

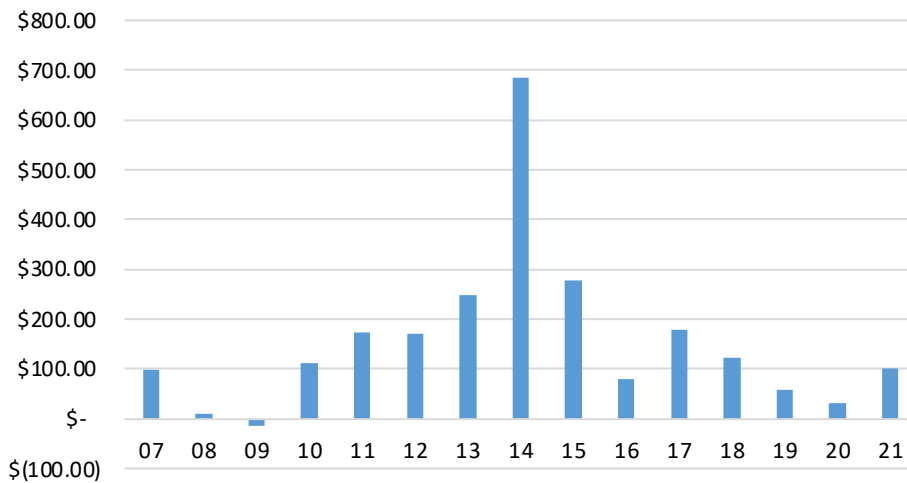
ND FARM

MANAGEMENT EDUCATION

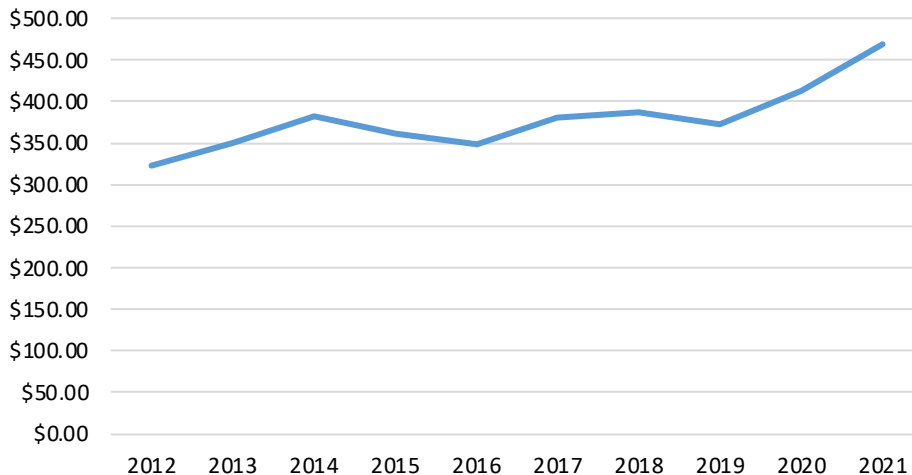
2021 North Dakota State Beef Average Summary

The historical charts below are generated from the North Dakota Farm Management Education Programs

Average Net Return per Beef Cow



Average Feed Cost per Beef Cow



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The 2021 summary reports are based on data from individual farm analysis completed by farm/ranch families enrolled in the North Dakota Farm Management Education Program.

Data for this North Dakota State Average Summary Report was derived from operations with at least 50 head of beef cows and 70% of commodity sales coming from beef enterprises.

Farm Income Statement
North Dakota Farm Business Management Education Program
2021 Beef Farm Report (70% Sales & 50 Head Criteria)
(Farms Sorted by Net Farm Income)

	Avg. Of All Farms
Number of Farms	17
Cash Farm Income	
Crop Income	5,639
Beef Income	202,364
Other Livestock Income	25,994
Government Payments	50,307
Other Farm Income	24,950
Gross Cash Farm Income	309,253
Cash Farm Expense	
Seed and Plants	3,522
Fertilizer	4,604
Crop chemicals	2,220
Crop insurance	1,135
Crop misc.	353
Feeder livestock purchase	55,951
Purchased feed	35,265
Breeding fees	1,263
Veterinary	7,681
Livestock supplies	3,319
Livestock misc.	1,137
Interest	16,732
Fuel & Oil	13,246
Repairs	24,022
Custom hire	8,192
Hired labor	3,503
Land rent	26,755
Machinery Bldg & Livestock lease	831
Real estate taxes	2,308
Farm insurance	4,439
Utilities	5,074
Marketing	4,176
Miscellaneous expense	7,218
Total cash expense	232,949
Net cash farm income	76,304
Total inventory change	4,742
Net operating profit	81,045
Total depreciation	-18,070
Gain or loss on capital sales	-2,180
Net farm income	60,795

Livestock Enterprise Analysis
North Dakota Farm Business Management Education Program
2021 State Report
(Farms Sorted by Net Return)

Beef Cow-Calf -- Average Per Cow

Whole Herd W/ Backgrounding

	Avg. Of All Farms		Avg. Of All Farms	
	Quantity	Value	Quantity	Value
Number of Farms		12		25
Beef Calves sold (lb)	124.1	258.31	383.0	537.10
Herd Inventory Change (lb)	346.1	418.23	179.8	286.89
Government payments		71.75		59.91
Other income		60.45		4.27
Gross margin		808.74		888.16
Direct Expenses				
Protein Vit Minerals (lb.)	80.1	25.15	240.8	51.28
Corn (bu.)			3.4	16.88
Corn Silage (lb.)	3,030.4	48.557	4,667.4	83.31
Hay, Alfalfa (lb.)	713.8	34.45	511.9	25.25
Hay, Grass (lb.)	4,173.3	172.73	5,985.1	224.31
Pasture (aum)	6.3	116.71	6.4	134.65
DDGS, wet (lb.)	79.1	5.94	63.3	13.33
Other feed stuffs (lb.)	2,547.3	66.05	2,115.50	74.99
Veterinary		32.10		29.36
Supplies		12.64		16.41
Livestock insurance		9.01		
Fuel & oil		18.65		26.72
Repairs		40.51		64.94
Miscellaneous		19.46		36.48
Total direct expenses		602.00		797.90
Return over direct expense		206.73		90.26
Overhead Expenses				
Hired Labor		22.20		19.65
Interest				27.94
Mach & bldg depreciation		38.70		44.70
Miscellaneous		43.71		61.92
Total overhead expenses		104.61		154.22
Total dir & ovhd expenses		706.61		952.12
Net return		102.12		-63.96
Labor & management charge		75.38		99.86
Net return over lbr & mgt		26.74		-163.82
Cost of Production Per Cwt. Produced				
Total direct expense per unit		127.47		141.12
Total dir & ovhd expense per unit		149.62		168.39
With other revenue adjustments		155.32		165.54
With labor and management		171.29		183.20

Continued From Previous Page

Beef Cow-Calf -- Average Per Cow

Whole Herd W/ Backgrounding

Avg. Of All Farms		Avg. Of All Farms	
Number of Farms	12		25
	Value		Value
Number of Cows	272.6		143.7
Pregnancy Percentage	96.1		93.9
Pregnancy Loss Percentage	0.7		2.0
Culling Percentage	17.2		18.4
Calving Percentage	95.5		92.0
Weaning Percentage	87.5		87.9
Calf Death Loss Percent	3.6		4.9
Cow Death Loss Percent	1.7		1.8
Average Weaning Weight	496		547
Lb. Weaned/Exposed Female	434		480
Feed Cost Per Cow	469.62		623.99
Avg Wgt/ Beef Calves Sold	403		683
Avg Price / CWT.	208.22		140.25

Financial Standards Measures

**North Dakota Farm Business Management Education Program
2021 Beef Farm Report (70% Sales & 50 head Criteria)
(Farms Sorted by Net Farm Income)**

	Avg. Of All Farms
Number of Farms	17
Liquidity	
Current Ratio	1.78
Working Capital	86,927
Working Capital to Gross Income	28.4%
Solvency Cost	
Farm Debt to Asset Ratio	43%
Profitability Cost	
Rate of Return on Farm Assets	4.5%
Rate of Return on Farm Equity	7.0%
Net Farm Income	60,795
Repayment Capacity	
Term Debt Coverage Ratio	2.07
Efficiency	
Operating Expense Ratio	68.9%
Depreciation Expense Ratio	5.9%
Interest Expense Ratio	4.6%
Net Farm Income Ratio	20.6%

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Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow), 2022 ¹

	N.D. Avg.	Your Numbers
VARIABLE COST PER COW:		
1. Summer Pasture	\$ 185.00	\$ _____
2. Hay-silage	230.00	_____
3. Other feed	45.00	_____
4. Protein and Mineral	30.00	_____
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	20.00	_____
10. Marketing	25.00	_____
11. Miscellaneous	15.00	_____
12. Interest	20.00	_____
A. TOTAL VARIABLE COSTS	\$ 685.00	\$ 0.00
FIXED COSTS PER COW		
13. Depreciation	\$ 30.00	\$ _____
14. Interest	15.00	_____
15. Insurance	10.00	_____
16. Cow interest, death loss	65.00	_____
B. TOTAL FIXED COSTS	\$ 120.00	\$ 0.00
C. TOTAL COSTS PER COW (A + B)	\$ 805.00	\$ 0.00
RETURNS PER COW ²		
	<u>Your Numbers</u>	
	%	x Weight x Price
17. Steers: .45 x 590 x 1.90	_____ x _____	_____ x _____
		\$ 504.45
18. Heifers: .26 x 570 x 1.65	_____ x _____	_____ x _____
		244.53
19. Cull cows; .14 x 1300 x 0.60	_____ x _____	_____ x _____
		109.20
20. Cull heifers: .05 x 900 x 1.35	_____ x _____	_____ x _____
		60.75
D. GROSS RETURNS PER COW	\$ 918.93	\$ 0.00
E. RETURN OVER VARIABLE COSTS (D - A)	\$ 233.93	\$ 0.00
F. RETURN OVER TOTAL COSTS (D - C) ³	\$ 113.93	\$ 0.00

¹ Information in this budget is based on the [North Dakota Farm and Ranch Business Management Annual Report, 2021](#).

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:

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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."

Balance Sheet at Cost Values
North Dakota Farm Business Management Education Program
2021 Beef Farm Report (70% Sales & 50 head Criteria)
(Farm Sorted by Net Farm Income)

	Avg. Of All Farms
Number of Farms	17
Assets	
Current Farm Assets	
Cash and checking balance	16,763
Prepaid expenses & supplies	3,291
Growing crops	60
Accounts receivable	10,244
Hedging accounts	352
Crops held for sale or feed	54,661
Crops under government loan	0
Market livestock held for sale	112,568
Other current assets	0
Total current farm assets	197,939
Intermediate Farm Assets	
Breeding livestock	204,258
Machinery and Equipment	114,317
Titled vehicles	29,335
Other Immediate Assets	2,423
Total intermediate farm assets	350,333
Long Term Farm Assets	
Farm land	406,444
Buildings and improvements	28,006
Other long-term assets	4,829
Total long-term farm assets	439,278
Total Farm Assets	987,551
Total Nonfarm Assets	140,911
Total Assets	1,128,461
Liabilities	
Current Farm Liabilities	
Accrued interest	6,730
Accounts payable	7,733
Current notes	59,408
Government crop loans	0
Principal due on term debt	37,141
Total current farm liabilities	111,012
Total intermediate farm liabilities	128,081
Total long-term farm liabilities	320,134
Total farm liabilities	559,227
Total non-farm liabilities	16,072
Total liabilities	575,299
Net worth (farm and non-farm)	553,163
Net worth change	64,254