

IRM HERD ANALYZER

INPUT FORM FOR 2004 CALVES

BY

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IRM Herd Analyzer

Input form for assisting cow-calf producers to evaluate herd performance, costs and returns, and the beef herd's profitability.

HERD ANALYZER ANALYSIS 2001 Manitoba DATABANK (Average of 26 Herds)

Cow on Hand Jan 1, 2001:	111
Females Exposed:	119
Total Investment Per Cow:	\$ 2,307
Total Debt Per Cow:	\$ 308
Average Steer Price (\$/CWT):	\$ 135
Average Weaning Weight:	559
Gross Income Per Cow:	\$ 685
Feed Costs:	
Summer	\$ 51
Aftermath	\$ 2
Winter	\$ 170
Total Feed Costs:	\$ 223
Livestock Expenses:	
Vet & Medicine	\$ 24
Trucking	\$ 3
Miscellaneous	\$ 0
Fuel	\$ 18
Utilities & Gen Farm Exp	\$ 9
AI Expense	\$ 3
L S Supp & Lease Print	\$ 31
Marketing	\$ 7
Breeding	\$ 17
Hired Labor & Mgt	\$ 5
Total Livestock Expense:	\$ 117
Interest on Feed & L S Expenses:	\$ 6
Fixed Expenses:	
BLD. FAC. Cows & Heifers	\$ 71
Debt Interest	\$ 14
Debt Principal	XXXX
Total Costs:	\$ 431
Value Added Per Cow (P&L)	\$ 254
Unit Cost of Prod (\$/Cwt)	\$ 87

Name _____

_Address_____ County_____

_City_____ State_____ Zip_____

_Phone (____)_____

Date_____ / _____ / _____

E-Mail Address:_____

Is your herd enrolled in CHAPS? ___No ___Yes-Herd # _____

May we request a copy of your CHAPS summary? ___Yes ___No

Signature:_____

Can you compete? How do you compare?

Cow-calf production is characterized by cyclical prices and marginal returns with large differences between years and profitability among producers. Rather than continuing without knowledge of profitability, the challenge for today's beef cow operator is to know the cost and returns from your beef cow herd, direct where it is going and plan how to get there.

Records are a must...you can't manage what you can't measure

It takes information to accurately analyze and evaluate a beef cow enterprise, this includes records of cash expenses, operation's debts, herd inventory and herd performance. Some of the financial inputs are readily available from your tax records. Others are more difficult to obtain and may need to be initially approximated. This clearly identifies the need for future changes in farm record keeping and accounting. For herds not currently enrolled in CHAPS it is strongly encouraged that they do so. Much of the necessary production information required in the Herd Analyzer can be easily and more accurately retrieved from your CHAPS summary reports.

Dr. Harlan Hughes' IRM Herd Analyzer... assisting with analysis and information

Harlan Hughes' IRM-Herd Analyzer provides an excellent starting point for you to systematically evaluate your beef cow operation. Through comprehensive benchmarking you will be able to identify key bottlenecks to profitability and opportunities that can improve your cow herd's profitability.

To become involved in Hughes' IRM Herd Analyzer program, enter your herds information as completely as possible on this form and return for analysis to the address listed on the bottom of the last page. The information you provide will be handled **confidentially** and analyzed to provide a standardized performance and economic analysis. Two copies of the analysis will be mailed back to you. Preliminary results can then be confidentially discussed and modified for further individual analysis. A revised analysis is the normal process.

Herd Inventory Example Inventory Sheet Calf crop year 2004

Numbers of animals comprising the operation is very critical in evaluating both financial and production performance of a herd, but often very difficult to determine historically without written records.

	Total Females	Mature Cows	Bred Heifers	Replacement Heifer Calves	Bulls
No. exposed in 2003	<u>101</u>	<u>89</u>	<u>12</u>		No. in service in 2003 <u>5</u>
Business Year					
No. at beginning of year (1/1/04)	<u>101</u> a a=c+d			<u>14</u> b (2003 calves)	No. at beginning of year 1/1/04 Held for breeding <u>5</u> Held for sale <u>0</u>
Kept for calving	<u>92</u> c	<u>80</u>	<u>12</u>		
Culls held for sale	<u>9</u> d	<u>9</u>	<u>0</u>		
TOTAL \$ 3600					
No. calved this year - 2004	<u>92</u>	<u>80</u>	<u>12</u>		
No. losing calves this year - 2004	<u>6</u>	<u>4</u>	<u>2</u>		
No. determined open in fall - 2004		<u>0</u>	<u>0</u>		
No. leaving herd during calendar year 2004	<u>7</u> e e=h+i+j				No. leaving herd this calendar year Died 2004 <u>1</u> Sold 2004 <u>1</u>
h) died	<u>2</u> h	<u>1</u>	<u>1</u>	<u>0</u>	
i) non-breeding sold	<u>4</u> i	<u>1</u>	<u>2</u>	<u>1</u>	
j) bred cows sold	<u>1</u> j	<u>1</u>	<u>0</u>	<u>0</u>	
No. bought during calendar year - 2004	<u>2</u> f	<u>2</u>	<u>0</u>	<u>0</u>	No. bought 2004 <u>2</u>
TOTAL \$ 1,600					
—	<u>101</u> g g=k+l				No. at end of year 12/31/04 Kept for breeding <u>5</u> Held for sale <u>0</u>
No. at end of year (12/31/04):	<u>k</u>	<u>80</u>	<u>13</u>		
k) kept for calving	<u>1</u> l	<u>8</u>	<u>0</u>		
l) culls held for sale					
Heifer calves kept for replacements				<u>18</u> (2004 calves)	

Inventory check (optional, should equal zero)

a	b	d + e	f	g
<u>101</u>	<u>14</u>	<u>9+7</u>	<u>2</u>	<u>101</u> Head
Beg Inv #	+	Kept for Replacements	-	No. leaving herd
			+	Purchases
			=	Ending Inv #

Production schedule - several key dates are required to define pasture and winter feed use

Date mature cows start calving 2 / 15 / 04 Average calving date 3 / 08 / 04

Grazing schedule **Cows** **Heifers** **Dry Cows**

Date off grass 2003 10 / 15 / 03 xxxx xxxx

Date on grass 2004 4 / 30 / 04 xxxx xxxx

Total days calves were creep fed 0

Date off grass 2004 10 / 20 / 04 xxxx xxxx

Date calves weaned in 2003 Oct / 20 / 03

Days on aftermath 2004 0

Are your heifer calves X Raised Purchased

Simple Simplified Inventory Input Form

No. 2a: A Short Cut To Your Herd Inventory

Inventory Simulation Sheet For IRM-FARMS

Year: 2002 Goal Mature Cows Bred Heifers Virgin Hfrs

Females Exposed At Bull Turnout		<u>89</u>	<u>12</u>
Females: Begining Inventory Kept for calivng		<u>80</u>	<u>12</u> <u>14</u>
Held for sale	\$ <u>0.00</u>	<u>0</u>	
	Suggest Values		
Lost Calves %age =	5% 0	<u>4</u>	<u>2</u>
Preg Cecked Open %age =	5% 0	<u>0</u>	<u>0</u>
Died		<u>1</u>	<u>1</u> <u>0</u>
Culls %age =	16% 0	<u>1</u>	<u>2</u> <u>1</u>
Animals Bought That Calved this Yr		<u>2</u>	<u>0</u> <u>0</u>
Animals Bought No Calf This Year		<u>0</u>	<u>0</u> <u>0</u>
Total Dollar Value	\$ <u>1600</u>		
Bred Animals Sold	(Bought Only)	<u>1</u>	<u>0</u> <u>0</u>
Culls Held In EI For Sale		<u>0</u>	<u>0</u>
Hfr calves held back (EI) % Rpl Rate	20% 0		<u>18</u>

Lost Calf Calculator	
<u>0</u>	aborts
<u>2</u>	born dead
<u>4</u>	died
0	= Total

Figure 1: It is recommended that you complete this form in place of No 2 on the next page.

Inventory Simulation Sheet For IRM-FARMS

Year:

Goal Mature Cows Bred Heifers Virgin Hfrs

Females Exposed At Bull Turnout

<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>
---	---	---

Females: Begining Inventory Kept for calivng

<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>
---	---	---

Held for sale \$

<input style="width: 95%; height: 95%;" type="text"/>

	Suggest Values														
Lost Calves %age =	<input style="width: 60px; height: 20px;" type="text" value="5%"/>	0	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;">Lost Calf Calculator</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">aborts</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">born dead</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;">died</td> </tr> <tr> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">= Total</td> </tr> </table>				Lost Calf Calculator	aborts	born dead	died	0	= Total
Lost Calf Calculator															
aborts															
born dead															
died															
0															
= Total															
Preg Cecked Open %age =	<input style="width: 60px; height: 20px;" type="text" value="5%"/>	0	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>										
Died			<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>										

Culls %age =

0

<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>
---	---	---

Animals Bought That Calved this Yr

<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>
---	---	---

Animals Bought No Calf This Year

<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>
---	---	---

Total Dollar Value \$

Bred Animals Sold

<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>
---	---	---

Culls Held In EI For Sale

<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>
---	---	---

Hfr calves held back (EI) % Rpl Rate

0

<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>	<input style="width: 95%; height: 95%;" type="text"/>
---	---	---

Figure 2: It is recommended that you complete this form in place of No 2 on the next page.

No 2: Your Herd Inventory (skip if completed previous page)

No. 3: Bulls

(This section is crossed out with a large X)

You must complete this section.

No. in service in 2003 _____

No. at beginning of year 1/1/04
Held for breeding _____
Held for sale _____

No. leaving herd this calendar year
Died 2004 _____
Sold 2004 _____

No. bought 2004 _____

No. at end of year 12/31/04
Kept for breeding _____
Held for sale _____

No. 6: Cattle Sales Exclude Culls Held for Sale on January 1, 2004

A record of actual cattle sales receipts are needed for cull cattle and weaned calves.

If calves are not sold at weaning please leave blank.

How Were Calves Marketed?

- Cattle Buyer Sale Barn
- Video Auction Private Treaty
- Backgrounded Other _____
- Finished in ND Feedlot
- Finished in Outstate Feedlot

2004 SALES	Fall Cull Cows	Bred Females Sold	Cull Open Heifers	Cull Bulls
Number of head sold	_____	_____	_____	_____
Avg weight of animals sold	_____	_____	_____	_____
Avg price per cwt of animals sold	\$ _____	\$ _____	\$ _____	\$ _____
Total \$'s Bred Females Sold.....		\$ _____		

Heifer Calves Steer Calves
group 1 group 2 group 1 group 2

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Estimated marketing shrink _____% on calves

No. 7: Feed Description For Winter 2003/Spring 2004

Provide name and information for feeds, used in winter feeding and pasture supplementation.

	Name	Unit/wt	%Dry Matter	Market Price per Unit
<i>Example!</i>	Grain <u> Oats </u>	bu./ <u> 32 </u>	<u> 88 </u>	<u> \$2.05 </u>
Your Feeds				
Grain*	_____	bu./ _____	_____	_____
Supplement	_____	ton/2,000	_____	_____
Forage 1	_____	ton/2,000	_____	_____
Forage 2	_____	ton/2,000	_____	_____
Forage 3	_____	ton/2,000	_____	_____
Salt & Mineral - herd intake per day	_____ lbs.	ton/2,000	_____	_____

*If more than one grain is fed you should treat it as a mixed grain and average unit wt., % dry matter and market price.

You have two options for reporting winter feeds: No. 8 below or No. 17 back page

No. 8: Winter Feed Option (Fall 2003 and Winter/Spring 2004)

Reliable estimates or typical daily rations fed during the wintering period are needed and should be equivalent to total feed disappearance.

	Grain	Supplement	Forage 1	Forage 2	Forage 3
Name (from previous feed description section)	_____	_____	_____	_____	_____
*Cows — pounds fed/cow/day					
Mid gestation	_____	_____	_____	_____	_____
Late gestation	_____	_____	_____	_____	_____
Lactation	_____	_____	_____	_____	_____
Bred Heifers — pounds fed/heifer/day					
Mid gestation	_____	_____	_____	_____	_____
Late gestation	_____	_____	_____	_____	_____
Lactation	_____	_____	_____	_____	_____
Heifer calves — pounds fed/heifer/day	_____	_____	_____	_____	_____
Bulls — pounds fed/bull/day	_____	_____	_____	_____	_____
--days in drylot _____					
Creep fed to calves — intake per day	_____	_____			
Estimated percent feeding loss (waste)	_____ %	_____ %	_____ %	_____ %	_____ %

*If feeding multiple rations for each production stage, rations should first be averaged before posting to input form.

No. 9: Farm Raised Feed (Cash Costs of Production Summer 2003)

Home raised feed production and associated cash expenses are needed to estimate the “cash costs” of producing feeds for the cow herd. **Do not include purchased feeds in this section.**

	<i>Example!</i>	Grain	Forage 1	Forage 2	Forage 3
Name	Oats	_____	_____	_____	_____
Acreage	40	_____	_____	_____	_____
Yield	80	_____	_____	_____	_____
Cash costs per acre (total\$/acre)		_____	_____	_____	_____
or:					
Fuel	5.86	_____	_____	_____	_____
Seed	6.00	_____	_____	_____	_____
Fertilizer	4.32	_____	_____	_____	_____
Chemical	1.68	_____	_____	_____	_____
Repairs	8.76	_____	_____	_____	_____
Real estate taxes	0	_____	_____	_____	_____
Cash rent	0	_____	_____	_____	_____
Custom hire	0	_____	_____	_____	_____
Operating interest	1.34	_____	_____	_____	_____
Other misc	1.05	_____	_____	_____	_____

No. 10 : Machinery and land debt for cropland only-

Values	Example!	Your
Remaining land debt	120,000	_____
Interest rate	10%	_____
- Years left in loan	15	_____
-		
Remaining mach debt	20,000	_____
Interest rate	10%	_____
- Years left in loan	5	_____
-		
Total acres farmed	2,001	_____
-		

2003 Per Acre Family Living Draw \$ _____ /Acre

2003 Allocated Overhead.....\$ _____ /Acre



No. 11: Pasture Use and Costs (2004)

Pasture and related expenses associated with cow herd, breeding bulls and replacement heifers are needed to determine summer feed costs.

Annual Public Land Costs \$ _____

Owned Rented

Rented Pasture

Total Cash Pasture Costs

Acres _____ A

Total (per acre) \$ _____ XXXXX

Rent per acre \$ _____ /A

Acres per cow _____ A/Cow

Fuel \$ _____ \$ _____

Owned Pasture

Acres _____ A

Acres per cow _____ A/Cow

Market value per acre \$ _____ /A

Pasture loan (principal remaining) \$ _____

Interest rate _____ %

Years in loan (remaining) _____ yrs

Or:



Seed \$ _____ \$ _____

Fertilizer \$ _____ \$ _____

Chemicals \$ _____ \$ _____

Real estate taxes \$ _____ \$ _____

Fencing/repairs \$ _____ \$ _____

Water development \$ _____ \$ _____

Other _____ \$ _____ \$ _____

Aftermath Grazing

Daily cost per cow \$ _____ /Cow

No. 12: Total Livestock Expenses (source: your IRS records, 1040 schedule F tax form) (2004)

Total expenditures on behalf of cow herd, breeding bulls and replacement heifers

(Be sure expenditures are in proportion to cows in this herd analysis.)

Number of cows covered by expenses (head) _____ (Normally Jan. 1 inventory unless operating separate herds)

	Total Farm	% to Cow Herd		Total Farm	% to Cow Herd
Vet & Med	\$ _____	_____ %	Elec Utility	\$ _____	_____ %
Fuel (for feed processing, feeding, manure removal)	\$ _____	_____ %	Hired Labor	\$ _____	_____ %
Supplies	\$ _____	_____ %	Trucking	\$ _____	_____ %
Marketing Fees	\$ _____	_____ %	AI Breeding	\$ _____	_____ %
Misc _____	\$ _____	_____ %	Other	\$ _____	_____ %
			Family Living from Cow Herd	\$ _____	_____ %

Did you borrow money to feed the cow herd and/or for livestock expenses?

___ No ___ Yes, if so, average interest rate was _____% and principal amount was \$ _____

No. 13: Capital Gains Information (source: IRS Form 4797) (2004)

Livestock capital gains this year (IRS form 4797) \$ _____

Dollars from bull sales \$ _____ covering _____ bulls

Dollars from cow sales \$ _____ covering _____ cows

No. 14: Cattle Investment and Ownership

Best estimates of cattle values, average bull purchases and associated debts are required to determine ownership costs and cash flow requirements. (Jan 1, 2004)

	Cows	Bulls	Breeding Heifers
Market value per head	\$ _____	\$ _____	\$ _____
Average purchase price	\$ _____	\$ _____	\$ _____
Average years of use		_____ Yrs	
Loans -			
Remaining principal balance	\$ _____	\$ _____	\$ _____
Interest rate	_____ %	_____ %	_____ %

No 15: Leasing Information

*Number of leased cows kept for calving _____ Head

Total lease payment \$ _____ /Herd

Describe lease arrangements in detail _____

_____ *These must be included in beginning herd inventory.

No. 16: Capital Investment (31 Dec 2004)

Investments included should be based on allocation of value and debts associated with the cow herd for items such as buildings (i.e. barns, wells, feed storage facilities), equipment (i.e. corrals, bunks, water fountains, chutes, scales and stock trailers) and machinery (i.e. manure spreader, feed wagons, feed grinders and tractors for feeding and for feed production). **DO NOT INCLUDE FARMING MACHINERY.**

	Buildings Used for Cows	Equipment Used for Cows	Machinery Used for Cows
Total market value/cow herd share	\$ _____ / _____ %	\$ _____ / _____ %	\$ _____ / _____ %
or			
Include items/value/cow herd share			
<i>Example</i>	<u>Barns / 20,000 / 50%</u>	<u>Scale / 2,000 / 100%</u>	<u>Tractor / 50,000 / 35%</u>
	_____ / _____ / _____	_____ / _____ / _____	_____ / _____ / _____
	_____ / _____ / _____	_____ / _____ / _____	_____ / _____ / _____
	_____ / _____ / _____	_____ / _____ / _____	_____ / _____ / _____
Loans - Remaining principal balance	\$ _____	\$ _____	\$ _____
Interest rate	_____ %	_____ %	_____ %
Remaining years	_____ Yrs	_____ Yrs	_____ Yrs

No. 17: Winter Feed Option 2:

Feed Quantities Fed To Beef Cow Herd **No. Cows** _____

	FEED NAME	UNIT WT	AMT FED	UNIT PRICE
Grain 1&2	1 _____	_____	_____	\$ _____
	1a _____	_____	_____	\$ _____
Protein 1&2	2 _____	2000	_____	\$ _____
	2a _____	2000	_____	\$ _____
Forage 1&2	3 _____	2000	_____	\$ _____
	3a _____	2000	_____	\$ _____
Forage 3&4	4 _____	2000	_____	\$ _____
	4a _____	2000	_____	\$ _____
Forage 5&6	5 _____	2000	_____	\$ _____
	5a _____	2000	_____	\$ _____
Min/Salt 1&2	6 _____	2000	_____	\$ _____
	6a _____	2000	_____	\$ _____

To Be Used Instead Of Inputting Daily Cow & Heifer Rations

IRM Producer Comments

Through the use of the CHAPS program and IRM-Herd Analyzer we have been able to show more profit in our cow-calf operation. With the beef cow-calf herd analyzer, which integrates herd performance data and business management records, it tells us which parts of our operation where we can or should cut costs and other aspects of the operation we can build on. We greatly appreciate the knowledge and expertise of our area livestock specialist and county agent.

Myron Wold, Watford City, ND

Return complete herd analyzer input forms for processing to:

Harlan Hughes
Western Edge Consulting
30 Ramble A Road
Laramie, WY 82070

For additional information contact:
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