

Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow), 2019 <sup>1</sup>

	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

	Your Numbers					
	%	x	Weight	x	Price	
17. Steers: .45 x 590 x 1.62	x	x	x		\$ 430.11	\$ 0.00
18. Heifers: .26 x 570 x 1.40	x	x	x		207.48	0.00
19. Cull cows; .14 x 1300 x 0.5	x	x	x		91.00	0.00
20. Cull heifers: .05 x 900 x 1.25	x	x	x		56.25	0.00
D. GROSS RETURNS PER COW					\$ 784.84	\$ 0.00
E. RETURN OVER VARIABLE COSTS (D - A)					\$ 245.84	\$ 0.00
F. RETURN OVER TOTAL COSTS (D - C) <sup>3</sup>					\$ 130.84	\$ 0.00

<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)  
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**Balance Sheet at Cost Values**  
North Dakota Farm Business Management Education Program  
2018 Beef Farm Report (Farms Sorted by Net Farm Income)

Number of Farms	Avg of all farms 68	Low 20% 13	High 20% 14
<b>Assets</b>			
<b>Current Farm Assets</b>			
Cash and checking balance	25,236	20,715	20,929
Prepaid expenses & supplies	6,212	1,798	15,339
Growing crops	1,113	438	712
Accounts receivable	12,415	3,766	26,567
Hedging accounts	1,159	0	4,628
Crops held for sale or feed	120,484	60,258	229,984
Crops under government loan	0	0	0
Market Livestock held for sale	146,436	78,046	324,755
Other current assest	0	0	0
Total Current Farm Assets	\$ 313,055	\$ 165,021	\$ 622,914
<b>Intermediate Farm Assets</b>			
Breeding livestock	253,732	194,468	401,270
Machinery & equipment	228,369	138,858	415,275
Titled vehicles	36,338	35,017	40,685
Other intermediate assets	6,441	1,778	8,207
Total Intermediate Farm Assets	\$ 524,880	\$ 370,121	\$ 865,437
<b>Long Term Assets</b>			
Farm land	355,025	228,000	483,655
Buidlings & improvements	78,542	64,621	196,992
Other long-term assets	9,923	6,067	4,746
Total Long-term assets	\$ 443,490	\$ 298,688	\$ 685,393
Total Farm Assets	\$ 1,281,425	\$ 833,830	\$ 2,173,744
Total Nonfarm assets	\$ 158,893	\$ 255,433	\$ 165,226
<b>Total Assets</b>	<b>\$ 1,440,318</b>	<b>\$ 1,089,263</b>	<b>\$ 2,338,970</b>
<b>Liabilities</b>			
<b>Current Farm Liabilities</b>			
Accrued Interest	14,446	12,578	22,212
Accounts payable	13,275	8,896	27,990
Current notes	142,099	92,503	311,301
Government crop loans	0	0	0
Principal due on term debt	40,323	32,969	61,450
Total Current Farm Liabilities	\$ 210,143	\$ 146,946	\$ 422,953
Total Intermediate Farm Liabs	\$ 126,731	\$ 127,466	\$ 163,600
Total Long-term Farm Liabilities	\$ 252,946	\$ 247,816	\$ 347,277
Total Farm Liabilities	\$ 589,820	\$ 522,228	\$ 933,830
Total Nonfarm Liabilities	\$ 25,930	\$ 64,438	\$ 6,487
<b>Total Liabilities</b>	<b>\$ 615,750</b>	<b>\$ 586,666</b>	<b>\$ 940,317</b>
<b>Net Worth (farm &amp; non farm)</b>			
Net Worth (farm & non farm)	\$ 824,568	\$ 502,597	\$ 1,398,653
<b>Net Worth change</b>	<b>\$ 62,038</b>	<b>\$ (13,652)</b>	<b>\$ 153,302</b>

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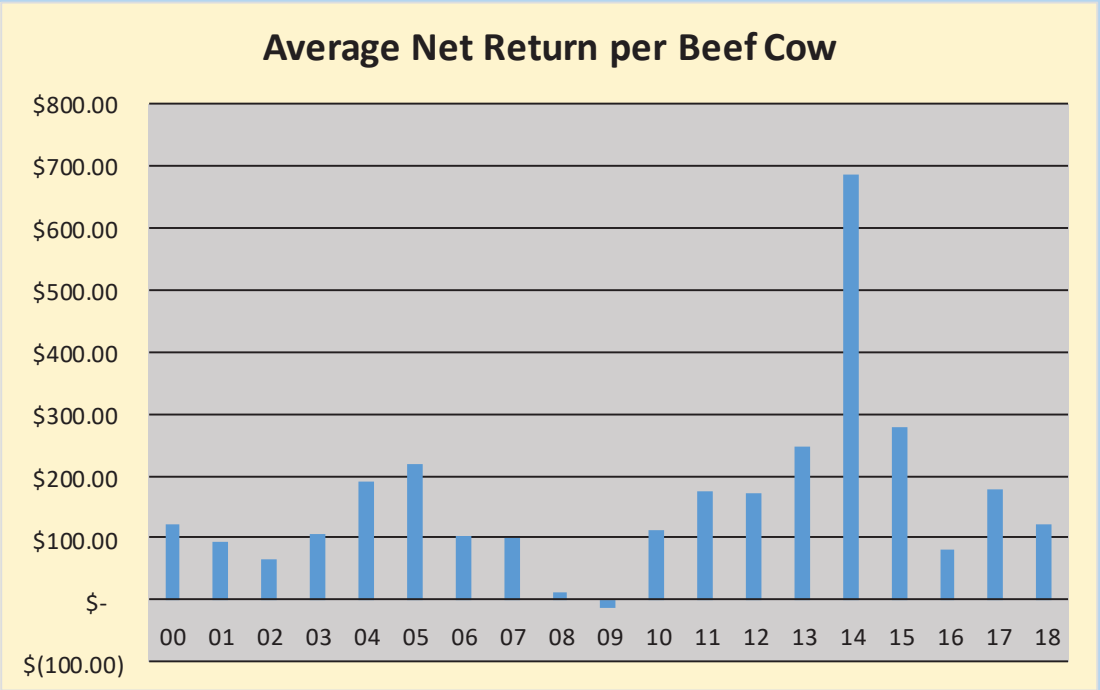
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## 2018 North Dakota State Beef Average Summary



### 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 2018 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				
2018 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	68	13	14	
<b>Cash Farm Income</b>				
Crop Income	\$ 78,186	\$ 16,527	\$ 167,487	
Beef Income	185,718	148,567	339,459	
Other Livestock Income	1,180	1,092	1,968	
Government Payments	28,730	15,431	63,113	
Other Farm Income	23,215	10,232	32,055	
Gross Cash Farm Income	\$ 317,029	\$ 191,849	\$ 604,082	
<b>Cash Farm Expense</b>				
Seed	\$ 19,356	\$ 6,272	\$ 38,606	
Fertilizer	19,306	6,400	34,416	
Chemicals	11,726	2,761	21,414	
Crop Insurance	5,977	2,816	10,584	
Crop Miscellaneous	1,094	40	1,994	
Feeder Livestock Purchase	11,759	982	45,144	
Purchased Feed	27,118	23,295	58,248	
Breeding Fees	1,032	583	3,208	
Veterinary	7,309	5,419	13,829	
Livestock Supplies	2,156	956	3,171	
Marketing	2,609	4,393	3,217	
Interest	22,261	21,458	36,334	
Fuel & Oil	17,343	11,512	24,114	
Repairs	27,333	20,708	42,344	
Custom Hire	13,628	8,801	23,970	
Hired Labor	6,394	2,155	13,593	
Land Rent	34,188	23,390	58,320	
Machinery Bldg & Lvstk Lease	1,674	1,841	2,360	
Real Estate Taxes	3,504	2,634	5,798	
Farm Insurance	6,945	6,752	9,975	
Utilities	5,417	5,524	7,171	
Miscellaneous Expense	12,635	10,744	17,240	
Total Cash Farm Expense	\$ 260,764	\$ 169,436	\$ 475,050	
Net Cash Farm Income	\$ 56,265	\$ 22,413	\$ 129,032	
Total Inventory Change	\$ 14,432	\$ (58,533)	\$ 83,684	
Net Operating Profit	\$ 70,697	\$ (36,120)	\$ 212,716	
Total Depreciation	\$ (24,192)	\$ (18,509)	\$ (41,072)	
Gain or Loss on Capital Sales	\$ 524	\$ (1,255)	\$ (443)	
Net Farm Income	\$ 47,029	\$ (55,884)	\$ 171,201	

North Dakota Farm Business Management Education Program  
2018 Beef Report (Farms Sorted by Net Return Per Unit)

Beef Cow Calf--Average Per Cow				Beef Cow-Calf: Whole Herd w/ Backgrounding			
		Avg of			Avg of		
		All Farms			All Farms		
Number of Farms		20			15		
Beef Calves sold (lb)	Quantity		Value	Quantity		Value	
Herd Inventory Change	510	\$	829.90	520.1	\$	770.65	
Other Income			(86.00)			65.83	
Government Payments			1.66			5.52	
Gross Margin		\$	10.61		\$	8.52	
			756.17			850.52	
<b>Direct Expenses</b>							
Protein Vit Minerals (lb)	763.2	\$	30.14	178.0	\$	86.90	
Creep/Starter	58.7	\$	5.95	-	\$	-	
Corn Silage (lb)	2,165.3		31.68	2,955.0		40.73	
Hay, Alfalfa (lb)	406.5		15.38	1,123.7		40.20	
Hay, Grass (lb)	4809.2		136.11	5,393.3		142.71	
Pasture (aum)	7.8		140.24	6.8		124.52	
Other feedstuffs (lb)	463.5		29.99	1,686.6		60.35	
Breeding Fees			-			8.52	
Veterinary			32.41			36.83	
Supplies			31.10			19.86	
Fuel & Oil			26.53			30.68	
Repairs			48.93			29.86	
Custom Hire			-			17.12	
Marketing			-			12.75	
Total Direct Expenses		\$	528.46		\$	651.03	
Return Over Direct expenses		\$	227.71		\$	199.49	
<b>Overhead Expenses</b>							
Hired labor		\$	5.52		\$	-	
Farm insurance			13.79			-	
Utilities			12.56			15.75	
Interest			15.29			18.44	
Mach & bldg depreciation			40.19			30.97	
Miscellaneous			18.73			31.44	
Total Overhead Expenses		\$	106.08		\$	96.60	
Total Direct & Overhead exp		\$	634.54		\$	747.63	
Net Return		\$	121.63		\$	102.89	
Labor & management charge		\$	69.94		\$	81.77	
Net return over lbr & mgt		\$	51.69		\$	21.12	
<b>Cost of Production per Cwt produced</b>							
Total direct expense		\$	103.62		\$	111.35	
Total dir & ovhd expense/unit		\$	124.42		\$	127.87	
With other revenue adjustments		\$	139.21		\$	132.82	
With labor & management		\$	152.92		\$	146.81	

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	Beef Cow Calf: Average Per Cow 20	Beef Cow-Calf: Whole Herd w/ Backgrounding 15
<b>Number of Farms</b>		
<b>Other Information</b>		
Number of cows	229.9	188.1
Pregnancy percentage	96.3	96.9
Pregnancy loss percentage	3.1	2.9
Culling Percentage	17.7	9.7
Calving Percentage	93.3	94.1
Weaning Percentage	88.6	90.0
Calf death loss percent	4.5	3.6
Cow death loss percent	1.2	1.0
Average weaning weight	550	516
Lb weaned/exposed female	487	464
Avg wgt/beef calf sold	577	692
Avg price/cwt.	\$ 165.95	\$ 148.37
Feed cost per cow	\$ 389.49	\$ 495.51

Financial Standards Measure

ND Farm Business Management Education Program

2018 Beef Farm Report (Sorted by Net Farm Income)

	Avg of			
	All Farms	Low 20%	High 20%	
Number of Farms	68	13	14	
<b>Liquidity</b>				
Current Ratio	1.49	1.12	1.47	
Working Capital	102,911	18,075	199,961	
WC to gross Inc	30.7%	12.5%	29.3%	
<b>Solvency (cost)</b>				
Farm Debt to Asset ratio	46%	63%	43%	
<b>Profitability (cost)</b>				
Rate of return onFarm assets	3.2%	-6.7%	8.1%	
Rate of return on Farm equity	2.1%	-24.7%	10.7%	
Net Farm Income	47,029	-55,884	171,201	
<b>Repayment capacity</b>				
Term Debt Coverage ratio	1.45	-0.07	2.24	
<b>Efficiency</b>				
Operating expense ratio	71.5%	108.5%	63.0%	
Depreciation expense ratio	7.2%	12.8%	6.0%	
Interest Expense ratio	7.3%	16.4%	5.8%	
Net farm income ratio	14.1%	-38.6%	25.1%	

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 for 2018.

Northland Ford Dealers, Asgrow/DEKALB/Channel/REA/Monsanto, CHS Foundation, ADM, Farm Credit Services of Mandan, Ag Country Farm Credit Services, Farm Credit Services of ND, ND Farmers Union, Farmers Union Insurance, AGTEGRA Cooperative, RDO Equipment Co., International Certification Services, Inc., Nodak Insurance, Zacharias Family, PROSEED, IRONCLAD Marketing, Butler Machinery, Wilbur-Ellis, ND Farm Bureau, PIONEER Seeds, CF Industries, North Central State Regional Council of Carpenters, International Brotherhoud of Electrical Workers, 1st International Bank & Trust, Gooseneck Implement, Titan Machinery, Plains Ag, ND Ethanol Council

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