



# Western Beef Development Centre

## 2003 Saskatchewan Cow-Calf Cost of Production Analysis

By: Tim Highmoor & Clint Monchuk, WBDC Economists

### **Introduction**

The fiscal 2003 cow-calf cost of production data provided in Table 1 was generated from 53 producers, situated within four regions of Saskatchewan. For a map of these regions see Figure 1. 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). Table 2 defines the average yardage costs observed within each region's cowherd.

### **Results**

#### **Value of Production**

Value of production is simply the value of weaned calves (net of trucking and marketing deductions) less breeding stock depreciation. Weaned calf values ranged from 537 lbs/head @ \$1.06/lb in the east region to 501 lbs/head @ \$1.16/lb in the southwest.

Breeding stock depreciation (\$49-88/cow depending on the region) was only calculated on the breeding stock culled or determined to be a cull during 2003 (open, stifled, etc.).

*Obviously the BSE crisis resulted in the Saskatchewan breeding herd devaluing substantially from the beginning to end of 2003. However, the true market devaluation was beyond the scope of this study for a couple of reasons. First, the limited trading of breeding stock in the second half of 2003 resulted in many producers being uncertain as to what their breeding stock were worth. Second, the cow culling rate of 4.7%-10.4% (depending on the region) was lower than past years (because of poor cull prices and extended breeding seasons) and thus resulted in the breeding stock depreciation per cow being calculated on smaller percentage of the herd than normal.*

#### **Production Costs**

Winter feed, bedding, and all types of grazing were based on the producer's discretion as to its 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).

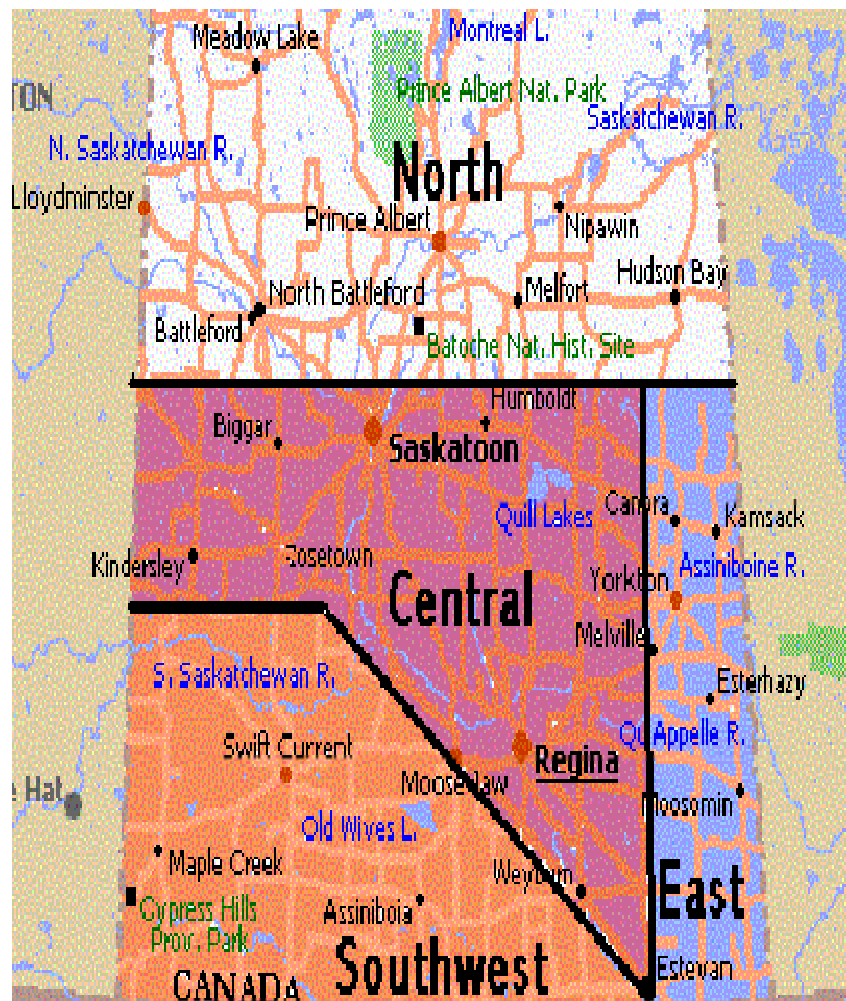
Please note production costs listed in Tables 1 & 2 are for the cowherd enterprise only, and do not include the costs associated with growing crops, baling feed, etc. given all feed was assigned its market value sitting in the bin, stack, pit, etc. The costs of rolling, grinding, processing and transporting feed to the animals are included in the yardage category.

Total cowherd yardage costs (i.e. all overhead costs including unpaid labour) ranged from \$131-186/cow or \$0.72-1.09/winter feeding day depending on the region (Table 2). When unpaid labour was not included as a yardage cost, the range was from \$82-127/cow or \$0.43-0.74 per feeding day. Both total costs of production and total costs of production less unpaid labour are detailed at the bottom of Table 1.

All production costs associated with the bulls (feed, bedding grazing, etc.) have been included and absorbed by the cowherd. Furthermore, interest payments are included as a production cost, however principal debt payments have not been included.

### Margin

Regional margins varied from -\$23/cow to -\$113/cow (when unpaid labour was included as an expense). When unpaid labour was not included as an expense, the regional margins ranged from +\$37/cow to -\$54/cow.



**Figure 1. Map of 2003 Saskatchewan Cowherd Regions**

## Conclusions

Similar to 2003, last year's analysis (2002) also resulted in a negative margin for all areas of Saskatchewan (when unpaid labour was included in the cost of production), given the high winter feed costs, expensive grazing, etc. When unpaid labour was not included as a production cost, the returns earned were still minimal for both years.

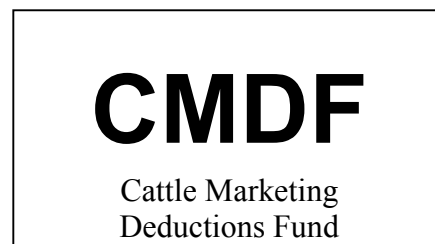
To participate in the WBDC cost of production program (cow-calf and/or feedlot) or to obtain further information regarding this and many other articles pertaining to this topic, contact Tim Highmoor at (306) 966-2627, [www.wbdc.sk.ca](http://www.wbdc.sk.ca) or email [thighmoor@wbdc.sk.ca](mailto:thighmoor@wbdc.sk.ca).

**Table 1. 2003 Saskatchewan Regional Cowherd Analysis**

	Central		East		North		Southwest	
# of Herds	13		18		11		11	
Cows expected to calve in 2003	183		149		281		275	
Number of Calves Weaned	173		141		261		256	
Average Weaning Weight	502		537		509		501	
Average Winter Feeding Days/Cow	146		172		189		153	
Average Pasture Grazing Days/Cow	146		146		153		196	
Average Aftermath Grazing Days/Cow	51		19		13		16	
Average Swath/Corn Grazing Days/Cow	23		28		10		0	
Bull Culling Rate	26.74%		13.27%		19.22%		4.56%	
Cow Culling Rate	4.72%		5.75%		7.60%		10.36%	
Cow Deaths	1.23%		1.57%		1.00%		0.79%	
Bull Deaths	3.85%		1.96%		0.91%		3.65%	
<b>Value of Production</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>
Value of Weaned Calves (Net of Trucking & Marketing)	540.12	1.14	542.02	1.06	513.58	1.09	540.76	1.16
Breeding Stock Depreciation	-49.34	-0.10	-55.15	-0.11	-54.00	-0.11	-88.19	-0.19
<b>Total Value of Production (A)</b>	<b>490.78</b>	<b>1.04</b>	<b>486.87</b>	<b>0.95</b>	<b>459.58</b>	<b>0.97</b>	<b>452.57</b>	<b>0.97</b>
<b>Production Costs</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>
Winter Feed & Bedding	171.78	0.36	220.83	0.43	228.69	0.48	175.20	0.38
Pasture Grazing	120.49	0.25	116.75	0.23	112.58	0.24	146.76	0.31
Aftermath Grazing	19.80	0.04	6.89	0.01	5.37	0.01	9.55	0.02
Swath/Corn Grazing	22.07	0.05	24.41	0.05	7.72	0.02	0.00	0.00
Veterinary & Medicine	24.61	0.05	24.96	0.05	19.74	0.04	23.46	0.05
Operating Interest	3.20	0.01	1.84	0.00	4.54	0.01	2.85	0.01
Capital Interest	7.63	0.01	17.54	0.03	7.25	0.02	4.88	0.01
Yardage (see Table 2 for description)	144.39	0.31	186.98	0.37	136.15	0.29	131.57	0.28
<b>Total Production Costs (B)</b>	<b>513.97</b>	<b>1.09</b>	<b>600.20</b>	<b>1.17</b>	<b>522.04</b>	<b>1.11</b>	<b>494.27</b>	<b>1.06</b>
<b>Margin (A - B)</b>	<b>-23.19</b>	<b>-0.05</b>	<b>-113.33</b>	<b>-0.22</b>	<b>-62.46</b>	<b>-0.13</b>	<b>-41.70</b>	<b>-0.09</b>
<b>Total Production Costs Less Unpaid Labour</b>	<b>453.19</b>	<b>0.96</b>	<b>540.87</b>	<b>1.06</b>	<b>467.91</b>	<b>0.99</b>	<b>449.95</b>	<b>0.96</b>

**Table 2. 2003 Saskatchewan Regional Cowherd Yardage Analysis**

	Central		East		North		Southwest	
Avg. Winter Feeding Days/Cow	146		172		189		153	
Cows expected to calve in 2003	183		149		281		275	
<b>Yardage Costs</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>	<b>\$/cow</b>	<b>\$/lb</b>
Fuel	12.82	0.03	12.23	0.02	11.02	0.02	7.50	0.02
Repairs – Machine	11.47	0.02	11.83	0.02	9.44	0.02	7.77	0.02
Repairs – Buildings	2.80	0.01	8.22	0.02	2.96	0.01	3.86	0.01
Utilities & Miscellaneous	14.39	0.03	19.28	0.04	15.43	0.03	24.95	0.05
Custom Work & Specialized Labour	5.33	0.01	10.61	0.02	6.66	0.01	10.10	0.02
Paid Labour	6.48	0.01	32.44	0.06	9.49	0.02	13.16	0.03
Unpaid Labour	60.78	0.13	59.33	0.12	54.13	0.11	44.32	0.09
Taxes & Insurance	9.67	0.02	7.45	0.01	4.99	0.01	3.70	0.01
Depreciation	19.16	0.04	24.67	0.05	15.99	0.03	16.01	0.03
Machine Lease Payments	1.48	0.00	0.92	0.00	6.05	0.01	0.21	0.00
<b>Total Yardage Costs</b>	<b>144.39</b>	<b>0.31</b>	<b>186.98</b>	<b>0.37</b>	<b>136.15</b>	<b>0.29</b>	<b>131.57</b>	<b>0.28</b>
<b>Total Yardage Costs/Feeding Day</b>	<b>\$0.99</b>		<b>\$1.09</b>		<b>\$0.72</b>		<b>\$0.86</b>	
<b>Total Yardage Costs Less Unpaid Labour</b>	<b>83.61</b>	<b>0.18</b>	<b>127.65</b>	<b>0.25</b>	<b>82.02</b>	<b>0.17</b>	<b>87.25</b>	<b>0.19</b>
<b>Total Yardage Costs/Feeding Day Less Unpaid Labour</b>	<b>\$0.57</b>		<b>\$0.74</b>		<b>\$0.43</b>		<b>\$0.57</b>	
<b>Cowherd Enterprise Investment (\$/cow)</b>								
Buildings	115.79		184.94		77.98		102.29	
Machinery	152.04		156.47		111.39		74.96	



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