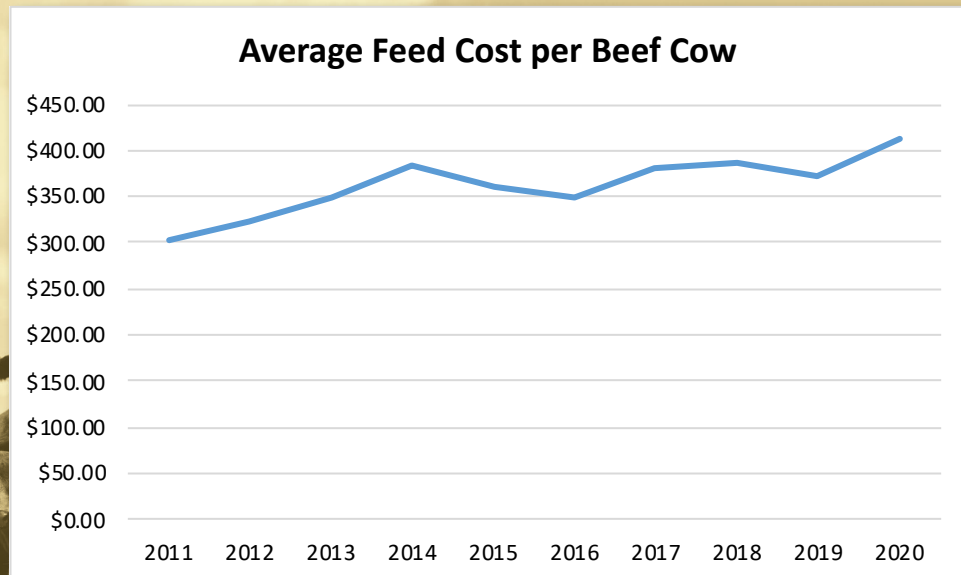
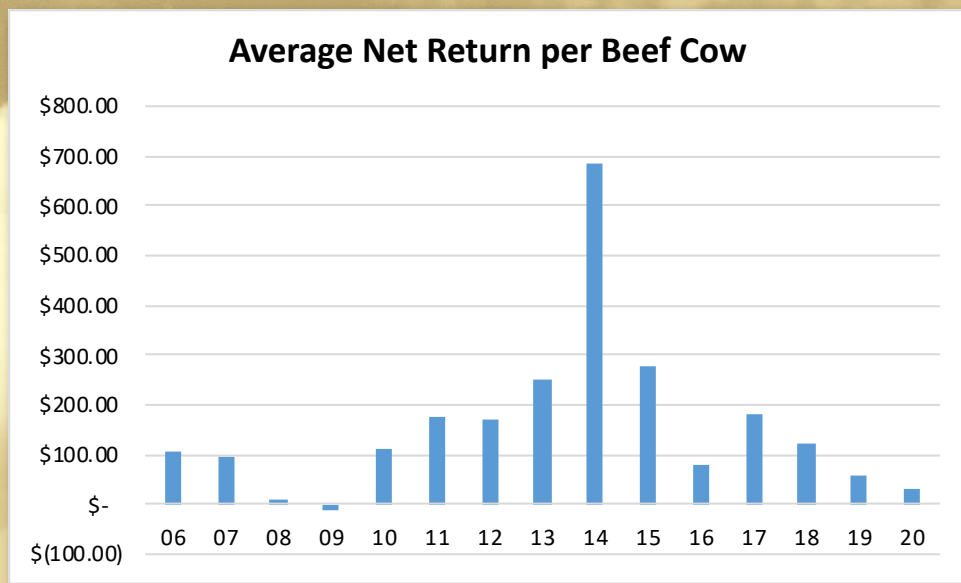


ND FARM

MANAGEMENT EDUCATION

2020 North Dakota State Beef Average Summary

The historical charts below are generated from the ND Farm and Ranch Business Management Programs



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The 2020 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
2020 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	48	9	10
Cash Farm Income			
Crop Income	106,247	67,162	109,822
Beef Income	176,189	116,717	295,402
Other Livestock Income	22,076	12,293	56,945
Government Payments	83,599	50,747	158,484
Other Farm Income	27,466	28,453	20,984
Gross Cash Farm Income	415,576	275,371	641,634
Cash Farm Expense			
Seed and Plants	20,233	7,927	37,247
Fertilizer	24,083	18,602	40,046
Crop chemicals	16,999	11,521	22,763
Crop insurance	5,118	3,064	6,496
Crop misc.	2,213	1,716	2,557
Feeder livestock purchase	24,616	42,762	16,793
Purchased feed	25,398	13,510	42,580
Breeding fees	1,054	1,779	943
Veterinary	8,636	6,526	16,896
Livestock supplies	5,533	5,067	12,999
Livestock misc.	438	-	207
Interest	29,746	19,830	35,993
Fuel & Oil	18,535	13,803	22,052
Repairs	35,986	40,861	45,614
Custom hire	13,841	5,962	19,938
Hired labor	9,922	6,961	7,287
Land rent	39,297	32,159	55,592
Machinery Bldg & Livestock lease	9,837	4,682	731
Real estate taxes	4,921	2,115	10,271
Farm insurance	7,323	4,150	9,645
Utilities	5,390	3,634	7,060
Marketing	2,330	405	4,437
Miscellaneous expense	11,952	10,256	17,272
Total cash expense	323,401	257,292	435,414
Net cash farm income	92,175	18,079	206,220
Total inventory change	17,054	35,913	96,563
Net operating profit	109,230	17,834	302,873
Total depreciation	33,008	16,756	59,101
Gain or loss on capital sales	-162	581	-588
Net farm income	76,060	-34,009	243,094



Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
2020 Beef Farm Report (40% Sales/ 50 head Criteria)
(Farms Sorted by Net Return)

Beef Cow-Calf -- Average Per Cow

Whole Herd W/ Backgrounding

	Avg. Of All Farms		Avg. Of All Farms	
	14		17	
	Quantity	Value	Quantity	Value
Number of farms				
Beef Calves sold (lb)	128.9	186.40	343.4	499.98
Herd Inventory Change	416.4	408.43	192.8	360.98
Government payments		112.90		134.47
Other income		6.06		21.37
Gross margin		717.27		1016.82
Direct Expenses				
Protein Vit Minerals (lb.)	8,446.4	18.36	263.0	30.25
Corn Silage (lb.)	3,182.6	54.03	0.2	6.12
Hay, Alfalfa (lb.)	864.8	34.40	864.8	34.40
Hay, Grass (lb.)	4,450.6	134.42	5750.9	156.24
Pasture (aum)	7.1	126.94	7.4	158.35
DDGS, dry (lb.)	38.6	3.65	38.6	3.65
DDGS, wet (lb.)	146.1	6.09	146.1	6.09
Cover crop / Aftermath grazing (aum)	0.1	3.12	0.2	6.12
Veterinary		40.79		41.22
Supplies		13.88		17.82
Fuel & oil		18.77		23.04
Repairs		49.25		44.88
Custom hire / Hired labor		14.42		35.78
Marketing		1.20		21.43
Operating interest		5.39		23.76
Miscellaneous		9.29		14.19
Total direct expenses		569.93		751.40
Return over direct expense		147.33		265.41
Overhead Expenses				
Hired labor		20.43		20.43
Farm insurance		10.99		14.31
Utilities		9.82		9.82
Interest		6.13		22.89
Mach & bldg depreciation		45.78		47.20
Miscellaneous		21.07		31.65
Total overhead expenses		114.23		116.05
Total dir & ovhd expenses		684.16		867.45
Net return		33.11		149.37
Labor & management charge		60.91		78.50
Net return over lbr & mgt		-27.81		70.87
Cost of Production Per Cwt.				
Total direct expense		104.31		139.91
Total dir & ovhd expense per unit		125.21		161.52
With other revenue adjustments		144.79		116.79
With labor and management		155.94		131.41

(Continued from previous page)

Beef Cow-Calf -- Average Per Cow Whole Herd W/ Backgrounding

	<u>Avg. Of All Farms</u>	<u>Avg. Of All Farms</u>
	14	17
	Value	Value
Number of farms		
Other Information		
Number of cows	261.8	191.4
Pregnancy percentage	96.6	95.5
Pregnancy loss percentage	1.1	2.4
Culling percentage	13.4	13.3
Calving percentage	95.5	93.3
Weaning percentage	88.1	89.2
Calf death loss percent	7.8	4.3
Cow death loss percent	2.4	1.8
Average weaning weight	564	544
Lb. weaned/exposed female	497	485
Feed cost per cow	416.95	529.28
Avg wgt/ Beef Calves sold	585	755
Avg price / cwt.	144.57	145.58

Financial Standards Measures

**North Dakota Farm Business Management Education Program
2020 Beef Farm Report (40% Sales/ 50 head Criteria)
(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	48	9	10
Liquidity			
Current ratio	1.70	1.29	2.25
Working capital	147,634	36,784	386,971
Working capital to gross inc	33.9 %	15.5 %	51.8 %
Solvency (cost)			
Farm debt to asset ratio	37 %	58 %	31 %
Profitability (cost)			
Rate of return on farm assets	4.1 %	-6.1 %	8.8 %
Rate of return on farm equity	4.3 %	-29.1 %	10.5 %
Net farm income	76,060	-34,009	243,094
Repayment Capacity			
Term debt coverage ratio	1.72	-0.01	3.69
Efficiency			
Operating expense ratio	68.2 %	99.6 %	54.6 %
Depreciation expense ratio	7.6 %	7.1 %	7.9 %
Interest expense ratio	6.7 %	7.9 %	4.8 %
Net farm income ratio	17.5 %	-14.6 %	32.6 %

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Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow), 2021 ¹

	N.D. Avg.	Your Numbers
VARIABLE COST PER COW:		
1. Summer Pasture	\$ 135.00	\$ _____
2. Hay--silage	180.00	_____
3. Other feed	30.00	_____
4. Protein and Mineral	25.00	_____
5. Hired Labor, Custom Hire	20.00	_____
6. Veterinary, Drugs, and Supplies	30.00	_____
7. Utilities, Fuel, and Oil	25.00	_____
8. Facilities and Equipment Repairs	40.00	_____
9. Breeding Charge	10.00	_____
10. Marketing	15.00	_____
11. Miscellaneous	19.00	_____
12. Interest	15.00	_____
A. TOTAL VARIABLE COSTS	\$ 544.00	\$ 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)	\$ 659.00	\$ 0.00
	Your Numbers	
RETURNS PER COW ²	%	x Weight x Price
17. Steers: .45 x 590 x 1.65	x _____	x _____
		\$ 438.08
18. Heifers: .26 x 570 x 1.40	x _____	x _____
		207.48
19. Cull cows: .14 x 1300 x 0.55	x _____	x _____
		100.10
20. Cull heifers: .05 x 900 x 1.25	x _____	x _____
		56.25
D. GROSS RETURNS PER COW	\$ 801.91	\$ 0.00
E. RETURN OVER VARIABLE COSTS (D - A)	\$ 257.91	\$ 0.00
F. RETURN OVER TOTAL COSTS (D - C) ³	\$ 142.91	\$ 0.00

¹ Information in this budget is based on the [North Dakota Farm and Ranch Business Management Annual Report, 2019](#).

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:

Bryon Parman, NDSU Extension Finance Specialist



Our Mission
“To provide lifelong learning opportunities in economic and financial management for adults involved in the farming and ranching business.”



Photos submitted by: Lynsey Aberle & Judy Jacobson

Balance Sheet at Cost Values
North Dakota Farm Business Management Education Program
2020 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	48	9	10
Assets			
Current Farm Assets			
Cash and checking balance	24,167	26,358	27,988
Prepaid expenses & supplies	7,816	5,223	21,646
Growing crops	378	750	294
Accounts receivable	12,627	1,517	27,093
Hedging accounts	1,220	1,425	-
Crops held for sale or feed	154,633	74,244	309,279
Crops under government loan	-	-	-
Market livestock held for sale	158,427	53,388	311,323
Other current assets	92	-	-
Total current farm assets	359,360	162,903	697,623
Intermediate Farm Assets			
Breeding livestock	294,276	185,056	574,291
Machinery and Equipment	260,564	141,037	499,392
Titled vehicles	41,855	38,356	80,554
Other Immediate Assets	5,096	2,068	4,743
Total intermediate farm assets	601,792	366,516	1,158,980
Long Term Farm Assets			
Farm land	535,474	275,504	687,706
Buildings and improvements	88,987	10,008	154,371
Other long-term assets	4,973	1,461	100
Total long-term farm assets	629,434	286,972	841,177
Total Farm Assets	1,590,586	816,392	2,698,780
Total Nonfarm Assets	135,127	117,506	220,987
Total Assets	1,725,712	933,898	2,919,767
Liabilities			
Current Farm Liabilities			
Accrued interest	12,175	8,115	11,955
Accounts payable	12,736	3,828	7,037
Current notes	136,508	75,698	215,460
Government crop loans	-	-	-
Principal due on term debt	50,306	38,478	76,200
Total current farm liabilities	211,725	126,120	310,652
Total intermediate farm liabilities	170,151	167,312	190,672
Total long-term farm liabilities	371,747	314,305	341,066
Total farm liabilities	753,623	607,736	842,390
Total non-farm liabilities	38,562	46,493	23,372
Total liabilities	792,185	654,230	865,762
Net worth (farm and non-farm)	933,527	279,668	2,054,005
Net worth change	69,778	-31,165	217,616