

11/30/53

IRM-FARMS BEEF COW HERD ANALYZER

Ver 4.2

BEEF COW HERD SELLING WEANED CALVES IN FALL  
ND-DEMO-160 COW HERD

1998  
75% EQUITY

output0-

mod date: 6/ 2/1908

ECONOMIC ANALYSIS

DESCRIPTION

DESCRIPTION				output1-
166 Head Spring Calving Cow Herd				
No Repl Heifers	0 Head	Cow Death Rate		1%
Calf Weaning Age	Days	Cow Culling Rate		15%
Steer Wean Weight	579 Pounds	Heifer Conception Rate		89%
Heifer Wean Weight	548 Pounds	Percent Calf Crop		120%
Feed Included For	166 Cows	Calf Transit Shrink		4%
	and 0 Rpl Hfrs	Rpl Heifers		Purchase
Number of Bulls	8 Head	Calving Distribution		Herd Ave
Cows On Pasture For	153 Days	Days On Aftermath		0
Calf Wt/Day Age	2.63 Pounds	Cows Wormed?		

REPRODUCTIVE EFFICIENCY

REPRODUCTIVE EFFICIENCY			output2-
NUMBER OF MATURE COWS IN THE HERD (beg business year)			166 HEAD
MATURE COWS EXPOSED TO BULLS (CHAPS SPA Adjust)	-28		128 HEAD
YEARLING HEIFERS EXPOSED TO BULLS suggest no. =>	30		0 HEAD
PERCENT OF MATURE COWS CHECKED PREGNANT IN FALL	87%		111 HEAD
PERCENT YEARLING HFRS CHECKED PREGNANT IN FALL	89%		0 HEAD
PERCENT OF PREGNANT CHECKED FEMALES THAT CALVE	100%		111 HEAD
NUMBER OF LIVE CALVES BORN( 0 CALVES BORN DEAD)			111 HEAD
PERCENT OF ALL EXPOSED FEMALES CHECKED PREGNANT			87%
PERCENT OF EXPOSED FEMALES WITH LIVE CALVES			87%
NUMBER OF CALVES LOST PREWEANING	8 HEAD		7%
CALCULATED LIVE CALVES WEANED			103 HEAD
CHAPS WEANED CALVES (steers= 86 hfrs = 68)			154 HEAD
Calves Weaned/No. Of Cows In Beginning Inventory			93%
PERCENT CALF CROP (Calves Weaned/No. Females Exposed)			120%

ANNUAL COST/RETURN SUMMARY

CASH FLOW		ECONOMIC OPPORTUNITY C	output3-
\$87,596	Receipts		\$90,686
\$35,658	Less Feed and Livestock Expenses		\$45,974
\$51,938	Returns Above Variable Costs		\$44,712
\$13,260	Less Fixed Expenses		\$15,923
\$38,678	Returns to Labor & Mgt, & Equity Capital Per Herd		\$28,789
\$528	Total Receipts Per Cow		\$546
\$295	Total Expenses Per Cow		\$373
\$233_1	Returns to Labor & Mgt, & Equity Capital Per Cow		\$173

\_1/ This figure is before family living draw.

=====output4=  
 1998 VALUE ADDED TO FARM/RANCH FAMILY'S CONTRIBUTED RESOURCES  
 JAN 1 INVENTORY= 166 COWS FEMALES EXPOSE 156

-----  
 \$1,999 TOTAL INV/COW PER COW, JANUARY  
 \$508 TOTAL DEBT/COW -----  
 \$92 STEER PR \$88.87 CASH/CWT ECONOMICASHFLOW  
 565 # AVE WN WT. GROSS INCOME/COW: \$546 \$528  
 -----

FEED COSTS:

SUMMER	\$67	\$21
AFTERMATH	\$0	\$0
WINTER	\$156	\$147
	-----	-----
	\$222	\$169

LIVESTOCK EXPENSES:

VET & MEDICINE	\$21	\$21
TRUCKING	\$0	\$0
MISCELLANEOUS	\$0	\$0
FUEL	\$7	\$7
UTILITIES	\$4	\$4
AI EXPENSE	\$0	\$0
LIVESTOCK SUPPLIES	\$3	\$3
MARKETING	\$8	\$8
BREEDING	\$13	\$4
HIRED LABOR OR MGT	\$0	\$0
	-----	-----
	\$55	\$46

INTEREST ON FEED & L.S. EXP \$0 \$0

FIXED EXPENSE:

BLD, FAC, COWS & HEIFERS	\$92	\$23
DEBT INTEREST	\$4	\$40
DEBT PRINCIPAL	xxxxx	\$16
	-----	-----

TOTAL COSTS	\$373	\$295
NET CASH FLOW BEFORE FAMILIY LIVING	xxxxx	\$233
FAMILY LIVING DRAW	xxxxx	\$90
NET CASH INCOME BEFORE TAX/COW	xxxxx	\$143
NET VALUE ADDED INCOME (P&L)	\$173	xxx

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 COST OF PRODUCTION\_1/cwts steer equivalent=> \$63 \$65  
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\_1/ Per cwt calf produced based on CWT Steer Equivalent Basis.

=====output5-  
 1998 ECONOMIC COST OF PRODUCING A HUNDRED WEIGHT OF CALVES  
 NO. BRED COWS => 166 HEAD FEMALES POSED=> 156

-----  
 \$1,999 TOTAL INV/COW 75% OWNERSHIP PER COW PR CWT 1/  
 \$508 TOTAL DEBT/COW 5.94 CWT/COW JAN 1 INV ALF PROD  
 \$92 STEER PRICE -----  
 565 LB CALVES ACCRUAL INCOME:==> \$546 \$92

-----  
 FEED COSTS:

SUMMER \$67 \$11.21  
 AFTERMATH \$0 \$.00  
 WINTER \$156 \$222 \$26.23 \$37

LIVESTOCK EXPENSE:

VET & MED \$21 \$3.46  
 TRUCKING \$0 \$.00  
 MISCELLANEOUS \$0 \$.00  
 FUEL \$7 \$1.11  
 UTILITIES \$4 \$.68  
 AI EXPENSE \$0 \$.00  
 SUPPLY & \_\_\_\_\_ \$3 \$.44  
 MARKETING \$8 \$1.33  
 BREEDING \$13 \$2.17  
 HIRED LABOR OR MGT \$0 \$55 \$.00 \$9

INTEREST ON FEED & L.S. EXP \$0 \$0

FIXED EXPENSE:

BLD, FAC, COWS & HEIFERS \$92 \$16  
 DEBT INTEREST \$4 \$1  
 DEBT PRINCIPAL N/A N/A

-----  
 TOTAL COSTS \$373 \$63

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 RETURNS TO OPERATOR AND UNPAID FAMILY \$173 /COW \$29  
 LABOR, MANAGEMENT AND EQUITY CAPITAL \$28,789 /HERD

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 COST OF PRODUCTION cwts steer equivalents => 5.94/ COP=> \$63

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 \_1/ Based Cwt's Steer Equivalents. Units determined by dividing gross  
 income by the price received for 100 pounds of steer calves. In this  
 \$546 gross dollars per cow divided by \$92.00/cwt = 5.93  
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=====output6-

1998 CASH COSTS OF PRODUCING A HUNDRED WEIGHT OF CALVES  
 No. Bred Cows => 166 Head FEMALES posed=> 156

-----  
 \$1,999 TOTAL INV/COW 75% OWNERSHIP PER COW PR CWT\_1/  
 \$508 TOTAL DEBT/COW 5.94 CWT/COW JAN 1 INV ALF PROD  
 \$89 STEER CASH PRICE -----  
 565 LB CALVES CASH INCOME:==> \$528 \$89  
 -----

FEED COSTS:  
 SUMMER \$21 \$3.61  
 AFTERMATH \$.00 \$.00  
 WINTER \$147 \$169 \$24.82 \$28

LIVESTOCK EXPENSE:  
 VET & MED \$21 \$3.46  
 TRUCKING \$0 \$.00  
 MISCELLANEOUS \$0 \$.00  
 FUEL \$7 \$1.11  
 UTILITIES \$4 \$.68  
 AI EXPENSE \$0 \$.00  
 SUPPLY & \_\_\_\_\_ \$3 \$.44  
 MARKETING \$8 \$1.33  
 BREEDING \$4 \$.71  
 HIRED LABOR OR MGT \$0 \$46 \$0.00 \$8

INTEREST ON FEED & L.S. EXP \$0 \$0  
 FIXED EXPENSE:  
 BLD,FAC, COWS & HEIFERS \$23 \$4  
 DEBT INTEREST \$40 \$7  
 DEBT PRINCIPAL \$16 \$3

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 TOTAL CASH COSTS \$295 \$50  
 NET CASH FLOW \$233 \$39  
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FAMILY LIVING DRAW \$90 \$15  
 NET CASH INCOME BEFORE TAX \$143 /COW \$24  
 \$23,677 /HERD

-----  
 COST OF PRODUCTION cwts steer equivalents => 5.94\_1/ cop \$65  
 -----

\_1/ Based Cwt's Steer Equivalents. Units determined by dividing gross  
 income by the price received for 100 pounds of steer calves. In this  
 \$546 gross dollars per cow divided by \$92.00/cwt = 5.93  
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 PROJECTED OPPORTUNITY COSTS OF PRODUCTION FOR  
 WEANING A CALF IN 166 COW HERD.  
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	UNITS	PRICE	TOTAL COSTS
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FALL AND WINTER FEED PER COW:			
GR HAY	2.19 TONS	\$50.00	\$109.36
PROTEIN	39.89 LBS	\$250.00	\$4.99
Min&salt	40.28 LBS	\$320.00	\$6.44
BARLEY	.00 BU	\$2.50	\$0.00
ALFALFA	.15 TONS	\$60.00	\$9.07
STRAW	1.29 TONS	\$20.00	\$25.89
Crop After math	0 DA	\$0.00	\$0.00
			-----
Total Fall & Winter Feed Costs			\$155.75
SUMMER GRAZING COSTS:			
Pasture for cows	5.10 AUMS	\$12.13	\$61.89
Pasture for replac	.00 AUMS	\$12.13	\$0.00
Summer mineral and	30.47 LBS	\$320.00	\$4.88
			-----
Total Summer Grazing Costs			\$66.76
TOTAL FEED COST			\$222.51
LIVESTOCK COSTS:			
Vet & Medicine	\$3,411		\$20.55
Trucking	\$0		\$0.00
Miscellaneous	\$0		\$0.00
Fuel	\$1,096		\$6.60
Utilities	\$674		\$4.06
AI Expense	\$0		\$0.00
Livestock Supplies	\$438		\$2.64
Hired Labor	\$0		\$0.00
Marketing	\$1,315		\$7.92
			-----
Livestock costs less breeding			\$41.77
BULL DEPRECIATION & INSURANCE COST:			\$12.89
INTEREST COST (OP PLUS DEBT)			\$3.74
FIXED EXPENSES (EXCLUDING INTEREST):			
Buildings (d,i,r)	7%	\$20,000	\$8.43
Equipment (d,i,r)	13%	\$15,000	\$11.75
Cattle Ins & Dep	9%	XXXXXX	\$72.00
Taxes on cattle	0%	XXXXXX	\$0.00
			-----
Total			\$92.18
TOTAL COSTS (Excluding labor, management, & equity capital)			\$372.87
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LABOR CHARGE:	8.00 hr	@	\$8.00	\$64.00
MANAGEMENT CHARGE:	6% OF GROSS			\$32.78
EQUITY CAPITAL:	8%			
Cows	XXXXXX		\$800	\$64.00
Rpl Hfrs	XXXXXX		\$800	\$ .00
Bull(s)	XXXXXX		\$14,000	\$6.75
Buildings	166 HD		\$20,000	\$9.64
Equipment	166 HD		\$15,000	\$7.23
Total equity capital interest cost				\$87.61
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FULL-COST OF PRODUCTION				\$557
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UNIT FULL-COSTS OF PRODUCT			5.93 CWTS/COW	\$94
-----				
PERCENT CONTRIBUTION				100%
=====				
				TOTAL
ECONOMIC INCOME/COW FROM	166	COWS:		HERD
-----				
.52 head ste	558 LB		\$92.00	\$266
.41 head hfr	527 LB		\$86.00	\$186
.13 cull co	1100 LB		\$42.00	\$58
.02 cull hei	800 LB		\$65.00	\$13
.01 cull bul	1800 LB		\$47.00	\$5
inventory change	\$3,200			\$19
				-----
				\$547
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				TOTAL
CASH FLOW INCOME/COW FROM	166	COWS:		HERD
-----				
.52 head ste	558 LB		\$92.00	\$266
.41 head hfr	527 LB		\$86.00	\$186
.13 cull cow	1100 LB		\$42.00	\$58
.02 cull hei	800 LB		\$65.00	\$13
.01 cull bul	1800 LB		\$47.00	\$5
				-----
				\$528
=====				

PROJECTED OPPORTUNITY COSTS OF PRODUCTION FOR A BEEF COW  
WEANING A CALF IN 166 COW HERD.

	UNITS	PRICE	TOTAL COSTSO	%AGE OWNER	OWNER OF COWS	WORKING RANCHER
FALL AND WINTER FEED PER COW:						
GR_HAY	2.19 TONS	\$50.00	\$109.36	0%	\$ .00	\$109.36
PROTEIN	39.89 LBS	\$250.00	\$4.99	0%	\$ .00	\$4.99
Min&salt	40.28 LBS	\$320.00	\$6.44	0%	\$ .00	\$6.44
BARLEY	.00 BU	\$2.50	\$ .00	0%	\$ .00	\$ .00
ALFALFA	.15 TONS	\$60.00	\$9.07	0%	\$ .00	\$9.07
STRAW	1.29 TONS	\$20.00	\$25.89	0%	\$ .00	\$25.89
Crop After math	0 DA	\$ .00	\$ .00	0%	\$ .00	\$ .00
Total Fall & Winter Feed Costs			\$155.75		\$ .00	\$155.75
SUMMER GRAZING COSTS:						
Pasture for cows	5.10 AUMS	\$12.13	\$61.89	0%	\$ .00	\$61.89
Pasture for replac	.00 AUMS	\$12.13	\$ .00	0%	\$ .00	\$ .00
Summer mineral and	30.47 LBS	\$320.00	\$4.88	0%	\$ .00	\$4.88
Total Summer Grazing Costs			\$66.76		\$ .00	\$66.76
TOTAL FEED COST			\$222.51		\$ .00	\$222.51
LIVESTOCK COSTS:						
Vet & Medicine	\$3,411		\$20.55	0%	\$ .00	\$20.55
Trucking	\$0		\$ .00	0%	\$ .00	\$ .00
Miscellaneous	\$0		\$ .00	0%	\$ .00	\$ .00
Fuel	\$1,096		\$6.60	0%	\$ .00	\$6.60
Utilities	\$674		\$4.06	0%	\$ .00	\$4.06
AI Expense	\$0		\$ .00	0%	\$ .00	\$ .00
Livestock Supplies	\$438		\$2.64	0%	\$ .00	\$2.64
Hired Labor	\$0		\$ .00	0%	\$ .00	\$ .00
Marketing	\$1,315		\$7.92	0%	\$ .00	\$7.92
Livestock costs less breeding			\$41.77		\$ .00	\$41.77
BULL DEPRECIATION & INSURANCE COST:			\$12.89	100%	\$12.89	\$ .00
INTEREST COST (OP PLUS DEBT)			\$3.74	0%	\$ .00	\$3.74
FIXED EXPENSES (EXCLUDING INTEREST):						
Buildings (d,i,r)	7%	\$20,000	\$8.43	0%	\$ .00	\$8.43
Equipment (d,i,r)	13%	\$15,000	\$11.75	0%	\$ .00	\$11.75
Cattle Ins & Dep	9%	XXXXXX	\$72.00	100%	\$72.00	\$ .00
Taxes on cattle	0%	XXXXXX	\$ .00	100%	\$ .00	\$ .00
Total			\$92.18		\$72.00	\$20.18
TOTAL COSTS (Excluding labor, management, & equity capital)			\$372.87		\$84.89	\$287.98

LABOR CHARGE:	8.00 hr	@	\$8.00	\$64.00	0%	\$ .00	\$64.00
MANAGEMENT CHARGE:	6% OF GROSS			\$32.78	0%	\$ .00	\$32.78
EQUITY CAPITAL:	8%						
Cows	XXXXXX		\$800	\$64.00	100%	\$64.00	\$ .00
Rpl Hfrs	XXXXXX		\$800	\$ .00	100%	\$ .00	\$ .00
Bull(s)	XXXXXX		\$14,000	\$6.75	0%	\$ .00	\$6.75
Buildings	166 HD		\$20,000	\$9.64	0%	\$ .00	\$9.64
Equipment	166 HD		\$15,000	\$7.23	0%	\$ .00	\$7.23
Total equity capital interest cost				\$87.61		\$64.00	\$23.61

FULL-COST OF PRODUCTION				\$557		\$149	\$408
UNIT FULL-COSTS OF PRODUCT	5.93	CWTS/COW		\$94		\$25	\$69
PERCENT CONTRIBUTION				100%		27%	73%

ECONOMIC INCOME/COW FROM	166	COWS:	TOTAL HERDO	%AGE OWNER	OWNER OF COWS	WORKING RANCHER
.52 head ste	558 LB	\$92.00	\$266	27%	\$71	\$195
.41 head hfr	527 LB	\$86.00	\$186	27%	\$50	\$136
.13 cull co	1100 LB	\$42.00	\$58	100%	\$58	\$0
.02 cull hei	800 LB	\$65.00	\$13	100%	\$13	\$0
.01 cull bul	1800 LB	\$47.00	\$5	0%	\$0	\$5
inventory change	\$3,200		\$19	27%	\$5	\$14
			\$547		\$197	\$350
					36%	64%

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CASH FLOW INCOME/COW FROM	166	COWS:	TOTAL HERDO	%AGE OWNER	OWNER OF COWS	WORKING RANCHER
.52 head ste	558 LB	\$92.00	\$266	20%	\$53	\$213
.41 head hfr	527 LB	\$86.00	\$186	20%	\$37	\$149
.13 cull cow	1100 LB	\$42.00	\$58	0%	\$0	\$58
.02 cull hei	800 LB	\$65.00	\$13	0%	\$0	\$13
.01 cull bul	1800 LB	\$47.00	\$5	0%	\$0	\$5
			\$528		\$90	\$437
					17%	83%