

# **IRM HERD ANALYZER**

**INPUT FORM  
FOR  
1999  
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 profitability.

## HERD ANALYZER ANALYSIS 1997 DATABANK

(Average of 45 Herds)

Cow on Hand Jan 1, 1997: 140  
Females Exposed: 150

Total Investment Per Cow: \$ 2097  
Total Debt Per Cow: \$ 345  
Average Steer Price (#/CWT): \$ 85  
Average Weaning Weight: 553

Gross Income Per Cow: \$ 386  
Feed Costs:  
    Summer \$ 82  
    Aftermath \$ 3  
    Winter \$ 162

Total Feed Costs: \$ 248  
Livestock Expenses:  
    Vet & Medicine \$ 14  
    Trucking \$ 1  
    Miscellaneous \$ 0  
    Fuel \$ 10  
    Utilities & Gen Farm Exp \$ 5  
    AI Expense \$ 1  
    L S Supp & Lease Print \$ 30  
    Marketing \$ 2  
    Breeding \$ 11  
    Hired Labor & Mgt \$ 6

Total Livestock Expense: \$ 80  
Interest on Feed & L S Expenses: \$ 8  
Fixed Expenses:  
    BLD, FAC, Cows & Heifers \$ 40  
    Debt Interest \$ 7  
    Debt Principal XXXX

Total Costs: \$ 382  
Value Added Per Cow (P&L) \$ 17  
Unit Cost of Prod (\$/CWT)(Mode) \$ 75

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.

### Extension's IRM program...assisting with analysis and information

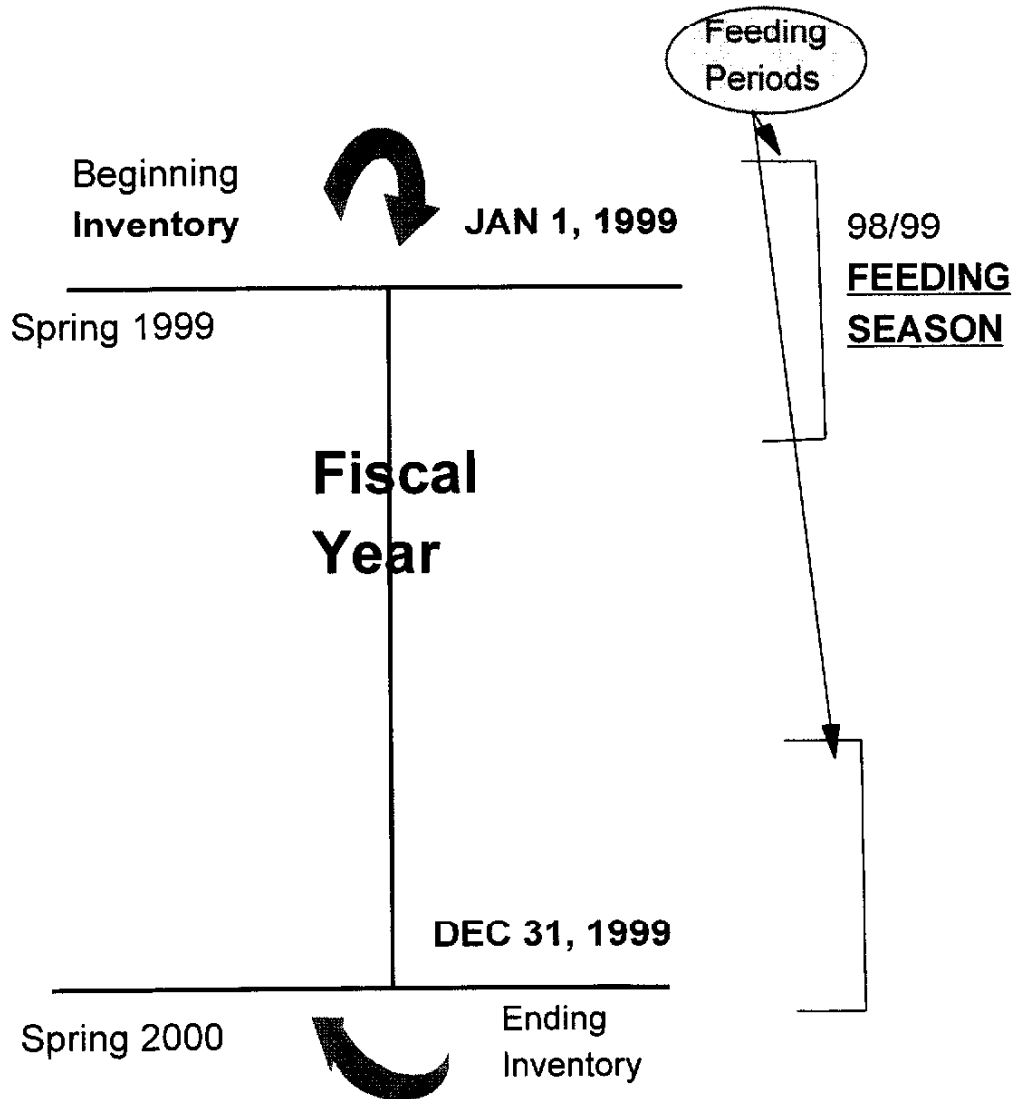
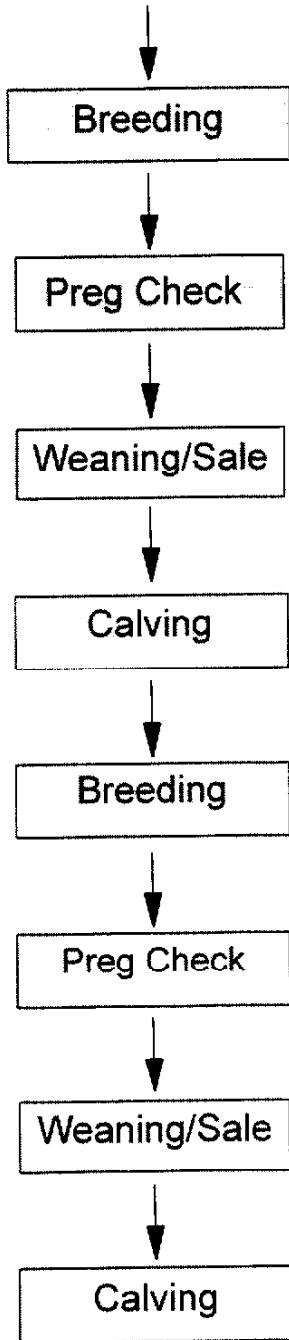
NDSU Extension Services' IRM-Herd Analyzer provides an excellent starting point for you to systematically evaluate your beef cow operation. Through comprehensive benchmarking you will be able to identify bottlenecks or opportunities that can improve your cow herd's profitability.

To become involved in NDSU's 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 page 8. 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.

# SPA COW-CALF

Production of 1999 Calves

## BULL TURN OUT 1998



# Herd Inventory Example Inventory Sheet Calf crop year 1999

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 1998	<u>101</u>	<u>89</u>	<u>12</u>		No. in service in 1998 <u>5</u>
<b>Business Year</b>					
No. at beginning of year (1/1/99)	<u>101 a</u> <small>a=c+d</small>			<u>14 b</u> <small>(1998 calves)</small>	No. at beginning of year 1/1/99 Held for breeding <u>5</u> Held for sale <u>0</u>
Kept for calving	<u>92 c</u>	<u>80</u>	<u>12</u>		
Culls held for sale	<u>9 d</u>	<u>9</u>	<u>0</u>		
<b>TOTAL \$</b>					
No. calved this year - 1999	<u>92</u>	<u>80</u>	<u>12</u>		
No. losing calves this year - 1999	<u>6</u>	<u>4</u>	<u>2</u>		
No. determined open in fall - 1999		<u>0</u>	<u>0</u>		
No. leaving herd during calendar year 1999	<u>7 e</u> <small>e=h+i+j</small>				No. leaving herd this calendar year Died 1999 <u>1</u> Sold 1999 <u>1</u>
h) died	<u>2 h</u>	<u>1</u>	<u>1</u>	<u>0</u>	
i) non-breeding sold	<u>4 i</u>	<u>1</u>	<u>2</u>	<u>1</u>	
j) bred cows sold	<u>1 j</u>	<u>1</u>	<u>0</u>	<u>0</u>	
No. bought during calendar year - 1999	<u>2 f</u>	<u>2</u>			No. bought 1999 <u>2</u>
<b>TOTAL \$</b>					
No. at end of year (12/31/99):	<u>101 g</u> <small>g=k+l</small>				No. at end of year 12/31/99 Kept for breeding <u>5</u> Held for sale <u>0</u>
k) kept for calving	<u>k</u>	<u>80</u>	<u>13</u>		
l) culls held for sale	<u>l</u>	<u>8</u>	<u>0</u>		
Heifer calves kept for replacements				<u>18</u> <small>(1999 calves)</small>	

#2

#3

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 Head</u>
Beg Inv #	+ Kept for Replacements	- No. leaving herd	+ Purchases	= Ending Inv #

#4

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

Date mature cows start calving	/ / 99	Average calving date	/ / 99
<b>Grazing schedule</b>	<b>Cows</b>	<b>Heifers</b>	<b>Dry Cows</b>
Date off grass 1998	<u>/ / 98</u>	xxxx	xxxx
Date on grass 1999	<u>/ / 99</u>	xxxx	xxxx
Date off grass 1999	<u>/ / 99</u>	xxxx	xxxx
Days on aftermath 1999	<u>          </u>		

Total days calves were creep fed \_\_\_\_\_  
Date calves weaned in 1998        /        / 98  
Are your heifer calves    Raised    Purchased

# Herd Inventory

Calf crop year 1999

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.

Primary Breed Cows ___ Bulls ___	Total Females	Mature Cows	Bred Heifers	Replacement Heifer Calves	Bulls
No. exposed in 1998	_____	_____	_____	_____	No. in service in 1998 _____
<b>Business Year</b> No. at beginning of year (1/1/99)	_____ a a=c+d	_____	_____	_____ b (1998 calves)	No. at beginning of year 1/1/99 Held for breeding _____ Held for sale _____
Kept for calving	_____ c	_____	_____	_____	
Culls held for sale	_____ d	_____	_____	_____	
<b>TOTAL \$</b> _____					
No. calved this year - 1999	_____	_____	_____	_____	
No. losing calves this year - 1999	_____	_____	_____	_____	
No. determined open in fall - 1999	_____	_____	_____	_____	
No. leaving herd during calendar year 1999	_____ e e=h+i+j	_____	_____	_____	No. leaving herd this calendar year Died 1999 _____ Sold 1999 _____
h) died	_____ h	_____	_____	_____	
i) non-breeding sold	_____ i	_____	_____	_____	
j) bred cows sold	_____ i	_____	_____	_____	
No. bought during calendar year - 1999	_____ f	_____	_____	_____	No. bought 1999 _____
<b>TOTAL \$</b> _____					
No. at end of year (12/31/99):	_____ g g=k+l	_____	_____	_____	No. at end of year 12/31/99 Kept for breeding _____ Held for sale _____
k) kept for calving	_____ k	_____	_____	_____	
l) culls held for sale	_____ l	_____	_____	_____	
Heifer calves kept for replacements				_____ (1999 calves)	

#2

#3

Inventory check (optional, should equal zero)

a	b	d - e	f	g
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 / / 99 Average calving date / / 99

**Grazing schedule** Cows Heifers Dry Cows

Date off grass 1998 / / 98 xxxx xxxx

Date on grass 1999 / / 99 xxxx xxxx

Date off grass 1999 / / 99 xxxx xxxx

Days on aftermath 1999 \_\_\_\_\_

Total days calves were creep fed \_\_\_\_\_

Date calves weaned in 1998 \_\_\_\_ / \_\_\_\_ / 98

Are your heifer calves \_\_\_ Raised \_\_\_ Purchased

#4

### Calf Production

Accurate and complete herd production records are fundamental to an operation's analysis.

#5

	Steers	Heifers	Bulls	Wean Date	Weigh Date
Number weaned	_____	_____	_____	____/____/99	____/____/99
Avg actual weaning weight	_____	_____	_____	____/____/99	____/____/99
Overall average weaning weight	_____				

#### How Were Calves Marketed?

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

### Cattle Sales

Exclude Culls Held for Sale on January 1, 1999

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

If calves are not sold at weaning please leave blank.

#6

1999 SALES	Fall Cull Cows	Bred Females Sold	Cull Open Heifers	Cull Bulls	Heifer Calves group 1 group 2	Steer Calves group 1 group 2
Number of head sold	_____	_____	_____	_____	_____	_____
Avg weight of animals sold	_____	_____	_____	_____	_____	_____
Avg price per cwt of animals sold	_____	_____	_____	_____	_____	_____
Total \$'s Bred Females Sold.....	\$ _____					
Estimated marketing shrink _____%	_____ % on calves					

### Feed Description

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

#7

	Name	Unit/wt	%Dry Matter	Market Price per Unit	
<i>Example!</i>	Grain	Oats	bu./ 32	88	\$1.05
-----					
	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: #8 below or #17 back page**

**Winter Feed Option (Fall 1998 and Winter/Spring 1999)**

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 feeding.

**Farm Raised Feed ( Cash Costs of Production)**

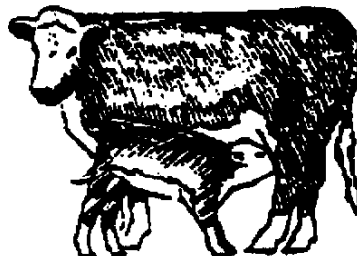
Home raised feed production and associated cash expenses are needed to estimate the "cash costs" of producing feeds for the cow herd. **Do not include purchased feeds in this section.**

	Example!	Grain	Forage 1	Forage 2	Forage 3
Name	Oats	_____	_____	_____	_____
Acreage	40	_____	_____	_____	_____
Yield	80	_____	_____	_____	_____
Cash costs per acre (total\$/acre)	_____	_____	_____	_____	_____
<b>or: -----</b>					
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	_____	_____	_____	_____

*Machinery and land debt for cropland only --*

	Example!	Your Values
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	2,000	_____

Per Acre Family Living Draw \$ \_\_\_\_\_ /Acre  
 Allocated Overhead.....\$ \_\_\_\_\_ /Acre



### Pasture Use and Costs

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

Annual Public Land Costs		\$ _____		<b>Owned</b>	<b>Rented</b>
#11	<b>Rented Pasture</b>		<b>Total Cash Pasture Costs</b>		
	Acres	_____ A	Total (per acre)	\$ _____	<u>XXXXXX</u>
	Rent per acre	\$ _____	<b>Or:</b>		
	Acres per cow	_____ A/Cow	Fuel	\$ _____	\$ _____
	<b>Owned Pasture</b>		Seed	\$ _____	\$ _____
	Acres	_____ A	Fertilizer	\$ _____	\$ _____
	Acres per cow	_____ A/Cow	Chemicals	\$ _____	\$ _____
	Market value per acre	\$ _____	Real estate taxes	\$ _____	\$ _____
	Pasture loan (principal remaining)	\$ _____	Fencing/repairs	\$ _____	\$ _____
	Interest rate	_____ %	Water development	\$ _____	\$ _____
	Years in loan (remaining)	_____ Yrs	Other _____	\$ _____	\$ _____
	<b>Aftermath Grazing</b>				
	Daily cost per cow	\$ _____			

### Total Livestock Expenses (source: your IRS records, 1040 schedule F tax form)

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
#12 Vet & Med	\$ _____	_____ %	Elec Util	\$ _____	_____ %
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 \$ \_\_\_\_\_

### Capital Gains Information (source: IRS Form 4797)

#13 Livestock capital gains this year (IRS form 4797) \$ \_\_\_\_\_

Dollars from bull sales \$ \_\_\_\_\_ covering \_\_\_\_\_ bulls

Dollars from cow sales \$ \_\_\_\_\_ covering \_\_\_\_\_ cows

#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.

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

### Leasing Information

\*Number of leased cows kept for calving \_\_\_\_\_ Head

Total lease payment \$ \_\_\_\_\_

Describe lease arrangements in detail \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\*These must be included in beginning herd inventory.

#15

#16

### Capital Investment

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

#### 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

Return complete herd analyzer input forms for processing to:

**Harlan Hughes**  
**NDSU**  
**301E Morrill Hall**  
**Fargo, ND 58105**

For additional information contact:  
 Ph: 701-231-7380 Fax: 701-231-1059  
 E-mail: harlan.hughes@gte.net  
 Web Page: www.ag.ndsu.nodak.edu

**Winter Feed Option 2:**

**Feed Quantities Fed To Beef Cow Herd**    **No. Cows** \_\_\_\_\_

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

To Be Used Instead Of Inputting Daily Cow & Heifer Rations

#17