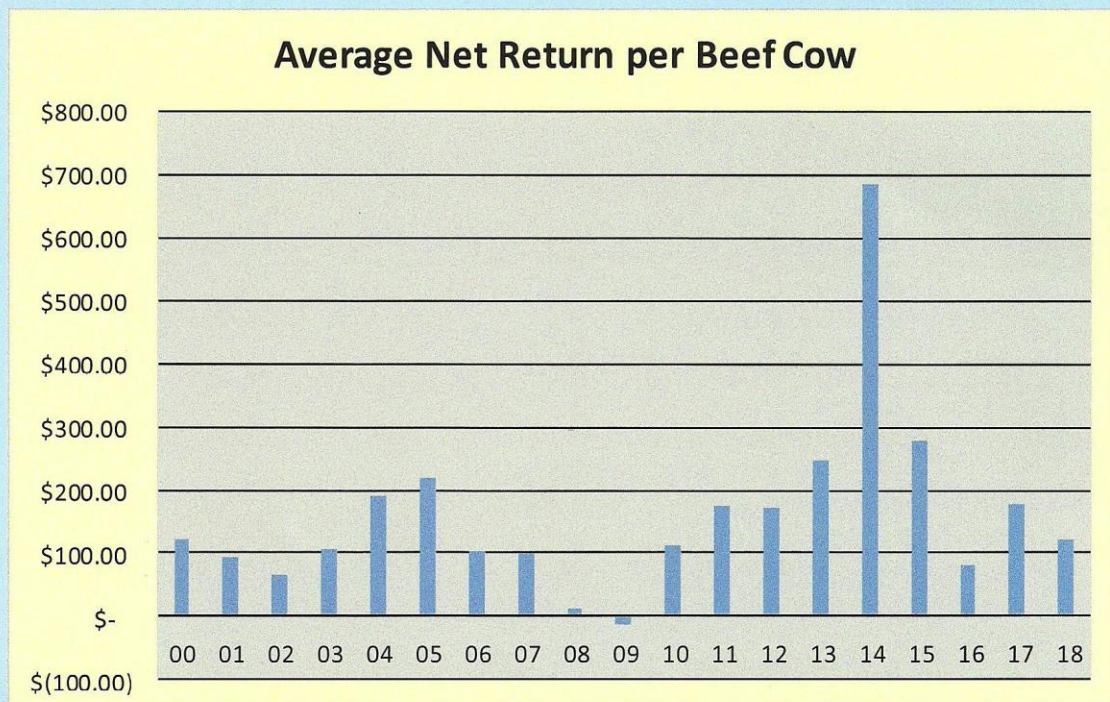


# 2018 North Dakota State Beef Average Summary



## 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.



## 2018 Farm/Ranch Business Management Instructors

### Bismarck

#### Kyle Olson

kyle.olson3@bismarckstate.edu  
Bismarck State College  
1500 Edwards Avenue  
Bismarck, ND 58506-5587  
701-224-5417  
701-323-4345 Fax

### Bottineau

#### Rodney Armstrong

rodney.armstrong@dakotacollege.edu  
Dakota College at Bottineau  
105 Simrall Boulevard  
Bottineau, ND 58318-1198  
701-228-5481  
701-550-9703 Cell  
701-228-5468 Fax

### Bottineau

#### Keith A. Knudson

keith.knudson@dakotacollege.edu  
Dakota College at Bottineau  
105 Simrall Boulevard  
Bottineau, ND 58318-1198  
701-228-2160  
701-228-5130 Fax

### Carrington

#### Steve Metzger

#### Joel Lemer

s.metzger@lrsc.edu  
joel.lemer@lrsc.edu  
Lake Region State College @  
Carrington Research Extension Center  
663 Hwy 281 N Box 219  
Carrington, ND 58421-0219  
701-652-2951 Joel Ext. 119 Steve Ext. 122  
701-652-5727 Steve's Cell  
701-652-2055 Joel's Cell  
701-652-2055 Fax

### Langdon

#### Jeremiah Halley

jeremiah.halley@lrsc.edu  
Lake Region State College @  
Langdon Research Extension Center  
9280 107th Ave NE  
Langdon, ND 58249  
701-256-2582  
701-261-0714 Cell

## 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)
<b>Net Farm Income</b>	<b>\$ 47,029</b>	<b>\$ (55,884)</b>	<b>\$ 171,201</b>



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 All Farms		AVG OF All Farms	
Number of Farms	20		15	
	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	510	\$ 829.90	520.1	\$ 770.65
Herd Inventory Change		(86.00)		65.83
Other Income		1.66		5.52
Government Payments		10.61		8.52
Gross Margin		\$ 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
<b>Net Return</b>		<b>\$ 121.63</b>		<b>\$ 102.89</b>
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

Continued on next page



**Devils Lake****Jason Fewell****Darren Wilcox**

jason.fewell@lrsc.edu

darren.wilcox@lrsc.edu

Lake Region State College

1801 College Drive N.

Devils Lake, ND 58301-1534

701-662-1554 Jason Office

701-331-1363 Jason Cell

701-662-1562 Darren Cell

**Oakes****Kacey Holm**

kacey.holm@k12.nd.us

Southeast Region Career &amp; Tech Center

924 S 7th St

Oakes, ND 58414

701-742-3234

701-210-0037 Cell

**Rugby****Sheila Braaten**

sheila.braaten@dakotacollege.edu

Dakota College at Bottineau @

Rugby Public School

1123 South Main

Rugby, ND 58368-2428

701-776-5095

701-771-7024 Cell

701-776-5091 Fax

**Wahpeton****Kara Wulfekuhle**

kara.wulfekuhle@ndscs.edu

ND State College of Science

800 N. 6th Street

Wahpeton, ND 58076-0002

701-671-2593

701-690-8480 Cell

701-671-2171 Fax

*Continued from previous page*

	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 on Farm 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 Brotherhood of  
Electrial Workers, 1st International Bank & Trust, Gooseneck Implement, Titan Machinery,  
Plains Ag, ND Ethanol Council**



# Cost-Return Projection -- Beef Cow-Calf Enterprise (Per Cow), 2019 <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 1.62	_____ x _____ x _____	\$ 430.11 \$ 0.00
18. Heifers: .26 x 570 x 1.40	_____ x _____ x _____	207.48 0.00
19. Cull cows; .14 x 1300 x 0.5	_____ x _____ x _____	91.00 0.00
20. Cull heifers: .05 x 900 x 1.25	_____ x _____ x _____	56.25 0.00
<b>D. GROSS RETURNS PER COW</b>	<b>\$ 784.84</b>	<b>\$ 0.00</b>
<b>E. RETURN OVER VARIABLE COSTS (D - A)</b>	<b>\$ 245.84</b>	<b>\$ 0.00</b>
<b>F. RETURN OVER TOTAL COSTS (D - C) <sup>3</sup></b>	<b>\$ 130.84</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.

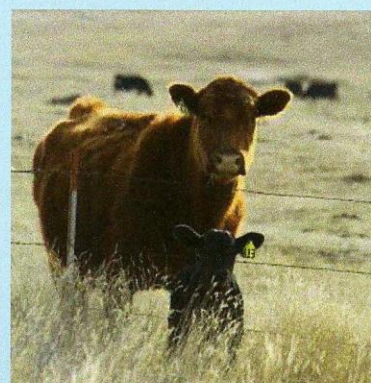
<sup>3</sup> Return over total costs is return to unpaid family labor, management, and equity.

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,  
NDSU Extension Farm Management Specialist.



Photos submitted by: Lynsey Aberle, Judy Jacobson, Lacey Maier & Kirsten Friedt





# Balance Sheet at Cost Values

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

## Dickinson

### Levi Helmuth

levi.helmuth@bismarckstate.edu  
Bismarck State College @  
Dickinson Research Extension Center  
1041 State Avenue  
Dickinson, ND 58601  
701-456-1121  
406-480-3383 Cell

## Fargo

### Ron Smithberg

ronald.smithberg@ndscs.edu  
NDSCS-Fargo Farm Business Mgt  
1305 19th Avenue N  
Fargo, ND 58102  
701-231-6931  
701-371-5335 Cell  
701-231-6905 Fax

## Glen Ullin

### Ron Egil

ron.egil@k12.nd.us  
Glen Ullin Public School  
PO Box 548  
Glen Ullin, ND 58631  
701-348-3590  
701-348-3084 Fax

## Jamestown

### Virgil Dagman

virgil.dagman@sendit.nodak.edu  
James Valley Career & Tech Center  
910 12th Avenue NE  
Jamestown, ND 58401-6513  
701-952-4166  
701-730-4782 Cell  
701-952-4174 Fax

## Minot

### Lynsey Aberle

lynsey.aberle@dakotacollege.edu  
Dakota College at Bottineau @  
North Central Research  
Extension Center  
5400 HWY 83 South  
Minot, ND 58701-4206  
701-857-7660 Office  
701-720-2323 Cell  
701-857-7676 Fax

	Avg of all farms 68	Low 20% 13	High 20% 14
<b>Number of Farms</b>			
<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 asset	0	0	0
<b>Total Current Farm Assets</b>	<b>\$ 313,055</b>	<b>\$ 165,021</b>	<b>\$ 622,914</b>
<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
<b>Total Intermediate Farm Assets</b>	<b>\$ 524,880</b>	<b>\$ 370,121</b>	<b>\$ 865,437</b>
<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
<b>Total Long-term assets</b>	<b>\$ 443,490</b>	<b>\$ 298,688</b>	<b>\$ 685,393</b>
<b>Total Farm Assets</b>	<b>\$ 1,281,425</b>	<b>\$ 833,830</b>	<b>\$ 2,173,744</b>
<b>Total Nonfarm assets</b>	<b>\$ 158,893</b>	<b>\$ 255,433</b>	<b>\$ 165,226</b>
<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
<b>Total Current Farm Liabilities</b>	<b>\$ 210,143</b>	<b>\$ 146,946</b>	<b>\$ 422,953</b>
<b>Total Intermediate Farm Liabs</b>	<b>\$ 126,731</b>	<b>\$ 127,466</b>	<b>\$ 163,600</b>
<b>Total Long-term Farm Liabilities</b>	<b>\$ 252,946</b>	<b>\$ 247,816</b>	<b>\$ 347,277</b>
<b>Total Farm Liabilities</b>	<b>\$ 589,820</b>	<b>\$ 522,228</b>	<b>\$ 933,830</b>
<b>Total Nonfarm Liabilities</b>	<b>\$ 25,930</b>	<b>\$ 64,438</b>	<b>\$ 6,487</b>
<b>Total Liabilities</b>	<b>\$ 615,750</b>	<b>\$ 586,666</b>	<b>\$ 940,317</b>
<b>Net Worth (farm &amp; non farm)</b>	<b>\$ 824,568</b>	<b>\$ 502,597</b>	<b>\$ 1,398,653</b>
<b>Net Worth change</b>	<b>\$ 62,038</b>	<b>\$ (13,652)</b>	<b>\$ 153,302</b>

**ND FARM**  
MANAGEMENT EDUCATION

www.ndfarmmanagement.com