

AgriProfit\$

Benchmarks for Alberta Cattlemen

Economics & Competitiveness

Economic, Productive & Financial Performance Of Alberta Cow/Calf Operations

Comparing:

Alberta Total, Top Profitability
& Low Production Cost
Management Groupings

Production Year - 1999

Nov-03



Foreword

This *AgriProfit\$ Cost & Returns Report* presents the productive, economic & financial performance of cow/calf producers across Alberta for the 1999 production year.

Field research was undertaken through Alberta Agriculture's *AgriProfit\$ Business Analysis & Research* program with the cooperation of producers across the Province.

The intent of this report is to benchmark three specific management groupings:

- an "Alberta Total" average including all program participants across the 6 grass type regions.
- an average of the "low cost" herds across the Province. This "**Low Cost**" average includes the lower 1/3rd of producers in the pool as ranked by total costs / lb. of calf weaned*.
- an average of the "top profit" herds across Alberta. This "**Top R2E**" average includes the upper 1/3rd of producers in the pool as ranked by profitability.*

The primary value of this report is to enable producers to gauge their productive, economic and financial performance relative to their peers locally and provincially. Benchmark analysis, comparing to one's own detailed cost and returns analysis, is the first critical step in identifying operational strengths and weaknesses in a cow/calf operation.

The map above illustrates the location of each grass type region within Alberta. This package only reports the results of aggregated provincial groupings. If you are interested in obtaining information on specific regions, please contact the Economics Unit at:

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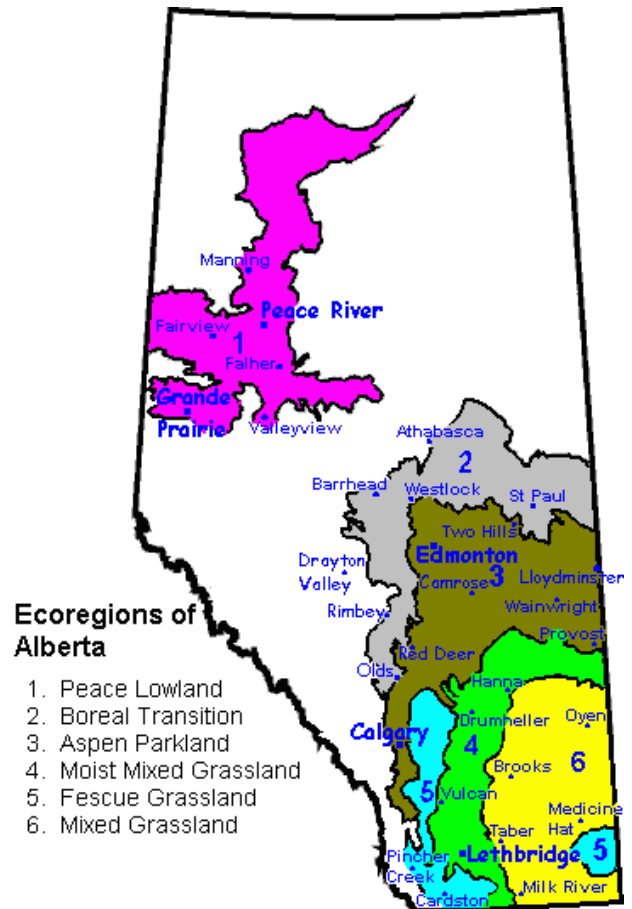
* For this analysis, return to equity (R2E) per lb. weaned & total production cost (TPC) per lb. weaned were the primary criteria for identifying the top management herd groupings. It should be noted, however, that there are several other factors that may contribute to the success of a cow/calf operation.

****Note:** The regional and top management groups provided sufficient observations to develop the farm financial benchmarks ... only these are used to develop the farm level financial performance indicators. Enterprise productive & economic information is developed based upon the whole regional sample.

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Alberta Agriculture, Food & Rural Development
November-03



1999 Cow/Calf Enterprise Overview

Economic & Physical Performance Comparisons

Benchmark Comparables: Alberta Total; Top Profit; Low Cost Groups

Enterprise Type: Weaned-Calf

Economic Performance Indicators:

	\$ / Lb. Weaned		
	Alberta Total	Top R2E	Low Cost
Production Stock Sales	1.302	1.318	1.292
Value of Production	1.338	1.433	1.298
Winter Feed Costs	0.374	0.338	0.274
Bedding Costs	0.028	0.024	0.025
Pasture Costs	0.227	0.209	0.215
Labour Costs	0.156	0.126	0.113
Other Variable Costs	0.192	0.148	0.140
Depreciation & Capital Lease Payments	0.082	0.061	0.074
Other Fixed Costs	0.055	0.032	0.031
Total Cash Costs	0.899	0.771	0.709
Total Production Costs	1.114	0.938	0.872
Contribution Margin	0.360	0.588	0.532
Gross Margin	0.439	0.662	0.589
Return to Investment	0.254	0.513	0.445
Return to Equity & Management	0.223	0.495	0.427
Total Investment (\$ / cow wintered)	1,913	1,862	1,870

Physical Performance Indicators:

	Alberta Total	Top R2E	Low Cost		Alberta Total	Top R2E	Low Cost
Conception Rate (%)	91.7	93.0	92.3	Cows Wintered	144.4	173.8	158.4
Calving Rate (%)	98.2	98.2	98.1	Cows per Bull	25.1	26.6	25.1
Weaning Rate (%)	97.3	98.6	98.2	Labour Hours per Cow	8.3	6.9	6.4
Calf Crop (%)	87.3	90.1	88.9	AUM's/Cow Wintered	7.0	6.8	6.8
% Calved - 1st 2 Cycles	81.7	85.3	84.5	Feeding Season Days	176.9	180.0	178.2
Lbs. Weaned/Cow Exposed	488.0	509.8	518.9	Tonnes Fed per Cow			
Lbs. Weaned/Cow Wintered	525.2	544.3	559.7	- as-fed	3.8	3.7	2.9
Wean Wt as a % of Cow Wt.	44.0	44.4	46.1	- dry matter			
Weight per Day of Age (lbs.)	2.60	2.62	2.66				

	Alberta Total	Top R2E	Low Cost
G rowth (weaning weight)	559.2	565.7	583.6
O pen Cows (%)	8.0	6.5	7.2
L ength of Calving Period	98.6	93.9	95.5
D eath Loss of Calves (%)	2.9	2.2	2.2

1999 Cow/Calf Enterprise Overview

Economic & Financial Performance Comparisons

Benchmark Comparables: Alberta Total; Top Profit; Low Cost Groups

Enterprise Type: Weaned-Calf

Economic Performance Indicators:

	<i>\$ / Cow Wintered</i>		
	Alberta Total	Top R2E	Low Cost
Production Stock Sales	683.82	717.40	723.24
Value of Production	702.49	779.97	726.69
Winter Feed Costs	196.67	184.09	153.29
Bedding Costs	14.87	13.17	13.71
Pasture Costs	119.03	113.82	120.24
Labour Costs	81.70	68.53	63.42
Other Variable Costs	101.03	80.53	78.37
Depreciation & Capital Lease Payments	43.21	33.09	41.64
Other Fixed Costs	28.65	17.32	17.12
Total Cash Costs	472.01	419.75	397.05
Total Production Costs	585.15	510.56	487.77
Contribution Margin	189.20	319.83	297.67
Gross Margin	230.48	360.23	329.65
Return to Investment	133.44	279.17	249.33
Return to Equity & Management	117.35	269.41	238.92

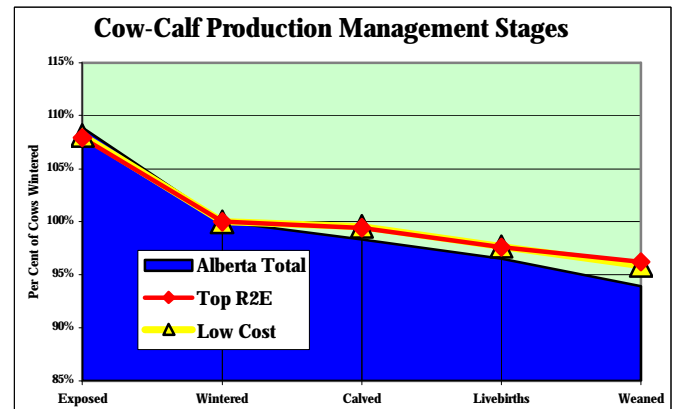
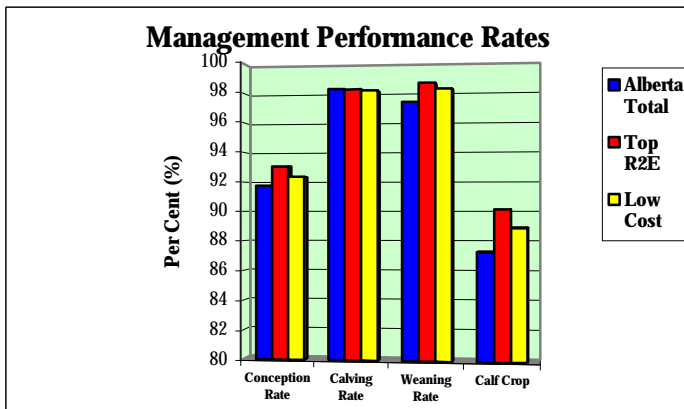
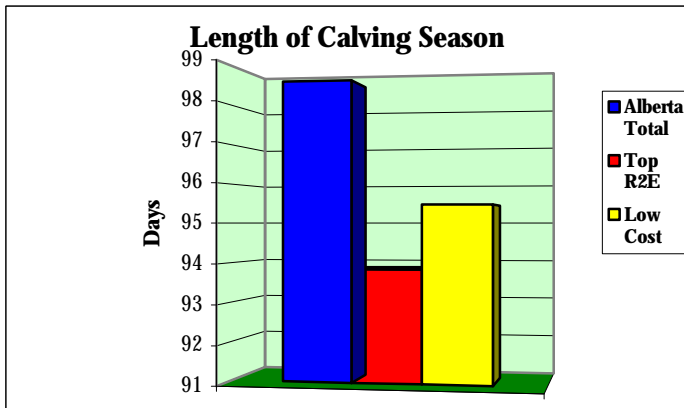
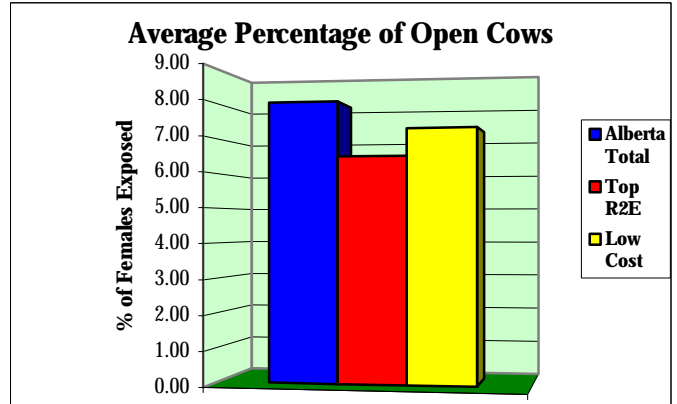
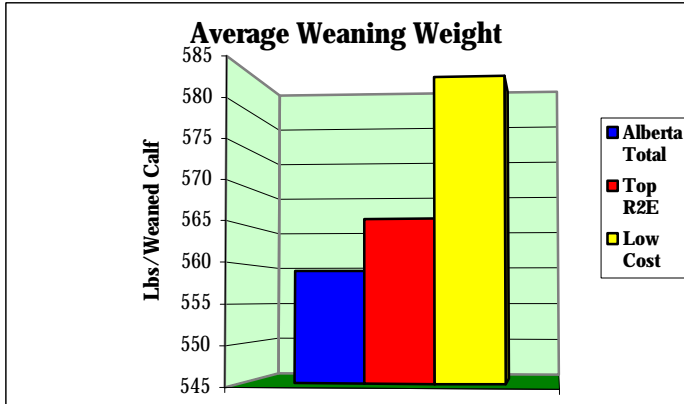
Farm Financial Performance Indicators:

ROAD to Profitability	Alberta Total	Top R2E	Low Cost	
Risk (Debt to Asset Ratio)	0.15	0.13	0.12	= Total Liabilities / Total Assets
Operating Expense Ratio	0.52	0.47	0.48	= Operating Expenses / Value of Production
Asset Return	0.03	0.05	0.04	= Return on Assets / Total Farm Assets
Debt Payout	3.93	2.18	2.42	= Total Liabilities / Net Farm Income
to Profitability	58,730.51	95,342.51	82,778.47	= Net Farm Income
The "3-C's"				
Current Ratio	2.98	3.61	3.25	= Current Assets / Current Liabilities
Calif. Working Cap. Ratio	0.86	1.21	1.06	= Working Capital / Total Expenses
Capital Turnover Ratio	0.14	0.16	0.14	= Value of Production / Total Farm Assets
Farm Size (Acres)	2,312	2,868	2,851	= Total Acres in crops, forages & grazing (includes all acres owned, rented & leased)

1999 Cow/Calf Enterprise Overview

Physical Performance Comparisons

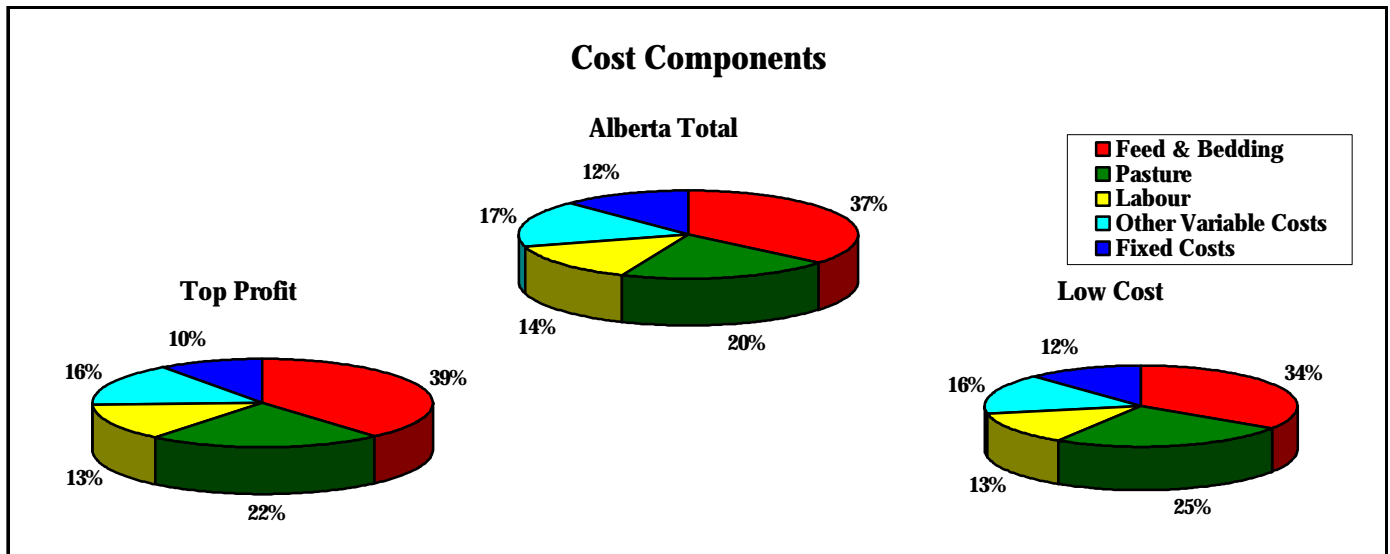
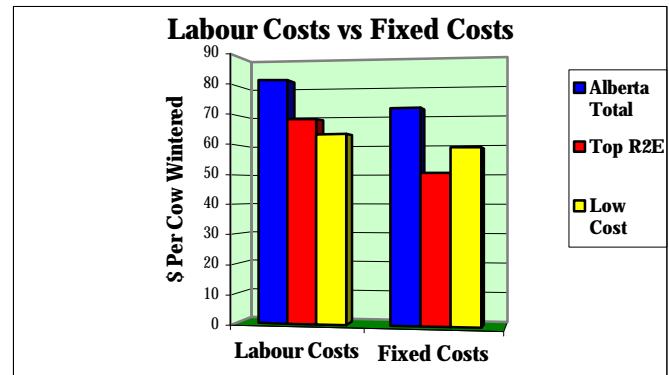
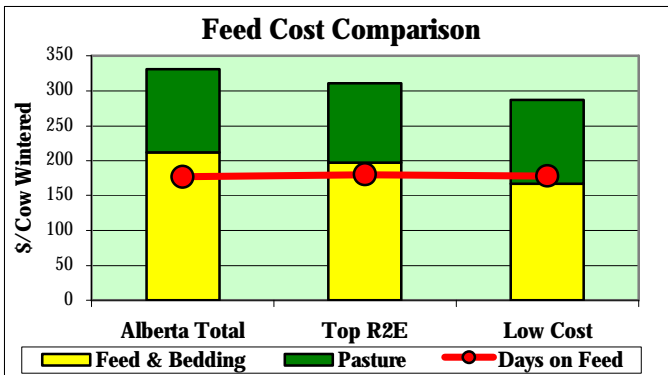
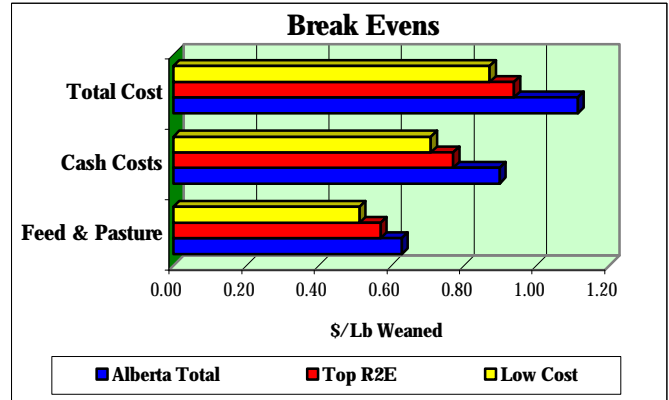
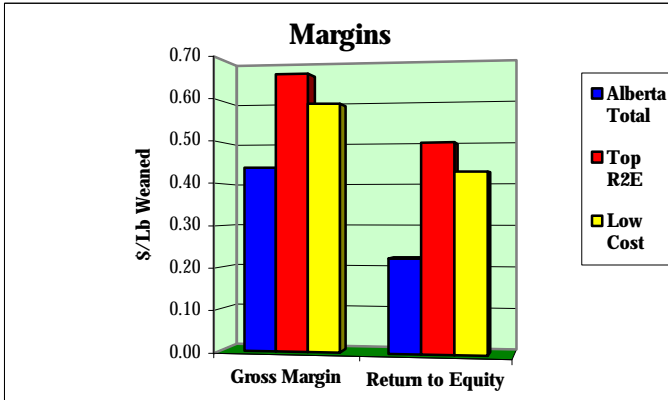
Benchmark Comparables: Alberta Total; Top Profit; Low Cost Groups



1999 Cow/Calf Enterprise Overview

Economic Performance Comparisons

Benchmark Comparables: Alberta Total; Top Profit; Low Cost Groups



1999 Cow/Calf Enterprise Unit Cost & Returns Detail**Economic Performance Comparisons**

	Alberta Total	Top R2E	Low Cost
	----- \$/Lb Weaned -----		
(A)			
1. Weaned Calves	1.30	1.32	1.29
2. Feeder Calves	0.00	0.00	0.00
3. Slaughter Cattle	0.00	0.00	0.00
4. Purebred Calves	0.00	0.00	0.00
5. Baby Calves	0.00	0.00	0.00
6. Cull Cows/Open Heifers	0.17	0.16	0.14
7. Bulls	0.04	0.03	0.03
8. Bred Cows/Bred Heifers	0.07	0.04	0.05
9. Miscellaneous Receipts	0.01	0.00	0.00
10. Government Programs	0.00	0.00	0.00
11. Inventory Adjustment	0.16	0.28	0.10
12. Less: Cattle Purchases	0.41	0.41	0.32
Value of Production	1.34	1.43	1.30
(B)			
1. Winter Feed	0.37	0.34	0.27
2. Bedding	0.03	0.02	0.02
3. Pasture	0.23	0.21	0.21
4. Veterinary & Medicine	0.03	0.03	0.03
5. Breeding Fees/Bull Rental	0.00	0.00	0.00
6. Trucking & Marketing Charges	0.02	0.02	0.02
7. Fuel	0.02	0.02	0.02
8. Repairs - Machine	0.03	0.02	0.02
9. Repairs - Corrals & Buildings	0.02	0.01	0.01
10. Utilities & Miscellaneous Expenses	0.04	0.03	0.03
11. Custom Work & Specialized Labour	0.01	0.01	0.01
12. Operating Interest Paid	0.01	0.00	0.01
13. Paid Labour & Benefits	0.02	0.02	0.02
14. Unpaid Labour	0.14	0.11	0.10
Variable Costs	0.98	0.85	0.77
(C)			
1. Share/Lease Cattle Payments	0.01	0.00	0.00
2. Taxes, Water Rates, Lic. & Insurance	0.02	0.01	0.01
3. Equipment & Building	0.08	0.06	0.07
a) Depreciation			
b) Lease Payments	0.01	0.00	0.01
4. Paid Capital Interest	0.03	0.02	0.02
Total Capital Costs	0.14	0.09	0.10
(D) Cash Costs	(B+C-B14-C3)	0.90	0.77
(E) Total Production Costs	(B+C)	1.11	0.94
(F) Gross Margin	(A-D)	0.44	0.66
Return to Unpaid Labour	(A-D+B14)	0.36	0.60
Return to Investment	(A-E+C4)	0.25	0.51
Return to Equity	(A-E)	0.22	0.50
Total Investment		3.64	3.42
		3.42	3.34

1999 Cow/Calf Enterprise Unit Cost & Returns Detail
Economic Performance Comparisons

	<u>Alberta</u>	<u>Top</u>	<u>Low</u>
	<u>Total</u>	<u>R2E</u>	<u>Cost</u>
	-----	-----	-----
	\$/Cow Wintered		
(A)			
1. Weaned Calves	683.82	717.40	723.24
2. Feeder Calves	0.00	0.00	0.00
3. Slaughter Cattle	0.00	0.00	0.00
4. Purebred Calves	0.00	0.00	0.00
5. Baby Calves	0.00	0.00	0.00
6. Cull Cows/Open Heifers	88.09	89.38	79.55
7. Bulls	19.60	17.42	14.81
8. Bred Cows/Bred Heifers	34.59	20.66	27.06
9. Miscellaneous Receipts	3.04	2.30	1.71
10. Government Programs	0.46	0.00	0.00
11. Inventory Adjustment	85.94	154.93	58.10
12. Less: Cattle Purchases	213.05	222.12	177.77
Value of Production	702.49	779.97	726.69
(B)			
1. Winter Feed	196.67	184.09	153.29
2. Bedding	14.87	13.17	13.71
3. Pasture	119.03	113.82	120.24
4. Veterinary & Medicine	17.54	15.85	15.55
5. Breeding Fees/Bull Rental	1.06	0.74	0.29
6. Trucking & Marketing Charges	12.62	11.53	8.83
7. Fuel	12.09	10.36	10.09
8. Repairs - Machine	13.42	10.60	9.03
9. Repairs - Corrals & Buildings	9.05	7.20	5.92
10. Utilities & Miscellaneous Expenses	23.19	13.95	17.68
11. Custom Work & Specialized Labour	7.09	8.12	6.02
12. Operating Interest Paid	4.96	2.18	4.96
13. Paid Labour & Benefits	8.94	10.38	10.24
14. Unpaid Labour	72.76	58.15	53.17
Variable Costs	513.29	460.15	429.02
(C)			
1. Share/Lease Cattle Payments	3.92	1.00	0.00
2. Taxes, Water Rates, Lic. & Insurance	8.64	6.57	6.71
3. Equipment & Building	40.38	32.66	37.55
a) Depreciation			
b) Lease Payments	2.83	0.43	4.08
4. Paid Capital Interest	16.10	9.75	10.41
Total Capital Costs	71.86	50.41	58.75
(D) Cash Costs (B+C-B14-C3)	472.01	419.75	397.05
(E) Total Production Costs (B+C)	585.15	510.56	487.77
(F) Gross Margin (A-D)	230.48	360.23	329.65
Return to Unpaid Labour (A-D+B14)	190.11	327.57	292.09
Return to Investment (A-E+C4)	133.44	279.17	249.33
Return to Equity (A-E)	117.35	269.41	238.92
Total Investment	1,913.07	1,861.52	1,870.18

Definitions & Explanations to Accompany the Cow/Calf Enterprise Overview

Production Stock Sales - revenues associated with the sale of weaned calves & other **non-breeding stock** related sales.

Value of Production (VOP) - the value of what was produced by the cow/calf enterprise over the course of the production year. Includes cash & non-cash values of:

- g** cull & breeding stock sales, revenues from miscellaneous sources (eg. program payments, patronage refunds, etc.) as allocated to the cow/calf enterprise,
- g** inventory adjustments relating changes in the number & value of stock included in the enterprise,
- g** an adjustment for livestock purchases (value is added only from the point of purchase forward)

Winter Feed Costs - the cost of all feeds used by the cow/calf enterprise, purchased or homegrown, based on the market value of these feeds (**not** the cost of raising the feeds).

Pasture Costs - the value of grazing used by the cow/calf enterprise (exclusive of any other retained ownership/backgrounding uses). Pasture is valued into the cow/calf enterprise at market value (**not** cost) & is treated as a "cash" cost.

Labour Costs - a sum of paid & contributed labour, as allocated to the cow/calf enterprise. Paid labour is valued at cost, while unpaid labour is valued at a standard or base cost.

Depreciation & Capital Lease Payments - sum of depreciation & mach./equip't/ bldg. lease payments on assets allocated to the cow/calf enterprise.

Other Fixed Costs - total cash overheads, as allocated to the cow/calf enterprise (share/lease cattle payments, property taxes, insurances, licences & term loan interest).

Total Cash Costs - sum of enterprise cash costs, considering home grown feeds, bedding & pasture as cash costs.

Total Production Costs - sum of all variable & fixed production costs.

Contribution Margin - VOP less Variable Costs

Gross Margin - VOP less Total Cash Costs

Return to Investment - VOP less Total Production Costs plus Term (Capital) Interest Paid

Return to Equity & Management - VOP less Total Production Costs

Investment - sum of assets allocated to the enterprise. includes: breeding stock, machinery, equipment, buildings/facilities & building site (only).

Breeding Performance Rates

(adjusted for sales & purchases of bred cattle)

Conception Rate (%) - # Bred / # Exposed

Calving Rate (%) - # Livebirths / # Bred Females

Weaning Rate (%) - # Weaned / # Livebirths

Calf Crop (%) - # Weaned / # Exposed

Calved in 1st 2 Cycles (%) - $\frac{\# \text{ Calved Cycle 1 \& 2}}{\text{Total Calved}}$

Lbs. Weaned/Cow Exposed - $\frac{\text{Total Lbs. Weaned}}{\# \text{ Females Exposed}}$

Lbs. Weaned/Cow Wintered - $\frac{\text{Total Lbs. Weaned}}{\# \text{ Bred Females Wintered}}$

Wean Wt. as % of Cow Wt. - $\frac{\text{Avg. Lbs. Weaned}}{\text{Avg. Mature Cow Wt.}}$
(adjusting bred heifer wts.)

Weight per Day of Age (lbs.) - $\frac{\text{Avg. Lbs. Weaned}}{\text{Wtd Avg Wean Age}}$

Cows Wintered - Open Inventory of Bred Cows & Heifers

Cows / Bull - # Cows & Heifers Exposed / # Bulls Used

Labour Hours / Cow - Total Labour Hrs. / Cows Wintered

AUM's / Cow Wintered - $\frac{\text{Total Enterprise AUM's}}{\text{Cows Wintered}}$

Feeding Season Days - Days Fed (in yard)

Tonnes Fed per Cow -

as-fed $\frac{\text{Tonnes Total Feed (As-Fed)}}{\# \text{ Cows Wintered}}$

dry matter $\frac{\text{Tonnes Total Feed (Dry Matter)}}{\# \text{ Cows Wintered}}$

GOLD Indicators

Growth (wean wt.) - $\frac{\text{Total Lbs. Weaned}}{\# \text{ Calves Weaned}}$

Open Cows (%) - $\frac{\# \text{ Open Cows \& Heifers}}{\# \text{ Exposed}}$

Length of Calving Period - Days from 1st to last calf

Death Loss of Calves (%) - $\frac{\# \text{ Calves Died}}{\# \text{ Livebirths}}$