
<b>Margin + Unpaid Labour</b>	\$ 97.86	\$ <b>32.24</b>	\$ 65.63



### Conclusions:

1. Herd size is an advantage to reducing costs, especially yardage costs per cow.
2. The length of the winter feeding period was not as important to being “low-cost” as in previous studies.
3. Soil zone or location within the province did not define “low-cost” producers; both Semiarid Prairie and Parkland producers can achieve “low-cost” status.
4. Five of the six low-cost producers are repeat participants in the WBDC COP study. This would suggest there is true value in monitoring your costs and production results year over year. WBDC encourages producers to determine their own cost of production, utilizing production and financial data.

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.

### References

Havens, A., G. Lastiwka, D. Laughton, D. Westerlund, J. Heyden, R. Rigney, J. Zylstra, J. Stone and D. Vandermeij. 2006. “ARECA - Year Round Grazing 365 Days.” *Livestock and Forage Group of Agricultural Research and Extension Council of Alberta (ARECA)*. pp.48.

McNinch, Ian. 2000. “Threshold Cowherd Size.” *Western Beef Development Centre*, pp. 15.

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