



# Western Beef Development Centre

## 2002 SASKATCHEWAN COW HERD COST OF PRODUCTION ANALYSIS

### **Introduction**

The 2002 cost of production information provided in this fact sheet is to be used as a benchmark for existing cowherds throughout Saskatchewan. This information is broken down into: I “Average of Producers Sampled” and II “Regional Specific Averages”.

Each section of the report is further segregated into 1) value of production, 2) total production costs, 3) returns and 4) investment. The value of production section includes 2002 weaned calf values (net of trucking and marketing deductions) and accounts for breeding herd sales, purchases and inventory adjustment. Total production costs are predominantly made up of feed and pasture expenses, accounting for roughly two-thirds of total costs. Feed and pasture values are assumed at fair market value or the revenue forgone by cows consuming the forage and pasture. Interest and lease payments specific to the cow herd are taken into account; however no principal payments on debt are included. Investment amounts used in this study do not include the value of cattle, land and other non-cowherd enterprise related assets.

### **SECTION I: AVERAGE OF PRODUCERS SAMPLED**

Table 1 represents the average results for the 67 Saskatchewan producers who participated in this program during 2002. On average these producers had 155 cows in their herd on January 1, 2002 and weaned 143 calves weighing 523lbs/head. The value of production totaled \$539.37/cow or \$1.11/lb. of weaned calf. Production costs to produce a pound of weaned calf totaled \$1.26. Increased market values for forage and pasture attributed to this higher than usual cost of production.

The inclusion of paid and unpaid labour (incorporated and non-incorporated farms) is necessary to generate a return on labour, based on a typical farm labour value of \$10/hour. The result is an average annual total labour cost of approximately \$14,500 per herd. The inclusion of labour for checking pastures, baling and silaging are not included due to market values being used for pasture and forage usage.

| <b>Table 1 - Average Costs and Returns of Producers Sampled</b>                   |                 |                |
|---|-----------------|----------------|
| Number of Herds   | 67              |                |
| Average Number of Cows in Herd (January 1, 2002)                                  | 155             |                |
| Average Pounds of Calf Produced   | 74830           |                |
| Average Number of Calves Weaned   | 143             |                |
| Average Weaning Weight (lbs/head)   | 523             |                |
| Average Cowherd Days on Feed  | 175             |                |
| <b>Value of Production</b>  |                 |                |
|   | <b>\$/Cow</b>   | <b>\$/Lb.</b>  |
| Value of Weaned Calves (Net of Trucking & Marketing)                              | \$580.66        | \$1.20         |
| Inventory Adjustment/Miscellaneous Revenue/ Replacement Breeding Stock/Cull Sales | -\$41.29        | -\$0.09        |
| <b>Total Value of Production</b>  | <b>\$539.37</b> | <b>\$1.11</b>  |
| <b>Production Costs</b>   |                 |                |
| Winter Feed & Bedding   | \$223.14        | \$0.46         |
| Pasture   | \$152.01        | \$0.31         |
| Veterinary & Medicine   | \$25.67         | \$0.05         |
| Fuel  | \$12.76         | \$0.03         |
| Repairs   | \$17.23         | \$0.04         |
| Utilities/Custom Work/Operating Interest/ Miscellaneous                           | \$31.81         | \$0.07         |
| Paid Labour & Benefits  | \$12.88         | \$0.03         |
| Unpaid Labour   | \$80.56         | \$0.17         |
| Leases – Machinery/Cattle   | \$9.07          | \$0.02         |
| Taxes/Water Rates/Licenses/Insurance  | \$5.48          | \$0.01         |
| Equipment & Building Depreciation   | \$26.75         | \$0.06         |
| Capital Interest  | \$10.35         | \$0.02         |
| <b>Total Production Costs</b>   | <b>\$607.72</b> | <b>\$1.26</b>  |
| <b>Return to Equity</b>   |                 |                |
|   | <b>-\$68.35</b> | <b>-\$0.14</b> |
| <b>Cowherd Enterprise Investment</b>  |                 |                |
| Buildings   | \$243.41        |                |
| Machinery   | \$181.31        |                |

Based on historical data from this on-going WBDC cost of production study, Saskatchewan cowherd enterprise “return to equity” dropped substantially from 2001 to 2002. Factors causing the lower returns include: 1) lower calf values and 2) higher feed, bedding and pasture costs.

Return to equity is the difference between the value of production and cost of production. Positive

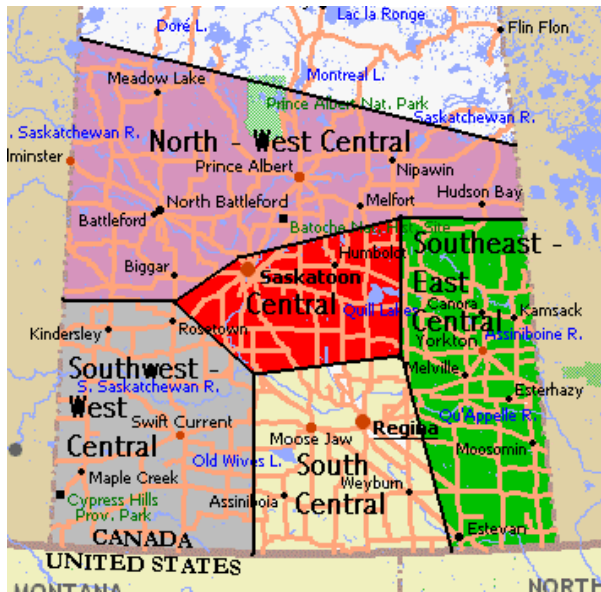
returns to equity are not primarily seen as increases in cash balance, but rather as increases in net worth (note “return to equity” is **NOT** the equivalent of “return on equity”).

## **SECTION II: REGIONAL SPECIFIC AVERAGES**

Analysis of the costs and returns between various regions of Saskatchewan were also compared (Table

2). The locations of the five regions are depicted in Figure 1.

The “Central” region had costs of production which were \$0.14/lb. of weaned calf greater than the lowest cost region, “Southwest – West Central”.



**Figure 1: Visual Depiction of the Five Regions**

One major regional cost of production difference focuses on winter feed, bedding and pasture expenses. The highest feeding costs were realized by producers north and west of Saskatoon. The “North – West Central” region recorded total feed and pasture costs of \$0.84/lb. of calf weaned or 69% of total production costs, compared to the “South Central” region at \$0.75/lb., or 61% of total production costs.

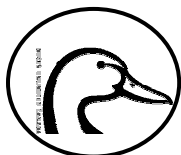
The other difference between regions centered on labour costs. Total labour costs remained similar among regions (\$0.16/lb. to \$0.19/lb.) with the exception of the “Central” region, which was substantially higher at \$0.27/lb. of weaned calf. However, producers sampled in the “Central” region had on average the smallest herd size in this study, which may have limited labour efficiencies.

Returns between regions show negative consistency. These negative returns were felt throughout Saskatchewan and as mentioned earlier, were due to higher costs of production and lower value of production.

### Conclusion

Sound managerial decisions, both financial and production related, assist producers to “stay above water” through tough times. By benchmarking your herd against these values you will be able to rate your existing cost of production against others producers in the province and your region. The goal of the WBDC is to help cattle producers in Western Canada become more profitable and the first step is to determine, “what does it cost to raise my calves?”

For further information about this study or to join the program contact Tim Highmoor at (306) 966-2627 or [thighmoor@wbdc.sk.ca](mailto:thighmoor@wbdc.sk.ca). This study and other WBDC cost of production studies can be found online at [www.wbdc.sk.ca](http://www.wbdc.sk.ca).



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| <b>Table 2 - Comparison of 5 Regions</b>   |                                 |                |                      |                |                                 |                |                  |                |                             |                |
|--|---------------------------------|----------------|----------------------|----------------|---------------------------------|----------------|------------------|----------------|-----------------------------|----------------|
|  | <b>Southwest - West Central</b> |                | <b>South Central</b> |                | <b>Southeast - East Central</b> |                | <b>Central</b>   |                | <b>North - West Central</b> |                |
| Number of Herds  | 16                              |                | 12                   |                | 19                              |                | 11               |                | 9                           |                |
| Average Number of Cows in Herd (January 1, 2002)                                     | 232                             |                | 112                  |                | 123                             |                | 107              |                | 200                         |                |
| Average Pounds of Calf Produced  | 109807                          |                | 54160                |                | 65471                           |                | 48633            |                | 91984                       |                |
| Average Number of Calves Weaned  | 215                             |                | 105                  |                | 112                             |                | 96               |                | 187                         |                |
| Average Weaning Weight (lbs/head)  | 511                             |                | 516                  |                | 585                             |                | 507              |                | 492                         |                |
| Average Days on Feed   | 164                             |                | 172                  |                | 186                             |                | 171              |                | 182                         |                |
| <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>  | <b>\$/Cow</b>               | <b>\$/Lb.</b>  |
| Value of Weaned Calves (Net of Trucking & Marketing)                                 | \$580.01                        | \$1.22         | \$595.82             | \$1.23         | \$616.74                        | \$1.16         | \$512.59         | \$1.13         | \$568.65                    | \$1.23         |
| Inventory Adjustment/Miscellaneous Revenue/<br>Replacement Breeding Stock/Cull Sales | -\$24.95                        | -\$0.05        | -\$61.48             | -\$0.13        | -\$52.59                        | -\$0.10        | -\$21.04         | -\$0.05        | -\$44.32                    | -\$0.10        |
| <b>Total Value of Production</b>   | <b>\$555.06</b>                 | <b>\$1.17</b>  | <b>\$534.34</b>      | <b>\$1.10</b>  | <b>\$564.15</b>                 | <b>\$1.06</b>  | <b>\$491.55</b>  | <b>\$1.08</b>  | <b>\$524.32</b>             | <b>\$1.14</b>  |
| <b>Production Costs</b>  |                                 |                |                      |                |                                 |                |                  |                |                             |                |
| Winter Feed & Bedding  | \$192.58                        | \$0.41         | \$194.81             | \$0.40         | \$268.93                        | \$0.50         | \$203.25         | \$0.45         | \$242.86                    | \$0.53         |
| Pasture  | \$151.83                        | \$0.32         | \$168.63             | \$0.35         | \$149.63                        | \$0.28         | \$146.28         | \$0.32         | \$142.25                    | \$0.31         |
| Veterinary & Medicine  | \$25.34                         | \$0.05         | \$33.04              | \$0.07         | \$26.86                         | \$0.05         | \$19.63          | \$0.04         | \$21.29                     | \$0.05         |
| Fuel   | \$12.75                         | \$0.03         | \$12.43              | \$0.03         | \$12.40                         | \$0.02         | \$16.08          | \$0.04         | \$9.91                      | \$0.02         |
| Repairs  | \$16.99                         | \$0.04         | \$19.58              | \$0.04         | \$18.71                         | \$0.04         | \$17.71          | \$0.04         | \$10.85                     | \$0.02         |
| Utilities/Custom Work/Operating Interest/<br>Miscellaneous                           | \$34.24                         | \$0.07         | \$35.26              | \$0.07         | \$35.32                         | \$0.07         | \$27.09          | \$0.06         | \$21.26                     | \$0.05         |
| Paid Labour & Benefits   | \$7.36                          | \$0.02         | \$1.56               | \$0.00         | \$25.71                         | \$0.05         | \$5.35           | \$0.01         | \$19.93                     | \$0.04         |
| Unpaid Labour  | \$79.91                         | \$0.17         | \$81.67              | \$0.17         | \$71.18                         | \$0.13         | \$117.91         | \$0.26         | \$54.36                     | \$0.12         |
| Leases - Machinery/Cattle  | \$0.10                          | \$0.00         | \$4.25               | \$0.01         | \$25.68                         | \$0.05         | \$3.16           | \$0.01         | \$3.59                      | \$0.01         |
| Taxes/Water Rates/Licenses/Insurance   | \$4.63                          | \$0.01         | \$4.18               | \$0.01         | \$6.70                          | \$0.01         | \$7.30           | \$0.02         | \$3.90                      | \$0.01         |
| Equipment & Building Depreciation  | \$20.34                         | \$0.04         | \$32.50              | \$0.07         | \$29.76                         | \$0.06         | \$30.56          | \$0.07         | \$19.52                     | \$0.04         |
| Capital Interest   | \$11.76                         | \$0.02         | \$7.70               | \$0.02         | \$15.57                         | \$0.03         | \$5.00           | \$0.01         | \$6.93                      | \$0.02         |
| <b>Total Production Costs</b>  | <b>\$557.82</b>                 | <b>\$1.18</b>  | <b>\$595.61</b>      | <b>\$1.23</b>  | <b>\$686.44</b>                 | <b>\$1.29</b>  | <b>\$599.31</b>  | <b>\$1.32</b>  | <b>\$556.66</b>             | <b>\$1.21</b>  |
| <b>Return to Equity</b>  | <b>-\$2.76</b>                  | <b>-\$0.01</b> | <b>-\$61.27</b>      | <b>-\$0.13</b> | <b>-\$122.29</b>                | <b>-\$0.23</b> | <b>-\$107.75</b> | <b>-\$0.24</b> | <b>-\$32.34</b>             | <b>-\$0.07</b> |
| <b>Cowherd Enterprise Investment</b>   |                                 |                |                      |                |                                 |                |                  |                |                             |                |
| Buildings  | \$200.01                        |                | \$277.71             |                | \$267.62                        |                | \$335.35         |                | \$111.36                    |                |
| Machinery  | \$149.80                        |                | \$214.70             |                | \$184.25                        |                | \$206.34         |                | \$156.00                    |                |