

## 2017 Farm/Ranch Business Management Instructors

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## Our Mission

**"To provide lifelong learning opportunities in economic and financial management for adults involved in the farming and ranching business"**

The 2017 summary reports are based on data from individual farm analysis completed by farm/ranch families enrolled in the ND Farm and Ranch Business Management Education program.

Data for this ND State Average Summary Report was derived from operations with at least 50 head of beef cows and 40% of commodity sales coming from beef enterprises.

<b>Farm Income Statement</b>				
North Dakota Farm Business Management Education Program				
2017 Beef Farm Report (40% sales/50 head criteria)				
Farms Sorted by Net Farm Income				
	Avg of			
	all farms	Low 20%	High 20%	
Number of Farms	77	15	16	
<b>Cash Farm Income</b>				
Crop Income	\$ 112,037	\$ 116,629	\$ 145,796	
Beef Income	209,627	288,980	203,063	
Other Livestock Income	10,173	2,112	37,773	
Government Payments	33,193	38,369	45,326	
Other Farm Income	48,810	41,713	69,563	
Gross Cash Farm Income	413,840	487,803	\$ 501,521	
<b>Cash Farm Expense</b>				
Seed	\$ 24,148	\$ 23,695	\$ 35,107	
Fertilizer	23,627	27,049	30,281	
Chemicals	13,946	17,274	17,239	
Crop Insurance	7,208	8,739	7,721	
Crop Miscellaneous	3,037	735	7,410	
Feeder Livestock Purchase	19,072	33,769	2,228	
Purchased Feed	35,127	46,472	40,390	
Breeding Fees	1,093	703	2,457	
Veterinary	8,893	12,310	10,739	
Livestock Supplies	2,458	3,006	2,758	
Marketing	3,717	6,059	3,308	
Interest	34,298	48,459	44,584	
Fuel & Oil	17,644	23,076	17,754	
Repairs	33,231	47,146	36,096	
Custom Hire	15,658	15,183	21,390	
Hired Labor	9,253	18,994	12,270	
Land Rent	44,024	48,458	54,027	
Machinery Bldg & Lvstk Lease	3,124	2,631	1,661	
Real Estate Taxes	3,855	4,832	7,031	
Farm Insurance	7,275	9,168	9,126	
Utilities	5,816	6,822	7,732	
Miscellaneous Expense	9,628	18,085	10,820	
Total Cash Farm Expense	\$ 326,132	\$ 422,665	\$ 382,129	
Net Cash Farm Income	\$ 87,708	\$ 65,138	\$ 119,392	
Total Inventory Change	\$ (2,008)	\$ (64,061)	\$ 91,612	
Net Operating Profit	\$ 85,700	\$ 1,077	\$ 211,004	
Total Depreciation	\$ (31,162)	\$ (49,209)	\$ (30,552)	
Gain or Loss on Capital Sales	\$ (302)	\$ (854)	\$ -	
<b>Net Farm Income</b>	<b>\$ 54,236</b>	<b>\$ (48,986)</b>	<b>\$ 180,452</b>	

**Livestock Enterprise Analysis**  
North Dakota Farm Business Management Education Program  
2017 Beef Report (Farms Sorted by Net Return Per Unit)

Beef Cow Calf--Average Per Cow

Number of Farms	Avg of All Farms		Low 20%		High 20%	
	28		6		7	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	543.9	\$ 869.72	513.9	\$ 819.42	596.6	\$ 937.25
Breeding Herd Depreciation		(109.58)		(164.69)		(43.28)
Other Income		7.12		0.88		13.97
Government Payments		49.36		37.16		40.82
Gross Margin		\$ 816.62		\$ 692.77		\$ 948.76
<b>Direct Expenses</b>						
Protein Vit Minerals (lb)	117.2	\$ 32.11	139.5	\$ 58.98	129.8	\$ 25.71
Creep/Starter	30.7	\$ 3.33	17.6	\$ 1.92	112.4	\$ 12.33
Corn Silage (lb)	1,970.7	28.38	2,340.7	40.80	1,532.3	24.66
Hay, Alfalfa (lb)	377.8	13.78	558.0	17.75	572.6	24.06
Hay, Grass (lb)	4685.7	126.19	4,762.0	111.22	4,409.5	117.98
Pasture (aum)	7.3	158.44	8.5	154.06	7.0	161.05
Other feedstuffs (lb)	587	26.85	1,559.9	60.32	153.3	7.30
Veterinary		35.65		36.20		28.51
Supplies		9.72		21.52		6.41
Fuel & Oil		23.00		30.55		20.25
Repairs		46.25		82.01		24.10
Custom Hire		11.31		6.69		7.63
Marketing		9.61		2.88		17.98
Operating Interest		9.72		10.81		8.26
Miscellaneous		1.21		6.03		-
Total Direct Expenses		\$ 535.55		\$ 641.74		\$ 486.23
Return Over Direct expenses		\$ 281.07		\$ 51.03		\$ 462.53
<b>Overhead Expenses</b>						
Hired labor		\$ 10.06		\$ 15.62		\$ 6.24
Farm insurance		11.82		18.92		8.40
Utilities		11.63		12.22		10.20
Interest		10.77		14.06		6.71
Mach & bldg depreciation		39.87		38.44		29.53
Miscellaneous		17.67		12.25		23.28
Total Overhead Expenses		\$ 101.82		\$ 111.51		\$ 84.36
Total Direct & Overhead exp		\$ 637.37		\$ 753.25		\$ 570.59
<b>Net Return</b>		<b>\$ 179.25</b>		<b>\$ (60.48)</b>		<b>\$ 378.17</b>
Labor & management charge		\$ 66.12		\$ 42.64		\$ 73.97
Net return over lbr & mgt		\$ 113.13		\$ (103.12)		\$ 304.20
<b>Cost of Production per Cwt produced</b>						
Total direct expense		\$ 98.47		\$ 124.88		\$ 81.50
Total dir & ovhd expense/unit		\$ 117.19		\$ 146.57		\$ 95.64
With other revenue adjustments		\$ 127.68		\$ 171.39		\$ 93.71
With labor & management		\$ 139.83		\$ 179.69		\$ 106.11

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### Number of Farms

Avg. of All Farms 28	Low 20% 5	High 20% 6
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### Other Information

Number of cows	237.0	272.7	229.8
Pregnancy percentage	95.0	91.9	98.8
Pregnancy loss percentage	2.8	3.6	0.8
Culling Percentage	21.8	24.6	22.1
Calving Percentage	92.4	88.6	98.0
Weaning Percentage	88.1	83.8	94.5
Calf death loss percent	4.6	6.6	3.9
Cow death loss percent	1.5	2.3	1.6
Average weaning weight	569	557	602
Lb weaned/exposed female	501	466	569
Avg wgt/beef calf sold	572	548	632
Avg price/cwt.	\$ 161.20	\$ 157.44	\$ 160.11
Feed cost per cow	\$ 389.08	\$ 445.04	\$ 373.09

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### Financial Standards Measure

ND Farm Business Management Education Program

2017 Beef Farm Report (Sorted by Net Farm Income)

	Avg of All Farms	Low 20%	High 20%
Number of Farms	77	15	16
<b>Liquidity</b>			
Current Ratio	1.48	1.27	1.74
Working Capital	115,161	82,902	204,353
WC to gross Inc	28.0%	19.3%	33.8%
<b>Solvency (cost)</b>			
Farm debt to Asset ratio	49%	56%	47%
<b>Profitability (cost)</b>			
Rate of return on Farm assets	3.3%	-2.4%	7.6%
Rate of return on Farm equity	2.2%	-11.4%	10.8%
Net Farm Income	54,235	-48,986	180,451
<b>Repayment capacity</b>			
Term Debt Coverage ratio	1.08	0.31	2.04
<b>Efficiency</b>			
Operating expense ratio	70.9%	89.2%	57.5%
Depreciation expense ratio	7.6%	11.5%	5.0%
Interest Expense ratio	8.3%	10.5%	7.7%
Net farm income ratio	13.2%	-11.4%	29.8%

*Thank you to the following Star Partners for providing funding for the production and distribution of the N.D. Farm and Ranch Business Management Regional and State Averages for 2017.*

**Northland Ford Dealers Asgrow/DEKALB/Channel/REA/Monsanto CHS Foundation**  
**ND Farmers Union Insurance/ND Farmers Union Agtegra Cooperative Nodak Insurance**  
**International Certification Services PROSEED CF Industries Wilbur-Ellis Company ND Farm Bureau**  
**RDO Equipment DuPont Pioneer First International Bank & Trust IRONCLAD Marketing**  
**ND Ethanol Council ND Building Trades Unions International Brotherhood of Electrical Workers**  
**North Central States Regional Council of Carpenters Lynnes Welding Training Zacharias Family**

# Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow), 2018 <sup>1</sup>

	N.D. Avg.	Your Numbers
<b>VARIABLE COST PER COW:</b>		
1. Summer Pasture	\$ 140.00	\$ _____
2. Hay--silage	170.00	_____
3. Other feed	25.00	_____
4. Protein and Mineral	25.00	_____
5. Hired Labor, Custom Hire	25.00	_____
6. Veterinary, Drugs, and Supplies	25.00	_____
7. Utilities, Fuel, and Oil	30.00	_____
8. Facilities and Equipment Repairs	40.00	_____
9. Breeding Charge	10.00	_____
10. Marketing	15.00	_____
11. Miscellaneous	20.00	_____
12. Interest	14.00	_____
<b>A. TOTAL VARIABLE COSTS</b>	<b>\$ 539.00</b>	<b>\$ 0.00</b>
<b>FIXED COSTS PER COW</b>		
13. Depreciation	\$ 30.00	\$ _____
14. Interest	10.00	_____
15. Insurance	10.00	_____
16. Cow interest, death loss	65.00	_____
<b>B. TOTAL FIXED COSTS</b>	<b>\$ 115.00</b>	<b>\$ 0.00</b>
<b>C. TOTAL COSTS PER COW (A + B)</b>	<b>\$ 654.00</b>	<b>\$ 0.00</b>
<b>RETURNS PER COW <sup>2</sup></b>		
	<b>Your Numbers</b>	
	% x Weight x Price	
17. Steers: .45 x 590 x 1.60	_____ x _____ x _____	\$ 424.80 \$ 0.00
18. Heifers: .26 x 570 x 1.35	_____ x _____ x _____	200.07 0.00
19. Cull cows; .14 x 1300 x 0.65	_____ x _____ x _____	118.30 0.00
20. Cull heifers: .05 x 900 x 1.15	_____ x _____ x _____	51.75 0.00
<b>D. GROSS RETURNS PER COW</b>	<b>\$ 794.92</b>	<b>\$ 0.00</b>
<b>E. RETURN OVER VARIABLE COSTS (D - A)</b>	<b>\$ 255.92</b>	<b>\$ 0.00</b>
<b>F. RETURN OVER TOTAL COSTS (D - C) <sup>3</sup></b>	<b>\$ 140.92</b>	<b>\$ 0.00</b>

<sup>1</sup> Information in this budget is based on the North Dakota Farm and Ranch Business Management Annual Report, 2017.

<sup>2</sup> Returns are based on a 90 percent weaning rate, 45 steers sold, 26 heifers sold, 19 heifers kept for replacement, 14 cull cows sold, and 5 cull heifers sold. Prices are projected for fall.

<sup>3</sup> Return over total costs is return to unpaid family labor, management, and equity.

The above cow/calf budget was developed by Tim Petry, Livestock Economist, NDSU Extension Service.  
For livestock economic and marketing information go to:  
[www.ag.ndsu.edu/livestockeconomics](http://www.ag.ndsu.edu/livestockeconomics)

The data for this brochure was compiled by Andrew Swenson,  
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Photos submitted by: Lynsey Aberle, Judy Jacobson, Lacey Maier & Kirsten Friedt





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**Balance Sheet at Cost Values****North Dakota Farm Business Management Education Program****2017 Beef Farm Report (Farms Sorted by Net Farm Income)**

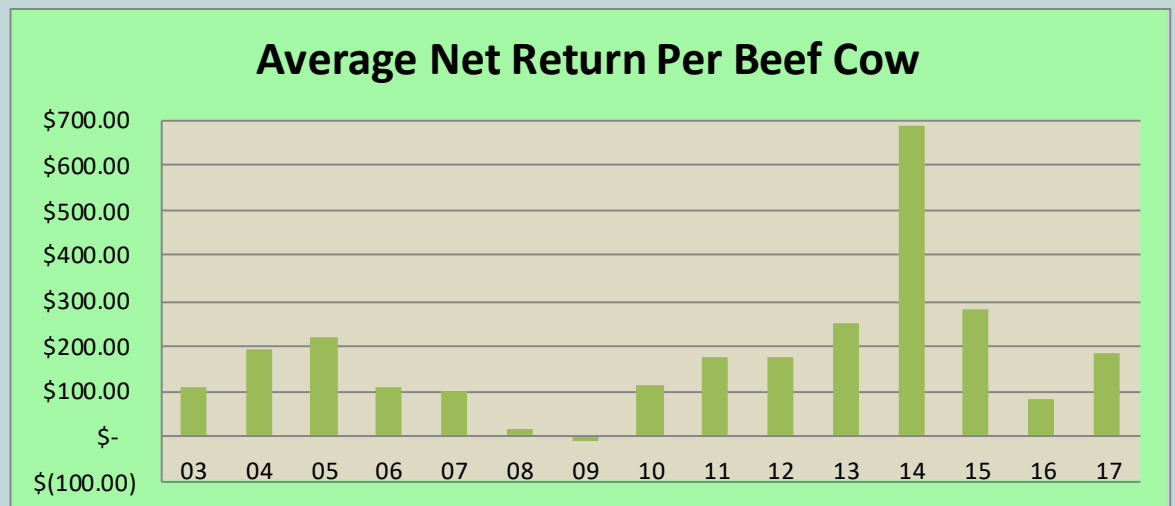
	Avg of all farms	Low 20%	High 20%
Number of Farms	77	15	16
<b>Assets</b>			
<b>Current Farm Assets</b>			
Cash and checking balance	26,487	17,446	24,849
Prepaid expenses & supplies	9,869	7,183	17,181
Growing crops	1,938	144	295
Accounts receivable	16,668	17,259	25,754
Hedging accounts	1,012	3,119	1,206
Crops held for sale or feed	143,089	160,638	187,512
Crops under government loan	0	0	0
Market Livestock held for sale	158,053	188,271	221,569
Other current asset	226	0	800
Total Current Farm Assets	\$ 357,342	\$ 394,060	\$ 479,166
<b>Intermediate Farm Assets</b>			
Breeding livestock	274,141	300,838	339,985
Machinery & equipment	259,551	304,140	312,591
Titled vehicles	42,242	61,303	30,493
Other intermediate assets	18,909	6,044	15,908
Total Intermediate Farm Assets	\$ 594,843	\$ 672,325	\$ 698,977
<b>Long Term Assets</b>			
Farm land	543,982	438,968	1,107,252
Buidlings & improvements	86,413	139,306	112,534
Other long-term assets	16,711	25,528	22,393
Total Long-term assets	\$ 647,106	\$ 603,802	\$ 1,242,179
Total Farm Assets	\$ 1,599,291	\$ 1,670,187	\$ 2,420,322
Total Nonfarm assets	\$ 154,309	\$ 134,111	\$ 244,912
<b>Total Assets</b>	<b>\$ 1,753,600</b>	<b>\$ 1,804,298</b>	<b>\$ 2,665,234</b>
<b>Liabilities</b>			
<b>Current Farm Liabilities</b>			
Accrued Interest	15,037	21,582	17,686
Accounts payable	12,385	12,975	14,753
Current notes	162,278	226,467	180,026
Government crop loans	0	0	0
Principal due on term debt	52,481	50,134	62,348
Total Current Farm Liabilities	\$ 242,181	\$ 311,158	\$ 274,813
Total Intermediate Farm Liabs	\$ 159,306	\$ 198,887	\$ 108,464
Total Long-term Farm Liabilities	\$ 381,250	\$ 422,476	\$ 747,908
Total Farm Liabilities	\$ 782,737	\$ 932,521	\$ 1,131,185
Total Nonfarm Liabilities	\$ 31,145	\$ 12,217	\$ 23,627
<b>Total Liabilities</b>	<b>\$ 813,882</b>	<b>\$ 944,738</b>	<b>\$ 1,154,812</b>
Net Worth (farm & non farm)	\$ 939,718	\$ 859,560	\$ 1,510,422
Net Worth change	\$ 46,903	\$ (17,322)	\$ 137,020

# 2017 North Dakota State Beef Average Summary



## Historical Data:

Average Beef Net Return from Farm & Ranch Management  
Programs for the last 15 years.



Farm Business Management Programs are designed to provide education to farm owners and operators. The purpose of the program is to assist clients in meeting their business and personal goals. This is best accomplished through the use of quality records and sound business decisions.