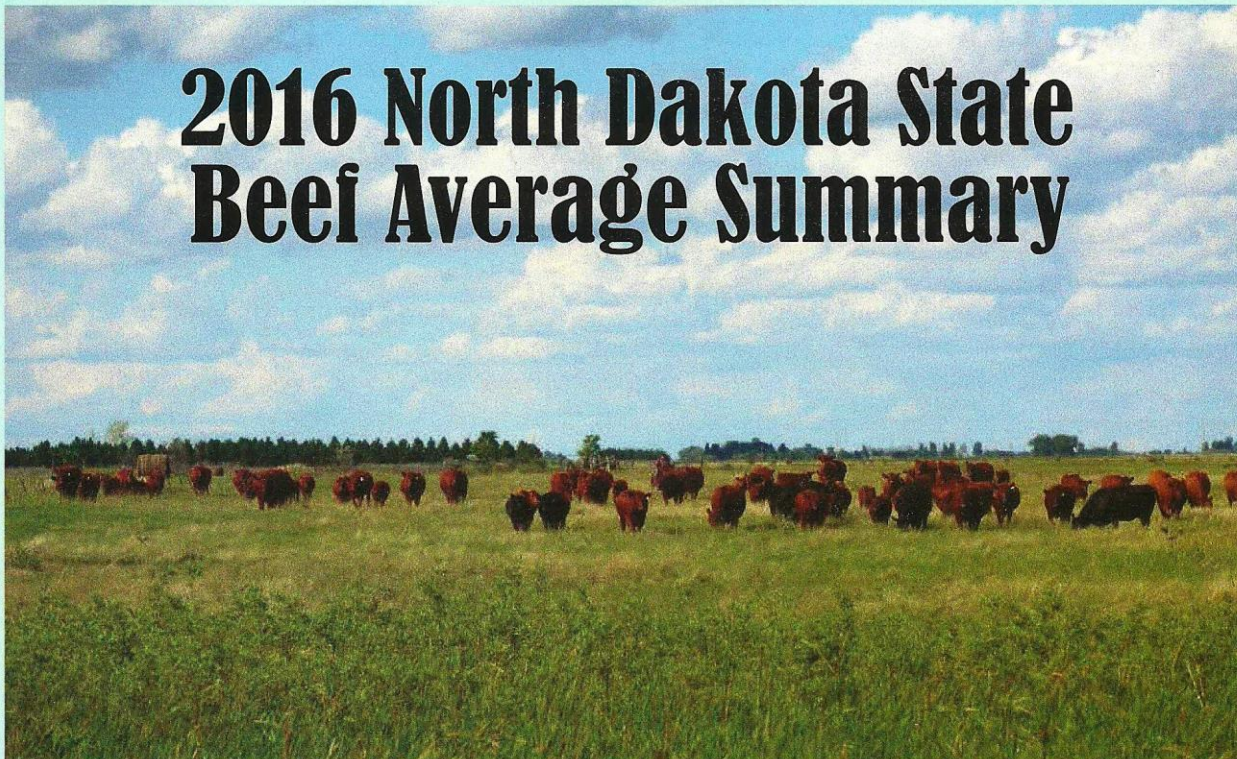
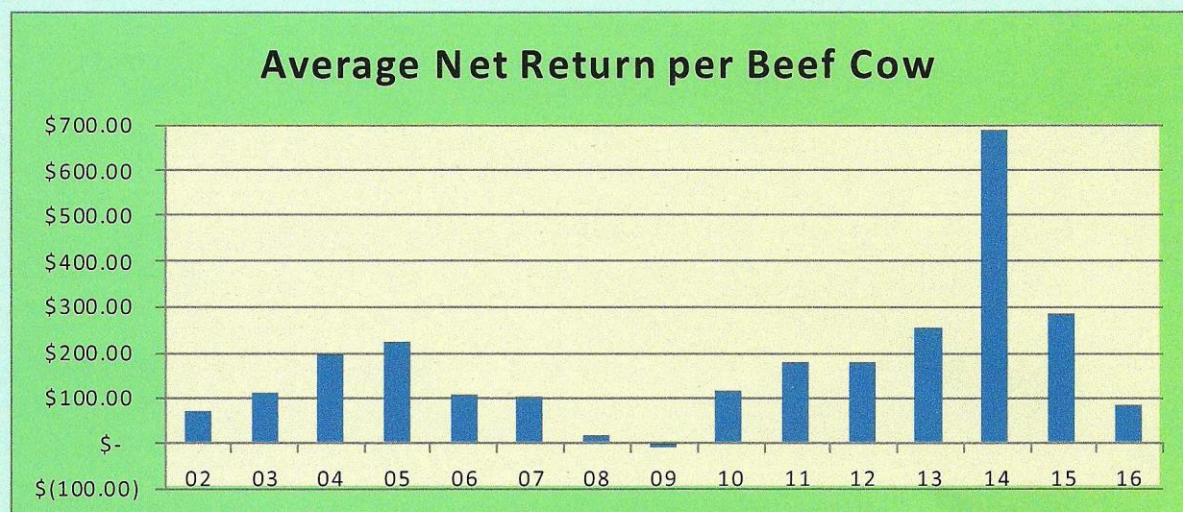


2016 North Dakota State Beef Average Summary



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.

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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 2016 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.

Farm Income Statement

North Dakota Farm Business Management Education Program

2016 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	86	17	18
Cash Farm Income			
Crop Income	\$ 99,256	\$ 96,384	\$ 241,276
Beef Income	206,974	240,696	361,133
Other Livestock Income	34,933	46,041	73,105
Government Payments	25,466	15,364	58,991
Other Farm Income	44,799	48,509	113,641
Gross Cash Farm Income	411,428	446,994	\$ 848,146
Cash Farm Expense			
Seed	\$ 27,188	\$ 26,501	\$ 69,345
Fertilizer	22,188	27,979	43,874
Chemicals	15,982	19,451	36,194
Crop Insurance	9,394	12,261	22,639
Crop Miscellaneous	1,654	2,844	1,798
Feeder Livestock Purchase	38,511	42,462	109,956
Purchased Feed	32,175	46,711	53,571
Breeding Fees	1,564	947	3,781
Veterinary	7,745	8,910	11,917
Livestock Supplies	2,186	2,842	2,349
Marketing	3,436	1,705	7,673
Interest	27,967	31,546	56,693
Fuel & Oil	14,022	16,281	23,766
Repairs	32,725	46,881	49,266
Custom Hire	20,353	25,299	47,554
Hired Labor	9,338	8,984	27,951
Land Rent	37,484	39,767	76,116
Machinery Bldg & Lvstk Lease	2,586	2,228	1,625
Real Estate Taxes	4,154	4,639	9,606
Farm Insurance	7,673	8,843	13,113
Utilities	6,517	7,620	11,428
Miscellaneous Expense	9,571	8,690	11,917
Total Cash Farm Expense	\$ 334,413	\$ 393,391	\$ 692,132
Net Cash Farm Income	\$ 77,015	\$ 53,603	\$ 156,014
Total Inventory Change	\$ (14,846)	\$ (100,028)	\$ 77,428
Net Operating Profit	\$ 62,169	\$ (46,425)	\$ 233,442
Total Depreciation	\$ (30,012)	\$ (30,686)	\$ (58,881)
Gain or Loss on Capital Sales	\$ 1,051	\$ (24)	\$ 4,868
Net Farm Income	\$ 33,208	\$ (77,135)	\$ 179,429

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
2016 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%	
	32		6		7	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	522.4	\$ 711.77	504.7	\$ 675.86	618.4	\$ 822.16
Breeding Herd Depreciation		(72.71)		(190.28)		56.21
Other Income		4.68		23.68		-
Gross Margin		\$ 643.74		\$ 509.26		\$ 878.37
Direct Expenses						
Protein Vit Minerals (lb)	53.9	\$ 19.94	41.5	\$ 19.48	33.6	\$ 8.11
Creep/Starter	143	\$ 9.66	62.1	\$ 6.85	424.2	\$ 20.04
Corn Silage (lb)	1,931.9	27.98	3,088.0	44.50	3,313.0	46.65
Hay, Alfalfa (lb)	490.8	13.22	201.4	7.17	785.2	23.08
Hay, Grass (lb)	4796.3	119.36	5,609.9	139.02	4,611.2	118.88
Pasture (aum)	7.5	154.94	7.9	149.80	6.8	124.68
Other feedstuffs (lb)	278.4	13.93	919.4	25.93	40.7	8.34
Veterinary		21.54		25.80		27.06
Supplies		5.44		15.26		5.95
Fuel & Oil		17.33		19.66		16.92
Repairs		46.83		53.67		42.68
Custom Hire		4.68		7.08		11.70
Marketing		4.02		5.67		0.02
Operating Interest		8.59		16.06		7.87
Total Direct Expenses		\$ 467.46		\$ 535.95		\$ 461.98
Return Over Direct expenses		\$ 176.28		\$ (26.69)		\$ 416.39
Overhead Expenses						
Hired labor		\$ 8.20		\$ 16.90		\$ 9.26
Farm insurance		12.85		15.31		9.30
Utilities		10.05		11.42		8.01
Interest		12.86		25.72		7.14
Mach & bldg depreciation		38.44		29.46		33.36
Miscellaneous		13.27		14.59		15.92
Total Overhead Expenses		\$ 95.67		\$ 113.41		\$ 82.99
Total Direct & Overhead exp		\$ 563.13		\$ 649.36		\$ 544.97
Net Return		\$ 80.61		\$ (140.10)		\$ 333.40
Labor & management charge		\$ 65.99		\$ 75.47		\$ 70.68
Net return over lbr & mgt		\$ 14.62		\$ (215.57)		\$ 262.72
Cost of Production per Cwt produced						
Total direct expense		\$ 89.43		\$ 106.21		\$ 74.71
Total dir & ovhd expense/unit		\$ 107.73		\$ 128.69		\$ 88.13
With other revenue adjustments		\$ 120.84		\$ 161.63		\$ 79.04
With labor & management		\$ 133.47		\$ 176.59		\$ 90.47

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	Avg. of All Farms	Low 20%	High 20%
Number of Farms	32	6	7
Other Information			
Number of cows	216.6	185.3	231.2
Pregnancy percentage	93.8	96.3	95.6
Pregnancy loss percentage	2.8	3.2	0.5
Culling Percentage	16.4	18.3	17.6
Calving Percentage	91.2	93.2	95.1
Weaning Percentage	86.7	87.0	90.4
Calf death loss percent	4.8	7.7	2.3
Cow death loss percent	2.2	2.2	2.7
Average weaning weight	558	530	636
Lb weaned/exposed female	484	461	575
Avg wgt/beef calf sold	574	569	581
Avg price/cwt.	\$ 130.80	\$ 132.45	\$ 129.09
Feed cost per cow	\$ 359.03	\$ 392.75	\$ 349.77

Financial Standards Measure

ND Farm Business Management Education Program
 2016 Beef Farm Report (Sorted by Net Farm Income)

	Avg of All Farms	Low 20%	High 20%
Number of Farms	86	17	18
Liquidity			
Current Ratio	1.46	1.18	1.65
Working Capital	121,536	58,778	342,817
WC to gross Inc	30.1%	16.9%	36.5%
Solvency (cost)			
Farm debt to Asset ratio	50%	60%	47%
Profitability (cost)			
Rate of return on Farm assets	1.7%	-4.7%	5.3%
Rate of return on Farm equity	-0.3%	-15.9%	6.5%
Net Farm Income	33,206	-77,135	179,428
Repayment capacity			
Term Debt Coverage ratio	0.45	-0.30	0.53
Efficiency			
Operating expense ratio	77.2%	103.8%	68.5%
Depreciation expense ratio	7.4%	8.8%	6.3%
Interest Expense ratio	7.4%	9.6%	6.7%
Net farm income ratio	8.2%	-22.2%	19.1%

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.

Northland Ford Dealers - Asgrow/DEKALB/Channel/REA/Monsanto - CHS Foundation
ND Farmers Union Insurance/ND Farmers Union - Wheat Growers - Thunder Seed
Nodak Mutual Insurance - International Certification Services - ADM - PROSEED
Wilbur-Ellis - ND Farm Bureau - RDO Equipment - DuPont Pioneer - CF Industries
Lynnes Welding Training - IRONCLAD Marketing - First International Bank & Trust
ND Building Trades Unions - International Brotherhood of electrical Workers
North Central States Regional Council of Carpenters

Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow), 2017 ¹

		N.D. Avg.	Your Numbers
VARIABLE COST PER COW:			
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		
A. TOTAL VARIABLE COSTS	\$ 539.00	\$	0.00
FIXED COSTS PER COW			
13. Depreciation	\$ 30.00	\$	
14. Interest	10.00		
15. Insurance	10.00		
16. Cow interest, death loss	65.00		
B. TOTAL FIXED COSTS	\$ 115.00	\$	0.00
C. TOTAL COSTS PER COW (A + B)	\$ 654.00	\$	0.00
RETURNS PER COW ²			
		Your Numbers	
	%	x	Weight x Price
17. Steers: .45 x 590 x 1.45	x	x	\$ 384.98 \$ 0.00
18. Heifers: .26 x 570 x 1.25	x	x	185.25 0.00
19. Cull cows; .14 x 1300 x 0.70	x	x	127.40 0.00
20. Cull heifers: .05 x 900 x 1.15	x	x	51.75 0.00
D. GROSS RETURNS PER COW			\$ 749.38 \$ 0.00
E. RETURN OVER VARIABLE COSTS (D - A)			\$ 210.38 \$ 0.00
F. RETURN OVER TOTAL COSTS (D - C) ³			\$ 95.38 \$ 0.00

¹ Information in this budget is based on the North Dakota Farm and Ranch Business Management Annual Report, 2016.

² 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.

³ 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

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
 2016 Beef Farm Report (Farms Sorted by Net Farm Income)

	Avg of all farms	Low 20%	High 20%
Number of Farms	86	17	18
Assets			
Current Farm Assets			
Cash and checking balance	27,902	42,350	52,059
Prepaid expenses & supplies	18,437	12,086	59,504
Growing crops	1,487	0	6,341
Accounts receivable	19,945	14,796	56,578
Hedging accounts	889	104	2,967
Crops held for sale or feed	160,191	150,217	357,227
Crops under government loan	0	0	0
Market Livestock held for sale	157,829	157,042	333,839
Other current asset	892	0	4,260
Total Current Farm Assets	\$ 387,572	\$ 376,595	\$ 872,775
Intermediate Farm Assets			
Breeding livestock	288,879	305,499	459,914
Machinery & equipment	260,274	278,242	514,261
Titled vehicles	38,906	40,293	64,273
Other intermediate assets	20,131	15,438	26,334
Total Intermediate Farm Assets	\$ 608,190	\$ 639,472	\$ 1,064,782
Long Term Assets			
Farm land	522,817	471,125	1,424,242
Buidlings & improvements	88,143	103,235	148,623
Other long-term assets	8,860	18,171	4,564
Total Long-term assets	\$ 619,820	\$ 592,531	\$ 1,577,429
Total Farm Assets	\$ 1,615,582	\$ 1,608,598	\$ 3,514,986
Total Nonfarm assets	\$ 133,801	\$ 120,282	\$ 199,693
Total Assets	\$ 1,749,383	\$ 1,728,880	\$ 3,714,679
Liabilities			
Current Farm Liabilities			
Accrued Interest	14,746	22,438	24,951
Accounts payable	11,596	14,161	8,028
Current notes	180,281	224,898	376,305
Government crop loans	0	0	0
Principal due on term debt	59,413	56,319	120,673
Total Current Farm Liabilities	\$ 266,036	\$ 317,816	\$ 529,957
Total Intermediate Farm Liabs	\$ 140,833	\$ 173,959	\$ 175,572
Total Long-term Farm Liabilities	\$ 396,616	\$ 470,186	\$ 944,609
Total Farm Liabilities	\$ 803,485	\$ 961,961	\$ 1,650,138
Total Nonfarm Liabilities	\$ 21,757	\$ 10,319	\$ 22,214
Total Liabilities	\$ 825,242	\$ 972,280	\$ 1,672,352
Net Worth (farm & non farm)	\$ 924,141	\$ 756,600	\$ 2,042,327
Net Worth change	\$ 9,416	\$ (89,262)	\$ 106,276