ECONOMIC IMPACT OF AGRICULTURE

EXTENSION

MONTANA STATE UNIVERSITY

Wheatland County



January 2021

Wheatland County is a rural sparsely populated county located in the central part of the state. Over 94% of land in Wheatland County is classified as farm land.

Overview (2017 Data)	
Population	2,236
County Size (acres)	910,388
Land in Farms (%)	94.5
Number of Farms	174
Median Farm Size (acres)	1,000
Average Farm Size (acres)	4,944
Source: <u>Census of Agriculture</u> : Table 1: 0 Summary Highlights: 2017	County

Farm Revenue

Farm revenues (which includes the market value of products sold, government payments, and farm-related income) were nearly \$47 million while production expenses were \$35 million. Government payments were 4.8% of farm expenses.

Market Value of Products Sold	\$43,103,000
Government Payments	\$2,221,000
Farm-Related Income	\$1,359,000
Total Farm Production Expenses	\$34,999,000
Net Cash Farm Income	\$11,684,000

Source: Census of Agriculture: Tables 2, 3, 4, 5 and 6: 2017

Taxation

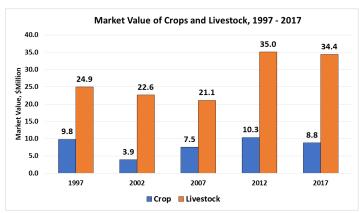
The market value of all property in Wheatland County was approximately \$459 billion in 2019. The taxable value assigned by the Montana Department of Revenue was \$16 million. Agricultural Property (as defined by Montana Department of Revenue as Class 3 Property) comprised 10% of the county's taxable value.

Property Tax Summary	2019	2014
Market Value of All	\$459,334,914	\$430,394,530
Property		
Taxable Value of All	\$16,892,710	\$15,167,740
Property		
Taxable Value of	\$1,740,096	\$1,696,003
Agricultural Property		
Ag Taxable Value as	10%	11%
% of All Property		

Source: Montana Dept. of Rev. Montana Taxes by County in $\underline{2018}$ and Montana Taxes by County in $\underline{2014}$

Market Value of Crops and Livestock

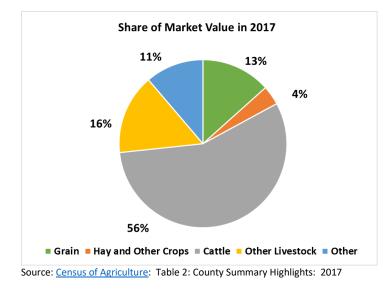
After adjusting for inflation, the market value of crops decreased by 11%, while the market value of livestock increased by 38%, from 1997 to 2017.



Sources: <u>Census of Agriculture</u>: Table 1: County Summary Highlights: 2017 and <u>St. Louis Fed Producer Price Index</u>

Crops and Livestock

Cattle (56%) and other livestock (16%) comprised 72% of total crop and livestock sales in 2017.



Farm Size by Acres

The percentage of smaller farms, less than 500 acres, increased from 34% to 37%, while the percentage of larger farms, 500 acres or more, decreased from 66% to 63% from 2012 to 2017.

	2017		2012	
	Number		Number	
Farm Size by Acres	of Farms	%	of Farms	%
1 to 9	9	5	9	6
10 to 49	11	6	9	6
50 to 179	22	13	10	6
180 to 499	23	13	25	16
500 to 999	20	11	17	11
1,000 or more	89	51	84	55
TOTAL	174	100	154	100

Source: Census of Agriculture: Table 2: County Summary Highlights: 2017

Farm Size by Sales

The percentage of the smallest farms with less than \$100,000 in sales increased from 61% to 66%, while the percentage of the largest farms with sales of \$100,000 or more decreased from 39% to 34% from 2012 to 2017.

	2017		2012	
Farm Size by	Number		Number	
Sales	of Farms	%	of Farms	%
Less than 2,500	28	16	39	25
2,500 to 4,999	9	5	7	5
5,000 to 9,999	10	6	8	5
10,000 to 24,999	24	14	10	6
25,000 to 49,999	18	10	14	9
50,000 to 99,999	26	15	16	10
100,000 or more	59	34	60	39
TOTAL	174	100	154	100

Source: Census of Agriculture: Table 1: County Summary Highlights: 2017

Tillage and Land Use

The percentage of farms using intensive tillage or cover crops increased, while the percentage of farms using no till decreased from 2012 to 2017.

	2017		2012	
	Number		Number	
Tillage	of Farms	%	of Farms	%
No tillage	19	11	18	12
Reduced tillage	10	6	9	6
Intensive tillage	31	18	23	15
Cover crops	8	5	3	2
TOTAL FARMS	174		154	

Source: Census of Agriculture: Table 41 Land Use Practices

Producer Profile

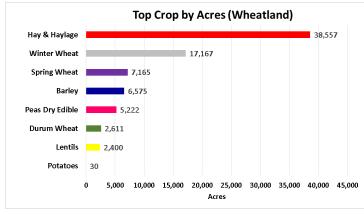
The county producer population was older than the Montana producer population. Thirty-one percent of county producers were under 55 years of age, while 43% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 60% of county producers, while farming was the primary occupation for 50% of Montana producers.

	County		State	
	Number of		Number of	
Characteristics	Producers	%	Producers	%
Age				
18 – 25	6	2	570	1
25 to 34	24	7	3,285	7
35 to 44	34	10	5,179	11
45 to 54	41	12	7,309	15
55 to 64	84	25	13,838	29
65 to 74	117	35	11,469	24
75 and older	29	9	5,587	12
Sex				
Male	202	60	28,563	60
Female	136	40	18,673	40
Primary Occupation				
Yes	203	60	23,847	50
No	135	40	24,314	50
TOTAL PRODUCERS	338	100	48,161	100

Source: <u>Census of Agriculture</u>: Table 45 Selected Operation and Producer Characteristics

Top Crops by Acres

The top crops were hay and haylage, winter wheat, spring wheat, barley, peas dry edible, durum wheat, lentils, and potatoes.



Source: Census of Agriculture: Table 1: County Summary Highlights: 2017

Top Livestock

The top livestock were cattle, sheep, hogs, and poultry (chicken-layers).

Number of Head
43,006
17,083
12,523
248

Source: <u>Census of Agriculture</u>: Tables 11 (Cattle), 13 (Sheep) and 19 (Poultry)

Employment Impact

Agricultural production employed 335 workers, or 43% of the county's labor force. According to IMPLAN, economic impact model, 215 of the workers were directly employed in production agriculture. An additional 86 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 34 workers were employed in other related businesses, such as grocery and drugs stores. For every 10 jobs on farms and ranches, 6 additional jobs are generated in the county.

Impact Type	Labor Force	Impact Multipliers
County Labor Force	784	
Direct Impact	215	
Indirect Impact	86	0.40
Induced Impact	34	0.16
Total Impact	335	0.56
Agriculture's Share (%)	43	

Source: Bureau of Labor Statistics, www.bls.gov/#cntyaa and IMPLAN Estimates

Value Added Impacts

Farms and ranches generated \$25 million of valueadded, or 34% of the county's total gross domestic product of \$73 million in 2017. According to IMPLAN, \$17.1 million was directly contributed by farmers and ranchers. An additional \$5.8 million was generated by businesses supporting agricultural production and \$2 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.46 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	73.0	
Direct Impact**	17.1	
Indirect Impact**	5.8	0.34
Induced Impact**	2.0	0.12
Total Impact**	25.0	0.46
Agriculture's Share (%)	34	

Sources: * St. Louis Federal Reserve Bank, ** IMPLAN Estimates

References

 2017 Census of Agriculture, National Agricultural Statistics Service, Montana, State and County Data, Volume 1, Geographic Area Series, part 26 <u>https://www.nass.usda.gov/Publications/AgCensus/2017/Full</u> <u>Report/Volume 1, Chapter 1 State Level/Montana/mtv1.p</u> <u>df</u>

- Dept. of Revenue "Montana Taxes by County in 2014" <u>https://mtrevenue.gov/wp-</u> content/uploads/2018/01/2014-Taxes-by-County.pdf
- Dept. of Revenue "Montana Taxes by County in 2018" <u>https://mtrevenue.gov/wpcontent/uploads/2020/02/</u> 2018-Taxes-by-County.pdf
- St. Louis Federal Reserve Bank (2017). Current dollar gross domestic product by county for Montana, retrieved from <u>https://fred.stlouisfed.org/release/tables?rid=397&</u> eid=1062609&od=2017-01-01#
- St. Louis Federal Reserve Bank (2020). Producer price index for all commodities, St. Louis Federal Reserve Bank, retrieved from https://fred.stlouisfed.org/series/PPIACO
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